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WFPC2 Observations of the Hubble Deep Field-South

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ABSTRACT

The Hubble Deep Field-South observations targeted a high-galactic-latitude field near QSO J2233-606. We present WFPC2 observations of the field in four wide band-passes centered at roughly 300, 450, 606, and 814 nm. Observations, data reduction procedures, and noise properties of the final images are discussed in detail. A catalog of sources is presented, and the number counts and color distributions of the galaxies are compared to a new catalog of the HDF-N that has been constructed in an identical manner. The two fields are qualitatively similar, with the galaxy number counts for the two fields agreeing to within 20%. The HDF-S has more candidate Lyman-break galaxies at $z > 2$ than the HDF-N. The star-formation rate per unit volume computed from the HDF-S, based on the UV luminosity of high-redshift candidates, is a factor of 1.9 higher than from the HDF-N at $z \sim 2.7$, and a factor of 1.3 higher at $z \sim 4$.

Subject headings: cosmology: observations — galaxies: evolution — galaxies: statistics

1. Introduction

The Hubble Deep Field-South (HDF-S) consists of a large set of observations of an otherwise unremarkable field around the QSO J2233-606 ($z = 2.24$), taken in parallel by three instruments aboard the Hubble Space Telescope (HST): the Wide Field and Planetary Camera 2 (WFPC2), the Space Telescope Imaging Spectrograph (STIS), and the Near Infrared Camera and Multi Object Spectrometer (NICMOS). This QSO was chosen because, among other characteristics, it is situated within the southern HST Continuous Viewing Zone (CVZ), a narrow declination range where, at specific times during the year, HST can make observations uninterrupted by Earth occultations.

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The majority of the observations were taken at a fixed pointing (the “main field”), with STIS aimed directly at the QSO, and WFPC2 and NICMOS imaging areas a few arcminutes away. The observations are described in a series of papers: Williams et al. (2000) details the field selection and the overall strategy, Fruchter et al. (2000) the NICMOS observations, Gardner et al. (2000) the STIS imaging observations, and Ferguson et al. (2000) the STIS spectroscopic observations. The present paper is concerned with the WFPC2 observations of the main field. Less deep observations were obtained of selected contiguous regions around the main field (the “flanking fields”), and these are described in Lucas et al. (2000).

The WFPC2 main field observations were centered around RA $22^{\text{h}} 32^{\text{m}} 56\overset{\text{s}}{.}22$, Dec $-60^{\circ}33'02\overset{\text{s}}{.}69$ (J2000), about $5'$ West of the QSO on which the STIS observations were centered, and consist of a total of approximately 450 ks worth of exposures in the four filters used for the original Hubble Deep Field in the Northern hemisphere (HDF-N, Williams et al. 1996): F300W, F450W, F606W, and F814W. The rationale underlying this filter choice is explained in detail in Williams et al. (1996). Briefly, these filters offer as broad a total wavelength coverage as can be obtained with reasonable depth with WFPC2, while also providing color information. Their width (about 30%) ensures maximum sensitivity within each wavelength range, while the total wavelength interval thus covered permits the identification of galaxies over an interesting range of redshifts, corresponding to the Lyman limit crossing each of the bluer filters. The photometric constraints on redshifts allow an estimate of the number of star-forming galaxies as a function of redshift to depths greater than can be achieved with direct spectroscopic techniques, and have been used to constrain the global star formation history of the Universe (e.g., Madau et al. 1996). At the same time, the availability of deep images in different wavebands has allowed comparative studies of the morphology and size in various filters, and of how they relate to other properties of the galaxies (e.g., Abraham et al. 1996). Perhaps more importantly, the existence of a common deep field has helped focus the redshift-gathering efforts with large telescopes to present a deeper view of the distribution of galaxies than could have been achieved by the effort of a single group.

The WFPC2 observations of HDF-S have been designed to be as similar as possible to those of the HDF-N, to permit direct comparisons between the two fields and to provide a similar point of focus for large telescopes now available in the Southern hemisphere. As with the Hubble Deep Field, they have been made public after a short period of time, during which only basic data reduction was carried out. Because of the higher complexity of the observations, described further in Section 2, and of the involvement of three separate instruments, the data processing took place over a somewhat longer period of about six weeks. The observations took place between September 29 and October 10, 1998; both raw and the Version 1 processed data were made public on November 23, 1998. Some refinements were subsequently applied to the data processing, and a Version 2 of the WFPC2 images has been made public in June 1999. This paper describes the Version 2 data products, highlighting the improvements over Version 1 where appropriate.

2. The Observations

2.1. Scattered Light Background and Observation Scheduling

As was the case for the HDF-N, the WFPC2 observations were carefully scheduled to take into account the varying sky background during each HST orbit. While observing in the CVZ, HST points within about 20° of the surface of the Earth. When on the day side, the illuminated Earth significantly increases the sky background, with this increase becoming greater as the telescope pointing approaches the illuminated Earth limb. The observations in F450W, F606W and F814W are essentially sky-limited, and thus are much less efficient when the illuminated side of the Earth is visible from HST. On the other hand, observations in F300W are closer to being read-noise limited, and thus suffer less from an elevated sky background. As the sky background is a predictable function of orbital phase, the observations were scheduled so that F300W was used during the periods of high background, and the other filters during periods of normal background. For more details, see Williams et al. (2000).

2.2. Dithering Strategy

The HDF-N utilized a dithering strategy in which observations were obtained at nine separate pointings separated by about $2''$. The shifts between pointings had a double advantage. First, by overlaying slightly different areas of the detector within each point on the sky, they allowed the averaging and smoothing of low-level detector features, such as slight imperfections in the flat fields and dark current subtraction, hot pixels, etc, resulting in more uniform images. Second, since the pointings were at different fractional pixel positions, it was possible to reconstruct a combined image with better sampling and quality than the original, undersampled WFPC2 images, thus greatly increasing the ability to discern small-scale details. The “drizzle” software package (Fruchter & Hook 1997, 1999) was developed in order to perform the necessary image reconstruction efficiently and reliably. On the other hand, the HDF-N observations were also designed to have multiple observations in each filter taken at precisely the same pointing, so that the abundant cosmic rays could be rejected efficiently using standard techniques.

The HDF-S situation was markedly different. The ability to dither the observations was limited by the requirements of STIS spectroscopy and the need to keep the QSO within the aperture. Long slit observations prohibited translations perpendicular to the slit; echelle observations, which use one of five small apertures, limited the ability to translate in either direction. In consequence, our dithering strategy relied heavily on changing the telescope roll angle, resulting in different shifts for different parts of the camera. Thus, a consistent subpixel dithering strategy was not feasible. In addition, optimal NICMOS observations required a variety of shifts, including some large ones (up to $7''$); with such large shifts, the geometric distortion in WFPC2 also prevented a consistent subpixel dithering strategy.

Therefore we adopted a diametrically opposite strategy. Being unable to create a pointing strategy resulting in uniform offsets for each location within the field of view, we effectively “randomized” the pointings, using a large number of different shifts and rolls—as many as the STIS constraints allowed. The consequence was a quasi-random set of subpixel shifts in the pointing, allowing a near-uniform coverage of each pixel throughout WFPC2. Some examples of total and fractional (subpixel) shifts are shown in Williams et al. (2000).

The obvious drawback of this strategy was that multiple images at each pointing were not always available for direct cosmic ray rejection. Instead we had to rely on new capabilities within the **dither** and **ditherII** STSDAS packages (Fruchter et al. 1997) which allow cosmic ray rejection in cases where all the images have different pointings. The procedure worked very well, although it did increase the processing complexity.

2.3. Observing Log

The list of observations, with their time, length, planned pointing, and quality flags is given in Table 1. The various quality flags are explained further in Section 3.

3. Data Reduction

All observations obtained for the WFPC2 main field were processed with a procedure that included the following steps: preliminary quality checking, pipeline processing, hot pixel removal, preliminary image registration, preliminary combination, final image registration, cosmic ray rejection, interchip alignment, sky background correction, scattered light correction, final combination, and astrometric calibration.

Lacking matched pairs (same filter, same pointing) for the majority of WFPC2 exposures, cosmic ray rejection was carried out by taking advantage of the new capabilities of the dithering software. This cosmic ray rejection is based on a three-stage process. Each individual input image is registered and separately drizzled to the same output frame. These individual images are not summed, but are combined using a robust median rejection technique to produce an intermediate image with somewhat lower resolution, but clean from cosmic rays. The intermediate image is then projected back to the frame of each input image in turn, and compared to identify and mask cosmic rays, bad pixels, and other imperfections. Finally, the masked images are combined using the standard **dither** at the full resolution and sampling allowed by the data. We also included extra steps to verify and improve the measurement of the pointing for individual images.

Because of the relatively large pointing shifts (up to $13''$) and chip rotations, we decided, unlike the HDF-N, to combine all images into a single mosaic comprising all four WFPC2 chips. This reduces the data loss which would otherwise occur because parts of the sky switch between

chips when the relatively large pointing shifts occur, and it provides the community with a single image for each filter rather than the four separate images (one per chip) produced for the HDF-N. Processing all the data for each filter into a single final image was slightly more complex, as it required careful chip realignment to avoid mismatches in positions in the overlap regions and to produce an astrometrically correct, nearly seamless final image. Because of the dithering strategy mandated by the STIS constraints, the seams running roughly in the E-W direction—between WF3 and WF4 and between PC and WF2—largely disappear in the final image, whereas the seams running N-S—between WF2 and WF3 and between WF4 and PC—are not as well covered, and there is a noticeable drop in signal-to-noise ratio between these chips.

3.1. Calibration and Quality Verification

3.1.1. Quality Control

As a first step, each image went through a direct inspection and quality control. Any obvious artifacts (satellite trails, scattered Earth light, cosmic ray clusters, charge trails left by previous images) were noted. About 30% of the images were flagged in some way. Many of the defects, such as satellite trails, could be corrected with normal processing; others required masking the affected area by hand. Bias jumps and scattered Earth light were treated in special steps described below. Quality flags set during this process are noted in Table 1, with an indication of how the problem was addressed, if appropriate, and for each case we have verified after the fact that the anomaly was corrected satisfactorily.

3.1.2. Pipeline Processing

The standard pipeline processing was used to obtain calibrated images. A new set of reference files (superbias, superdark, flat fields) was obtained shortly before the HDF-S observations as part of the normal WFPC2 update process. The new reference files have since become standard for WFPC2 processing.

The new superbias file, named I9817383U.R2H, was generated in August 1998 from an average of 120 on-orbit bias frames taken between December 4, 1997 and August 13, 1998. Each bias image was corrected for its mean bias level, using separate averages for even and odd columns as is standard for WFPC2 images. The resulting images were combined using the STSDAS task **mkdark**, which rejects cosmic rays via an iterative process. Four passes were used, with rejection levels set at 6, 5, 5, and 4σ respectively. The task also rejects pixels adjacent to each cosmic ray that differ from their average. Pixels with fewer than 100 images contributing were flagged as “bad”.

The new superbias does not differ in any major way from the previous WFPC2 superbias files, although it is generally advisable to use the superbias closest to the date of the observations.

The new superdark frame, named I9T1701QU.R3H, was produced in September 1998 from 120 dark images obtained between May 11 and August 21, 1998. Each dataset was processed by removing the mean bias level and then the new superbias image. Files were then combined using the STSDAS task **crreject** with rejection levels set at 4, 3, and 2σ . Pixels with fewer than 60 contributors were flagged as “bad”. Similarly, pixels with a high dark current ($> 0.02 \text{ DN/s}$) were flagged as “hot”. The new superdark reflects the gradual increase in WFPC2 dark current over the years; the total dark signal was about 40% higher at the time of the HDF-S observations than at the time of the HDF-N observations. In the vast majority of observations, however, noise due to dark current is a minor contribution to the total noise, and thus the increase in dark current does not significantly affect the sensitivity of the observations.

The new flat field reference files, named I9T1701IU.R4H (F300W), I9T1701KU.R4H (F450W), I9T1701MU.R4H (F606W), and I9T1701OU.R4H (F814W), were produced in September 1998 using new Earth flats obtained over the preceding year. They differ from previous flats primarily because of features at the pyramid edge, which have shifted slightly in pixel coordinates. The shift, approximately 1 pixel, is a consequence of slight motions of the individual detectors within the WFPC2 instrument; these motions are also reflected in the relative positions of the detectors on the plane of the sky (cf. Section 3.3.3). A very small residual background variation, probably related to slight changes in the interchip alignment, was removed empirically in the sky background correction phase (cf. Section 3.4.1).

The pipeline processing consists of the following steps: masking of known bad pixels; analog-to-digital conversion; subtraction of the bias level, separately for even and odd columns; subtraction of the superbias image; subtraction of the superdark image, scaled by the nominal dark time of the observation; and multiplication by the (inverse) flat field for the appropriate filter. This process, documented in the HST Data Handbook, Version 3 (Voit et al. 1997), results in high-quality calibrated images with background and pixel response usually constant to better than 1%. The full pipeline processing was carried out in the standard way using the new reference files.

3.1.3. Hot Pixel Removal

Hot pixels, i.e., pixels with elevated dark current, are formed in WFPC2 on a daily basis, as a result of the continual impinging of charged particles onto the detectors. Approximately 30 new hot pixels appear every day in each detector (WFPC2 Handbook). The majority of these hot pixels disappear each month when the detectors are warmed up to room temperature to remove contaminants from the optical surfaces.

Most hot pixels are masked and excluded as part of the cosmic ray removal process, since the image dithering moves each hot pixel onto different areas of the image. However, some hot pixels are not “hot” enough to hit the threshold for cosmic ray removal, especially when they fall near an object. Therefore prior identification of hot pixels is desirable whenever possible.

In order to track the increasing population of hot pixels, we produced daily hot pixel masks by median combination of all F300W images taken in a given day. The F300W images are generally well-suited for this purpose, since they contain few objects and have low overall counts. The median combination excludes astronomical objects which fall on different places on the chip due to the changes in pointing, and makes hot pixels clearly discernible. These are then flagged in the daily hot pixel mask. Images taken each day were combined with the appropriate daily mask, so that each hot pixel was masked. Insufficient images were available for October 4, 9 and 10; we used the October 5 mask for October 4 and the October 8 mask for October 9 and 10.

3.2. First Pass: Preliminary Combination

The first combination of the data was aimed at producing an image that could be used to verify the registration of individual exposures and to identify cosmic rays and other imperfections. For this purpose, the emphasis of the first combination was on robustness, rather than on obtaining the best possible signal-to-noise ratio or resolution. The first combined image had a pixel scale of 60 milli-arcseconds (mas), more than adequate for a proper cosmic ray rejection, but not as demanding in terms of number of input images and pointing quality as the scale of 40 mas/pixel desired for the final image. The first combination included determination of preliminary registration, median-combination of “good” images, and final image registration.

3.2.1. Preliminary Image Registration

Although robust with respect to occasional deviations, the preliminary combination needed a good-quality typical image registration, to about a quarter of a pixel, to avoid interimage blurring of sources and improper cosmic ray rejection. This preliminary registration was performed using two separate methods. The first was to adopt the position recorded in the jitter file, derived from the average measured position of the guide stars throughout each exposure. The second was to cross-correlate each image with a cosmic-ray cleaned image pair chosen as reference. (The second method could not be used for F300W because of the low signal level.) The images for which the two methods gave discrepant results (about 20%) were rejected from the first combination, and were later registered with respect to the others by cross-correlation with the median-combined image.

3.2.2. The Median-Combined Image

After excluding all images with inconsistent registration, we used the remaining images to produce a single, median-combined mosaic image for each filter. The combination entailed the following steps:

- For each input image, **drizzle** was used to produce a mosaic of the four chips (this mosaic had a small inter-chip gap); the registration information was used to line up all images into a common reference position which was chosen to have North approximately up. The **drizzle** parameters were chosen to have a pixel size of 60 mas and a footprint of 100 mas, thus producing a modest additional blurring of the input images. This blurring, which affected each input image in the same way, helped in the identification of cosmic rays by smoothing out apparent variations in source signal due to the undersampling of WFPC2.
- The mosaic images were then median-combined, excluding all pixels marked “bad” in the data quality file, “hot” in the daily hot pixel list, or too close to the edges of the chip or of the pyramid beam splitter.

As a result, we obtained a coregistered, largely cosmic-ray free image with a sampling of 60 mas and a slightly larger PSF than each input image. Some cosmic rays remained in the regions where fewer than three exposures could be combined, because these regions lack sufficient information to distinguish between objects and cosmic rays.

3.3. Other Adjustments

In preparation for the second and final pass, the preliminary combined image was used to improve the image registration, to identify cosmic rays on the original images, and to refine the interchip alignment. The images were also photometrically balanced to compensate for zero point differences between the detectors.

3.3.1. Improved Image Registration

Individual images taken in F450W, F606W, and F814W were re-registered with respect to the median image by cross-correlating each individual mosaic with the median image. Cross-correlating the mosaics, rather than each chip separately, yields a more accurate and more robust measurement of the central position of the image, which is especially helpful in the F450W images with their lower signal level.

In a few cases, the quality of the cross-correlation indicated a possible anomalous rotation. For these cases we determined the image rotation angle by drizzling the individual image with various rotations and then cross-correlating different image sections with the preliminary combined image. The correct rotation angle was determined by requiring that the measured shifts in both coordinates be the same for all image sections.

Images in F300W required a different procedure due to the low signal level that caused even the mosaic cross-correlation to be dominated by cosmic rays. We cut out two 100-pixel regions

around the two brightest stars, and cross-correlated those against the reference image. The shifts were generally in good agreement and their average was adopted; in a few cases, one of the stars was affected by a cosmic ray and the other was used. For one image, both stars were affected by a cosmic ray and unusable; that image, identified in the Observation Log, was excluded from the final combination.

The formal uncertainties in the registration obtained for individual exposures are typically 5–10 mas for F450W, F606W, and F814W, and 10–20 mas for F300W.

3.3.2. *Cosmic Ray Rejection*

A special feature of the **dither** package was exploited to identify and flag cosmic rays in all WFPC2 images, a process that can be difficult in the absence of cosmic-ray splits. The conceptual basis of the cosmic ray rejection procedure is to compare each individual exposure to a “predicted” exposure based on the median-combined image. The predicted exposure was obtained via the task **blot**, which computes the expected flux in each pixel of each original exposure using the median-combined image, taking into account the geometric distortion of the WFPC2 cameras. The process is conceptually the reverse of **drizzle**, hence the name.

The predicted image produced by **blot** is expected to be somewhat different from the true exposure because of the undersampling of the WFPC2 images and of the additional blurring due to the median combination itself. In order to determine whether the predicted and true images are consistent, the **dither** package uses a special algorithm. For each pixel, the task **deriv** determines the largest difference (in absolute value) between that pixel and each of the neighboring pixels, and the task **driz_cr** compares this value with the difference between predicted and actual value. This process was in general very successful except close to the edges of the median image, where there was not enough information to identify cosmic rays properly. Pixels affected by cosmic rays were identified in the cosmic ray mask and excluded from the final combination.

3.3.3. *Interchip Alignment*

The relative alignment of the WFPC2 detectors has changed slowly over time. The astrometric solutions derived by Holtzman et al. (1995) and by Gilmozzi et al. (1996) were very accurate when they were determined, but there is now evidence that the interchip alignment has changed by as much as $0''.15$ over the last three years, probably because of a slow change in the WFPC2 optical bench. Therefore it was necessary to redetermine the interchip registration of WFPC2 for the HDF-S observations. Some of the pointing changes were large enough to cause significant areas of the sky to be covered by different chips in different exposures. The image registration described above ensured that the central regions of each detector would be properly aligned from image to image, thus we could use the overlap regions to verify the relative alignments.

The process we used was the following. a) For each filter, a separate image was produced for each of the detectors. These images overlap by about $10''$ in the N-S direction, and by about $3''$ in the E-W direction due to the variety of pointings used. b) The positions of objects in the overlap area were compared to determine shift corrections with WF4 used as the reference; for the PC we used the average of the shift determined by comparison with WF2 and WF4. c) In addition, we also determined the very small inter-filter shift due to both the so-called filter wedge and the difference in the position of the reference image.

We then corrected the shifts used by **drizzle** for each detector to compensate for the differences we found, keeping WF4 in F450W as the reference. After these updates, we estimate the relative alignment of the images in different filters to be good to better than 5 mas, and between detectors to about 15 mas.

3.3.4. Photometric balancing

The four WFPC2 detectors are known to have slightly different sensitivities. Prior to any further processing, we rescaled each image to compensate for the difference in sensitivity between detectors, using the WF3 as reference. Thus, the published zero points for WF3 apply to the final combined image. See Table 2 for more details.

3.4. Other Corrections

A number of additional small corrections were applied to the individual images in order to improve the quality of the final combined image. While none of these corrections made a substantial impact on the scientific results of the HDF-S project, they contributed to improve the depth, flatness, and cosmetic appearance of the final image. These corrections include: a better sky background subtraction, a correction for the scattered Earth light, and special processing to remove bias jumps, satellite trails, and residual images.

3.4.1. Sky background correction

A very small, but detectable systematic variation of the sky brightness was apparent in the flat-fielded images in F606W and F814W. This variation was probably due to subtle changes in the flat field, possibly related to the slow relative drift of the WFPC2 detectors, and produced a slightly mottled combined image. This residual sky background was efficiently removed by the following procedure. (1) Pipeline-calibrated images were scaled to unit sky and median combined without shifting. Because of the extensive dithering, this effectively removes all sources. (2) A slowly-varying function was fitted to the sky image (a Chebyshev function of order 3 was used). (3)

This fitted function was scaled to the observed mode of the sky in each image and subtracted. The use of this procedure improves the sky flatness by about 0.4%, a very small gain that is nonetheless noticeable especially in F606W and F814W.

3.4.2. *Scattered light correction*

Images taken during daytime have an elevated background due to light from the illuminated Earth, scattered off the support structure of the HST secondary. Besides the higher background, these images also suffer from a distinctive cross-shaped pattern (the “Earth cross”) due to the shadowing of the HST secondary by the support structure of the WFPC2 repeater. Our observing strategy (Section 2.1) ensured that only a small number of images in F450W, F606W and F814W, which are background-limited, were affected by the Earth cross. On the other hand, the majority of the F300W images show a visible Earth cross.

Images affected by the Earth cross in F450W, F606W, and F814W were corrected by applying a median filter (width 21 pixels) to the image obtained after subtracting the “expected” image produced by **blot** as part of the cosmic ray rejection (Section 3.3.2). The median filter preserves the edges and produces an adequate subtraction for a sharply varying background, such as that produced by either a bias jump or the scattered Earth light. Direct inspection confirmed the subtraction to be satisfactory.

The large number of F300W images affected by the Earth cross precluded the use of the median-filtering procedure. Instead, we obtained and subtracted an “average” Earth cross with the same technique used to correct for the variations in the sky brightness. While not perfect—since the properties of the Earth cross vary depending on the orbital phase and pointing of HST—this technique did remove most visible traces of the Earth cross, and produced a nearly flat final image.

3.4.3. *Other problems*

Bias jumps are small, sharp variations in the bias voltage that produce a distinctive change of background (usually by less than 0.5 DN) on a row boundary. Bias jumps can be corrected using the same technique of subtracting a median box-filtered residual used for the Earth cross in F450W, F606W, and F814W. Cosmic rays were identified properly in the vast majority of cases. A handful of exceptions—usually due to a very large cosmic ray event—were identified and masked by hand. Similarly, moving targets usually were flagged properly by the cosmic ray rejection routine, but in some cases they left visible residuals. These were also masked by hand. This special processing allowed us to recover nearly all of the images with anomalies, and only seven of the 260 images were completely excluded from the final combination.

3.5. Final Combination

The parameters chosen for the final drizzling were similar to those for the HDF-N image combination wherever possible. We used a pixel scale of 0.4 WF pixels, and a footprint of 0.5 WF pixels for the Wide Field cameras and of 0.8 PC pixels for the Planetary Camera. We produced a noise image appropriate for large-area scaling, as described below; the Appendix describes how the noise can be predicted for small areas.

3.5.1. Weight and noise maps

Optimal image combination requires weighting each input exposure in inverse proportion to the square of the noise per pixel. The **drizzle** task accepts a weight image for each input exposure, and produces an output weight image which can be used to compute the noise in the final combined image. In practice, we used weights that reflect only the noise due to the *background*, both sky and detector, without considering the local signal due to individual objects. While it is possible in principle to use schemes that obtain an optimal combination while taking into account the presence of local signal, their implementation is very complex when images are shifted at the subpixel level. The “natural” solution of using the measured signal level to estimate the noise in each pixel can produce biased results. The background noise is the appropriate quantity to consider when estimating the significance of detection, which implies rejection of the null hypothesis that there is no object. Optimal combination based on the background noise also provides the best sensitivity for faint objects, for which the gain from an optimal combination is most important. Combination based on background noise is near-optimal for *all* objects, regardless of their brightness, in background-dominated images such as F606W and F814W, and for all but the brightest objects in images where the read noise is a significant component of the noise.

Because the output pixels in **drizzled** images are not independent, the “noise” in individual pixels does not have the same meaning as for the input images, and noise does not scale as it would for individual pixels. In particular, when estimating the noise over an area, the correlation between pixels causes the total noise to be larger than the quadratic combination of the noise in individual pixels.

In order to estimate the significance of detection and the quality of the photometry of individual objects, the quantity of interest is the rms noise expected in the total (background) signal over the typical area covered by an object. To provide a natural way of computing this quantity, we have designed the weight maps for **drizzle** so that they can be readily used to estimate the noise over a sufficiently large area. It is useful to define the *equivalent single-pixel noise* $\bar{\sigma}_i$, which is the single-pixel noise that would be expected for uncorrelated pixels with the same total signal. The quantity $\bar{\sigma}_i$ can be determined from the weight W_i in pixel i , as given in the weight image:

$$\bar{\sigma}_i = 1/\sqrt{W_i} \quad (1)$$

On large scales, the expected rms variation of the total signal is simply the sum in quadrature of the equivalent single pixel noise. Thus, the variance of the total signal over a sufficiently large area A is:

$$\sigma_A^2 = \sum_{i \in A} \bar{\sigma}_i^2 \quad (2)$$

Note that the variance in the single-pixel signal is substantially *smaller* than $\bar{\sigma}$. On the other hand, the single-pixel variance is artificially small due to the way the single-pixel signal is constructed. The Appendix gives the expected scaling and relations between single-pixel noise and noise over larger areas.

3.5.2. Definition of Weight for Input Images

The weight of each input pixel is defined as follows:

$$\text{Var} = [f(D + B)/\gamma + \sigma_{\text{read}}^2]/(f^2 t^2) \quad (3)$$

$$W = 1/(\text{Var} \times \text{Scale}^4) \quad (4)$$

where Scale is the linear size of the output pixel in units of the input pixel (0.4 for the WF cameras, 0.875 for the PC); D and B are the total signal in dark current and background, respectively, averaged over the image and expressed in counts (DN) per pixel; γ is the gain in e^-/DN (about 7); σ_{read} is the read noise, also in DN/pixel; f is the *inverse* flat field, the quantity that appears in the WFPC2 “flat field” reference files; and t is the exposure time in seconds. The images were scaled by the exposure time in order to obtain a final image in counts per second.

3.6. Final drizzling

The final image was obtained by running the task **drizzle** with parameters PIXFRAC of 0.5 for the WF images, and 0.8 for the PC, and SCALE of 0.4 for the WF2, resulting in a linear scale of $0''.03986/\text{pixel}$. The parameter SCALE for the other cameras was chosen to achieve the same linear pixel scale as for the WF2. The linear scale of the final image was verified *a posteriori* using the astrometric reference stars provided by the US Naval Observatory; see Section 4.4. The size of the final image is 4096 x 4600 pixels, or $163'' \times 183''$ —enough to include all the area with valid data. The intensity is expressed in units of counts per second, and the weight images defined above are used to obtain a final weight image that could be used to determine the noise per unit area.

4. Quality Control of the Combined Images

4.1. Noise Properties

Because neighboring pixels are strongly correlated, the noise in the HDF-S images is not well described by its single-pixel variance. On large scales, the expected rms variation of the total signal scales with the linear size N of the region, and in the limit of very large area, it approaches $N\bar{\sigma}$, where $\bar{\sigma}$ is the equivalent single-pixel noise defined in Section 3.5.1. Due to the noise correlation, the rms variation expected for the signal on smaller scales is substantially smaller. The calculations reported in the Appendix (Equation A21) predict the approximate behavior of the total noise on linear scale N as:

$$\sigma(N) = \bar{\sigma} \times \begin{cases} 44/75 & N = 1 \\ N \times [1 - 5/(12N)] & N > 1 \end{cases} \quad (5)$$

The actual noise has been measured by computing the rms variation in the total signal in several apparently empty areas of each image. The results are shown in Figure 1, and scale similarly to the prediction of Equation 5. The vertical line in the Figure indicates the linear size corresponding to 0.2 square arcseconds, the box for which limiting magnitudes are given in Table 4.

On small scales, the measured noise agrees extremely well with the predictions, indicating the high quality of the data and of the noise model. On larger scales, the measured noise grows somewhat faster than the model prediction, and is up to 20% larger than predicted on a linear scale of 15 pixels. This discrepancy is most likely due to a combination of very faint sources and small irregularities in the background.

4.2. Quality of the Point Spread Function

Figure 2 shows the radial profile of the final Point Spread Function (PSF) of well-exposed objects of very small size (most likely a star) in each of the four filters in the region covered by the Wide Field Cameras. The full-width at half-maximum of the best-fitting Gaussian is about 0''.13 (0''.16 in F300W), in good agreement with the PSF size in individual images. The PSF is significantly smaller (0''.088) in the region covered by the Planetary Camera. The smoothness and tightness of the PSF demonstrates the quality of the image combination, and especially of the relative pointings we determined. The size of the PSF is a crucial component of the star-galaxy separation.

4.3. Background Variations

At the depth of the final HDF-S images, very small irregularities in the background can become visible. Known sources of instrumental background variations include imperfections in the flat fields, non-uniform illumination, especially the Earth cross, and the so-called dark glow (cf. WFPC2 Instrument Handbook). Slight fluctuations in the effective background can be seen with heavy smoothing of the final images. However, thanks to the additional background correction steps taken in our analysis, the first two sources of irregularities have been reduced substantially compared to earlier combinations, and the residual fluctuations are extremely small.

The total effective backgrounds and their measured fluctuations are given in Table 3. For F300W, the background variations are at the 1.5% level, and are dominated by residual scattered Earth light, which could not be removed entirely. In the other filters the background variation is much smaller, about 0.2%–0.6%, and appears consistent with a 2–3% curvature in the dark current subtraction which could be related to the residual dark glow.

4.4. Astrometric Calibration

The final image was astrometrically calibrated using four stars with absolute astrometry determined by the Naval Observatory in the Hipparcos reference frame (Gauss et al. 1996, Zacharias 1997). The stars are listed in Table 5, with both their astrometric and pixel positions. After fitting for shifts, scale, and rotation, the rms residual is 15 mas in RA and 5 mas in Dec. The measured pixel size is 0''.03986. The World Coordinate System (WCS) parameters in the header were updated to reflect the best-fitting solution. The main uncertainty in the absolute astrometry is in the systematics of the positions of the reference stars, estimated to be less than 40 mas.

4.5. Impact of Charge Transfer Efficiency

After several years in orbit, the Charge Transfer Efficiency (CTE) of WFPC2 has decreased measurably (Whitmore et al. 1999), probably as a result of the cumulative effect of particle hits on the detectors. Consequently, the effective photometric response of the detector decreases at higher row and column numbers. The impact of the CTE decrease depends on source position, brightness, and shape, as well as on the background. Whitmore et al. (1999) offer an empirical assessment of the photometric impact of CTE for point sources, as well as an approximate correction. A similar program is currently underway for extended sources, but no results are available yet.

If extended (but small) sources behave similarly to point sources, CTE corrections for HDF-S sources are expected to be modest but not insignificant, in the neighborhood of 10–20%. The prescriptions of Whitmore et al (1999) predict a median point-source CTE correction of 18.7% in F300W, 13.0% in F450W, 9.2% in F606W, and 10.4% in F814W (Figure 3). These should be

regarded as upper limits, since extended sources are likely to be affected by loss due to CTE less than point sources.

An empirical indication of CTE-like effects is in the color of sources. The color distribution of galaxies is expected to be intrinsically independent of location in the field of view, except for possible selection effects related to the varying depth of observations. If CTE losses do in fact affect the HDF-S data, sources that typically lie near the top of each chip should appear fainter. The loss of signal is expected to be relatively small in F606W, by virtue of its high background and relatively large count rate. On the other hand, the loss of signal should be more pronounced in the blue filters—especially F300W—which have a low natural background and fewer counts per source. Thus, one might expect the color distribution to be biased towards redder colors at high x and y whenever F300W is involved.

No clear evidence for such a trend exists in the data. In Figure 4 we plot the measured $U - B$ color against the approximate coordinates in the original images. Full circles (solid lines) correspond to objects brighter than $U = 26.0$, and crosses (dashed lines) to objects in the range $26.0 < U < 27.5$; the lines represent straight linear regressions to the points shown. Any changes in mean color with position are relatively small, and in opposite directions in the two cases: galaxies appear somewhat redder at high x , and very slightly *bluer* at high y , which is contrary to expectations. In both cases, the regression for fainter objects ($26 < U < 27.5$) is tilted slightly more negatively than that for brighter objects ($U < 26$), again contrary to expectations—fainter sources should be more sensitive to CTE, and thus appear comparably redder at high x and y . Similar results are seen in other colors as well. The mean color varies with position differently in each detector, suggesting that the origin of this variation is not likely to be instrumental, but rather could reflect correlated variations in the intrinsic color distribution of the sources on the sky. We conclude that the color distribution of galaxies is too noisy for an independent determination of the effects of CTE, but CTE is unlikely to affect typical galaxy colors by more than 0.2 magnitudes.

5. Object Identification and Measurement

The version 2 catalogs were produced using the Source Extractor (SExtractor; Bertin & Arnouts 1996) package, version 2.1.0. The HDF-N catalog of Williams et al. (1996) was constructed using FOCAS. To allow direct comparison of the two data sets we have created a new catalog of the HDF-N data set using SExtractor with the same parameters used for HDF-S. We shall limit our discussion here to the version 2 catalogs, which supersede the initial catalog released on the World Wide Web in December 1998. The differences between the two catalogs are relatively minor, the most important being that version 2 images use more of the data with a better removal of the instrumental signatures.

A major motivation for using SExtractor was its incorporation of weight maps and rms maps in modulating the source detection thresholds and in determining the photometric errors. While

this is in principle straightforward, there are some subtleties in dealing with the data for both Hubble Deep Fields (HDF) that we will note below.

Source detection and deblending were carried out on the inverse-variance-weighted sum of the F606W and F814W drizzled images. While other techniques for weighting the photometric information from the different bands are possible (e.g., Szalay et al. 1999), this summed image provides the maximum limiting depth for most sources. The resulting source positions and isophotes are then used for subsequent photometric analysis in each of the individual bands. The combined F606W+F814W image is significantly deeper than any of the individual images, so few normal objects should be missed by using it to define the object catalog for all bands. It is possible, however, that objects with very strong emission lines in the F450W or F300W bands could have escaped detection.

Source detection with SExtractor follows a standard “connected pixel” algorithm used by most such programs. To identify sources, the detection image is first convolved with a fixed smoothing kernel, for which we use a circular Gaussian with $\text{FWHM} = 3.6$ pixels. Pixels with convolved values higher than a fixed threshold are marked as potential sources. This threshold is in units of σ_{sky} , where σ_{sky} as a function of position comes from the input RMS map. The variation of S/N as a function of position is thus automatically taken into account.

After thresholding, regions consisting of more than a certain number of contiguous pixels (including diagonals) are counted as sources. For the HDF data, the source detection threshold was set to 0.65 (per pixel in the convolved image), and the minimum area to 16 drizzled pixels, or 0.025 square arcseconds. The sources are then examined for sub-components using the segmentation scheme described by Bertin & Arnouts (1996). Each source is reconsidered at a series of 32 logarithmically stepped detection thresholds between the original detection threshold and saturation. If the source divides into two sources with a flux ratio greater than 0.03 at one of the thresholds, the source is considered as two separate objects. This splitting continues for each of successively higher thresholds.

For the HDF-N FOCAS catalog, Williams et al. (1996) listed all of the parents and daughters of this kind of splitting process. In the subsequent analysis, such as computing galaxy counts and finding candidate Lyman-break galaxies, color was used as an additional criterion to determine whether to combine two neighboring objects or keep them separate. SExtractor does not provide the option of outputting the whole splitting hierarchy. The catalog here thus offers a bit less flexibility for post-processing than the original HDF-N catalog (Williams et al. 1996).

After extensive tests of SExtractor with different input parameters, it became clear that no single set of parameters could satisfy the desire to create a catalog that would reach the faintest reasonable depth for isolated objects, but which at the same time did not include spurious sources around stellar diffraction spikes and did not merge faint companions of bright galaxies with the bright galaxy itself. The detection parameters described above were acceptable for most of the image, with only a few cases of clearly spurious sources or inappropriate merging. Nevertheless,

because the HDF catalogs will be used to find rare objects and to identify candidates for spectroscopy, it seemed appropriate to take some care to fix these problems. The simplest solution was to run SExtractor a second time with a higher detection threshold and to selectively remove objects from the first catalog and add them in from the second catalog. The detection threshold of the second run was five times higher than for the first run. Objects that were clearly spurious (which were all on top of diffraction spikes) were removed from the catalogs. Objects that were over-merged in the first catalog were replaced with their corresponding split entries from the second catalog. The end result is that magnitudes and other photometric quantities for objects from the second SExtractor run refer to a brighter isophote than from the first run. While this is not ideal, it is better than the alternative of miscataloging clearly distinct objects as part of the same entity. A total of 25 sources (out of 2650) were removed from the first run of the WFPC-2 catalog, and 32 sources were added in from the second run. Objects from the second SExtractor run have catalog numbers greater than 10000.

It is worth commenting on the use of the HDF error map in constructing the catalog. This affects both the detection and the photometry of sources. For the case of a single, cosmetically clean CCD image, the uncertainty of a galaxy flux is

$$(C + Bn + \sigma_{\text{read}}^2 n)^{1/2}, \quad (6)$$

where n is the number of pixels in the galaxy image, C is the total number of electrons detected from the galaxy, B is the estimated background (sky plus dark current) underlying the galaxy in e^-/pix , and σ_{read} is the rms read noise in e^-/pix . In this approximation, we ignore the uncertainties in the local background estimate.

For the HDF, the effective exposure time varies from pixel to pixel, and it is useful to use a noise model to compute the effective contributions from background and read noise in each pixel. As described in Section 3.5.1, the weight map for each image was constructed taking into account the noise sources at the mean sky level in each pixel, the variations in exposure time and detector sensitivity, and the correlations between neighboring pixels introduced by the resampling onto the final pixel grid. The RMS map given to SExtractor was $\sqrt{1/W}$, where W is the weight map described in Section 3.5.1.

At the source detection phase, the RMS map is used to modulate the detection threshold. The detection threshold in counts for a given pixel is

$$t_i = T \sqrt{\sigma_i^2} \quad (7)$$

where T is the default threshold in units of σ , and σ_i^2 is the variance at pixel i computed from the RMS map. The variance map is convolved with the same kernel as the image as part of the detection process.

In computing photometric errors, the uncertainties for individual pixels used in the sky estimate are simply set to the $\sqrt{\sigma_i^2}$ values in the variance map (in this case not convolved with the detection

kernel). The variance map is also used in computing the total number of electrons detected from the source. The counts in the image are multiplied by gain and by the ratio of the variance in each pixel to the median variance over the whole image. This is the appropriate model when the variations in S/N across the field are primarily due to changes in exposure time, as is the case for the HDF. Table 4 gives the typical 10σ limiting magnitude in the deepest part of the Wide Field Camera images for an object of area 0.2 square arcsec.

6. Catalog Parameters

The catalog is presented in Table 6, which contains a subset of the photometry; extended catalogs with full photometry information are available on the World Wide Web. For each object we report the following parameters:

ID: The SExtractor identification number. The objects in the list have been sorted by Right Ascension (first) and Declination (second), and thus are no longer in catalog order. In addition, the numbers are no longer continuous, as some of the object identifications from the first SExtractor run have been removed. Objects from the second SExtractor run have had 10000 added to their identification numbers. These identification numbers provide a cross-reference to the segmentation maps.

HDFS_J22r-60d: The minutes and seconds of Right Ascension, and negative arcminutes and arcseconds of Declination. To these must be added 22 hours (RA) and -60 degrees (Dec). The catalog name of each object can be determined from its coordinates, and has the form HDFS_Jhhmmss.ss–ddppss.s, where hhmmss.ss are hours, minutes and seconds of Right Ascension, and ddppss.s similarly represent degrees, arcminutes and arcseconds of (the absolute value of) declination. Thus, the first object in the catalog is named HDFS_J223333.69–603346.0, at RA $22^{\text{h}}33^{\text{m}}33\text{s}.69$, Dec $-60^{\circ}33'46''$, Equinox J2000.

x, y: The x and y pixel positions of the object in the version 2 images.

m_i , $\sigma(m_i)$, m_a : The isophotal magnitude in the F814W image (m_i), its uncertainty ($\sigma(m_i)$), and the “mag_auto” (m_a) in the same image. The magnitudes are given in the AB system (Oke 1971), where $m = -2.5 \log f_\nu - 48.60$. (Our preferred notation for the magnitudes on the WFPC-2 AB photometric system is U_{300} , B_{450} , V_{606} and I_{814} to avoid confusion with the Johnson and Strømgren systems. However space in the tables does not allow us to use this convention here). The isophotal magnitude is determined from the sum of the counts within the detection isophote, set to be 0.65σ . The “mag_auto” is an elliptical (Kron 1980) magnitude, determined from the sum of the counts in an elliptical aperture. The semi-major axis of this aperture is defined by 2.5 times the first moments of the flux distribution within an ellipse roughly twice the isophotal radius, with a minimum semi-major axis of 3.5 pixels.

u-b: Isophotal color, $U_{300} - B_{450}$, in the AB magnitude system, as determined in the detection-image isophote. SExtractor was run in two-image mode to determine the photometry in each separate band image, using the weighted average of the F606W and F814W images as the detection image. For this and other colors, when the measured flux in the bluer band is less than 2σ , we list the 2-sigma upper-limit to the color determined from the photometric errors in the aperture. If both bands are upper limits, no color is listed.

b-v: Isophotal color, $B_{450} - V_{606}$, in the AB magnitude system, as determined in the detection-image isophote.

v-i: Isophotal color, $V_{606} - I_{814}$, in the AB magnitude system, as determined in the detection-image isophote.

r_h : The half-light radius of the object in the detection image, given in mas. The half-light radius is defined by SExtractor as the radius at which a circular aperture contains half of the flux in the “mag_auto” elliptical aperture.

s/g: A star-galaxy classification parameter determined by a neural network within SExtractor, and based upon the morphology of the object in the detection images (see Bertin & Arnouts 1996 for a detailed description of the neural network). Classifications near 1.0 are more like a point source, while classifications near 0.0 are more extended.

flags: Flags are explained in the table notes, and include both the flags returned by SExtractor and additional flags we added while constructing the catalog. Note that the overlap flag (a) is set if more than 10% of the area included in the mag_auto calculation overlaps the isophotal area of a detected neighbor.

7. Number Counts and Color-Color Plots

The counts of galaxies as a function of apparent magnitude reflect both cosmological curvature and galaxy evolution. Galaxy counts are thus an essential tool for testing cosmological models and the HDF data provide the best statistics at faint magnitudes. Figure 5 shows a compilation of the galaxy counts from HDF-N, HDF-S, and other surveys. The HDF counts in this figure include no corrections for incompleteness or biases in magnitude measurements. Such corrections are necessarily model-dependent, and are best included as part of model comparisons to the data. It is important to realize that these corrections are likely to be substantial for any reasonable model. The downturn in the counts at faint I magnitudes, for example, is probably not significant given the uncertainties in the galaxy detection efficiency near the limiting depth of the HDF images.

Overall, the counts in the HDF-N and the HDF-S agree reasonably well. Figure 6 shows the ratio of the HDF-S counts to the HDF-N counts in different bands down to approximately the 10σ limiting magnitudes for typical galaxies. The counts in the two fields match well in the magnitude range shown. At fainter magnitudes, the HDF-S galaxy number densities are slightly lower than

the HDF-N number densities in all bands. This is presumably due to the fact that the HDF-S exposure times in the different bands were typically 84-90% of the HDF-N exposure times in all the bands and varied more across the field; the deficit in the HDF-S at very faint magnitudes may be largely due to incompleteness.

Figures 8–9 show color-color diagrams similar to those used by Madau et al. (1996) and others to isolate high-redshift galaxies. For this sample, we use only galaxies with isophotal thresholds within 25% of the mean threshold for the WF chips. This excludes galaxies found in the PC and a few galaxies along the boundaries between the WF chips. The total area used for finding Lyman break galaxies is 4.24 arcmin². We have also redone the Lyman-break galaxy search on the new HDF-N catalog to ensure that the different cataloging algorithms do not significantly affect the results. With the color selection used by Madau et al., brighter than $B_{450} = 26.79$, the HDF-S has 74 U-dropout galaxies, likely to be at $2.2 < z < 3.5$, compared to 68 in the HDF-N. With the slightly broader and deeper color selection used by Dickinson (1998) and Steidel et al. (1999) there are 101 U-dropouts in the HDF-S and 106 in the SExtractor catalog of HDF-N brighter than $R_{606+814} = 27$. In the $3.5 < z < 4.5$ B-dropout range, the HDF-S has 18 objects compared to 11 in the HDF-N SExtractor catalog.

The luminosity densities, and hence derived star-formation rates, also differ between the HDF-N and the HDF-S. Figure 11 shows the star-formation rate (SFR) as a function of redshift derived from the HDF-N and HDF-S and various ground-based surveys. A variety of methods have been used to determine the star-formation rate at $z < 1$, and a complete review is beyond the scope of this paper; here we include primarily those that are directly comparable with the high-redshift results. The star-formation rates are derived following the prescription of Steidel et al. (1999). We adopt a conversion

$$L_{1500} = 8.0 \times 10^{27} \frac{SFR}{M_{\odot} \text{yr}^{-1} \text{erg s}^{-1} \text{Hz}^{-1}} \quad (8)$$

and apply a uniform extinction correction factor of 4.7 (Steidel et al. 1999) to the measured UV luminosity densities. To compute the star-formation rate, we sum the fluxes of the detected objects, and correct for undetected objects by adopting the luminosity-function parameters of Steidel et al. (1999): $\alpha = -1.6$ and $m_{\mathcal{R}}^* = 24.48$ at $z = 3.04$. Adopting the cosmological parameters $h, \Omega_m, \Omega_{\Lambda}, \Omega_{\text{tot}} = 0.65, 0.3, 0.7, 1$ the corresponding m^* is $R_{606+814} = 24.195$ and $I_{814} = 24.96$ for the U and B dropouts, respectively, where $R_{606+814}$ is the AB magnitude in the average of the F606W and F814W images. Using the magnitude $m_{\text{AB,tot}}$ computed from the total integrated flux of the Lyman-break candidates, the star-formation rate density at a mean redshift z between two redshifts z_1, z_2 is given by

$$\log\left(\frac{SFR}{M_{\odot} \text{yr}^{-1} \text{Mpc}^{-3}}\right) = 2 \log \frac{D_L(z)}{\text{cm}} - 0.4m_{\text{AB,tot}} - \log \frac{\Delta V(z_1, z_2)}{\text{Mpc}^3} - \log A + \log \delta L - \log(1+z) - 34.516, \quad (9)$$

where D_L is the luminosity distance, ΔV is the total volume between the two redshifts, A is the area of the field of view in arcsec, and δL is the correction to the integrated luminosity computed by integrating from the survey limit down to $0.1L^*$.

For both redshift ranges, the integrated star-formation rate density is higher in the HDF-S than in the HDF-N. At $z = 4$ the SFRs for both fields are significantly lower than that measured by Steidel et al. (1999) from their ground-based survey. This may indicate that the assumption of a redshift independent luminosity function is faulty, or it may indicate that strong clustering causes significant field-to-field variations. The SFR at $z \sim 4$ computed here from the HDF-N SExtractor catalog is a factor of 2.6 lower than that shown in Fig. 9 of Steidel et al. (1999). The differences are due in part to the different cosmology adopted here, and in part to the different photometry in the SExtractor and FOCAS catalogs. In any event, the integrated SFR at $z \sim 4$ remains uncertain from these small fields, and from the limited magnitude range probed by the ground-based survey. This is an area where a large-area survey from the HST Advanced Camera for Surveys would be particularly beneficial.

8. Conclusions

The interpretation of any astronomical image requires distinguishing the true celestial signal from the artifacts, non-uniformities, and non-linearities of the optics and detector. In many cases, fortunately, the scientific results can be extracted from the data with only a rudimentary understanding of the behavior of the detector and the noise properties of the images it produces. However, the HDF-S is intended to be a data set of lasting archival value for a wide variety of purposes (some undoubtedly still to be conceived). Thus, it is important to have a lasting archival record of how the images were produced, and a detailed description of technical peculiarities of the final images.

Sections 1-6 of this paper outlined the technical features of the WFPC2 portion of the HDF-S campaign. Significant departures from the HDF-N campaign include a different dithering scheme (dictated primarily by the simultaneous STIS observations of QSO J2233-606), a different cosmic-ray rejection technique, and a slightly different weighting scheme for combining the final images. Calibration observations show significant degradation of the WFPC-2 charge-transfer efficiency over the three years since the HDF-N campaign. However, tests for the symptoms of CTE in the photometry of galaxies at different positions on the chips reveal no significant trends, and we conclude that CTE affects galaxy photometry at a level less than 0.2 mag.

In Section 7, we compared the overall numbers of galaxies, and the number of Lyman-break galaxy candidates, in the HDF-N and HDF-S. For this purpose a new HDF-N catalog was constructed in a manner identical to that described for HDF-S. Overall number counts between the two fields are in excellent agreement. The HDF-S shows more candidate high-redshift objects, and a higher overall UV luminosity density at $z > 2$; however the luminosity densities derived here are still significantly lower than the $z = 4$ luminosity density found in the Steidel et al. (1999) ground-based survey. The discrepancy could be due either to field-to-field variations, or to a steepening of the faint end of the Lyman-break galaxy luminosity function at $z \sim 4$ relative to that at $z \sim 2.7$.

It is a pleasure to thank the U.S. Naval Observatory CCD Astrograph team and CTIO for making possible the astrometric link of the HDF-S positions to the ICRS. We are grateful as well to our many colleagues who shared their ground-based data with us in advance of publication, thus allowing us to optimize our observing strategies. This work was supported by several grants from the Space Telescope Science Institute, which is operated by the Association of Universities for Research in Astronomy, Incorporated, under NASA contract NAS5-26555.

A. Noise correlation in drizzled images

A.1. Goals and definitions

Under normal circumstances, the noise properties of CCDs are well described by the variance of the signal detected in each pixel. Both Poisson and read noise are with good approximation uncorrelated from pixel to pixel, and simple noise models can be used to accurately predict the image variance.

However, combining images with partial pixel overlap results in more complex noise properties, regardless of the method used. The main reason is that a “pixel” in the output image is no longer a separate physical entity from all other pixels. The signal apportioned to it from each input image can be a fraction of the signal in a number of different physical pixels, some of which may also contribute to the signal assigned to neighboring output pixels. The signal in nearby output pixels can thus be correlated; a full description of their noise properties requires not only a variance image, but also a covariance for each pair of correlated pixels.

A correlation image can in principle be produced, but at a very high cost in terms of computational intensity and complexity. In practice, rules describing the scaling of the effective noise as a function of the area considered may often suffice. The goal of this Appendix is to illustrate some approximate rules that can be used to estimate the effective noise in images produced by the **drizzle** method. For more details on the method see Fruchter and Hook (1997); a more general derivation of the noise properties of **drizzled** images is presented in Fruchter and Hook (2000).

In general, we will be interested in estimating the total noise within a given output area, be it a single output pixel or the area covered by an object of astronomical interest. Since **drizzle** is a linear method, the total signal in the area of interest is a linear combination of the signal in input pixels from different images and with varying weights; its variance can in principle be estimated by the appropriate weighted combination of the variance of the input pixels. Some of these pixels will be included in their entirety, others—near the border of the area of interest—only fractionally. The covariance between two areas is caused by pixels that are fractionally included in both, and thus it is a perimeter effect. If the area is sufficiently large—enclosing a significant number of input pixels—the perimeter effect can be neglected, and the variance scales with the area, as expected for uncorrelated noise.

An analytical approximation for the scaling of the noise properties in an area with its size can be obtained under a number of simplifying assumptions. We assume that all input images have similar properties and have been combined with the same parameters; we also assume that the input images have random pixel phases, so we can average over the fractional position of the input pixel with respect to the output pixel. We also neglect rotations and corrections for geometric distortions, assuming that the input pixels are all square and have the same size. Finally, the output area is assumed to consist of a square with an integral number of output pixels to each side. We expect that the above assumptions, while not perfectly realized in our data, are sufficiently close to reality that our results are applicable in practice.

The parameters in our calculation are: the **drizzle** parameters SCALE s , or the size of each output pixel, and PIXFRAC p , or the footprint that **drizzle** assigns to each input pixel; and the linear size l of the square output area. All are expressed in units of the size of the input pixel.

We use x_{ij} to refer to the signal in pixel i on the j -th input image, and X_k to refer to the signal in pixel k in the output image. We further assume that the input images only contain a flat background with a nominal flat-fielded signal of x per pixel, and noise σ_{ij} . Since the input pixels are assumed uncorrelated, their mean and covariance is:

$$\begin{aligned}\langle x_{ij} \rangle &= x \\ \langle x_{ij} x_{i'j'} \rangle - x^2 &= \delta_{ii'} \delta_{jj'} \sigma_{ij}^2\end{aligned}$$

A.2. Drizzled images

The signal of each pixel in the output image is computed as

$$X_k = s^2 \cdot \sum_{ij} a_{ij,k} x_{ij} w_{ij} / \sum_{ij} a_{ij,k} w_{ij}, \quad (\text{A1})$$

where s^2 is the area of the output pixel in units of the input pixel, and $a_{ij,k}$ is defined as the fraction of the signal of pixel i in image j that is apportioned to pixel k of the output image. By construction,

$$\sum_k a_{ij,k} = 1. \quad (\text{A2})$$

The weight w_{ij} can be chosen arbitrarily, but we will in general assume that it reflects the expected noise in the background and is flat over small scales, i.e., $w_{ij} = 1/\sigma_{ij}$ and w_{ij} is nearly independent of i over small scales, except for rejected pixels.

The variance of X_k is not obtained simply by scaling the noise from the input to the output pixels. There are two reasons for this: first, each input pixel is scaled by s^2 , which reduces the variance in the output pixel accordingly; second, for $p > 0$, each pixel may receive partial

contributions from multiple input pixels, even though the individual input pixels may be larger than the individual output pixels. Therefore the X_k are *not* uncorrelated, and their individual variance can be substantially lower than would be expected from a simple area extrapolation; conversely, their variance increases with area faster than the area itself. Thus, while it is possible to define a variance image for the X_k , i.e., an image that contains the expected variance of the signal for each pixel, this variance image would *not* have the normal properties expected from a variance image; namely, that the variance of the total signal over a number of pixels is the sum of the variances of the individual pixels.

Formally, we note that the X_k would be uncorrelated if only the values 0 and 1 were allowed for the coefficients $a_{ij,k}$, i.e., if each input pixel were either included or excluded in its entirety. The correlation derives from the fact that the input pixels can be split between different output pixels, so that the $a_{ij,k}$ can have values different from 0 and 1, and $\sum_k (a_{ij,k})^2 < 1$.

On the other hand, most astrophysically useful noise measurements are on scales much larger than one output pixel. On large scales, the variance will indeed scale approximately with the area, with a correction for correlation that is approximately inversely proportional to the linear size of the region considered, as will be shown later.

Under these conditions, it is desirable to define an “equivalent variance per pixel” that gives the correct noise on large scales, and an expression that indicates the correction to be applied as a function of the area. We now proceed to derive the proper weight definition to achieve the correct noise estimate in the limit of infinite area (Section A.3) and to show how the noise should be corrected for finite areas (Sections A.5 and A.6).

A.3. Scaling of noise for large areas

The drizzle task provides a total weight per pixel that can be used to assess the relative statistical weight of each output pixel,

$$W_k = \sum_{ij} a_{ij,k} w_{ij}. \quad (\text{A3})$$

Let us assume for the moment that the W_k are the appropriate weights for the signal in pixel k . Then the total weighted signal X_A in a large area A will be expressed as:

$$X_A = \sum_A (A/A_k) X_k W_k / \sum_A W_k. \quad (\text{A4})$$

This can be re-expressed as:

$$X_A = \sum_{k \in A} (A/A_k) s^2 \sum_{ij} a_{ij,k} x_{ij} w_{ij} \sum_{k \in A} \sum_{ij} a_{ij,k} w_{ij}, \quad (\text{A5})$$

where we have implicitly assumed that A includes only full pixels of the output image; otherwise the expression must be modified to include partial pixels. Sum over k and define

$$a_{ij,A} = \sum_{k \in A} a_{ij,k}, \quad (\text{A6})$$

then,

$$X_A = (A/A_k)s^2 \sum_{ij} a_{ij,A} x_{ij} w_{ij} / \sum_{ij} a_{ij,A} w_{ij}, \quad (\text{A7})$$

and

$$\text{Var}(X_A) = (A/A_k)^2 s^4 \sum_{ij} a_{ij,A}^2 w_{ij} / \left(\sum_{ij} a_{ij,A} w_{ij} \right)^2, \quad (\text{A8})$$

where we have used the fact that $\text{Var}(x_{ij}) = 1/w_{ij}$, and that the x_{ij} are uncorrelated.

If the area A is sufficiently large, the majority of the pixels i will either be entirely inside A or entirely outside; therefore $a_{ij,A}$ is either 0 or 1 (cf. Equation A2) for most i, j . Thus,

$$a_{ij,A}^2 \approx a_{ij,A}, \quad (\text{A9})$$

and, in the limit $A \rightarrow \infty$,

$$\text{Var}(X_A) \approx (A/A_k)^2 s^4 / \left(\sum_{ij} a_{ij,A} w_{ij} \right) \approx (A/A_k)^2 s^4 / \left(\sum_{k \in A} W_k \right). \quad (\text{A10})$$

If one defines $\hat{W}_k = W_k/s^4$, and $N_A = A/A_k$ is the number of pixels included in area A , we then have:

$$\text{Var}(X_A) \approx N_A / \langle \hat{W}_k \rangle_A, \quad (\text{A11})$$

which is precisely the scaling we expect for large area with uncorrelated noise. This formula can probably be generalized to the case in which input images have different scales, by defining $\hat{W}_k = \sum_{ij} a_{ij,k} w_{ij} / s_j^4$ (s_j being the scale of the j -th input image); however, we have not verified this formally.

A.4. Area correction: the noise in a finite area

The scaling formula above only works if the area A is very large. For smaller areas the variance can be predicted by a suitable modification of Equation A11. It is convenient to define the “variance reduction factor” F_A as:

$$F_A = \sum_{ij} a_{ij,A}^2 / \sum_{ij} a_{ij,A}. \quad (\text{A12})$$

Since $a_{ij,A} \leq 1$, then $F_A \leq 1$ as well, and $F_A = 1$ if, and only if, all $a_{ij,A}$ are either 0 or 1, which means that the area A contains only whole input pixels. Note that we have also assumed that A contains only whole *output* pixels. The quantity F_A measures of how many “pixel pieces” are

contained in the area A . The denominator is simply M_A , the total number of pixels, including fractions, that are included in area A . The $a_{ij,A}$ depend on the pixel kernel used, which in turn is defined by the value of the parameter p , the size of the pixel footprint in **drizzle**. If p is very small, then $a_{ij,A}$ will be typically either 0 or 1, and $F_A \approx 1$ even for small areas.

Assuming that w_{ij} remains constant for areas $\sim A$, we can express $\text{Var}(X_A)$ as

$$\text{Var}(X_A) \approx (A/A_k)^2 s^4 F_A \sum_{ij} a_{ij,A} w_{ij} / \left(\sum_{ij} a_{ij,A} w_{ij} \right)^2 \approx (A/A_k) F_A / \langle \hat{W}_k \rangle. \quad (\text{A13})$$

This shows that the variance per unit area is reduced by a factor F_A with respect to the large-area scaling.

The value of F_A will depend in general on the **drizzle** parameters SCALE and PIXFRAC, and on the exact placement of the area A onto the input grid. For the latter reason, F_A can vary significantly from place to place, even for equal-area regions. However, it is possible to estimate the typical value of F_A assuming random placement of the area A onto the input grid. We now proceed to work out the special case in which the input pixels are square and parallel to the output pixels, and the area A is a square containing an integral number of output pixels.

A.5. Variance reduction factor for random phases

An analytic expression for the variance reduction factor F_A can be obtained in the special case in which 1) the input and output grids are parallel, 2) the area A consists of a square region with an integral number of pixels on each side, and 3) the boundaries of input and output pixels are at random relative phases.

Two distinct formulae apply depending on whether the linear size l of the area A is bigger or smaller than the pixfrac p , which is the size of the kernel used for each input pixel. (Both l and p are expressed in input pixels.) Tedious but elementary calculations show that:

$$F_A = \begin{cases} [1 - p/(3l)]^2 & (l > p) \\ (l/p)^2 \cdot [1 - l/(3p)]^2 & (l < p). \end{cases} \quad (\text{A14})$$

Substituting in the formula for the variance, we obtain:

$$\text{Var}(X_A) = (A/A_k) \cdot [l/\max(l, p)]^2 \cdot \{1 - [\min(l, p)/(3\max(l, p))]^2\}^2 / \langle \hat{W}_k \rangle. \quad (\text{A15})$$

From this expression, it is possible to derive the predicted noise over scales ranging from a single pixel to very large areas.

A.6. Scaling with size of the region used

With uncorrelated signal, the variance in the total signal over an area scales linearly with the area considered. In the case we are considering, the signal is correlated (to some extent) on all scales, and thus its expected variance does not scale exactly with area. We can use the above formulae to determine the scaling expected.

Consider the case of two areas A_1 and A_2 , of linear size l_1 and l_2 , both larger than the pixfrac p . The ratio of the variances of the total signals X_1, X_2 is

$$\text{Var}(X_1)/\text{Var}(X_2) = (l_1)^2[1 - p/(3l_1)]^2/\{(l_2)^2[1 - p/(3l_2)]^2\}, \quad (\text{A16})$$

and the ratio of the rms σ_1, σ_2 will be

$$\sigma_1/\sigma_2 = (l_1/l_2) \cdot [1 - p/(3l_1)]/[1 - p/(3l_2)]. \quad (\text{A17})$$

The “natural” ratio (for uncorrelated noise) is the ratio of the linear sizes l_1/l_2 , thus the actual noise ratio differs from the uncorrelated value by the factor

$$[1 - p/(3l_1)]/[1 - p/(3l_2)]. \quad (\text{A18})$$

For example, consider the HDF-S values $p = 0.5$, $s = 0.4$, and take $l_1 = 10$, $l_2 = 2$ (both expressed in input pixels). Then the ratio is $(1 - 0.5/30)/(1 - 0.5/6) = 1.072$; the noise in an area 10×10 input pixels ($= 25 \times 25$ output pixels) is 1.072 times the noise expected in an area 2×2 input pixels (5×5 output pixels).

The noise scaling from a single output pixel to a large area can be obtained by taking the smaller size to be one output pixel, or $l_2 = s$. If the scale s is smaller than the pixfrac p , as is often the case, then

$$\sigma_1/\sigma_2 = (l_1/s)(p/s)[1 - p/(3l_1)]/[1 - s/(3p)]. \quad (\text{A19})$$

If the size of the larger area in *output* pixels is $m = l_1/s$, then

$$\sigma_1/\sigma_2 = m(p/s)[1 - p/(3ms)]/[1 - s/(3p)]. \quad (\text{A20})$$

This differs from the “area” scaling by a factor $(p/s)[1 - p/(3ms)]/[1 - s/(3p)]$, which becomes $(p/s)/[1 - s/(3p)]$ as the larger area grows to infinity. For the HDF-S values, the large-area noise is larger than the scaling from single-pixel by the factor $(0.5/0.4)/(1 - 0.4/1.5) = 75/44 = 1.7045$ in the region covered by the Wide Field cameras. In the region covered by the Planetary Camera, $p = 0.8$ and $s = 0.8755 > p$, thus the large-area noise exceeds the value inferred from the single-pixel noise by the factor $1/[1 - p/(3s)] = 1.4380$.

More generally, the scaling from single-pixel noise to infinity is given by the factor

$$\sqrt{F_A} = \begin{cases} (s/p)[1 - s/(3p)] & (s < p) \\ [1 - p/(3s)] & (p < s). \end{cases} \quad (\text{A21})$$

Some special cases are

$$\sqrt{F_A} = \begin{cases} 5/6 & (p = 0.5s) \\ 2/3 & (p = s) \\ 44/75 = 1/1.7045 & (p = 0.5, s = 0.4) \text{ [HDF-S, Wide Field cameras]} \\ 14/27 = 1/1.9286 & (p = 0.6, s = 0.4) \text{ [HDF-N, Wide Field cameras, Version 1]} \\ 0.6954 = 1/1.4380 & (p = 0.8, s = 0.8755) \text{ [HDF-S, Planetary Camera].} \end{cases} \quad (\text{A22})$$

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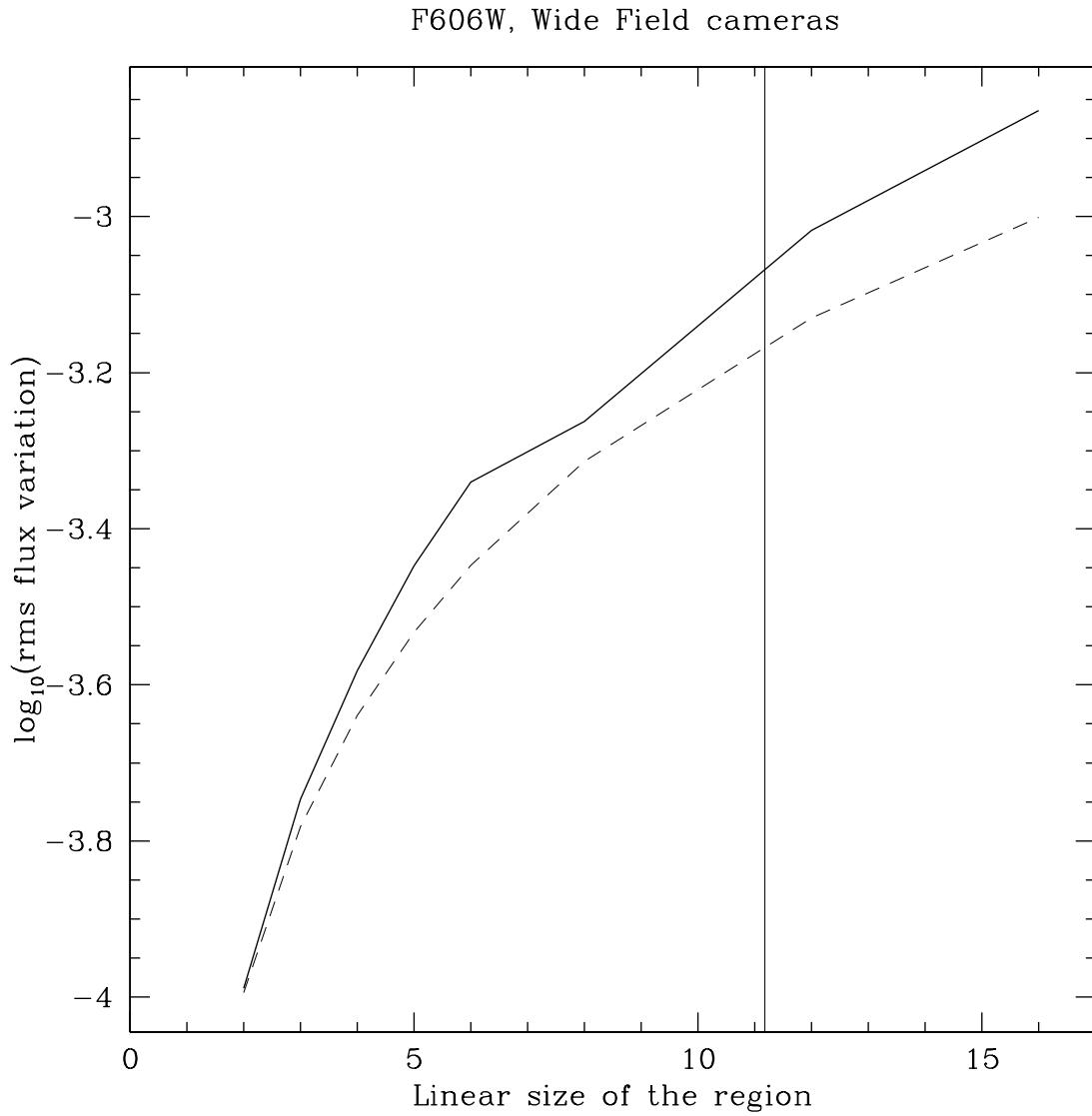


Fig. 1.— Scaling of the measured rms noise as a function of the linear size of the region (in output pixels). The measured values (solid) represent the median for the center of the three Wide Field cameras in F606W. The dashed line is the theoretical prediction of Equation A19, using the weight derived in the final combination. The deviation of the measured noise from the prediction probably reflects correlated background fluctuations.

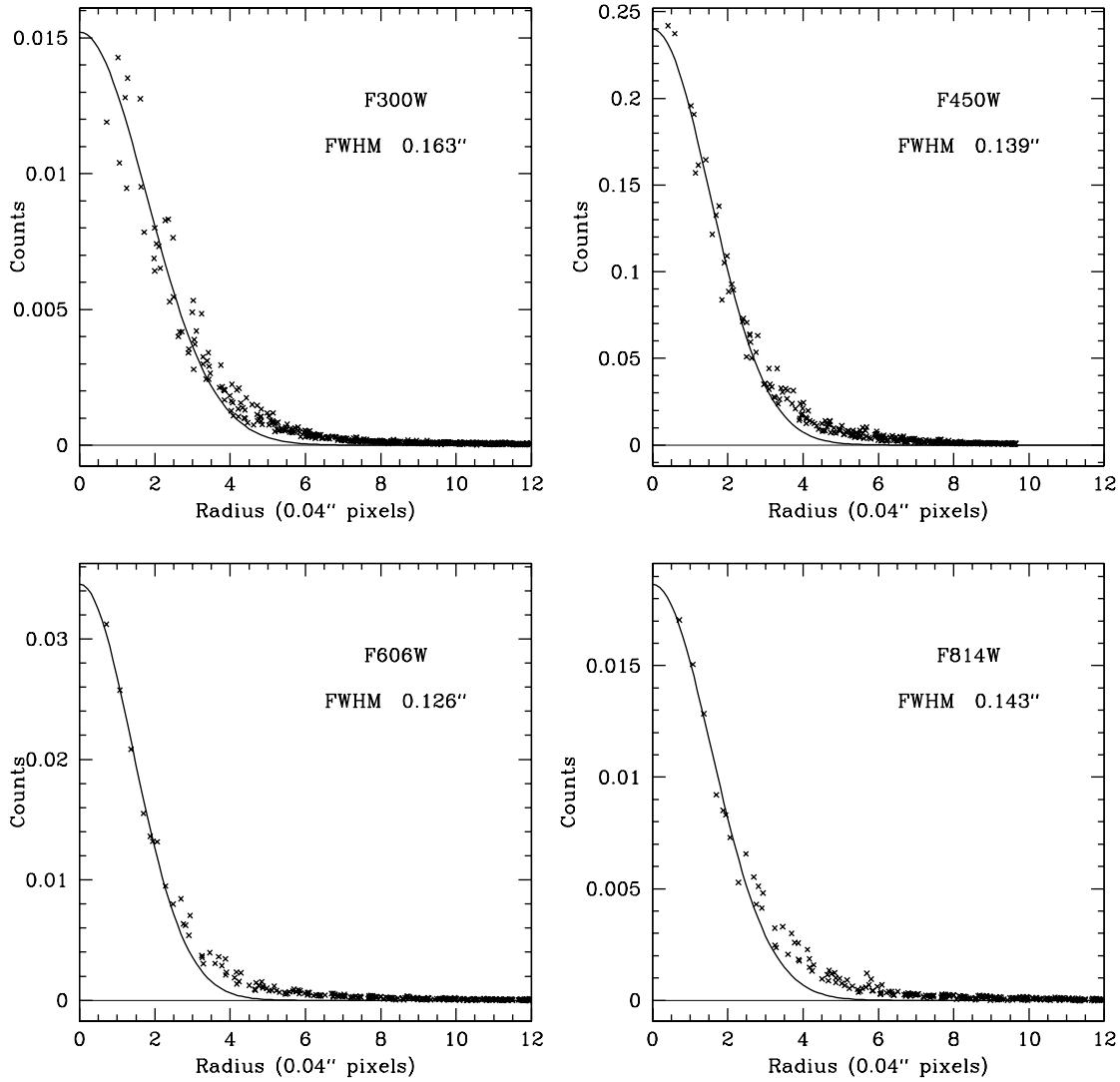


Fig. 2.— PSF profile in the final image for selected starlike objects in each of the four filters, in the region covered by Wide Field cameras.

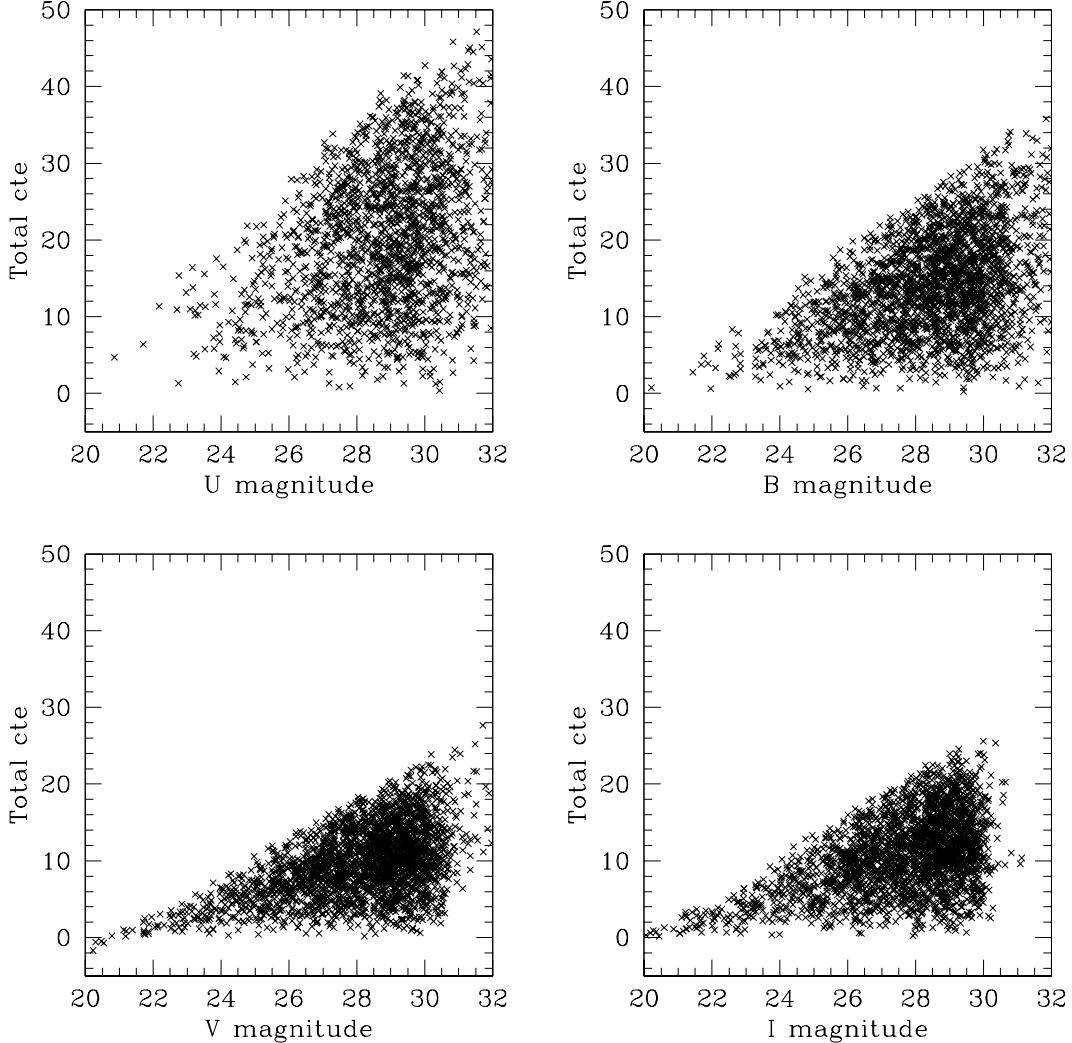


Fig. 3.— Distribution of the point-source CTE correction (in percent) suggested by Whitmore et al. (1999) for galaxies in the HDF-S, based on total counts and typical background in individual images. The point-source correction most likely overestimates the CTE-induced photometric error for extended sources, and is shown here only as indicative of the potential worst-case impact of the CTE. No CTE correction has been applied to the HDF-S data.

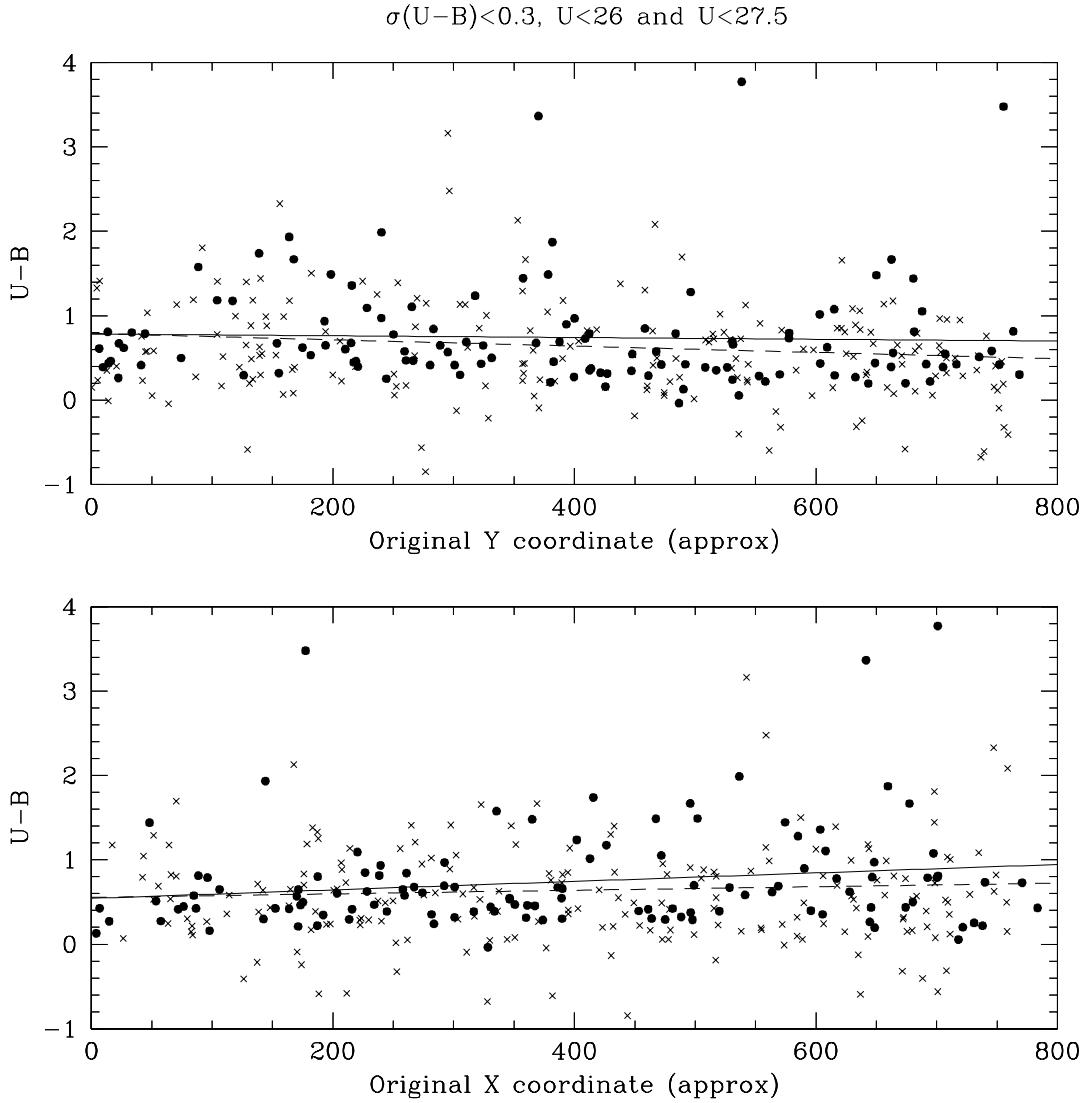


Fig. 4.— A test for CTE effects: $U - B$ color vs. mean pixel position in the original images, for $U < 26$ (solid dots) and $26 < U < 27.5$ (crosses). Linear regressions are shown by solid lines for the dots, and dashed lines for the crosses. There is no clear evidence for the position-dependent color variations that could be ascribed to CTE.

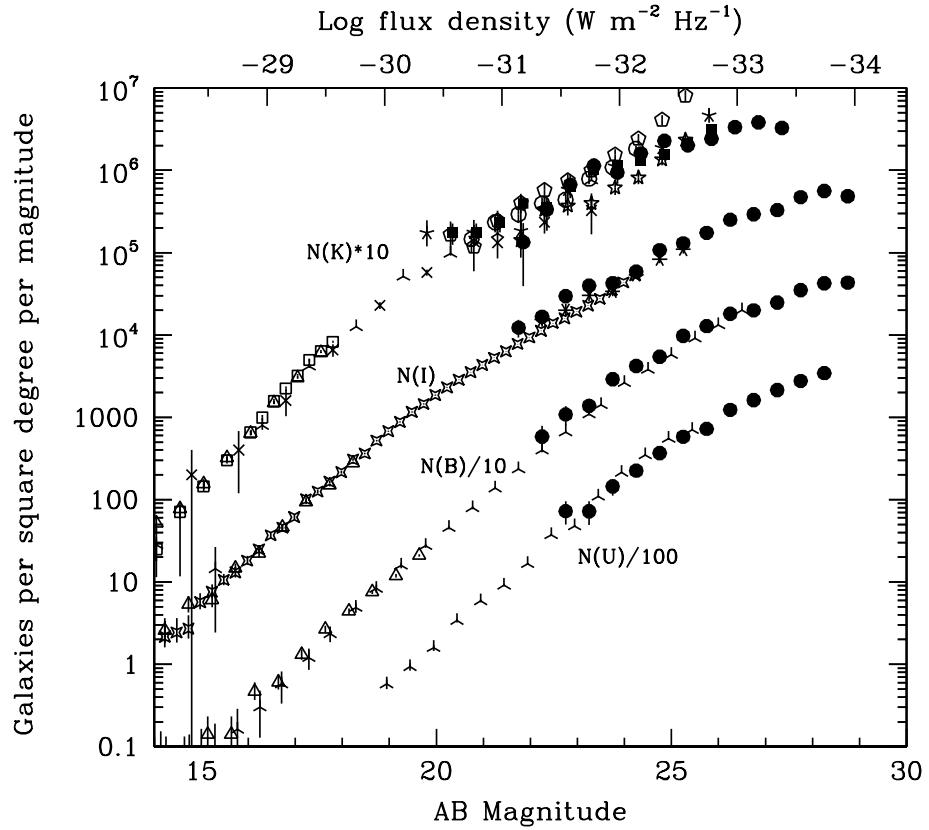


Fig. 5.— Galaxy counts from the Hubble deep fields (HDF) and other surveys. The HDF galaxy counts (*solid symbols*) use isophotal magnitudes and have not been corrected for incompleteness. These corrections will tend to steepen the counts at the faint end, but in a model-dependent way. For the K -band, a color correction of -0.4 mag has been applied to the NICMOS F160W band magnitudes. The HDF-N counts from Thompson et al (1999) (*filled squares*) and the HDF-S counts from Fruchter et al. 2000 (*filled circles*) are shown. For the U, B and I bands, the HDF counts (*filled circles*) are the average of HDF-N (Williams et al. 1996) and HDF-S (this paper) with no color corrections. The groundbased counts are from Gardner et al. (1993; 1996; open triangles), Mcleod and Rieke (1995, three-pointed symbols), Huang et al. (1997, open squares), Minezaki et al. (1998, crosses), Postman et al. (1998, four-pointed stars), Bershadsky et al. (1998, open pentagons), Moustakas et al. (1997, five-pointed symbols), Djorgovski et al. (1995, five-pointed stars), and Lilly, Cowie & Gardner (1991, six-pointed symbols).

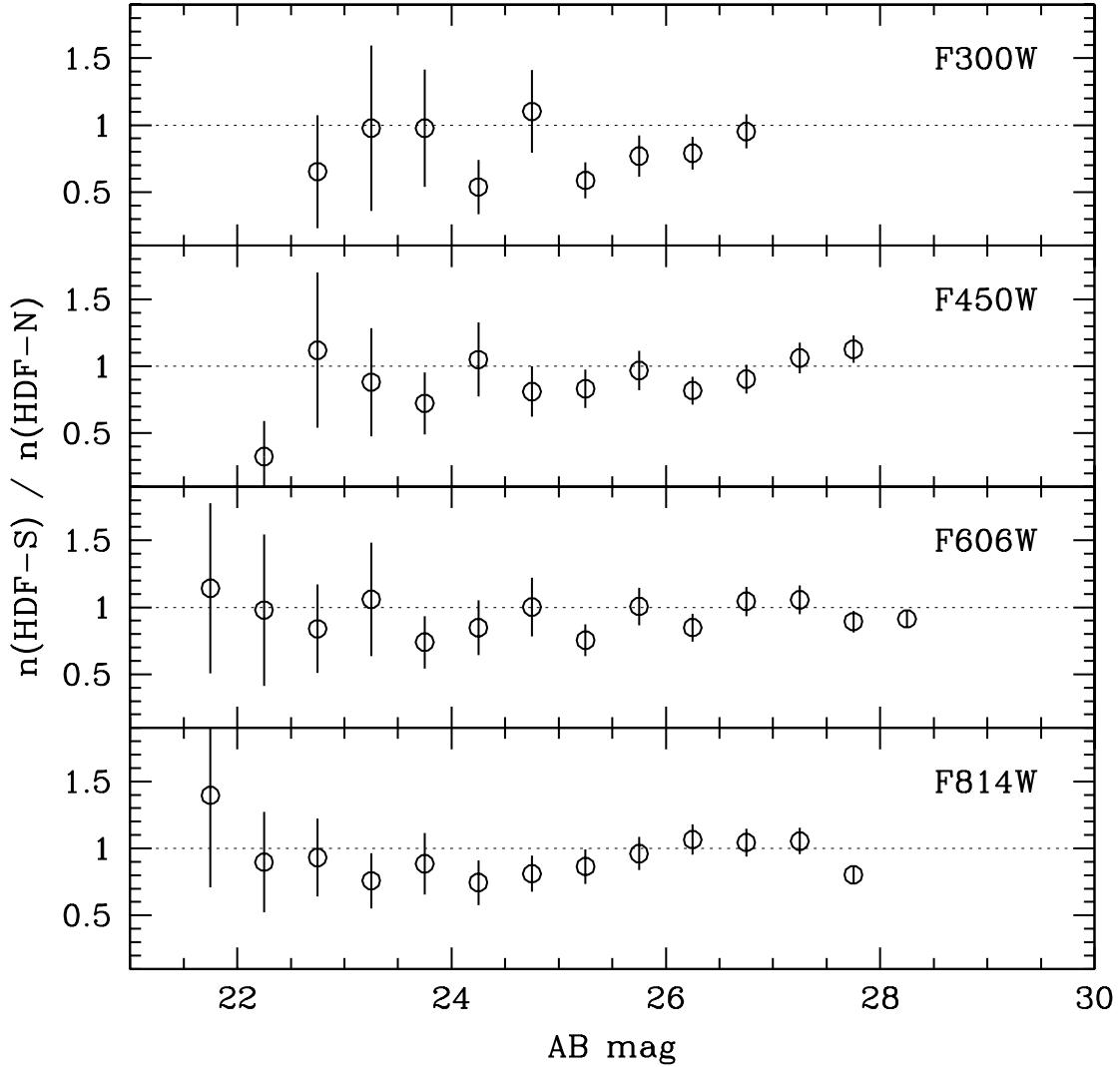


Fig. 6.— Ratio between number counts in HDF-S and HDF-N. The ratios are plotted down to roughly the 10σ limit for galaxy detection. The slight differences in the depth of the HDF-N and HDF-S images, and the slight variations in sensitivity across the field introduce significant corrections at fainter magnitudes, but these corrections are negligible to the limits shown.

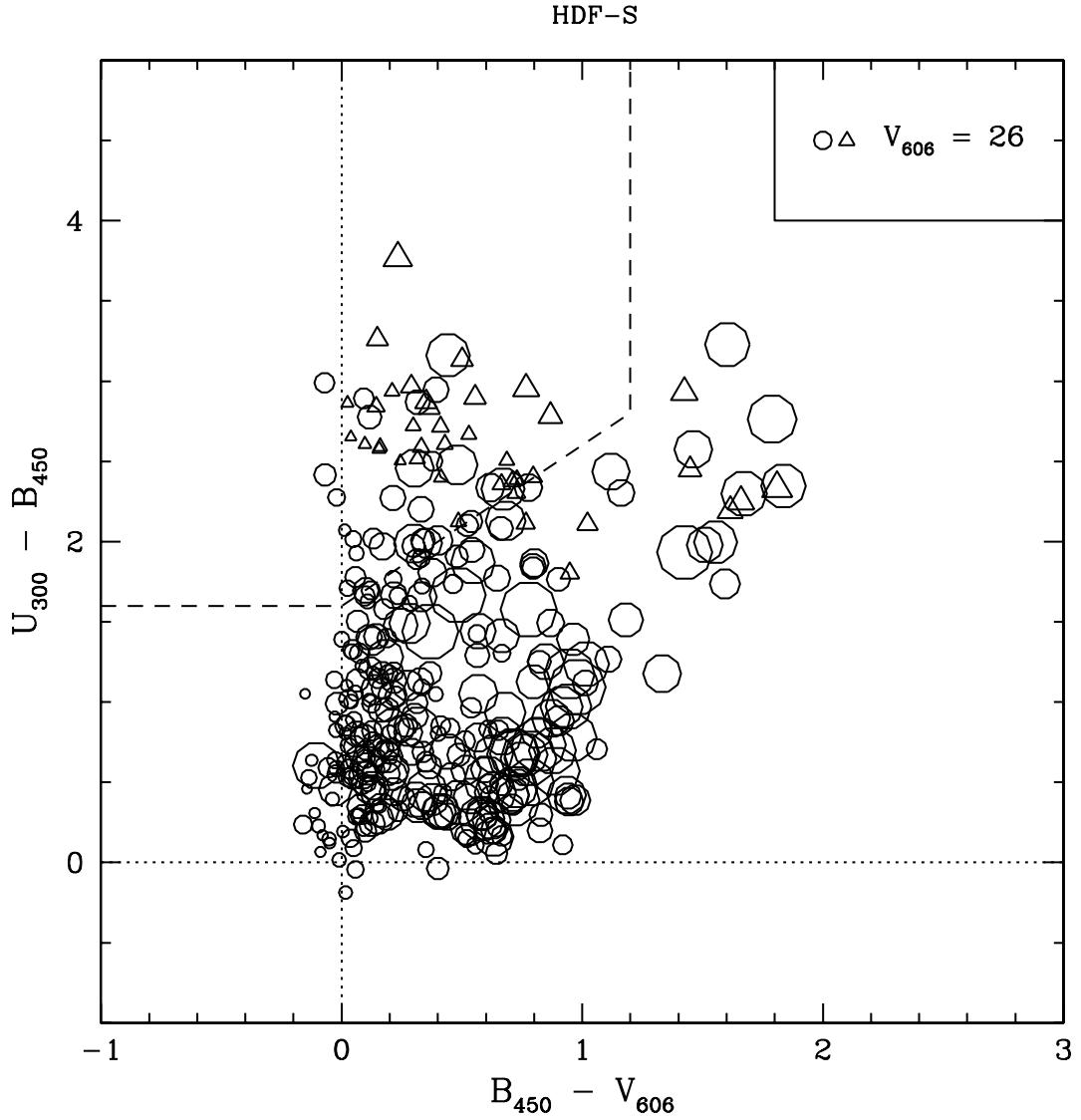


Fig. 7.— Color-color plot highlighting the candidate U-band dropouts (above dashed line) in HDF-S. Circles indicate measurements; triangles indicate non-detections in U_{300} , thus lower limits in the ordinate $U_{300} - B_{450}$. The size of the symbols scales with the magnitude in F814W.

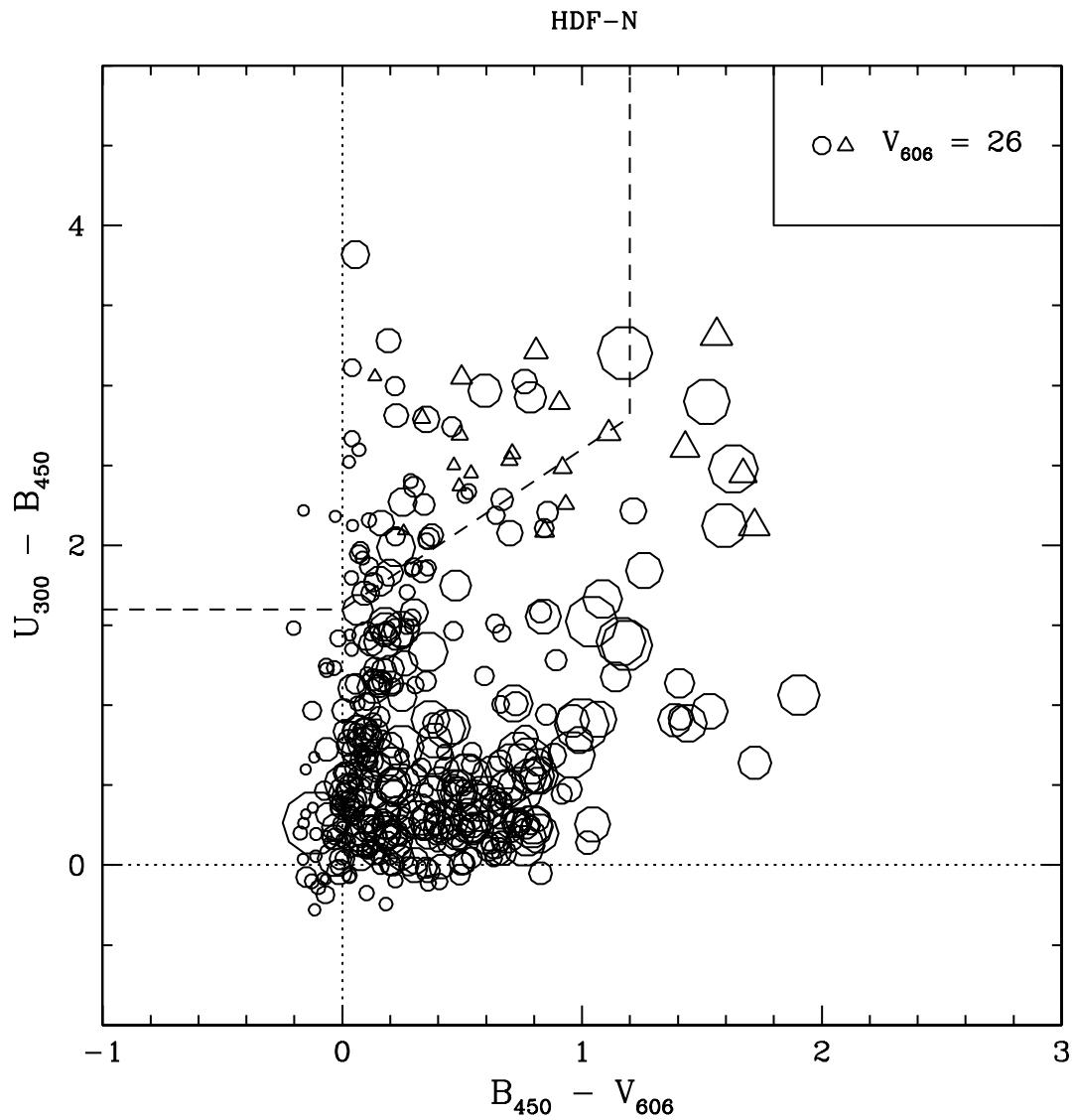


Fig. 8.— Same as Figure 7, but for HDF-N.

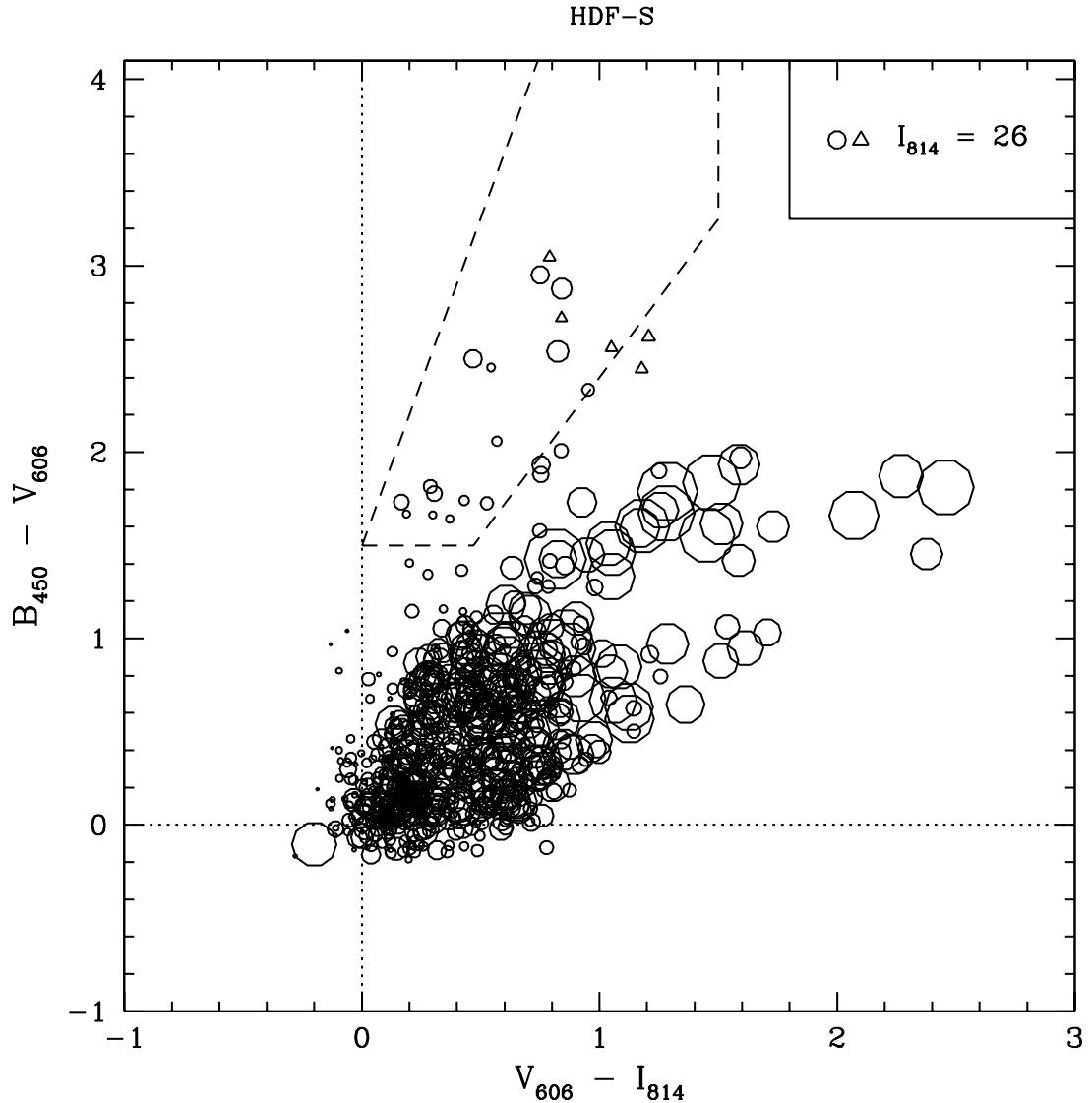


Fig. 9.— Color-color plot highlighting the candidate B-band dropouts in HDF-S (within the region bounded by the dashed line). Circles indicate measurements; triangles indicate non-detections in B_{450} , thus lower limits in the ordinate $B_{450} - V_{606}$. The size of the symbols scales with the magnitude in F814W.

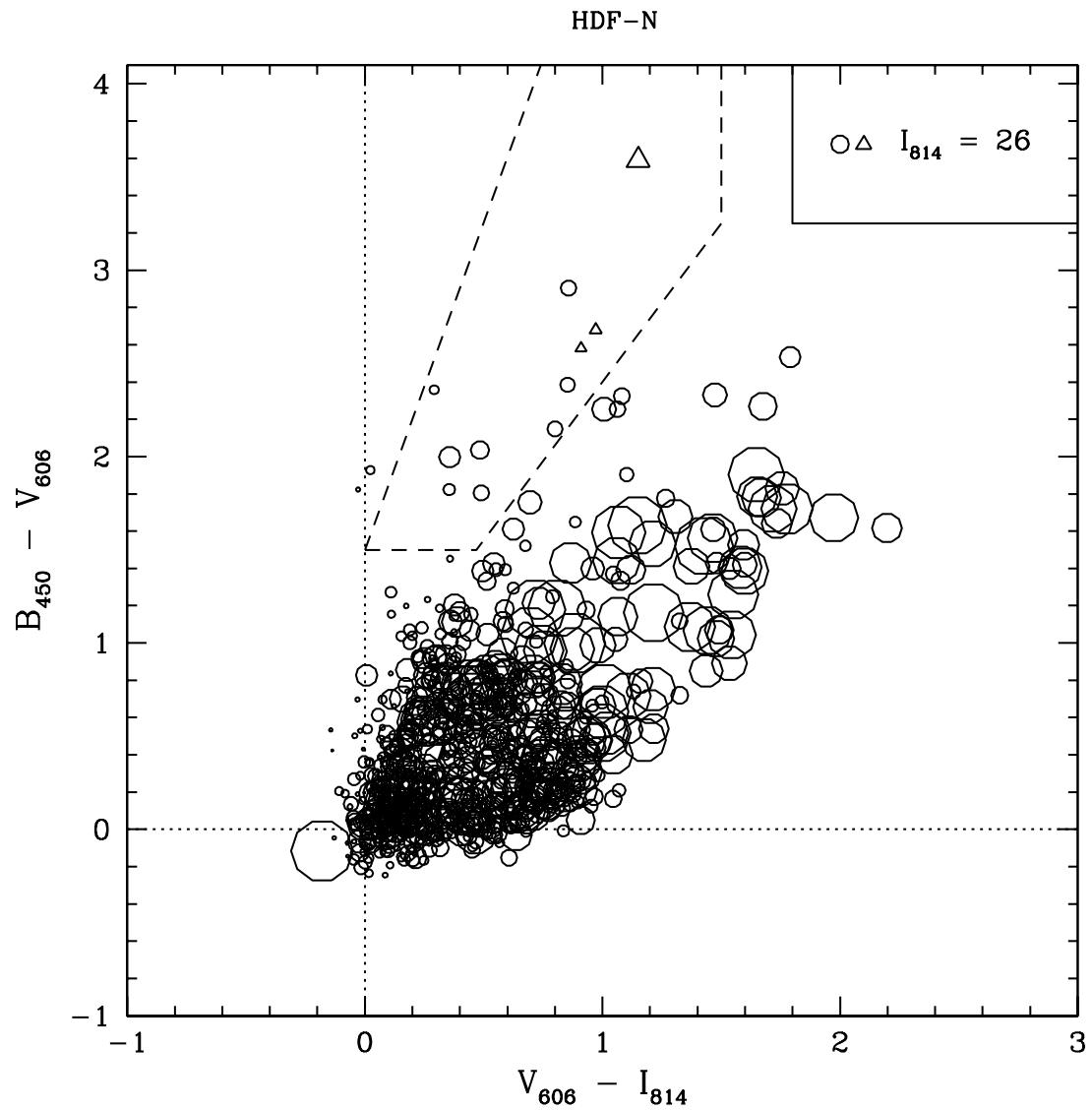


Fig. 10.— Same as Figure 9, but for HDF-N.

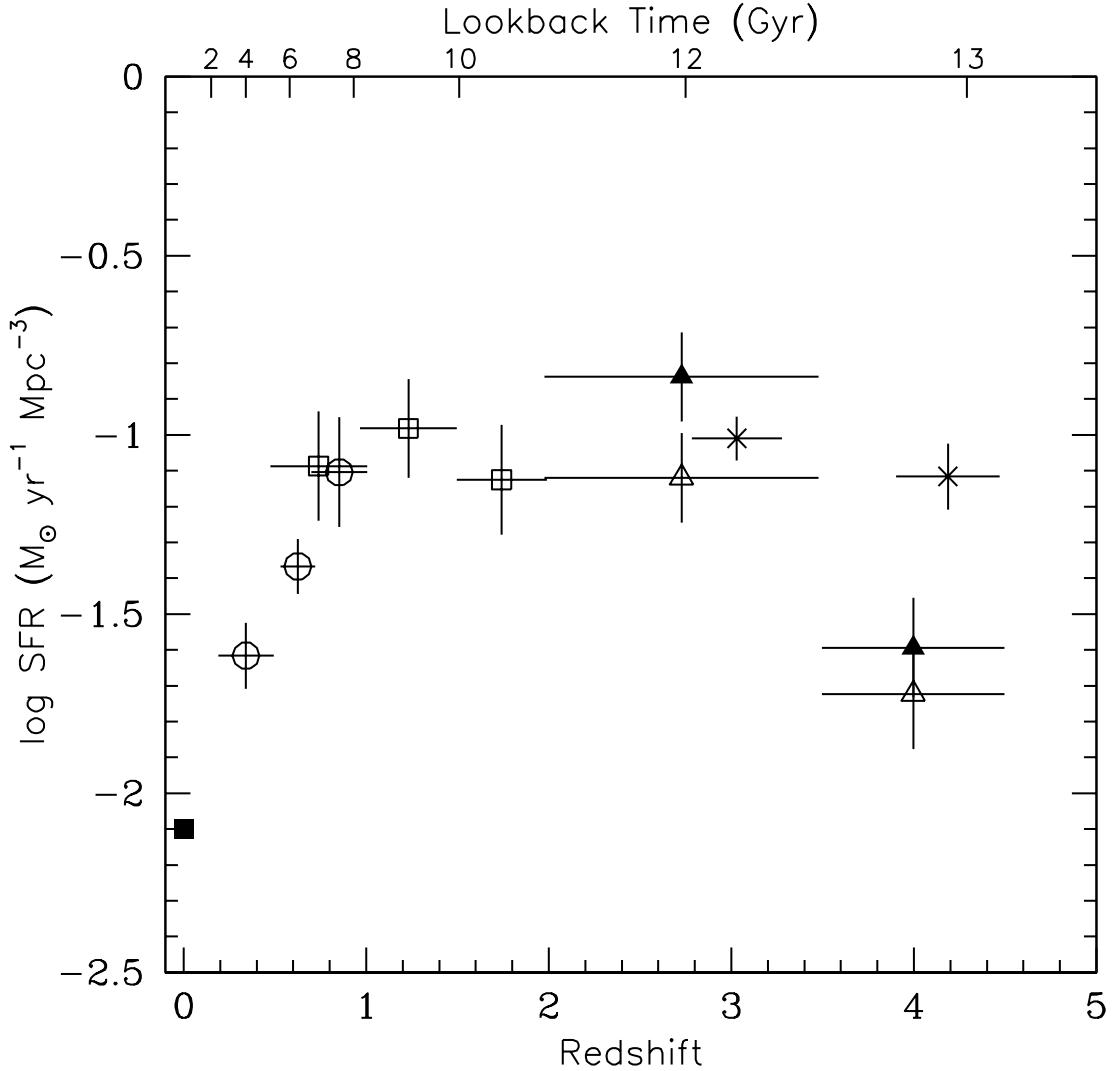


Fig. 11.— Star-formation rate density vs. redshift derived from ultraviolet luminosity density. The $z > 2$ points are from Lyman-break objects in the HDF-N (open triangles), in the HDF-S (filled triangles), and in the Steidel et al. (1999) ground-based survey (\times symbols). The luminosity density has been determined by integrating over the luminosity function and correcting for extinction following the prescription of Steidel et al. (1999). Distances and volumes are computed using the cosmological parameters $h, \Omega_m, \Omega_\Lambda, \Omega_{\text{tot}} = 0.65, 0.3, 0.7, 1.0$. Possible contributions from far-IR and sub-millimeter sources are not included. Also not included are the upward revisions of the $z < 1$ star-formation densities suggested by Tresse & Maddox (1998) and Cowie et al. (1999). For the lower-redshift points, the open squares are from HDF photometric redshifts by Connolly et al (1997), the open circles are from Lilly et al. (1996), the solid square is from the H α survey of Gallego et al. (1995), and the solid circle from Sullivan et al. (2000).

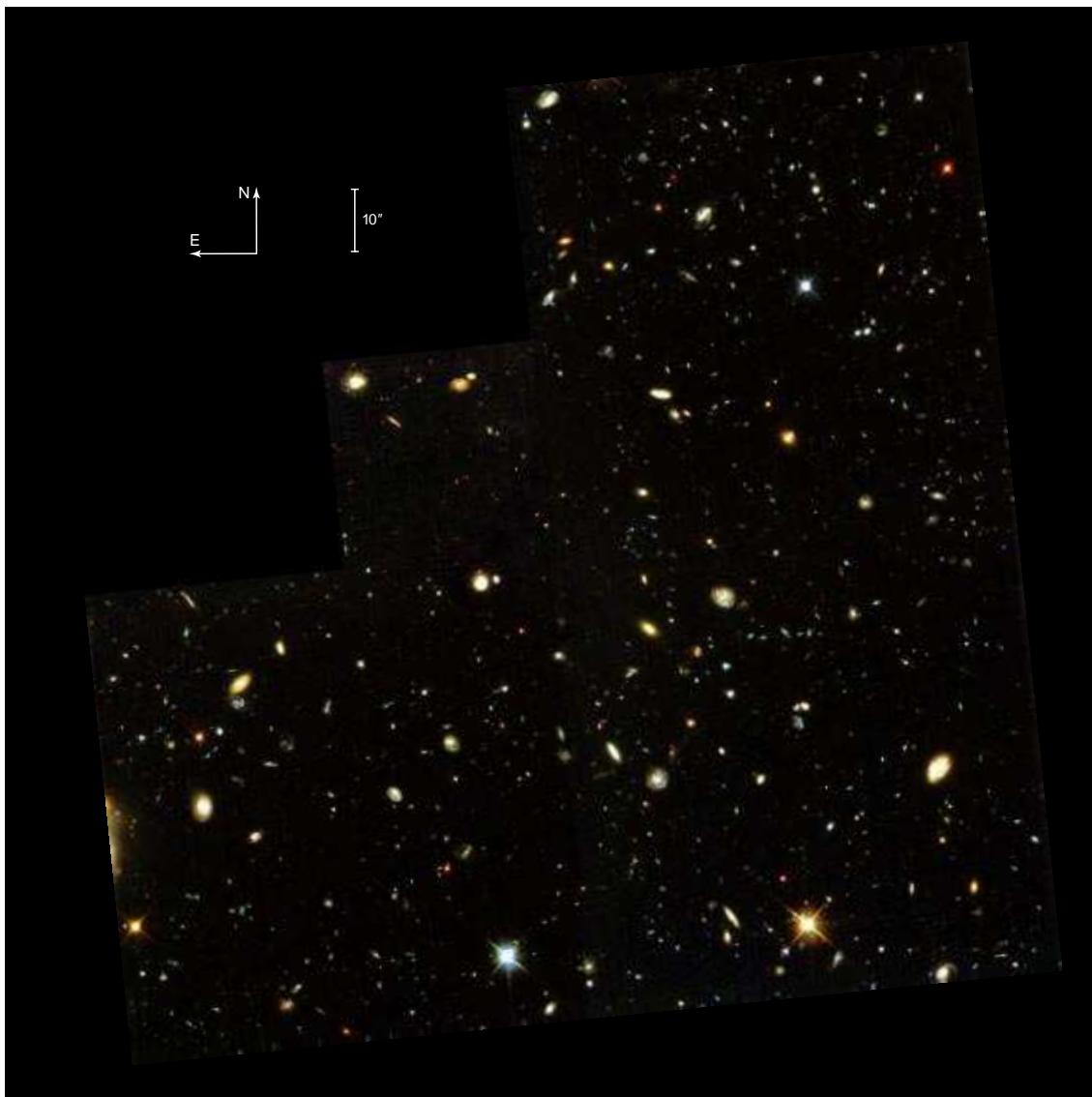


Fig. 12.— Three-color composite image of the WFPC2 field, using F450W as blue, F606W as green, and F814W as red.

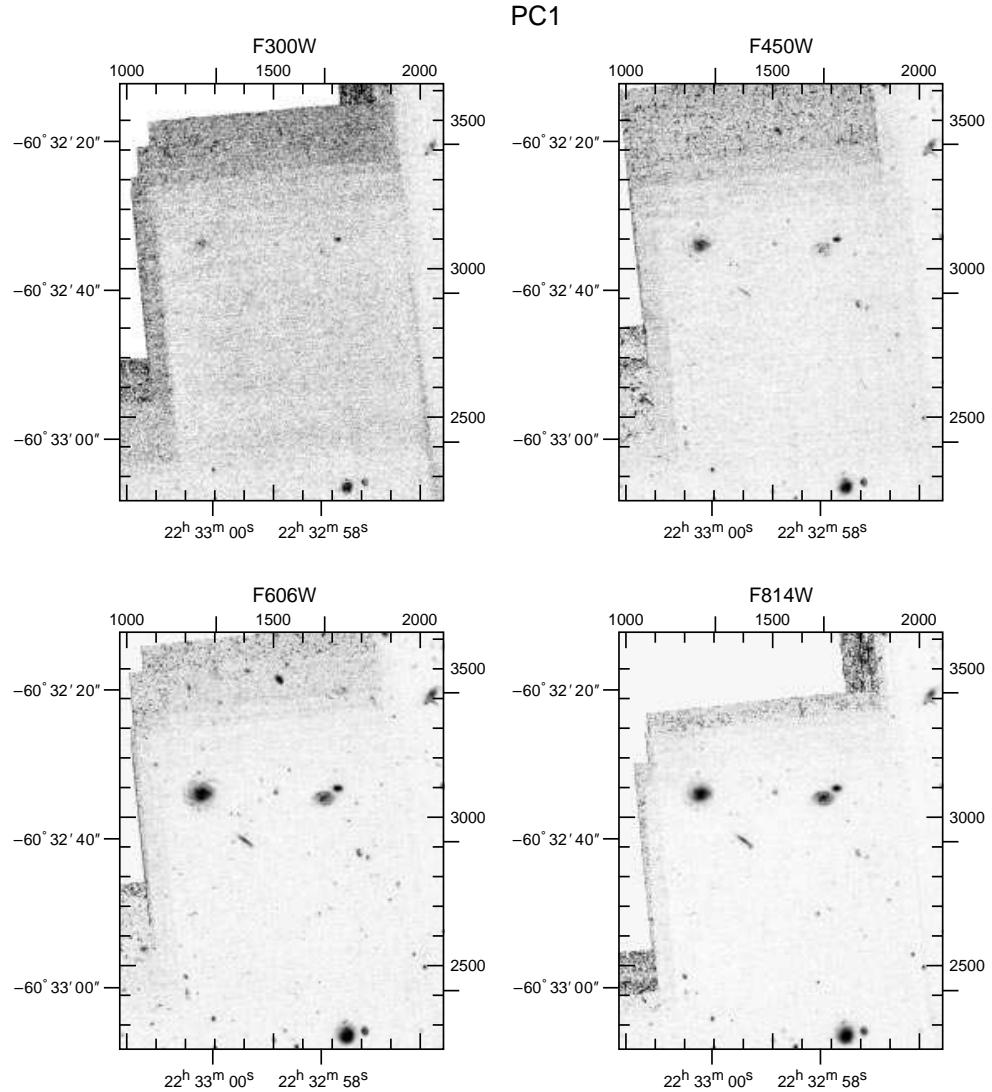


Fig. 13.— The NE quadrant of the WFPC2 field, roughly corresponding to the area covered by the Planetary Camera, in each of the four filters. The labels on the top and right of each panel (inner tickmarks) refer to pixel coordinates in the combined image; the labels on the bottom and left (outer tickmarks) to J2000 celestial coordinates.

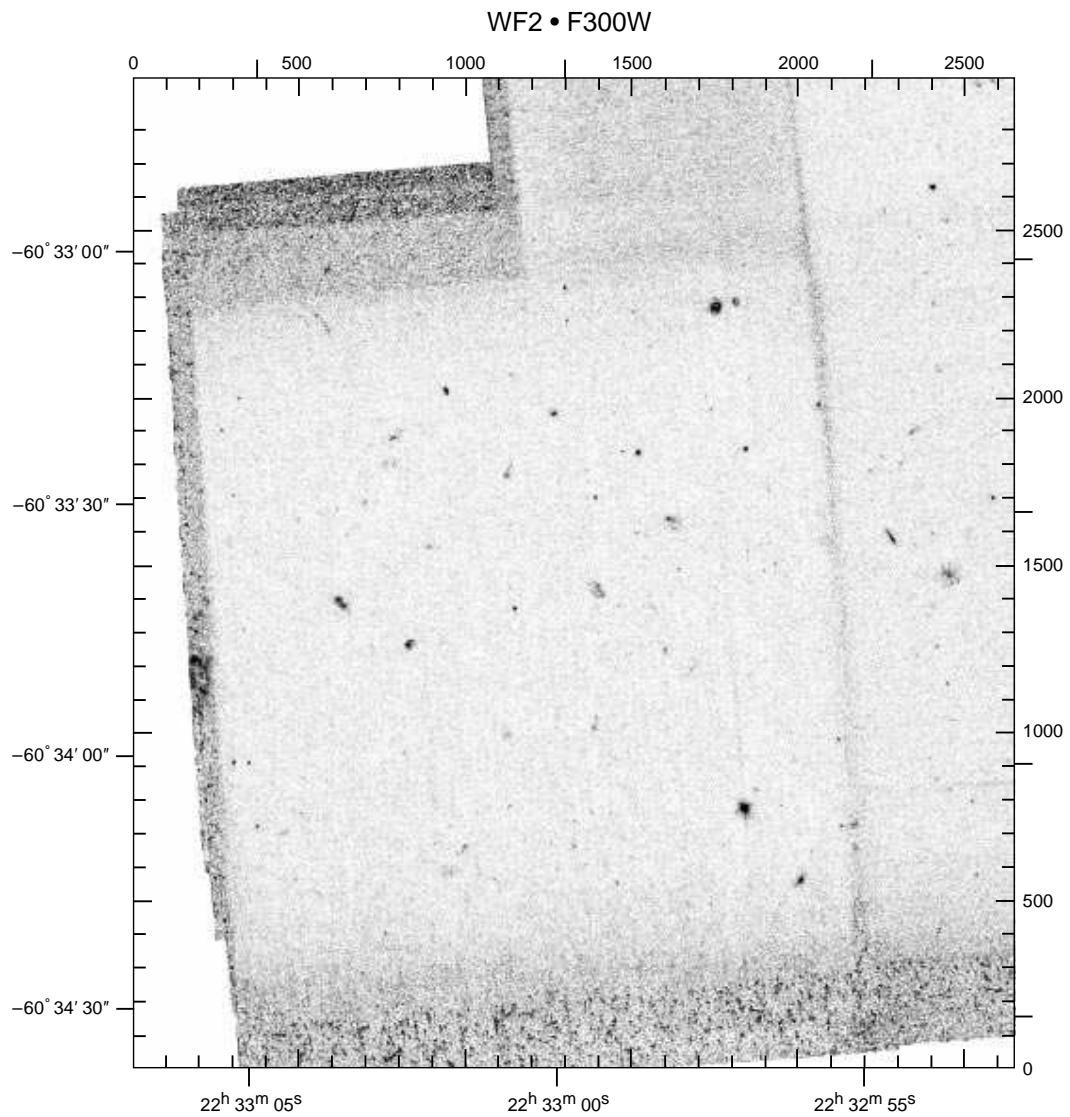


Fig. 14.— The SE quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 2, in F300W.

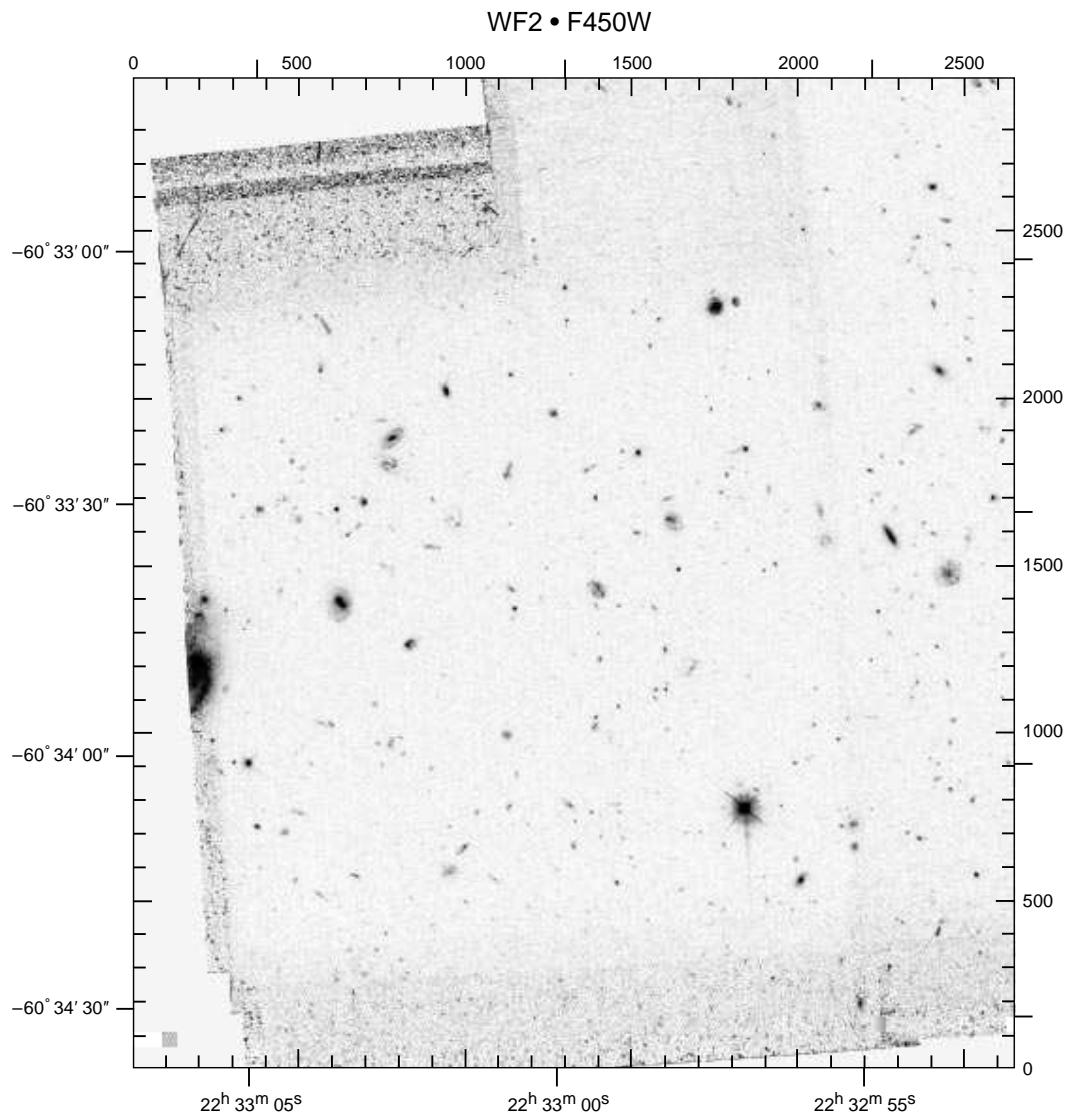


Fig. 15.— The SE quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 2, in F450W.

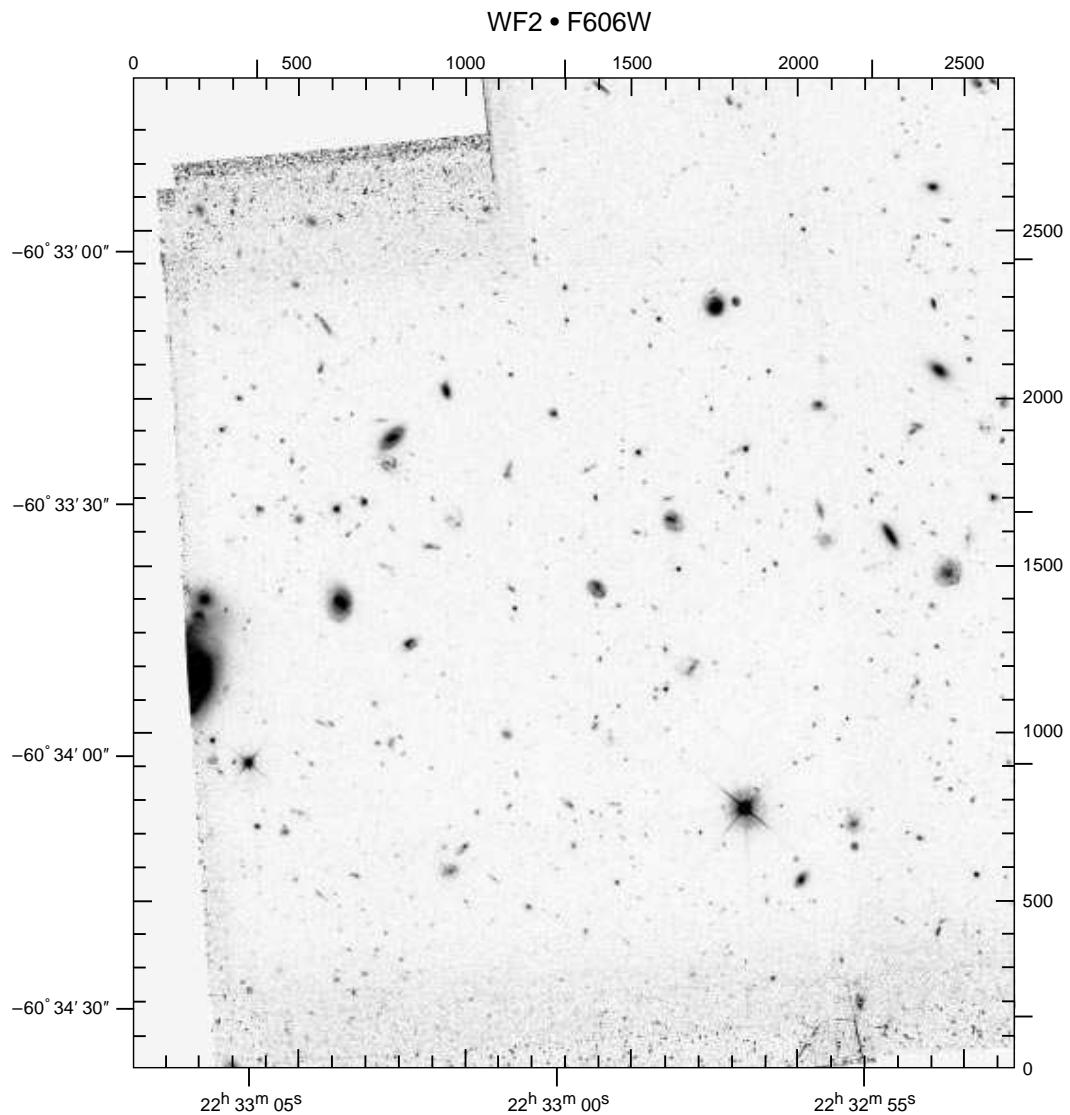


Fig. 16.— The SE quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 2, in F606W.

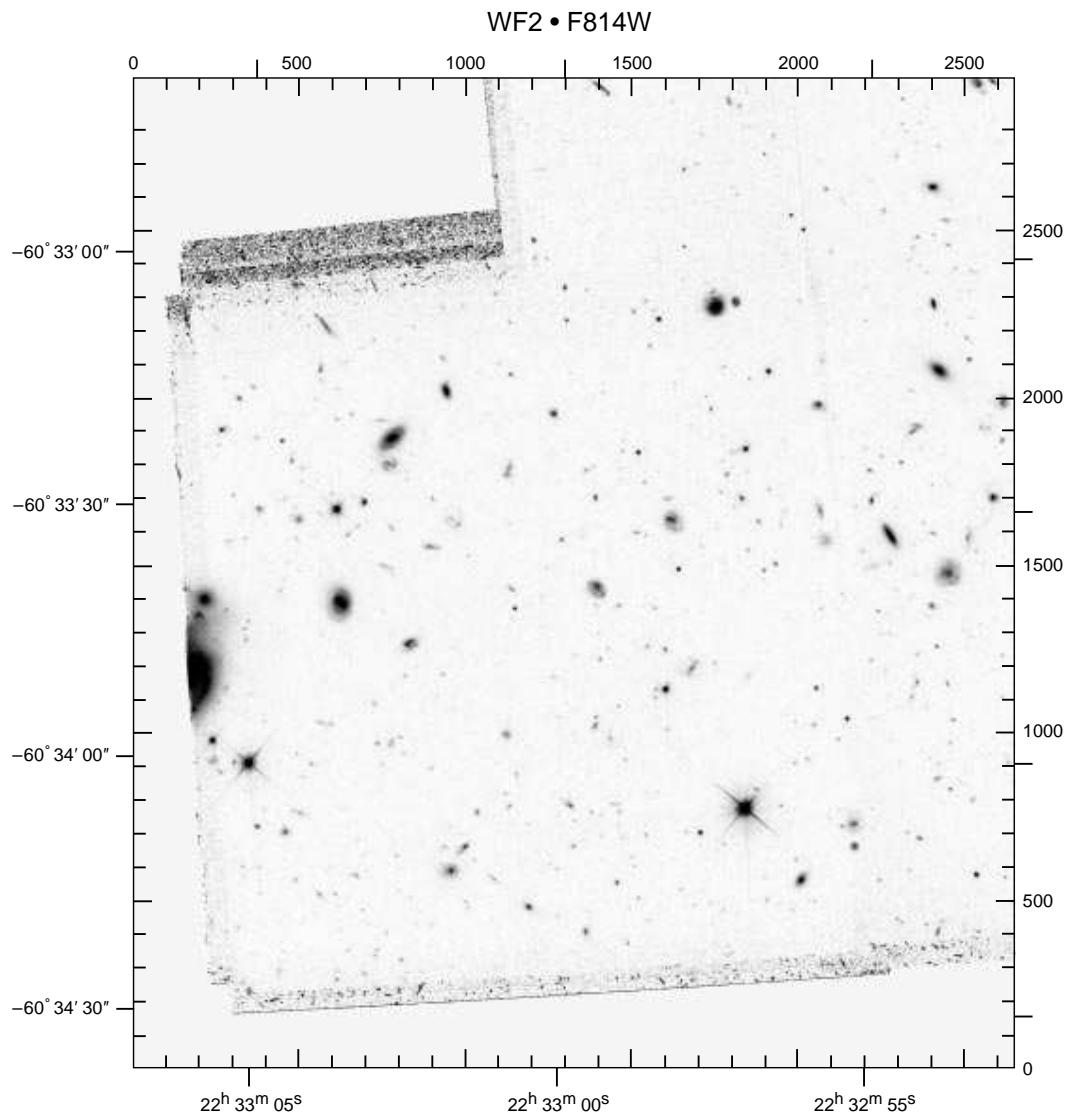


Fig. 17.— The SE quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 2, in F814W.

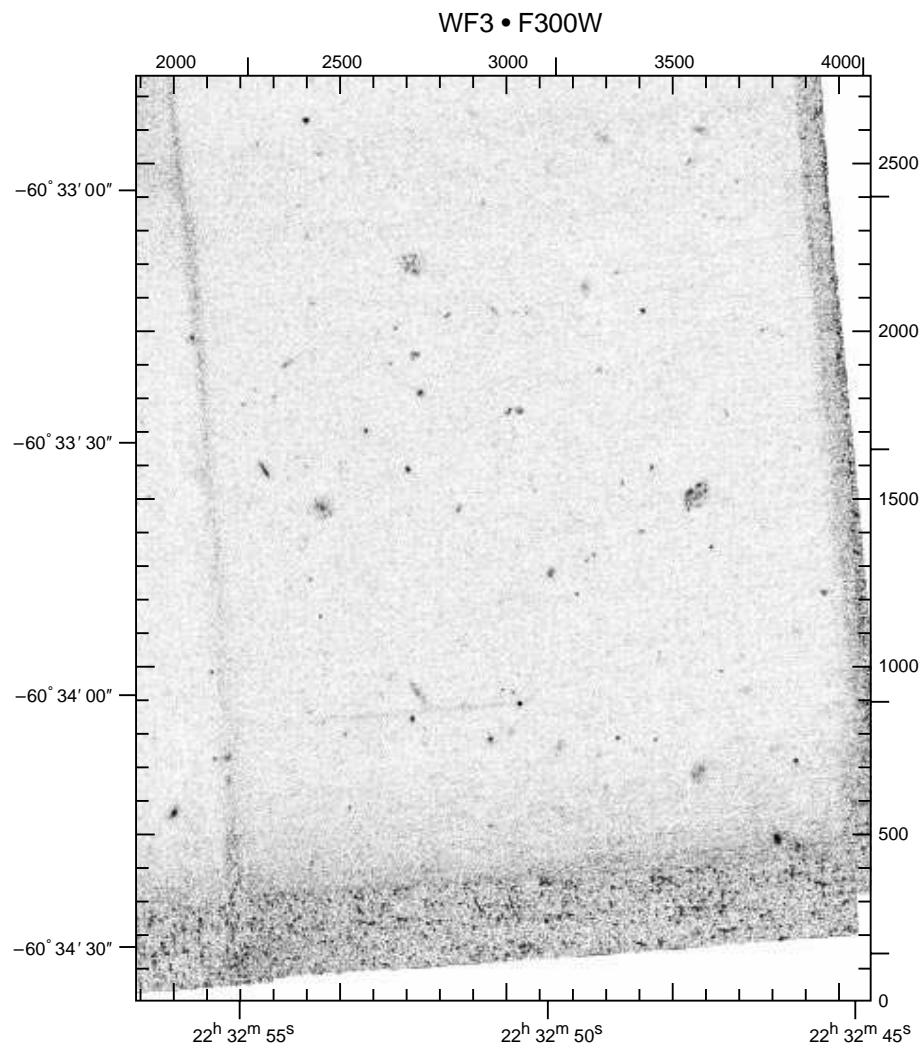


Fig. 18.— The SW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 3, in F300W.

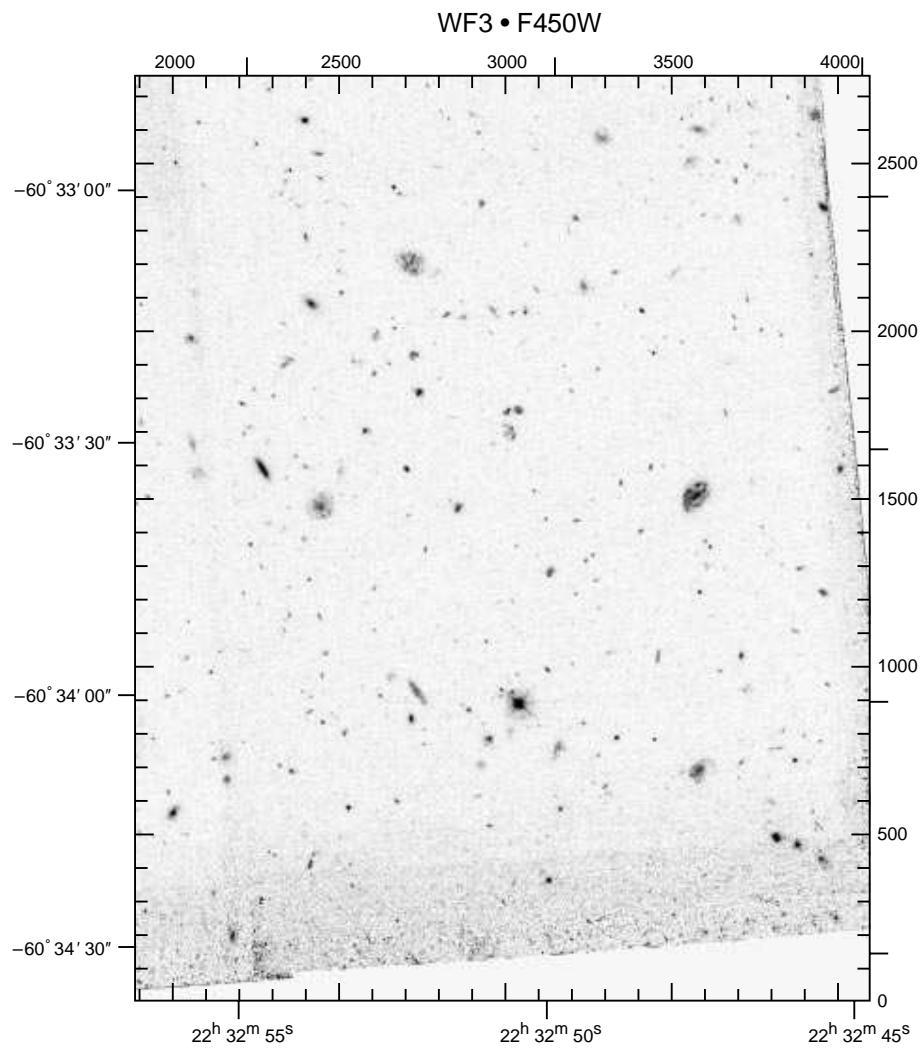


Fig. 19.— The SW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 3, in F450W.

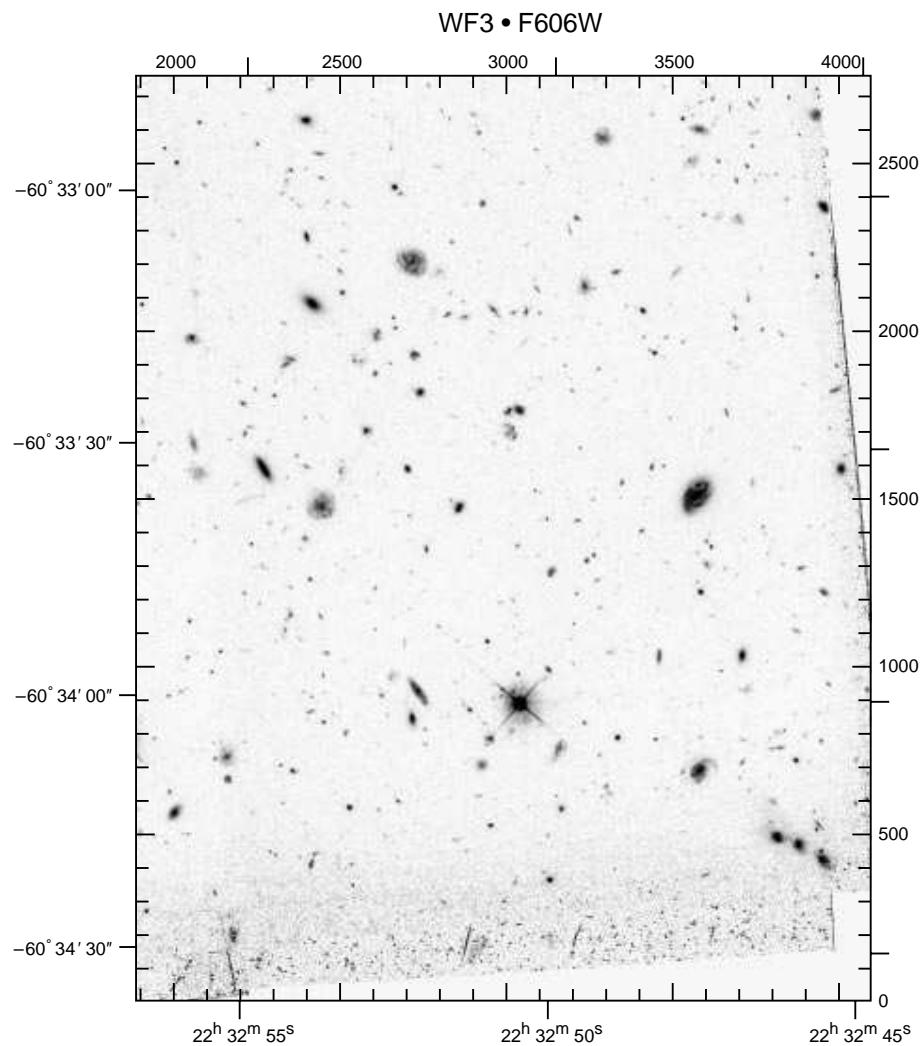


Fig. 20.— The SW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 3, in F606W.

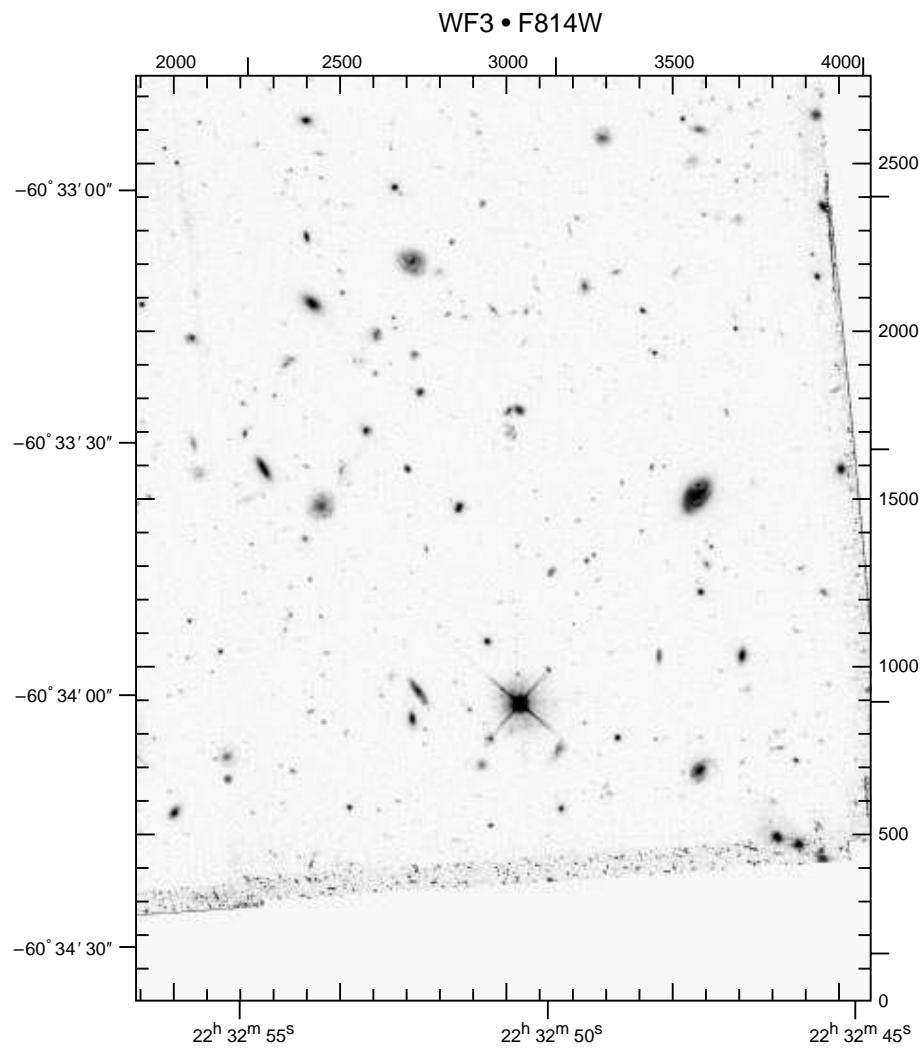


Fig. 21.— The SW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 3, in F814W.

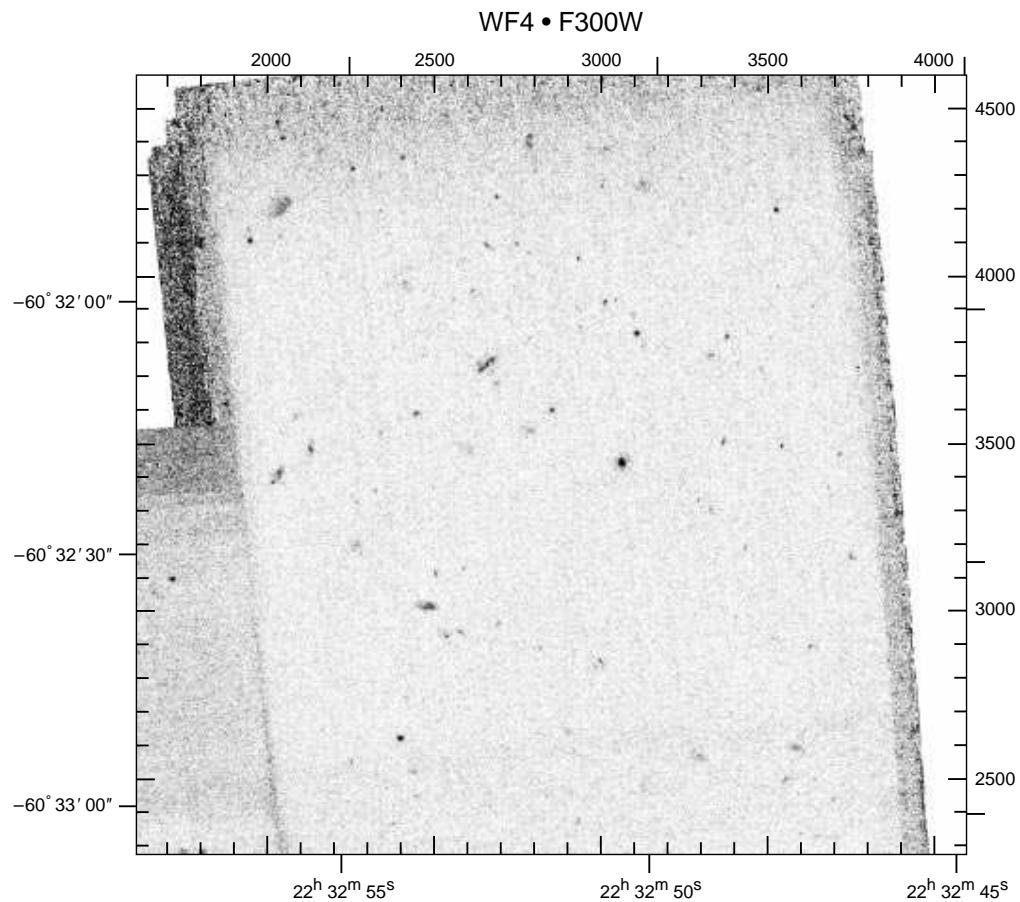


Fig. 22.— The NW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 4, in F300W.

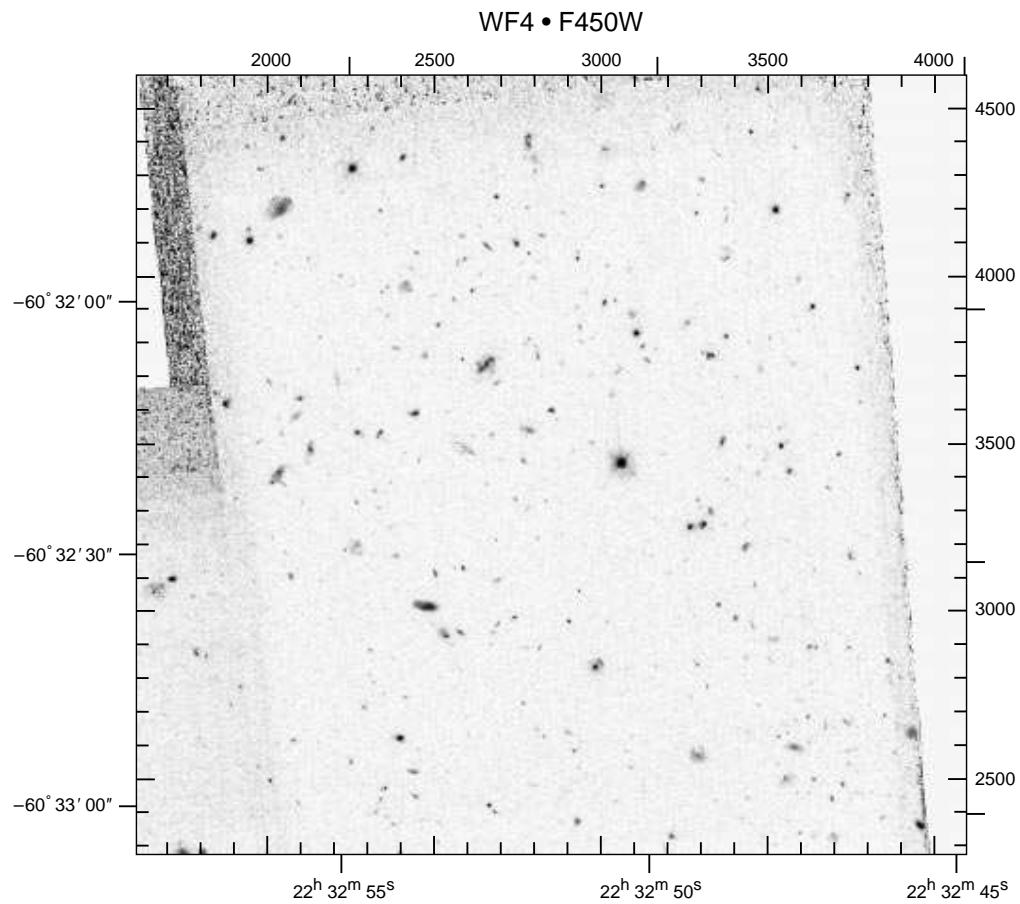


Fig. 23.— The NW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 4, in F450W.

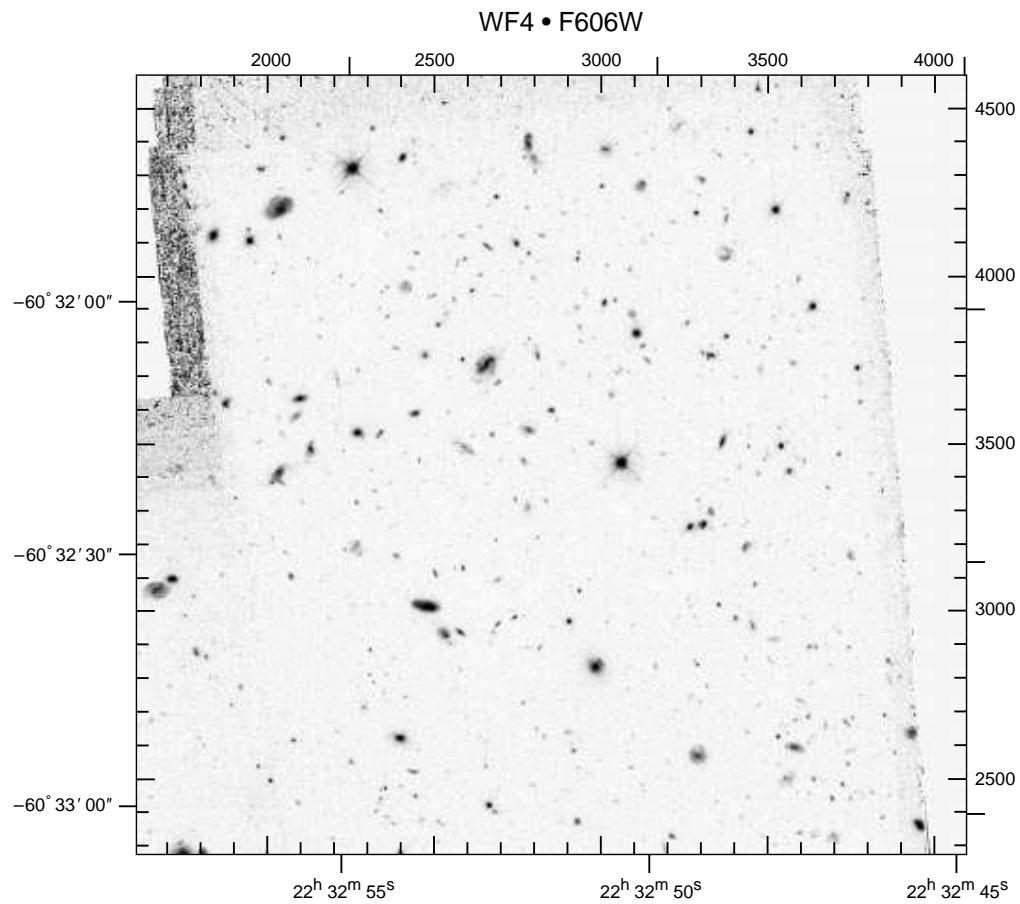


Fig. 24.— The NW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 4, in F606W.

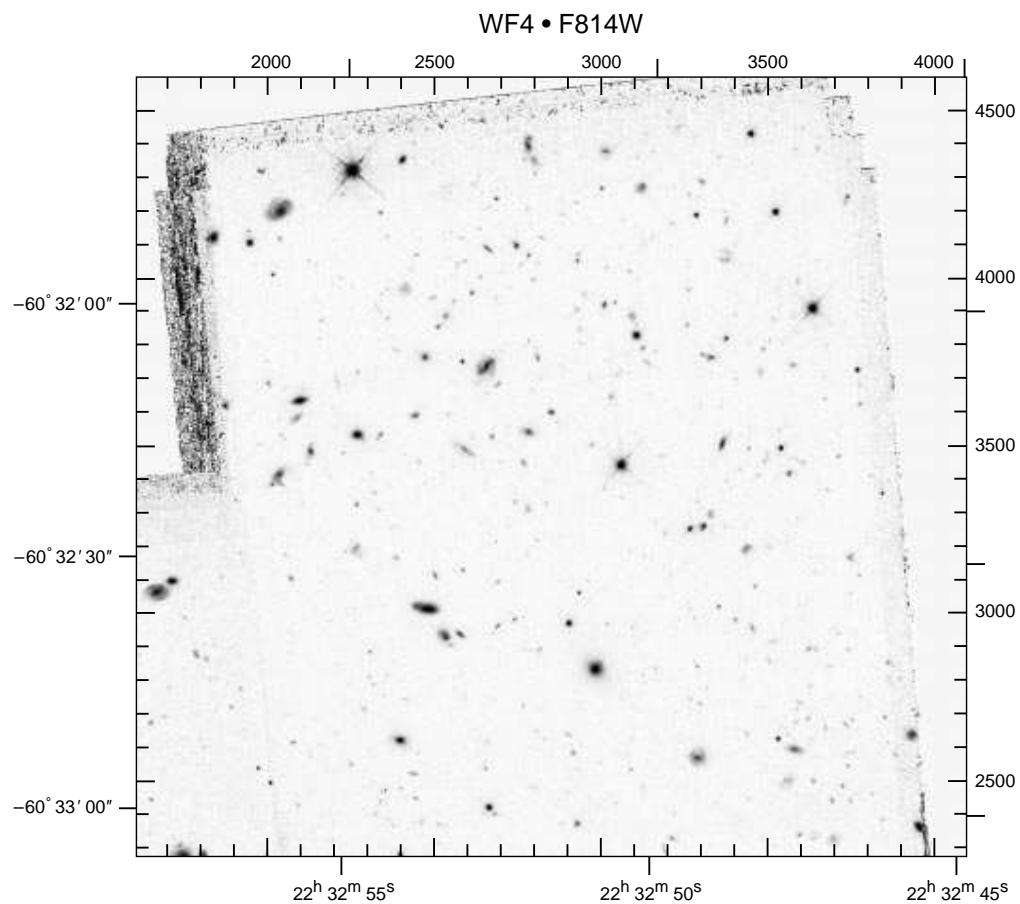


Fig. 25.— The NW quadrant of the WFPC2 field, roughly corresponding to the area covered by the Wide Field Camera 4, in F814W.

Table 1. WFPC2 exposures for HDF-S

Rootname	Start time (UT)	Filter	Exp time	RA ^a 22 32	Dec ^a -60	Roll ^b	Included? ^c	Flags ^d
U5350501R	09/28/98 01:39:14	F300W	900.000	55.670	33 09.369	229.652	yes	
U5350504R	09/28/98 03:10:14	F300W	900.000	55.643	33 11.877	229.653	yes	
U5350507R	09/28/98 04:46:14	F300W	900.000	55.615	33 14.385	229.653	yes	[3] a
U535050AR	09/28/98 06:23:14	F300W	1000.000	55.615	33 14.385	229.653	yes	
U5350601R	09/28/98 08:06:14	F300W	400.000	55.790	32 58.574	231.652	yes	
U5350603R	09/28/98 09:48:14	F300W	300.000	55.790	32 58.574	231.652	yes	
U5350806R	09/28/98 22:41:14	F300W	700.000	55.685	33 07.748	229.952	yes	
U5350809R	09/29/98 00:06:14	F300W	1000.000	55.656	33 10.255	229.952	yes	
U535080GR	09/29/98 01:42:14	F300W	1100.000	55.344	33 07.527	229.954	yes	
U5350903R	09/29/98 03:20:14	F300W	1000.000	55.383	33 03.716	230.654	yes	
U5350908R	09/29/98 04:56:14	F300W	1100.000	55.722	33 03.966	230.652	yes	
U535090DR	09/29/98 06:32:14	F300W	1000.000	56.062	33 04.216	230.651	yes	
U5351001R	09/29/98 08:17:14	F300W	300.000	55.656	33 10.255	229.952	yes	
U5351003R	09/29/98 10:00:14	F300W	300.000	55.626	33 12.761	229.953	yes	
U5351102R	09/29/98 16:43:14	F300W	2000.000	55.525	32 53.284	230.653	yes	
U5351103R	09/29/98 18:23:14	F300W	1700.000	55.864	32 53.535	230.652	yes	[3] a
U5351104R	09/29/98 19:25:14	F300W	300.000	55.724	33 03.968	230.652	yes	
U5351105R	09/29/98 20:02:14	F300W	1800.000	55.864	32 53.535	230.652	yes	
U5351106R	09/29/98 21:02:14	F300W	350.000	55.724	33 03.968	230.652	yes	[1] a
U5351201R	09/29/98 22:52:14	F300W	500.000	56.107	33 00.470	231.351	yes	
U5351203R	09/30/98 00:15:14	F300W	1300.000	55.391	33 02.409	231.353	yes	
U5351205R	09/30/98 01:51:14	F300W	1400.000	55.721	33 02.683	231.352	yes	
U5351301R	09/30/98 03:42:14	F300W	900.000	55.740	33 01.064	231.652	yes	[1] b
U5351303R	09/30/98 05:05:14	F300W	1400.000	55.797	33 01.113	231.652	yes	
U5351305R	09/30/98 06:42:14	F300W	2000.000	55.747	33 01.069	231.652	yes	
U5351401R	09/30/98 08:29:14	F300W	300.000	55.769	33 00.191	231.352	yes	
U5351403R	09/30/98 10:12:14	F300W	300.000	55.769	33 00.191	231.352	yes	
U5351504R	09/30/98 19:33:14	F300W	400.000	55.751	33 01.073	231.652	yes	[4] b
U5351506R	09/30/98 21:09:14	F300W	1000.000	55.751	33 01.073	231.652	yes	[1] b
U53Q1701R	10/01/98 01:59:14	F300W	1200.000	55.667	33 10.262	229.952	yes	[1] b
U53Q1703R	10/01/98 03:35:14	F300W	1700.000	55.645	33 10.247	229.952	yes	
U53Q1705R	10/01/98 05:12:14	F300W	1700.000	55.702	33 10.284	229.952	yes	
U53Q1801R	10/01/98 06:58:14	F300W	700.000	55.643	33 11.877	229.653	yes	
U53Q1803R	10/01/98 08:42:14	F300W	300.000	55.643	33 11.877	229.653	yes	
U53Q1805R	10/01/98 10:24:14	F300W	300.000	55.670	33 09.369	229.652	yes	
U53Q1901R	10/01/98 13:45:14	F300W	2400.000	56.148	32 57.522	229.951	yes	
U53Q1904R	10/01/98 18:01:14	F300W	500.000	55.656	33 10.255	229.952	yes	
U53Q1905R	10/01/98 18:45:14	F300W	1900.000	55.500	33 23.204	229.953	yes	
U53Q1906R	10/01/98 19:37:14	F300W	900.000	55.656	33 10.255	229.952	yes	
U53Q2001R	10/01/98 21:23:14	F300W	1400.000	55.737	33 06.505	230.652	yes	
U53Q2003R	10/01/98 22:51:14	F300W	2400.000	55.686	33 06.468	230.652	yes	
U53Q2005R	10/02/98 00:19:14	F300W	2000.000	55.686	33 06.468	230.652	yes	
U53Q2101R	10/02/98 02:12:14	F300W	1500.000	55.696	33 02.662	231.352	yes	
U53Q2103R	10/02/98 03:31:14	F300W	2400.000	55.743	33 02.701	231.352	yes	
U53Q2105M	10/02/98 05:05:14	F300W	2700.000	55.743	33 02.701	231.352	no	H [3] b
U53Q2201R	10/02/98 07:16:14	F300W	600.000	55.691	33 06.471	230.652	yes	
U53Q2203R	10/02/98 08:54:14	F300W	400.000	55.691	33 06.471	230.652	yes	
U53Q2205R	10/02/98 10:36:14	F300W	300.000	55.691	33 06.471	230.652	yes	
U53Q2303R	10/02/98 16:20:14	F300W	1000.000	55.694	33 05.192	231.352	yes	
U53Q2305R	10/02/98 18:02:14	F300W	1000.000	55.694	33 05.192	231.352	yes	[3] c
U52Z2402R	10/02/98 21:17:14	F300W	2300.000	55.740	33 01.064	231.652	yes	
U52ZZ2404R	10/02/98 22:53:14	F300W	2000.000	55.797	33 01.113	231.652	yes	[2] b
U52ZZ2501R	10/03/98 00:46:14	F300W	1800.000	55.638	33 11.874	229.653	yes	
U52ZZ2503R	10/03/98 02:10:14	F300W	2100.000	55.638	33 11.874	229.653	yes	[1] b
U52ZZ2601R	10/03/98 05:46:14	F300W	1100.000	55.712	33 03.572	231.652	yes	
U52ZZ2603R	10/03/98 07:23:14	F300W	800.000	55.751	33 01.073	231.652	yes	
U52ZZ2605R	10/03/98 09:06:14	F300W	300.000	55.712	33 03.572	231.652	yes	
U52ZZ2606R	10/03/98 09:21:14	F300W	2100.000	55.544	33 13.983	231.653	yes	
U52ZZ2607R	10/03/98 10:56:14	F300W	2100.000	55.882	33 14.276	231.652	yes	
U52ZZ2704R	10/03/98 16:35:14	F300W	800.000	55.330	33 09.166	229.654	no	J; [2,3] d
U52ZZ2802R	10/03/98 19:49:14	F300W	2147.000	55.667	33 10.262	229.952	no	e
U52ZZ2804R	10/03/98 21:26:14	F300W	2300.000	55.645	33 10.247	229.952	yes	
U52ZZ2901R	10/03/98 23:16:14	F300W	1500.000	55.679	33 06.463	230.652	yes	
U52ZZ2903R	10/04/98 00:40:14	F300W	2600.000	55.737	33 06.505	230.652	yes	[1] b
U52ZZ2905R	10/04/98 02:16:14	F300W	2144.000	55.686	33 06.468	230.652	no	e
U52ZZ2907R	10/04/98 03:53:14	F300W	2300.000	55.686	33 06.468	230.652	yes	
U52ZZ3001R	10/04/98 06:00:14	F300W	900.000	55.685	33 07.748	229.952	yes	[3] b, [4] a
U52ZZ3003R	10/04/98 07:35:14	F300W	700.000	55.685	33 07.748	229.952	yes	
U52ZZ3005R	10/04/98 09:18:14	F300W	400.000	55.685	33 07.748	229.952	yes	
U52ZZ3104R	10/04/98 16:46:14	F300W	600.000	55.691	33 06.471	230.652	yes	
U52ZZ3106R	10/04/98 18:28:14	F300W	600.000	55.691	33 06.471	230.652	yes	
U4YF3202R	10/04/98 20:10:14	F300W	2300.000	55.696	33 02.662	231.352	yes	
U4YF3204R	10/04/98 21:42:14	F300W	2135.000	55.743	33 02.701	231.352	yes	e; [3] b
U4YF3302R	10/05/98 02:32:14	F300W	2300.000	55.797	33 01.113	231.652	yes	[4] b
U4YF3401R	10/05/98 04:21:14	F300W	1500.000	55.732	33 02.692	231.352	yes	
U4YF3403R	10/05/98 06:05:14	F300W	1200.000	55.694	33 05.192	231.352	yes	
U4YF3405R	10/05/98 07:48:14	F300W	700.000	55.769	33 00.191	231.352	yes	
U4YF3407R	10/05/98 09:29:14	F300W	500.000	55.732	33 02.692	231.352	yes	

Table 1—Continued

Rootname	Start time (UT)	Filter	Exp time	RA ^a 22 32	Dec ^a -60	Roll ^b	Included? ^c	Flags ^d
U4YF3801R	10/06/98 04:42:14	F300W	1300.000	55.615	33 14.385	229.653	yes	[3] b
U4YF3803R	10/06/98 06:17:14	F300W	1200.000	55.615	33 14.385	229.653	yes	[3] b
U52F4002R	10/06/98 18:50:14	F300W	2400.000	55.350	33 06.220	230.654	yes	d, f
U52F4004R	10/06/98 20:22:14	F300W	2700.000	55.723	33 03.967	230.652	yes	f
U52F4101R	10/06/98 22:21:14	F300W	1500.000	55.694	33 05.192	231.352	yes	f
U52F4103R	10/06/98 23:43:14	F300W	2100.000	55.769	33 00.191	231.352	yes	f
U52F4105R	10/07/98 01:09:14	F300W	2800.000	55.732	33 02.692	231.352	yes	f
U52F4107R	10/07/98 02:47:14	F300W	2700.000	55.694	33 05.192	231.352	yes	f
U52F4201R	10/07/98 04:46:14	F300W	1500.000	55.691	33 06.471	230.652	yes	f
U52F4203R	10/07/98 06:29:14	F300W	1200.000	55.657	33 08.975	230.653	yes	f
U52F4205R	10/07/98 08:11:14	F300W	900.000	55.657	33 08.975	230.653	yes	f
U52F4206R	10/07/98 08:37:14	F300W	1800.000	55.174	33 19.155	230.654	yes	
U52F4207R	10/07/98 09:52:14	F300W	600.000	55.724	33 03.968	230.652	yes	f
U52F4304R	10/07/98 17:24:14	F300W	600.000	55.694	33 05.192	231.352	yes	
U52F4401R	10/07/98 21:52:14	F300W	2400.000	55.750	33 01.072	231.652	yes	
U52F4404R	10/07/98 23:53:14	F300W	1200.000	56.089	33 01.366	231.651	yes	
U52F4702R	10/08/98 17:36:14	F300W	900.000	55.664	33 09.173	230.153	yes	
U52F4704R	10/08/98 19:10:14	F300W	900.000	55.664	33 09.173	230.153	yes	
U52F4706R	10/08/98 20:51:14	F300W	900.000	55.664	33 09.173	230.153	yes	
U52F4708R	10/08/98 22:28:14	F300W	900.000	55.664	33 09.173	230.153	yes	
U52F470AR	10/09/98 00:05:14	F300W	900.000	55.664	33 09.173	230.153	yes	[3] b
U52F470CR	10/09/98 01:42:14	F300W	900.000	55.664	33 09.173	230.153	yes	
U5350502R	09/28/98 02:04:14	F450W	1500.000	55.643	33 11.877	229.653	yes	[1] b
U5350505R	09/28/98 03:33:14	F450W	1500.000	55.643	33 11.877	229.653	yes	[1] b
U5350508R	09/28/98 05:09:14	F450W	1500.000	55.615	33 14.385	229.653	yes	
U5350709R	09/28/98 21:30:14	F450W	1500.000	55.632	33 11.870	229.653	yes	
U5350807R	09/28/98 23:03:14	F450W	1700.000	55.685	33 07.748	229.952	yes	
U535080AR	09/29/98 00:28:14	F450W	2300.000	55.656	33 10.255	229.952	yes	[3] a
U535080HR	09/29/98 02:08:14	F450W	2300.000	55.344	33 07.527	229.954	yes	
U5350904R	09/29/98 03:45:14	F450W	2000.000	55.722	33 03.966	230.652	yes	
U5351202R	09/29/98 23:08:14	F450W	2300.000	55.391	33 02.409	231.353	yes	[1] a
U5351204R	09/30/98 00:43:14	F450W	2400.000	55.391	33 02.409	231.353	yes	
U5351501R	09/30/98 15:14:14	F450W	2100.000	56.040	33 03.855	231.651	yes	
U5351502R	09/30/98 16:54:14	F450W	2000.000	55.442	32 58.273	231.653	yes	
U5351503R	09/30/98 18:34:14	F450W	2000.000	55.442	32 58.273	231.653	yes	
U5351505R	09/30/98 20:12:14	F450W	1700.000	55.780	32 58.565	231.652	yes	
U53Q1806R	10/01/98 10:39:14	F450W	2000.000	56.000	33 09.568	229.651	yes	
U53Q1807R	10/01/98 12:05:14	F450W	2700.000	55.292	33 11.665	229.654	yes	
U53Q1902R	10/01/98 15:25:14	F450W	2400.000	55.160	33 22.984	229.954	yes	
U53Q1903R	10/01/98 17:05:14	F450W	2400.000	55.160	33 22.984	229.954	yes	
U53Q2106R	10/02/98 05:58:14	F450W	1100.000	55.721	33 02.683	231.352	yes	
U53Q2202R	10/02/98 07:35:14	F450W	2000.000	55.680	33 06.464	230.652	yes	
U53Q2204R	10/02/98 09:10:14	F450W	2200.000	55.680	33 06.464	230.652	yes	
U53Q2206R	10/02/98 10:51:14	F450W	2100.000	56.020	33 06.712	230.651	yes	
U52Z2502R	10/03/98 01:25:14	F450W	2200.000	55.638	33 11.874	229.653	yes	
U52Z2504R	10/03/98 02:54:14	F450W	2400.000	55.607	33 11.855	229.653	yes	
U52Z2506R	10/03/98 04:33:14	F450W	1900.000	55.607	33 11.855	229.653	yes	
U52Z2602R	10/03/98 06:13:14	F450W	1700.000	56.040	33 03.855	231.651	yes	
U52Z2702R	10/03/98 14:07:14	F450W	2500.000	55.446	32 58.713	229.653	yes	
U52Z2803R	10/03/98 20:37:14	F450W	2300.000	55.667	33 10.262	229.952	yes	
U52Z2805R	10/03/98 22:14:14	F450W	2000.000	55.645	33 10.247	229.952	yes	[1] b
U52Z2902R	10/03/98 23:52:14	F450W	2300.000	55.737	33 06.505	230.652	yes	[1] b
U52Z2904M	10/04/98 01:32:14	F450W	2000.000	55.737	33 06.505	230.652	yes	
U52Z3103R	10/04/98 15:58:14	F450W	2400.000	55.680	33 06.464	230.652	yes	
U52Z3105R	10/04/98 17:38:14	F450W	2400.000	55.680	33 06.464	230.652	yes	
U4YF3201R	10/04/98 19:21:14	F450W	2100.000	55.696	33 02.662	231.352	yes	
U4YF3203R	10/04/98 20:59:14	F450W	2000.000	55.743	33 02.701	231.352	yes	
U4YF3404R	10/05/98 06:34:14	F450W	1700.000	55.588	32 49.491	231.353	no	J; [1] a
U4YF3501R	10/05/98 11:30:14	F450W	2100.000	56.294	32 48.454	231.650	yes	
U4YF3502R	10/05/98 13:01:14	F450W	2100.000	56.080	33 01.356	231.651	yes	
U4YF3503R	10/05/98 14:49:14	F450W	2100.000	55.362	33 03.271	231.654	yes	
U4YF3504R	10/05/98 16:10:14	F450W	2500.000	55.362	33 03.271	231.654	yes	
U4YF3804R	10/06/98 06:45:14	F450W	1700.000	55.605	33 14.378	229.653	1,4	[2,3] d
U4YF3901R	10/06/98 11:41:14	F450W	2100.000	55.335	33 07.523	229.954	yes	
U52F4003R	10/06/98 19:36:14	F450W	2400.000	55.350	33 06.220	230.654	yes	f
U52F4005R	10/06/98 21:13:14	F450W	2400.000	55.723	33 03.967	230.652	yes	f
U52F4202R	10/07/98 05:21:14	F450W	1400.000	56.204	32 53.785	230.650	yes	
U52F4209R	10/07/98 11:42:14	F450W	2100.000	55.514	33 19.406	230.653	yes	
U52F4403R	10/07/98 23:06:14	F450W	2500.000	55.750	33 01.072	231.652	yes	
U52F4406R	10/08/98 00:43:14	F450W	1800.000	56.089	33 01.366	231.651	yes	
U52F4501R	10/08/98 05:35:14	F450W	1400.000	55.741	33 01.064	231.652	yes	[1] d
U52F4801R	10/09/98 02:41:14	F450W	600.000	55.691	33 06.471	230.652	yes	
U52F4804R	10/09/98 07:26:14	F450W	900.000	55.691	33 06.471	230.652	yes	
U52F4903R	10/09/98 12:16:14	F450W	1800.000	55.691	33 06.471	230.652	yes	
U535050BR	09/28/98 06:45:14	F606W	1500.000	55.670	33 09.369	229.652	1,2,4	[1] b; [3] d
U5350602R	09/28/98 08:21:14	F606W	2000.000	55.442	32 58.273	231.653	yes	
U5350604R	09/28/98 10:02:14	F606W	1800.000	55.442	32 58.273	231.653	yes	
U5350605R	09/28/98 11:30:14	F606W	2400.000	55.780	32 58.565	231.652	yes	
U5350909R	09/29/98 05:20:14	F606W	2300.000	55.722	33 03.966	230.652	yes	[1] a
U535090ER	09/29/98 06:55:14	F606W	2000.000	56.062	33 04.216	230.651	2,3,4	[1] B

Table 1—Continued

Rootname	Start time (UT)	Filter	Exp time	RA ^a 22 32	Dec ^a –60	Roll ^b	Included? ^c	Flags ^d
U5351206R	09/30/98 02:26:14	F606W	2000.000	55.721	33 02.683	231.352	yes	
U5351302R	09/30/98 04:07:14	F606W	1800.000	55.797	33 01.113	231.652	yes	
U5351304R	09/30/98 05:34:14	F606W	2100.000	55.797	33 01.113	231.652	yes	
U5351507R	09/30/98 21:45:14	F606W	2100.000	55.741	33 01.064	231.652	yes	
U53Q1702R	10/01/98 02:29:14	F606W	2400.000	55.645	33 10.247	229.952		4 [1] g; [2,3] d
U53Q1907R	10/01/98 20:22:14	F606W	1700.000	55.305	33 10.030	229.954		2,3,4
U53Q2002R	10/01/98 21:57:14	F606W	2000.000	55.686	33 06.468	230.652		2,3,4 [1] g; [2,3] d
U53Q2207R	10/02/98 12:20:14	F606W	2100.000	56.020	33 06.712	230.651	yes	
U53Q2301R	10/02/98 13:56:14	F606W	2200.000	55.344	33 04.904	231.354	yes	
U53Q2302R	10/02/98 15:36:14	F606W	2200.000	55.344	33 04.904	231.354	yes	
U53Q2304R	10/02/98 17:16:14	F606W	2200.000	55.683	33 05.184	231.352	yes	
U52Z2604R	10/03/98 07:46:14	F606W	2000.000	56.040	33 03.855	231.651	no	J
U52Z2701R	10/03/98 12:34:14	F606W	2300.000	55.836	33 25.038	229.652	2,4	[3] d
U52Z2906R	10/04/98 03:04:14	F606W	2300.000	55.686	33 06.468	230.652	yes	
U52Z2908R	10/04/98 04:42:14	F606W	1200.000	55.654	33 06.445	230.653	yes	[1] b
U52Z3002R	10/04/98 06:24:14	F606W	1700.000	55.675	33 07.741	229.952	no	[1,3,4] d
U52Z3004R	10/04/98 07:57:14	F606W	2000.000	55.675	33 07.741	229.952	yes	[3] g
U4YF3205R	10/04/98 22:31:14	F606W	2600.000	55.743	33 02.701	231.352	2,3,4	[1] B
U4YF3301R	10/05/98 01:52:14	F606W	1700.000	55.797	33 01.113	231.652	yes	
U4YF3303R	10/05/98 03:20:14	F606W	2000.000	55.797	33 01.113	231.652	yes	[1] b
U4YF3406R	10/05/98 08:09:14	F606W	1800.000	55.927	32 49.771	231.351	yes	
U4YF3408R	10/05/98 09:47:14	F606W	2000.000	55.927	32 49.771	231.351	yes	
U4YF3601R	10/05/98 19:36:14	F606W	1700.000	55.638	33 11.874	229.653	1,2,4	[3] B
U4YF3603R	10/05/98 21:04:14	F606W	2300.000	55.607	33 11.855	229.653	yes	
U4YF3605R	10/05/98 22:41:14	F606W	2300.000	55.654	33 11.884	229.653	yes	[1] b; [3] a
U4YF3902R	10/06/98 13:10:14	F606W	2100.000	55.335	33 07.523	229.954	yes	
U4YF3903R	10/06/98 14:58:14	F606W	2400.000	55.675	33 07.741	229.952	yes	[2] k
U4YF3904R	10/06/98 16:20:14	F606W	2400.000	55.675	33 07.741	229.952	yes	f
U52F4104R	10/07/98 00:26:14	F606W	2100.000	55.732	33 02.692	231.352	yes	f
U52F4204R	10/07/98 06:58:14	F606W	1500.000	55.174	33 19.155	230.654	2,4	[1] B
U52F4208R	10/07/98 10:11:14	F606W	2100.000	55.514	33 19.406	230.653	no	J
U52F4301R	10/07/98 13:27:14	F606W	2100.000	56.098	33 00.462	231.351	yes	
U52F4302R	10/07/98 14:58:14	F606W	2500.000	56.098	33 00.462	231.351	yes	f
U52F4503R	10/08/98 07:11:14	F606W	1600.000	56.080	33 01.356	231.651	2,3,4	[1] B
U52F4601R	10/08/98 08:49:14	F606W	1700.000	55.972	33 12.075	229.651	2,3,4	[1] B
U52F4602R	10/08/98 10:25:14	F606W	2000.000	55.264	33 14.173	229.654	1,2,4	[1] b
U52F4603R	10/08/98 12:02:14	F606W	2400.000	55.264	33 14.173	229.654	2,4	[1] B
U52F4802R	10/09/98 04:12:14	F606W	900.000	55.691	33 06.471	230.652	2,3,4	[1] B
U52F4901R	10/09/98 09:09:14	F606W	1200.000	55.691	33 06.471	230.652	yes	
U52F4904R	10/09/98 13:53:14	F606W	1800.000	55.691	33 06.471	230.652	yes	
U5350606R	09/28/98 13:11:14	F814W	2100.000	55.780	32 58.565	231.652	yes	
U5350701R	09/28/98 14:51:14	F814W	2000.000	56.000	33 09.568	229.651	yes	
U5350703R	09/28/98 16:31:14	F814W	1800.000	56.000	33 09.568	229.651	yes	
U5350705R	09/28/98 18:11:14	F814W	1700.000	55.292	33 11.665	229.654	yes	
U5350707R	09/28/98 19:52:14	F814W	1500.000	55.292	33 11.665	229.654	yes	
U5351005R	09/29/98 11:42:14	F814W	2700.000	55.985	33 10.466	229.951	yes	
U5351006R	09/29/98 13:23:14	F814W	2400.000	55.276	33 12.536	229.954	yes	
U5351306R	09/30/98 07:25:14	F814W	1000.000	55.747	33 01.069	231.652	yes	
U5351402R	09/30/98 08:44:14	F814W	2300.000	55.344	33 04.904	231.354	yes	
U5351404R	09/30/98 10:27:14	F814W	2000.000	55.721	33 02.683	231.352	yes	
U5351405M	09/30/98 11:53:14	F814W	2400.000	55.683	33 05.184	231.352	yes	
U5351406R	09/30/98 13:34:14	F814W	2400.000	56.022	33 05.463	231.351	yes	
U53Q1704R	10/01/98 04:09:14	F814W	2100.000	55.645	33 10.247	229.952	yes	[1] b
U53Q1706R	10/01/98 05:46:14	F814W	1900.000	55.702	33 10.284	229.952	yes	
U53Q1802R	10/01/98 07:19:14	F814W	1200.000	55.660	33 09.363	229.653	yes	[1] b
U53Q1804R	10/01/98 08:57:14	F814W	2400.000	56.000	33 09.568	229.651	yes	
U53Q2004R	10/01/98 23:40:14	F814W	1800.000	55.686	33 06.468	230.652	yes	
U53Q2006R	10/02/98 01:03:14	F814W	2000.000	55.654	33 06.445	230.653	yes	
U53Q2102R	10/02/98 02:48:14	F814W	2000.000	55.696	33 02.662	231.352	yes	[3] a
U53Q2104R	10/02/98 04:21:14	F814W	2000.000	55.743	33 02.701	231.352	yes	
U53Q2306R	10/02/98 18:55:14	F814W	2100.000	55.683	33 05.184	231.352	yes	[2] d
U52Z2401R	10/02/98 20:37:14	F814W	1800.000	55.740	33 01.064	231.652	yes	
U52Z2403R	10/02/98 22:05:14	F814W	2300.000	55.797	33 01.113	231.652	yes	
U52Z2405R	10/02/98 23:37:14	F814W	2000.000	55.797	33 01.113	231.652	yes	[1] b
U52Z2703R	10/03/98 15:47:14	F814W	2400.000	55.320	33 09.158	229.654	no	J
U52Z2705R	10/03/98 17:27:14	F814W	2200.000	55.320	33 09.158	229.654	no	J
U52Z2801R	10/03/98 19:13:14	F814W	1500.000	55.667	33 10.262	229.952	yes	
U52Z3006R	10/04/98 09:34:14	F814W	2000.000	56.015	33 07.959	229.951	yes	
U52Z3007R	10/04/98 11:10:14	F814W	2100.000	56.015	33 07.959	229.951	yes	
U52Z3101R	10/04/98 12:50:14	F814W	2500.000	55.341	33 06.215	230.654	yes	
U52Z3102R	10/04/98 14:18:14	F814W	2800.000	55.341	33 06.215	230.654	yes	f
U4YF3402R	10/05/98 04:55:14	F814W	1700.000	56.060	33 02.962	231.351	yes	
U4YF3505R	10/05/98 17:48:14	F814W	2400.000	55.741	33 01.064	231.652	yes	[4] d
U4YF3702R	10/06/98 00:25:14	F814W	2000.000	55.667	33 10.262	229.952	yes	[1] b
U4YF3704R	10/06/98 01:56:14	F814W	2000.000	55.645	33 10.247	229.952	yes	
U4YF3706R	10/06/98 03:34:14	F814W	1200.000	55.702	33 10.284	229.952	yes	
U4YF3802R	10/06/98 05:12:14	F814W	1400.000	55.605	33 14.378	229.653	yes	
U52F4001R	10/06/98 18:07:14	F814W	2100.000	55.350	33 06.220	230.654	yes	
U52F4102R	10/06/98 22:55:14	F814W	2400.000	55.769	33 00.191	231.352	yes	
U52F4106R	10/07/98 02:04:14	F814W	2100.000	55.732	33 02.692	231.352	yes	

Table 1—Continued

Rootname	Start time (UT)	Filter	Exp time	RA ^a 22 32	Dec ^a –60	Roll ^b	Included? ^c	Flags ^d
U52F4701R	10/08/98 16:54:14	F814W	2000.000	55.664	33 09.173	230.153	yes	
U52F4703R	10/08/98 18:30:14	F814W	2000.000	55.633	33 11.678	230.153	yes	
U52F4705R	10/08/98 20:07:14	F814W	2300.000	55.633	33 11.678	230.153	yes	
U52F4707R	10/08/98 21:44:14	F814W	2300.000	55.633	33 11.678	230.153	yes	[1] g
U52F4709R	10/08/98 23:21:14	F814W	2300.000	55.633	33 11.678	230.153	yes	[4] b
U52F470BR	10/09/98 00:58:14	F814W	2300.000	55.633	33 11.678	230.153	yes	
U52F4803R	10/09/98 05:49:14	F814W	900.000	55.691	33 06.471	230.652	yes	
U52F4902R	10/09/98 10:39:14	F814W	1800.000	55.691	33 06.471	230.652	yes	
U52F4905R	10/09/98 15:30:14	F814W	1800.000	55.691	33 06.471	230.652	yes	
U52F5001R	10/09/98 17:08:14	F814W	2000.000	55.664	33 09.173	230.153	yes	
U52F5002R	10/09/98 18:44:14	F814W	2000.000	55.633	33 11.678	230.153	yes	
U52F5003R	10/09/98 20:21:14	F814W	2300.000	55.633	33 11.678	230.153	yes	[1] b
U52F5004R	10/09/98 21:57:14	F814W	2300.000	55.633	33 11.678	230.153	yes	

^aNominal pointing for the WFPC2 reference position WFALL

^bNominal position angle of the HST V3 axis on the sky

^cNumbers within square brackets indicates the chips included in the final combination

^dData quality flags; affected chips within square brackets. Corrected conditions in lowercase, uncorrected in uppercase. The flags indicate: a) Bias jump(s); b) Charge trail(s); c) Large streak; d) Moving object; e) Interrupted; f) Earth cross; g) Cosmic ray shower; h) Recentered; j) Pointing problem; k) Cross-shaped scattered light pattern

Table 2: Photometric Scaling and Zeropoints for HDF-S

Filter	Scaling factor			Zeropoint			PHOTFLAM
	PC	WF2	WF4	Vegamag	ABMAG	STMAG	
F300W	1.025	0.984	1.019	19.43	20.77	19.45	$5.985 \cdot 10^{-17}$
F450W	1.027	1.008	1.030	22.01	21.93	21.53	$8.797 \cdot 10^{-18}$
F606W	1.008	0.979	1.015	22.90	23.02	23.21	$1.888 \cdot 10^{-18}$
F814W	1.019	0.994	1.017	21.66	22.09	22.91	$2.449 \cdot 10^{-18}$

Note. — The PC, WF2 and WF4 images were multiplied by the factor given above before combination, to bring their zero points in line with the WF3 images.

Table 3: Typical Background in HDF-S Images

Detector	Sky Background				Dark current
	F300	F450	F606	F814	
PC	0.000256	0.000526	0.00247	0.001374	0.00105
WF2	0.000456	0.002509	0.01221	0.00675	0.00069
WF3	0.000555	0.002557	0.0122	0.006774	0.00095
WF4	0.000521	0.002528	0.01199	0.006636	0.00091
Fluctuations	0.000007	0.000015	0.000021	0.000016	
Fractional	1.4%	0.6%	0.2%	0.2%	

Note. — The background is expressed in counts/pixel/second in original detector pixels. The sky background does not include the dark current contribution. Background fluctuations are expressed in counts/second in a WF pixel.

Table 4: Characteristics of the HDF-S Observations

Filter	Exposure time (seconds) ^a	Number of exposures	Limiting AB Magnitude (10- σ in 0.2 square arcsec)	Area (square arcsec)
F300W	132,585	102	26.8	18243
F450W	101,800	51	27.7	18110
F606W	97,200	49	28.3	18212
F814W	112,200	56	27.7	18121

^aTotal exposure time in non-excluded images.

Table 5: Astrometric reference stars for HDF-S

x	y	USNO Position		Corrected HDF-S Position		Residuals (arcsec)	
		RA	Dec	RA	Dec	RA	Dec
3059.960	3445.710	338:12:37.694	-60:32:18.737	338:12:37.708	-60:32:18.744	0.014	0.007
350.300	907.560	338:16:15.616	-60:34:00.836	338:16:15.617	-60:34:00.831	0.001	-0.005
1835.790	772.600	338:14:15.013	-60:34:05.718	338:14:15.040	-60:34:05.715	0.027	-0.003
3040.420	884.870	338:12:37.456	-60:34:00.815	338:12:37.414	-60:34:00.816	-0.042	0.001

Note. — HDF-S positions are measured in the F450W image.

Table 6. The object catalog for the HDF-S WFPC2 field

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
2216	3244.88	3400.7	4078.59	876.98	...	26.39	-0.84	1.80	-1.43	138	0.92	ae
2273	3244.88	3403.1	4078.26	817.83	...	...	...	...	...	65	0.92	a
2170	3244.91	3358.8	4074.26	926.73	27.07	0.31	24.74	...	2.01	0.97	255	0.75
2083	3244.96	3354.3	4065.84	1039.21	26.35	0.10	23.68	...	8.29	89	0.89	ae
2230	3245.00	3401.2	4057.09	866.96	27.75	0.17	27.19	-1.74	...	78	0.94	a
2164	3245.03	3357.5	4052.57	957.96	26.25	0.15	23.80	...	2.46	-0.35	382	0.03
2356	3245.03	3407.1	4048.85	716.67	26.01	0.09	26.03	...	0.92	0.33	145	0.07
2060	3245.04	3353.2	4050.61	1066.19	...	25.24	...	0.14	1.80	289	0.03	a
1977	3245.05	3348.9	4050.89	1174.01	26.33	0.23	25.88	...	1.49	129	0.23	a
1914	3245.06	3345.2	4048.81	1267.89	27.87	0.91	24.09	...	...	61	0.80	ae
1863	3245.07	3342.9	4047.07	1325.56	26.33	0.12	25.33	...	...	36	0.90	ae
1708	3245.17	3335.0	4031.01	1523.45	25.55	0.20	24.65	...	1.35	2.08	192	0.98
2061	3245.19	3353.5	4023.62	1058.68	27.60	0.17	26.74	0.09	0.32	0.35	148	0.88
1668	3245.20	3333.4	4025.48	1563.11	24.28	0.06	24.24	-4.40	-0.03	4.84	70	0.97
1967	3245.22	3348.8	4018.34	1178.29	26.68	0.14	26.10	1.58	0.55	0.05	278	0.03
1637	3245.24	3330.9	4019.35	1625.68	24.52	0.06	23.27	...	-0.10	2.30	162	1.00
1839	3245.25	3341.9	4015.51	1349.40	26.32	0.09	26.16	-2.47	3.09	0.84	168	0.03
1646	3245.32	3332.6	4004.50	1584.50	21.55	0.01	21.54	-1.77	1.47	0.94	233	0.03
2035	3245.34	3352.3	3996.09	1090.51	29.37	0.30	27.94	...	1.00	272	0.94	a
2413	3245.34	3410.3	3990.87	638.67	29.01	0.32	28.66	2.02	-0.15	-0.04	111	0.31
1436	3245.36	3321.3	3998.28	1867.29	25.78	0.07	25.73	-2.18	-1.59	4.78	41	1.00
1421	3245.37	3320.7	3997.95	1881.44	25.37	0.17	25.02	...	...	3.98	67	0.97
1575	3245.38	3327.9	3994.15	1702.00	28.88	0.40	28.04	...	0.32	0.22	96	0.94
1411	3245.41	3320.3	3989.99	1893.17	25.27	0.10	24.30	0.20	0.46	0.71	149	0.16
1468	3245.43	3323.2	3986.50	1820.47	24.53	0.05	23.11	...	0.46	-0.10	356	0.03
1797	3245.45	3340.4	3978.97	1388.81	27.82	0.18	28.01	-0.14	0.19	-0.09	212	0.01
1776	3245.46	3338.9	3976.49	1426.39	28.42	0.22	28.24	0.37	-0.05	0.08	123	0.33
2287	3245.47	3404.3	3969.04	789.12	28.31	0.15	27.83	...	1.39	1.56	137	0.13
2154	3245.49	3358.2	3966.24	942.36	25.71	0.03	25.66	0.76	0.13	0.21	173	0.03
1565	3245.51	3327.8	3970.03	1704.87	26.97	0.16	26.77	...	0.26	0.30	136	0.05
2219	3245.51	3400.8	3961.31	876.34	28.54	0.18	28.24	-0.13	-0.20	0.32	135	0.05
2231	3245.52	3401.5	3959.85	860.35	27.70	0.12	26.87	0.09	0.00	0.49	297	0.02
1973	3245.56	3348.7	3955.61	1179.22	28.49	0.19	28.49	-0.32	0.82	-0.07	132	0.02
2500	3245.56	3414.2	3949.11	541.00	27.87	0.18	26.96	0.24	1.00	0.17	214	0.02
1936	3245.58	3347.3	3952.68	1216.08	23.94	0.01	23.90	0.58	0.11	0.41	327	0.03
1782	3245.59	3339.4	3951.64	1414.38	27.84	0.13	27.64	0.63	0.44	0.42	187	0.01
2301	3245.60	3405.0	3944.16	772.20	25.87	0.04	25.77	1.43	0.56	0.16	169	0.03
2502	3245.62	3415.0	3937.86	521.69	24.40	0.03	24.21	0.50	0.60	0.57	427	0.03
1495	3245.63	3324.3	3948.13	1793.33	28.91	0.28	29.03	0.06	-0.10	0.17	95	0.97
2123	3245.63	3356.5	3941.75	985.15	28.64	0.22	27.80	0.53	0.11	0.11	237	0.14
2234	3245.65	3401.7	3936.19	854.89	26.63	0.06	26.10	-0.11	0.65	0.80	281	0.03
1076	3245.66	3301.4	3947.75	2368.02	22.17	0.01	19.58	...	1.15	0.71	287	0.03
1264	3245.66	3312.7	3944.93	2084.23	27.83	0.21	27.46	...	1.12	1.20	101	0.91
1528	3245.66	3326.0	3942.53	1749.92	27.94	0.15	27.59	-0.86	1.44	0.60	152	0.01
2503	3245.66	3415.5	3930.40	508.75	24.96	0.03	24.83	0.20	1.44	0.55	259	0.03
1455	3245.68	3322.0	3939.88	1849.45	29.45	0.36	28.70	0.49	-0.25	0.50	111	0.95
1883	3245.70	3343.8	3930.79	1302.90	29.94	0.41	29.25	0.79	0.01	-0.23	151	0.88
1988	3245.70	3349.8	3929.19	1153.17	28.18	0.14	27.90	2.87	0.65	0.55	159	0.01
2488	3245.71	3413.4	3922.57	561.78	27.25	0.10	26.97	1.91	-0.32	-0.45	118	0.97
1952	3245.72	3347.6	3926.79	1209.23	28.99	0.21	28.49	-0.61	-0.01	1.53	153	0.60
1209	3245.74	3309.7	3931.75	2158.99	22.22	0.01	22.24	...	2.23	2.49	108	0.98
2047	3245.74	3352.9	3921.06	1075.10	27.76	0.11	27.86	0.55	0.31	0.78	131	0.23
881	3245.79	3347.5	3928.21	2716.40	27.54	0.20	26.11	0.83	0.12	0.23	180	0.80
2365	3245.79	3407.5	3908.85	709.12	27.13	0.07	26.99	0.47	0.10	0.24	105	0.83
919	3245.80	3250.31	3925.31	2641.28	22.84	0.02	22.63	-0.08	0.35	0.85	460	0.03
996	3245.82	3254.7	3920.33	2535.54	29.24	1.27	28.71	1.09	-0.29	-0.63	176	0.95
1162	3245.82	3307.1	3917.28	2225.51	24.90	0.04	24.84	1.10	0.41	0.68	140	0.08
1783	3245.83	3339.4	3907.83	1413.64	27.77	0.13	27.31	0.84	0.04	-0.05	193	0.01
1246	3245.86	3311.6	3908.46	2110.85	29.46	0.34	29.28	-0.44	0.98	0.20	135	0.96
2286	3245.86	3404.3	3896.08	789.81	26.66	0.06	26.46	0.50	-0.06	0.22	244	0.02
1858	3245.91	3342.8	3893.37	2808.15	26.66	0.15	26.16	-0.71	0.45	1.07	98	0.76
1463	3245.93	3322.6	3894.07	1836.67	26.34	0.05	26.24	-0.52	0.84	0.89	229	0.03
1044	3245.94	3258.1	3897.54	2450.58	27.83	0.35	27.23	...	0.43	0.44	191	0.14
1891	3245.95	3344.4	3884.02	1288.12	24.97	0.02	24.93	2.27	0.21	0.20	268	0.03
2091	3245.95	3354.7	3882.63	1031.00	27.62	0.12	27.07	...	0.20	0.17	370	0.00
1955	3245.97	3347.6	3880.11	1209.59	29.60	0.34	27.78	0.99	0.54	-0.04	236	0.18
816	3245.98	3243.8	3893.37	2808.15	26.66	0.15	26.16	-0.71	0.27	0.21	177	0.03
794	3245.99	3242.1	3892.25	2852.94	28.48	0.32	27.50	-1.06	0.51	1.54	136	0.95
1619	3246.00	3330.2	3878.91	1645.28	27.47	0.09	26.99	0.18	-0.13	0.12	157	0.05
1840	3246.00	3341.9	3875.14	1352.27	29.72	0.27	29.16	...	0.77	0.84	120	0.88
2403	3246.01	3407.3	3868.57	714.90	23.70	0.01	23.71	0.22	0.32	0.52	160	0.03
2023	3246.02	3351.9	3869.36	1100.78	25.31	0.03	25.27	0.32	0.23	0.42	284	0.03
2327	3246.04	3401.8	3864.53	852.96	26.96	0.07	26.53	7.04	0.70	0.69	218	0.02
670	3246.05	3234.3	3881.73	3047.02	28.43	0.35	27.92	0.54	0.03	-0.07	203	0.96
970	3246.05	3252.9	3877.68	2582.44	26.16	0.08	25.82	0.15	0.36	0.42	151	0.07
1687	3246.05	3334.1	3868.68	1548.52	28.82	0.19	28.45	...	0.49	0.31	146	0.01
1996	3246.05	3350.1	3864.52	1146.09	27.10	0.07	26.89	0.47	1.64	0.37	180	0.03
2523	3246.05	3415.5	3859.20	509.26	28.14	0.25	26.86	...	...	1.61	207	0.11
1618	3246.06	3330.1	3866.72	1648.35	27.26	0.08	26.92	-0.24	0.24	0.27	214	0.02
1702	3246.06	3334.8	3863.47	1529.92	29.20	0.19	29.30	...	1.44	75	0.86	a
785	3246.12	3242.3	3868.51	2846.64	26.97	0.14	26.00	1.57	0.07	0.07	223	0.19
1548	3246.12	3327.1	3865.75	1723.70	28.68	0.18	27.78	-0.12	1.14	0.14	153	0.03
907	3246.13	3248.7	3863.86	2685.54	29.06	0.26	28.82	...	0.19	0.31	112	0.52
1037	3246.14											

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
2145	3246.14	3357.7	3846.30	956.49	27.26	0.09	26.83	-0.12	0.40	0.30	388	0.19
810	3246.16	3244.1	3860.52	2802.75	25.91	0.07	25.65	...	0.27	0.43	401	0.03
1389	3246.16	3318.4	3851.64	1942.00	28.89	0.20	28.56	...	3.46	0.64	183	0.11
951	3246.17	3251.4	3857.20	2618.19	27.05	0.06	27.07	0.37	1.08	0.92	96	0.98
2508	3246.17	3415.0	3837.60	521.59	26.33	0.11	24.66	...	0.69	0.76	675	0.03
784	3246.18	3241.9	3857.52	2856.51	25.39	0.05	25.24	1.17	-0.13	0.14	206	0.03
2425	3246.18	3410.8	3835.72	626.68	28.35	0.17	27.93	...	...	0.46	119	0.67
2499	3246.19	3414.3	3833.24	539.87	27.90	0.17	26.74	-0.50	0.11	2.02	196	0.07
2278	3246.20	3403.8	3833.18	803.91	26.68	0.06	26.61	0.90	0.25	-0.05	151	0.03
895	3246.22	3248.4	3847.23	2693.72	25.60	0.03	25.57	2.40	0.42	0.19	109	0.99
1069	3246.24	3300.5	3840.84	2390.05	26.43	0.06	26.29	1.27	0.10	0.09	173	0.03
1880	3246.25	3343.9	3830.07	1300.89	26.95	0.06	26.93	1.75	0.27	0.09	135	0.26
2361	3246.25	3407.3	3824.25	714.66	28.73	0.20	28.24	2.07	-0.64	1.26	129	0.12
1553	3246.29	3327.4	3825.74	1716.55	29.33	0.23	28.54	...	-0.21	1.02	98	0.78
2494	3246.29	3413.5	3815.17	559.33	29.06	0.31	30.24	...	3.42	1.05	73	0.62
484	3246.30	3220.5	3838.87	3395.72	28.27	0.32	26.90	...	-0.21	0.38	210	0.10
497	3246.30	3221.8	3839.88	3362.12	24.34	0.02	24.31	...	1.04	1.65	111	0.99
1695	3246.30	3334.8	3822.17	1530.73	27.83	0.12	27.39	-0.40	0.26	0.12	229	0.02
2319	3246.30	3405.9	3814.49	751.25	24.37	0.02	24.32	0.20	0.63	0.68	437	0.03
2495	3246.30	3416.3	3811.60	490.02	21.22	0.01	20.93	0.56	0.85	0.52	340	0.03
1344	3246.31	3316.6	3825.43	1986.81	26.13	0.04	25.97	0.29	0.07	0.06	255	0.03
2279	3246.32	3404.0	3812.23	797.23	25.37	0.03	25.28	0.92	1.19	0.64	356	0.03
594	3246.33	3229.2	3831.77	3176.49	28.59	0.28	28.29	4.38	0.28	0.20	100	0.75
1176	3246.36	3307.6	3816.52	2213.08	29.32	0.26	28.28	...	1.23	0.37	161	0.14
2456	3246.38	3412.2	3798.52	591.88	25.05	0.03	24.91	...	0.17	0.47	356	0.03
1813	3246.39	3341.1	3804.50	1371.98	28.46	0.18	28.92	0.94	0.23	0.07	135	0.01
2127	3246.40	3356.7	3798.96	982.26	30.03	0.38	29.69	2.24	0.01	-0.19	91	0.90
428	3246.41	3215.1	3820.11	3531.29	28.76	0.33	27.62	-1.11	-0.16	1.10	115	0.94
1030	3246.42	3257.6	3809.34	2464.54	26.62	0.06	26.53	...	0.97	0.47	169	0.03
400	3246.44	3213.0	3816.06	3582.59	28.53	0.30	27.04	-2.27	1.23	0.75	223	0.94
2297	3246.44	3404.9	3788.91	776.08	26.57	0.06	25.97	...	1.73	0.53	342	0.05
2339	3246.45	3406.7	3786.39	730.25	28.15	0.14	27.81	-0.41	1.14	0.84	155	0.07
2393	3246.45	3409.2	3787.18	667.95	28.32	0.16	28.23	0.30	0.04	0.03	117	0.64
875	3246.46	3247.1	3803.27	2726.95	28.81	0.21	28.51	...	-0.24	0.08	127	0.17
472	3246.48	3219.8	3806.03	3411.80	26.51	0.06	26.43	...	0.93	148	0.04	
324	3246.49	3206.5	3807.26	3746.29	27.98	0.24	27.40	2.48	0.19	-0.10	107	0.95
698	3246.49	3236.0	3801.54	3006.71	28.77	0.19	28.05	1.40	-0.16	0.71	178	0.28
1525	3246.49	3326.1	3788.59	1750.03	28.65	0.20	29.16	-0.33	0.56	-0.20	214	0.15
1852	3246.49	3342.7	3785.52	1332.24	27.31	0.10	27.12	1.01	0.34	-0.09	206	0.02
2104	3246.49	3355.6	3782.19	1009.75	27.91	0.10	27.87	0.45	0.70	0.42	105	0.15
313	3246.51	3205.0	3804.15	3784.90	29.53	0.72	27.70	...	0.26	-0.51	167	0.95
2482	3246.52	3413.4	3772.73	563.00	27.61	0.17	...	-0.73	0.76	0.63	-1140	0.04
555	3246.53	3227.1	3795.05	3228.56	27.73	0.10	27.60	2.10	0.19	0.21	123	0.05
1786	3246.54	3340.4	3776.14	1389.98	27.69	0.12	27.07	1.30	0.31	0.02	240	0.01
1677	3246.55	3333.7	3777.03	1559.70	28.60	0.17	28.31	0.38	-0.30	0.27	123	0.13
112	3246.56	3148.7	3797.92	4193.06	28.79	1.29	28.37	-0.56	4.35	-3.26	83	0.98
1184	3246.57	3306.0	3777.99	2252.43	28.68	0.16	28.41	...	1.52	0.45	131	0.09
2481	3246.57	3413.2	3763.65	566.93	28.53	0.26	...	...	0.18	-68	0.70	aef
1036	3246.58	3257.8	3778.95	2459.11	27.95	0.19	27.20	0.55	0.05	-0.18	272	0.00
1313	3246.58	3314.6	3774.75	2038.35	29.81	0.36	29.63	...	0.45	-0.09	98	0.61
1785	3246.58	3339.6	3769.50	1411.19	26.38	0.04	26.36	0.74	0.45	0.05	125	0.08
100	3246.59	3147.7	3793.89	4216.80	28.31	1.16	28.39	...	-4.55	82	0.98	ae
2002	3246.60	3350.3	3763.27	1141.35	29.44	0.25	28.56	...	0.56	0.59	141	0.71
856	3246.61	3246.0	3775.61	2754.12	27.30	0.08	27.25	0.25	-0.03	0.79	137	0.01
1338	3246.62	3316.1	3767.77	1999.96	25.96	0.03	25.87	0.29	0.06	0.21	166	0.03
230	3246.63	3159.1	3783.84	3933.13	26.85	0.14	26.62	0.27	0.12	0.46	144	0.16
442	3246.64	3217.0	3777.90	3481.72	28.90	0.19	27.83	...	0.77	141	0.07	
1984	3246.64	3347.4	3755.46	1215.70	27.39	0.08	27.08	...	0.55	0.55	173	0.03
650	3246.65	3231.6	3771.82	3116.59	26.18	0.04	26.13	0.80	0.38	0.62	152	0.03
806	3246.65	3243.4	3769.49	2820.64	28.86	0.21	28.78	0.05	-0.09	-0.24	112	0.03
843	3246.65	3245.2	3768.86	2775.65	28.92	0.18	28.66	...	0.80	122	0.12	
1196	3246.65	3308.8	3762.93	2182.85	27.14	0.07	27.00	0.95	0.45	0.47	177	0.02
376	3246.66	3211.3	3774.19	3626.54	25.55	0.03	25.45	0.15	0.75	0.47	223	0.03
2466	3246.66	3412.2	3746.77	593.68	29.22	0.28	28.03	-2.62	1.26	1.59	158	0.75
350	3246.67	3209.0	3773.88	3684.29	26.11	0.06	25.67	...	0.96	0.93	473	0.00
782	3246.67	3241.6	3766.63	2865.23	29.33	0.25	29.03	...	-0.40	0.20	122	0.44
923	3246.67	3249.7	3764.34	2656.88	28.48	0.17	27.75	...	-0.06	0.19	145	0.15
740	3246.69	3238.7	3763.15	2939.60	28.64	0.18	28.73	1.76	-0.05	0.24	108	0.63
1031	3246.69	3257.6	3759.56	2465.10	27.97	0.16	28.19	1.22	-0.06	-0.06	128	0.01
2317	3246.69	3405.4	3742.59	762.25	29.09	0.25	28.93	0.71	-0.15	-0.12	114	0.14
323	3246.71	3207.2	3765.99	3728.89	22.93	0.01	22.97	2.08	0.67	0.44	104	0.98
1510	3246.71	3325.0	3749.17	1777.07	30.04	0.40	28.80	-0.01	0.27	0.04	137	0.49
1168	3246.72	3307.2	3750.38	2222.86	28.69	0.17	28.13	0.47	0.53	0.55	156	0.81
2504	3246.72	3414.4	3734.41	536.47	29.00	0.30	28.35	0.48	-0.01	0.08	127	0.91
634	3246.73	3232.2	3758.04	3101.98	28.92	0.19	29.15	1.00	0.43	0.70	141	0.15
902	3246.74	3248.8	3751.13	2685.77	26.14	0.05	25.97	1.01	0.66	0.50	186	0.03
1676	3246.75	3334.3	3738.40	1544.28	25.84	0.04	25.66	0.42	0.61	0.29	338	0.01
2191	3246.75	3359.9	3732.54	900.71	28.20	0.12	28.15	0.92	0.19	1.18	112	0.01
1041	3246.76	3258.4	3746.02	2445.30	26.17	0.05	26.23	-0.26	0.88	0.68	179	0.03
2421	3246.76	3410.9	3728.11	624.51	26.40	0.06	26.20	...	1.23	0.79	179	0.03
964	3246.77	3252.7	3744.61	2588.46	25.81	0.04	25.66	0.35	0.16	0.55	406	0.02
299	3246.78	3204.4	3754.22	3799.90	29.17	0.26	28.24	-0.18	0.49	0.23	193	0.89
680	3246.78	3235.0	3747.16	3031.02	28.87	0.19	28.42	-0.19	0.27	0.11	100	0.71
1647	3246.											

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
354	3246.79	3208.0	3751.04	3709.20	29.52	0.30	29.15	...	1.32	0.32	96	0.69	a
581	3246.80	3229.5	3745.55	3169.30	24.46	0.02	24.38	0.25	0.16	0.61	363	0.03	
658	3246.80	3233.8	3744.73	3062.89	27.01	0.06	26.80	...	1.18	1.08	164	0.02	a
767	3246.81	3240.5	3740.32	2894.77	26.36	0.04	26.26	2.69	0.04	0.13	151	0.03	
986	3246.81	3254.3	3737.54	2548.40	26.04	0.04	26.00	0.69	0.79	0.27	153	0.03	a
2155	3246.81	3358.9	3721.71	926.01	24.97	0.03	24.82	0.20	0.10	0.58	447	0.00	f
1066	3246.82	3300.0	3733.46	2403.95	29.00	0.28	27.89	2.65	-0.05	0.68	160	0.76	a
2265	3246.82	3403.0	3718.71	824.11	29.31	0.30	27.97	-2.57	2.64	0.05	276	0.05	a
903	3246.84	3249.4	3733.23	2671.44	25.45	0.03	25.43	1.03	0.22	0.24	283	0.03	ef
1242	3246.85	3312.4	3724.89	2094.58	25.79	0.04	25.69	2.86	0.14	-0.03	314	0.03	
1431	3246.86	3321.2	3721.03	1871.88	30.59	0.62	29.58	...	0.54	-0.62	113	0.73	ae
1814	3246.87	3341.1	3715.32	1373.98	27.67	0.09	27.28	1.05	0.11	0.64	151	0.01	a
2295	3246.87	3404.9	3709.98	776.22	25.95	0.04	25.76	-0.31	0.98	0.57	280	0.03	
52	3246.88	3142.3	3741.30	4353.57	27.03	0.22	26.73	0.08	-0.19	0.41	147	0.26	a
686	3246.88	3235.3	3728.86	3025.34	29.71	0.35	28.38	...	0.95	-0.17	126	0.25	a
2354	3246.88	3407.6	3707.61	709.09	25.45	0.03	25.42	1.08	0.17	0.21	237	0.03	
1015	3246.89	3256.7	3721.82	2488.45	25.50	0.03	25.41	2.89	0.09	0.25	183	0.03	
1353	3246.90	3316.9	3714.84	1981.72	29.27	0.25	29.08	0.46	-0.04	0.76	168	0.27	ae
2059	3246.90	3354.9	3707.18	1027.77	21.25	0.00	21.28	2.76	1.79	1.29	200	0.03	
85	3246.91	3146.9	3734.41	4239.21	24.06	0.02	24.01	2.52	0.63	0.23	334	0.05	
2156	3246.92	3359.0	3702.37	925.42	27.02	0.07	26.91	-0.06	0.76	0.20	175	0.02	ef
2397	3246.92	3409.4	3700.02	662.68	27.11	0.08	27.00	1.27	0.12	0.12	146	0.02	a
283	3246.93	3201.5	3726.70	3872.17	28.61	0.19	27.84	...	0.57	0.24	144	0.05	a
1152	3246.95	3305.9	3707.71	2255.86	28.88	0.18	28.54	-0.25	0.77	0.84	138	0.17	a
1318	3246.95	3314.9	3705.65	2031.83	30.10	0.46	...	-0.43	0.26	-0.04	109	0.82	ae
1361	3246.95	3317.3	3706.01	1971.32	27.98	0.12	28.01	...	0.42	-0.02	154	0.01	
727	3246.98	3238.6	3710.05	2942.29	26.66	0.06	26.56	0.57	1.37	0.42	213	0.03	f
961	3246.98	3251.9	3706.48	2608.67	29.69	0.36	29.49	4.66	0.15	-0.31	108	0.72	a
1432	3246.99	3320.6	3698.47	1886.92	28.64	0.18	28.40	...	0.26	149	0.14	aef	
1909	3246.99	3345.4	3691.31	1266.19	27.36	0.08	27.10	-0.54	0.32	0.72	169	0.01	
444	3247.00	3217.5	3710.11	3470.99	25.74	0.03	25.72	0.59	-0.06	0.03	182	0.03	
408	3247.01	3214.2	3710.32	3554.25	27.27	0.09	26.85	-0.14	0.53	0.33	281	0.00	
925	3247.01	3250.1	3701.35	2653.05	28.72	0.21	27.81	...	0.61	0.47	216	0.01	a
2138	3247.02	3357.1	3683.08	971.25	29.38	0.26	29.57	...	-0.46	0.61	79	0.55	a
1098	3247.03	3303.0	3694.73	2329.52	24.28	0.02	24.18	0.81	0.28	0.55	511	0.01	
726	3247.05	3237.9	3697.16	2959.41	27.31	0.08	27.05	...	1.33	0.76	193	0.01	aef
1331	3247.05	3316.0	3687.49	2003.46	23.48	0.01	23.50	1.74	1.59	1.17	104	0.98	a
1437	3247.05	3320.6	3686.15	1886.95	28.00	0.14	27.77	...	0.15	212	0.00	aef	
609	3247.06	3230.5	3695.62	3143.70	28.82	0.22	28.74	0.53	1.41	0.13	173	0.00	a
1040	3247.06	3258.4	3690.28	2445.25	25.40	0.03	25.35	0.79	0.10	0.17	187	0.03	
1299	3247.07	3314.5	3685.00	2039.88	26.02	0.04	25.80	0.66	0.15	0.03	300	0.03	e
1282	3247.09	3313.6	3680.71	2064.48	29.36	0.26	29.20	-0.08	0.30	0.25	121	0.12	ae
2333	3247.09	3406.3	3669.01	741.12	29.22	0.25	28.10	0.72	0.78	0.09	196	0.64	a
361	3247.10	3209.3	3693.96	3676.72	29.26	0.22	28.92	...	1.46	133	0.27	a	
795	3247.12	3242.5	3683.05	2844.45	26.71	0.06	26.32	0.63	0.81	0.86	240	0.02	
1407	3247.13	3320.1	3671.11	1901.33	27.18	0.08	26.87	0.90	0.10	0.32	214	0.02	
770	3247.16	3240.9	3675.47	2883.22	29.26	0.25	28.83	0.88	0.08	0.68	113	0.31	a
495	3247.17	3221.5	3678.09	3371.17	26.32	0.04	26.27	1.00	0.04	0.09	190	0.03	
1483	3247.17	3323.8	3663.67	1808.73	28.84	0.20	28.13	...	-0.05	-0.04	162	0.27	a
915	3247.18	3249.7	3670.45	2662.39	25.93	0.04	25.81	0.57	0.12	0.40	256	0.03	
1894	3247.18	3344.5	3656.63	1287.51	26.29	0.04	26.23	1.81	0.63	0.71	156	0.03	a
279	3247.19	3202.2	3678.76	3854.90	29.21	0.24	29.17	-1.17	1.18	0.61	60	0.52	a
1014	3247.19	3256.3	3666.07	2496.74	28.61	0.18	28.22	0.02	0.42	0.23	114	0.02	a
1516	3247.19	3326.0	3660.07	1753.66	24.83	0.02	24.81	0.67	0.49	0.59	280	0.03	
175	3247.20	3154.4	3679.56	4051.00	29.05	0.24	28.45	1.48	0.10	-0.38	127	0.97	a
760	3247.20	3240.1	3669.18	2904.48	28.39	0.15	28.24	...	0.03	-0.13	100	0.37	a
1648	3247.20	3331.6	3656.37	1611.12	28.09	0.13	27.79	1.15	-0.07	0.46	118	0.01	a
22	3247.21	3138.7	3680.86	4445.78	28.50	0.46	26.67	...	0.43	333	0.97	ae	
296	3247.21	3204.4	3674.35	3800.48	26.97	0.07	26.75	0.34	0.69	0.86	299	0.00	
2498	3247.21	3414.1	3644.41	546.53	29.49	0.31	27.72	...	3.50	0.39	168	0.89	a
41	3247.22	3141.6	3677.32	4372.93	28.03	0.16	27.80	-0.40	0.13	0.71	129	0.15	a
593	3247.22	3229.3	3667.46	3174.54	28.51	0.16	28.14	3.68	0.45	0.11	130	0.09	a
346	3247.23	3208.2	3670.17	3705.08	27.22	0.08	26.98	0.77	0.21	0.54	242	0.04	
371	3247.23	3210.7	3669.88	3641.70	26.40	0.04	26.36	...	6.42	0.79	130	0.03	a
539	3247.23	3225.2	3666.01	3278.96	30.56	0.49	28.69	...	0.73	0.50	170	0.71	ae
11	3247.24	3137.0	3675.39	4487.47	26.73	0.14	24.65	...	3.61	0.44	95	0.94	ae
1583	3247.24	3328.6	3650.07	1688.71	28.83	0.18	28.46	...	0.70	110	0.20	a	
2270	3247.24	3356.7	3643.46	981.59	26.44	0.05	26.30	0.15	-0.05	0.06	147	0.03	
6	3247.26	3136.2	3671.58	4507.14	26.61	0.10	26.05	-0.60	-1.73	5.10	48	1.00	a
1269	3247.26	3313.0	3650.51	2079.10	29.01	0.24	29.05	...	0.11	-0.24	135	0.02	
2241	3247.26	3401.9	3638.08	851.39	29.24	0.23	28.86	...	0.32	0.24	113	0.68	a
2457	3247.26	3411.9	3636.17	600.95	28.22	0.15	27.65	...	0.63	0.95	131	0.21	a
1072	3247.27	3300.4	3650.26	2394.43	29.11	0.31	28.77	-1.51	1.03	0.04	129	0.84	
2284	3247.28	3403.9	3633.99	800.86	28.63	0.17	28.12	3.04	-0.01	0.88	167	0.04	a
2298	3247.28	3404.7	3634.78	781.72	28.71	0.17	28.68	-0.64	1.94	0.24	103	0.53	a
1841	3247.30	3342.0	3634.86	1352.02	29.28	0.25	28.60	...	0.67	158	0.41		
2325	3247.31	3406.0	3628.05	749.05	28.93	0.24	28.30	0.09	0.13	0.35	186	0.02	a
2159	3247.32	3358.5	3627.16	936.69	27.64	0.10	27.43	1.43	1.76	1.12	226	0.00	a
1038	3247.33	3257.9	3640.12	2458.09	29.63	0.31	29.05	...	0.99	0.38	88	0.93	a
758	3247.34	3240.4	3641.76	2896.40	26.23	0.04	26.17	0.53	0.04	0.15	199	0.03	ef
1094	3247.34	3302.6</											

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1007	3247.36	3256.1	3634.87	2503.49	25.52	0.03	25.42	1.18	0.19	0.42	186	0.03
170	3247.37	3154.3	3646.73	4053.94	27.18	0.08	27.00	-0.92	0.71	0.74	207	0.01
429	3247.37	3215.2	3642.68	3528.79	28.88	0.21	28.49	...	0.24	0.06	155	0.14
618	3247.38	3231.2	3636.97	3128.29	27.41	0.08	27.36	3.52	0.26	0.09	154	0.02
1402	3247.38	3319.5	3625.50	1917.19	28.65	0.15	28.13	-0.17	1.20	1.41	124	0.55
37	3247.39	3140.9	3646.85	4389.52	25.87	0.05	25.66	...	1.95	0.56	306	0.03
394	3247.39	3212.5	3639.13	3596.36	29.68	0.27	28.39	...	0.12	0.80	208	0.81
475	3247.39	3220.1	3638.06	3405.56	29.73	0.28	29.74	...	0.49	0.25	127	0.87
936	3247.39	3251.0	3631.47	2631.54	27.51	0.11	27.00	0.43	0.87	0.25	225	0.18
449	3247.40	3217.7	3635.94	3465.89	29.30	0.25	28.09	-1.96	1.86	0.57	162	0.10
1819	3247.41	3342.0	3614.44	1352.05	24.57	0.01	24.57	0.29	0.41	0.61	129	0.11
1998	3247.41	3350.2	3613.02	1146.00	27.46	0.07	27.34	0.04	0.33	0.49	106	0.43
280	3247.42	3202.3	3636.00	3851.91	28.37	0.18	28.49	1.32	0.27	-0.10	115	0.02
830	3247.42	3244.7	3626.71	2788.61	27.10	0.07	26.76	1.15	0.26	0.39	174	0.12
99	3247.43	3147.3	3638.54	4230.37	30.35	0.46	28.55	-1.47	1.74	-0.04	130	0.88
721	3247.43	3237.4	3626.60	2972.01	29.69	0.34	29.23	...	-0.12	-0.49	89	0.77
1033	3247.43	3257.8	3622.28	2461.39	27.67	0.12	27.36	0.37	0.05	0.15	156	0.01
595	3247.44	3229.5	3627.17	3170.95	28.29	0.14	28.23	0.88	0.32	-0.06	123	0.01
952	3247.44	3251.7	3621.61	2613.34	27.55	0.11	27.77	2.05	0.01	-0.01	172	0.02
1562	3247.44	3328.0	3612.44	1703.99	27.65	0.10	27.59	...	1.04	-0.06	137	0.07
1796	3247.44	3340.4	3609.25	1390.78	27.87	0.12	27.86	...	0.61	0.08	165	0.01
10081	3247.45	3160.0	3632.24	3911.99	19.85	0.00	19.89	3.55	1.69	2.35	114	0.89
759	3247.45	3240.4	3621.89	2897.30	25.27	0.02	25.19	0.30	0.09	0.50	235	0.03
611	3247.46	3230.7	3623.04	3140.17	28.98	0.23	28.42	0.30	-0.24	0.06	177	0.04
891	3247.46	3248.6	3618.54	2690.44	25.81	0.04	25.78	3.75	0.32	0.16	196	0.03
1628	3247.46	3330.3	3608.77	1644.21	29.22	0.22	28.88	3.90	0.56	0.73	91	0.93
2318	3247.47	3405.6	3598.39	759.10	28.99	0.22	28.49	0.83	0.94	0.31	99	0.72
143	3247.48	3151.9	3627.59	4112.87	29.30	0.27	28.96	...	0.78	0.13	165	0.18
1049	3247.48	3258.5	3613.17	2443.12	29.43	0.37	...	...	0.86	-0.35	88	0.05
1871	3247.48	3344.1	3601.89	1299.09	24.17	0.01	24.13	1.27	1.11	0.90	327	0.03
1818	3247.50	3341.3	3599.53	1368.56	26.11	0.04	26.17	...	0.30	-0.06	160	0.03
369	3247.51	3210.3	3618.10	3651.22	29.48	0.26	28.83	0.66	0.00	0.27	105	0.89
203	3247.52	3156.9	3618.75	3988.50	29.37	0.29	28.09	...	1.96	0.74	137	0.09
527	3247.53	3224.4	3611.15	3299.54	28.80	0.18	27.96	-0.12	-0.02	0.85	162	0.03
711	3247.55	3236.9	3604.10	2984.96	27.48	0.10	27.10	0.35	-0.16	0.38	216	0.01
448	3247.56	3218.3	3606.14	3451.81	25.95	0.04	25.87	...	2.50	0.47	232	0.03
1442	3247.56	3321.8	3591.34	1859.68	28.45	0.16	28.01	-1.29	1.29	0.75	178	0.07
2209	3247.56	3400.6	3582.68	885.09	28.11	0.13	28.04	1.38	0.34	-0.05	147	0.01
2340	3247.56	3404.7	3581.74	783.09	25.92	0.03	25.81	...	1.39	0.85	231	0.03
1096	3247.58	3302.5	3593.23	2343.65	25.29	0.03	25.15	0.30	0.61	0.84	210	0.03
1201	3247.58	3308.9	3591.38	2181.67	28.34	0.17	27.66	0.50	-0.10	0.17	211	0.00
1614	3247.58	3330.0	3586.04	1653.18	28.79	0.19	28.52	...	-0.12	0.05	132	0.13
1922	3247.58	3347.3	3583.10	1217.82	21.82	0.00	21.87	3.23	1.60	1.18	107	0.88
2338	3247.58	3408.6	3578.33	684.79	21.22	0.00	21.21	0.73	0.82	0.74	644	0.03
863	3247.59	3246.8	3594.50	2736.92	25.79	0.04	25.65	...	0.92	0.34	315	0.03
2227	3247.59	3401.3	3577.77	868.11	29.21	0.24	28.77	2.13	1.77	0.19	132	0.48
16	3247.62	3138.6	3604.29	4448.20	27.14	0.11	26.74	...	0.70	0.90	155	0.02
682	3247.62	3235.2	3591.94	3028.71	27.84	0.10	27.59	0.24	0.23	0.77	121	0.23
1032	3247.62	3257.7	3586.48	2463.00	27.84	0.12	27.60	-0.25	0.06	0.15	117	0.04
345	3247.63	3208.1	3596.90	3707.02	29.03	0.22	28.83	...	0.75	0.23	123	0.11
864	3247.63	3247.5	3586.41	2719.90	27.10	0.06	26.77	...	1.54	149	0.08	
1849	3247.63	3342.7	3575.76	1334.49	26.45	0.05	26.21	0.22	0.53	0.74	242	0.02
529	3247.65	3224.8	3589.08	3287.88	27.30	0.08	27.00	2.38	1.38	0.92	180	0.02
909	3247.65	3249.1	3582.20	2679.12	26.30	0.05	26.24	0.82	0.94	0.41	181	0.03
1670	3247.66	3335.9	3570.39	1504.93	19.54	0.00	19.55	1.02	1.14	1.00	894	0.03
1792	3247.66	3339.9	3569.50	1403.81	28.75	0.15	28.40	...	1.56	101	0.82	a
282	3247.67	3202.8	3589.64	3839.95	27.39	0.09	27.03	0.66	-0.11	0.43	199	0.04
956	3247.67	3252.4	3578.81	2597.53	23.20	0.01	23.19	0.26	0.62	0.52	460	0.03
2432	3247.67	3411.1	3559.64	621.05	28.46	0.17	29.28	-0.04	0.26	0.27	70	0.15
197	3247.68	3156.7	3589.06	3993.38	25.77	0.04	25.89	1.74	0.46	0.09	254	0.03
447	3247.69	3217.9	3583.30	3461.97	26.17	0.05	25.94	1.45	0.98	0.91	356	0.01
1136	3247.71	3305.2	3568.82	2275.80	28.92	0.18	28.16	-0.13	0.22	0.60	152	0.18
232	3247.74	3159.2	3577.53	3931.16	28.57	0.16	27.79	...	0.32	1.48	175	0.00
2214	3247.75	3400.8	3549.72	880.17	27.55	0.09	27.13	-0.33	0.43	0.66	157	0.01
25	3247.75	3138.9	3580.83	4440.87	28.24	0.19	27.74	...	-0.08	1.26	129	0.71
39	3247.75	3141.1	3580.00	4384.46	26.41	0.07	26.29	0.52	0.09	0.25	195	0.03
259	3247.75	3201.0	3575.61	3886.48	26.56	0.07	26.15	-0.40	0.25	0.77	303	0.00
322	3247.75	3206.7	3573.44	3742.46	24.93	0.02	24.79	0.71	1.06	0.79	298	0.03
1079	3247.75	3301.0	3560.82	2380.96	28.73	0.25	28.35	1.33	0.05	-0.34	112	0.84
2288	3247.75	3404.4	3547.38	789.98	28.73	0.17	27.64	-1.19	1.56	1.36	207	0.01
2303	3247.75	3405.2	3546.11	769.77	27.08	0.08	26.64	-0.19	3.27	1.01	216	0.02
2268	3247.76	3403.1	3545.51	822.21	28.77	0.18	28.53	-0.56	0.63	0.57	131	0.21
798	3247.77	3242.6	3561.42	2841.93	28.78	0.20	28.43	1.55	0.57	-0.05	166	0.03
932	3247.78	3250.7	3558.43	2640.35	27.39	0.09	27.45	...	0.17	0.05	104	0.22
1001	3247.78	3256.1	3557.02	2502.75	24.00	0.02	23.91	0.27	0.15	0.59	578	0.00
2330	3247.78	3406.5	3541.07	737.50	27.84	0.14	27.46	0.73	0.70	-0.01	202	0.01
1109	3247.79	3303.0	3553.51	2330.48	28.66	0.19	28.41	1.17	0.39	0.29	128	0.49
1595	3247.79	3329.2	3548.06	1674.30	29.35	0.24	28.92	...	2.69	0.28	108	0.51
207	3247.80	3157.4	3568.02	3976.43	28.57	0.21	30.23	...	0.70	-0.11	133	0.01
368	3247.80	3210.1	3565.17	3639.08	28.54	0.16	27.95	2.58	-0.03	0.45	160	0.01
465	3247.80	3219.6	3562.99	3419.92	24.32	0.01	24.28	2.01	0.40	0.39	269	0.03
2489	3247.80	3413.4	3536.36	564.55	28.92	0.24	28.51	-3.30	2.67	0.41	149	0.73
679	3247.82	3235.1	3554.36	3031.82	28.95	0.18	28.90	-0.20	0.43	0.94		

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
2532	3247.83	3415.9	3530.24	500.89	27.48	0.16	27.49	0.35	0.04	0.25	128	0.80	a
712	3247.84	3236.8	3549.94	2989.18	29.11	0.20	28.36	1.02	0.25	0.54	118	0.71	a
402	3247.86	3213.5	3552.05	3571.80	27.38	0.08	27.06	0.30	0.93	1.00	175	0.02	a
916	3247.86	3249.7	3543.26	2663.68	26.88	0.09	26.43	0.02	0.80	0.34	383	0.00	e
2437	3247.86	3411.7	3525.63	608.59	26.65	0.08	26.32	0.03	0.24	1.06	268	0.02	
411	3247.87	3214.1	3550.85	3557.00	28.72	0.19	28.32	...	-0.14	0.49	118	0.00	e
1228	3247.87	3310.7	3537.02	2137.16	28.89	0.17	28.57	-1.68	0.65	1.72	117	0.42	a
756	3247.88	3237.5	3542.88	2971.13	28.66	0.18	28.34	1.40	0.20	-0.25	131	0.21	a
2108	3247.89	3356.1	3522.31	999.65	27.48	0.10	26.81	...	0.03	0.72	282	0.00	a
659	3247.90	3233.8	3540.57	3063.63	28.51	0.14	28.57	...	-0.09	0.34	104	0.27	a
1367	3247.90	3317.6	3529.45	1963.46	26.65	0.05	26.55	5.67	0.25	0.06	139	0.26	
2222	3247.92	3401.1	3516.26	873.83	28.60	0.17	28.41	...	0.60	0.11	97	0.36	a
2260	3247.92	3403.0	3515.31	826.58	28.62	0.13	28.35	...	...	2.81	92	0.73	a
293	3247.93	3204.0	3541.17	3811.02	27.70	0.09	27.28	-1.34	1.11	1.11	162	0.05	
1145	3247.93	3305.6	3527.38	2265.47	29.39	0.31	28.54	...	0.83	-0.08	176	0.11	a
2095	3247.93	3355.0	3516.16	1027.45	28.81	0.15	28.03	-1.54	0.11	3.78	136	0.72	a
431	3247.94	3216.6	3537.73	3496.02	22.64	0.00	22.69	1.87	0.55	0.45	111	0.93	a
933	3247.94	3251.1	3528.87	2630.08	23.22	0.01	23.24	...	1.62	1.51	104	0.98	a
989	3247.94	3254.3	3527.77	2548.43	28.20	0.16	28.10	...	-0.10	-0.10	146	0.01	a
1056	3247.95	3258.1	3525.23	2453.26	28.67	0.22	28.78	-0.79	0.82	0.30	121	0.07	a
240	3247.96	3159.6	3537.78	3920.56	28.39	0.13	28.13	...	...	0.99	128	0.04	e
412	3247.96	3214.4	3532.85	3549.36	26.73	0.06	26.42	0.97	0.16	0.17	231	0.03	e
786	3247.97	3241.9	3524.74	2859.66	28.97	0.20	29.21	-0.21	-0.15	0.61	124	0.10	a
1117	3247.97	3303.9	3519.64	2307.51	27.64	0.11	27.45	...	0.27	0.15	152	0.01	a
2322	3247.97	3401.4	3506.77	865.18	29.63	0.25	31.18	...	-0.61	1.34	76	0.90	a
260	3247.98	3200.6	3533.87	3895.59	29.07	0.20	28.33	...	...	0.80	169	0.12	a
250	3247.99	3200.1	3531.64	3908.80	28.61	0.15	27.95	...	0.10	0.99	138	0.11	ae
1907	3248.00	3345.0	3505.66	1276.87	29.30	0.25	28.36	-0.01	0.46	0.49	161	0.09	a
2396	3248.00	3409.3	3499.96	667.22	29.05	0.24	28.63	...	0.19	-0.30	103	0.73	a
211	3248.02	3157.7	3526.34	3969.03	27.37	0.07	27.33	-0.32	0.11	0.21	99	0.69	a
480	3248.02	3220.4	3521.40	3398.95	28.55	0.16	28.55	0.19	0.12	0.36	117	0.16	a
746	3248.02	3239.5	3516.51	2919.89	25.60	0.04	25.46	0.53	0.03	0.22	444	0.00	
1191	3248.03	3309.4	3508.39	2171.64	24.99	0.02	24.92	1.97	0.30	0.46	461	0.01	
2193	3248.03	3400.1	3495.97	898.86	28.06	0.13	27.67	0.50	0.84	-0.04	130	0.11	a
86	3248.06	3148.6	3521.15	4199.05	21.41	0.00	21.46	1.67	0.48	0.30	107	0.94	a
781	3248.06	3242.2	3509.38	2852.63	27.49	0.08	27.37	0.75	0.15	0.06	151	0.12	aef
267	3248.07	3201.4	3516.58	3877.86	26.48	0.05	26.33	-3.00	4.56	0.84	240	0.02	
13	3248.08	3137.9	3520.31	4465.17	27.35	0.15	27.13	0.46	0.08	0.20	118	0.60	a
159	3248.08	3153.2	3516.96	4082.18	29.30	0.21	28.64	...	0.42	1.16	114	0.67	a
2420	3248.08	3410.8	3484.17	629.91	27.29	0.09	27.26	5.81	0.13	0.18	153	0.02	
2445	3248.08	3411.8	3484.89	606.01	28.62	0.22	28.11	-1.41	2.13	0.17	153	0.12	af
780	3248.10	3241.8	3500.60	2863.93	26.39	0.04	26.29	0.87	0.35	0.94	134	0.02	aef
1537	3248.10	3326.7	3490.74	1736.26	26.87	0.06	26.67	0.44	0.68	0.36	158	0.03	
2446	3248.10	3412.0	3479.96	601.13	28.82	0.25	27.99	4.12	0.87	0.07	150	0.57	aef
1319	3248.11	3314.9	3491.14	2032.19	30.07	0.39	29.01	...	0.22	0.03	129	0.80	a
1259	3248.12	3313.1	3491.06	2078.20	27.19	0.08	26.94	...	1.14	0.43	234	0.02	
1877	3248.12	3343.9	3482.57	1304.57	26.42	0.05	26.26	...	1.58	0.75	248	0.02	
2223	3248.12	3401.2	3480.29	870.91	29.52	0.31	29.28	2.01	1.82	-0.11	127	0.26	a
414	3248.13	3214.3	3502.07	3553.40	28.84	0.17	28.73	1.76	-0.09	0.33	82	0.83	a
570	3248.13	3228.3	3499.89	3200.77	26.44	0.05	26.11	2.22	0.50	1.14	230	0.02	
2291	3248.13	3404.9	3476.07	779.30	26.38	0.05	25.98	...	0.80	1.26	336	0.00	a
287	3248.14	3203.8	3503.34	3816.53	26.84	0.05	26.78	0.48	-0.06	0.50	137	0.02	
1798	3248.14	3340.3	3480.22	1395.23	29.39	0.22	29.10	...	-0.08	0.64	103	0.89	a
436	3248.15	3217.5	3497.66	3473.63	25.94	0.04	25.72	0.61	0.46	0.84	360	0.00	ef
1104	3248.17	3302.9	3483.61	2334.99	27.43	0.12	27.05	...	0.42	0.08	247	0.02	a
1356	3248.18	3317.1	3478.15	1976.95	26.53	0.05	26.47	3.73	0.78	0.03	146	0.03	
28	3248.20	3139.3	3497.56	4431.36	27.66	0.16	28.18	-1.35	1.65	0.52	112	0.02	a
437	3248.20	3218.2	3488.82	3455.93	26.21	0.04	26.05	...	0.64	0.78	152	0.03	ef
521	3248.20	3223.2	3487.47	3330.99	29.70	0.22	29.34	...	1.23	84	0.85	a	
1287	3248.20	3313.8	3476.00	2060.26	29.10	0.21	28.71	...	3.84	0.46	97	0.45	a
1504	3248.20	3325.0	3472.37	1778.88	28.08	0.11	27.76	...	1.76	1.91	134	0.01	
1660	3248.20	3332.4	3471.49	1592.76	25.82	0.03	25.82	...	1.13	0.55	144	0.03	
2171	3248.20	3358.9	3465.76	928.62	28.98	0.22	28.71	0.43	0.29	0.05	141	0.43	a
2363	3248.20	3407.6	3462.33	711.41	28.75	0.18	28.54	0.97	0.58	0.07	87	0.97	a
301	3248.24	3204.9	3484.20	3789.82	25.67	0.03	25.62	-0.71	2.88	0.84	171	0.03	
2068	3248.24	3355.1	3457.84	1024.91	23.30	0.01	23.28	1.13	0.80	0.90	412	0.04	
876	3248.25	3247.3	3472.12	2724.84	27.66	0.10	27.52	0.92	-0.13	0.09	123	0.36	a
2409	3248.27	3410.8	3450.03	631.42	26.88	0.08	26.81	...	0.78	0.36	264	0.02	a
328	3248.28	3207.5	3476.29	3723.04	25.38	0.03	25.22	0.09	0.05	0.76	360	0.02	
1979	3248.28	3349.4	3452.97	1166.32	27.95	0.13	27.48	1.14	0.37	0.03	209	0.01	a
2296	3248.29	3405.0	3447.58	777.17	25.46	0.02	25.44	0.72	0.05	0.11	123	0.79	
192	3248.30	3155.7	3474.36	4020.06	28.77	0.19	28.53	-0.17	0.23	0.13	153	0.08	a
471	3248.30	3219.9	3469.92	3413.65	26.47	0.05	26.44	1.15	0.33	0.19	213	0.03	
1377	3248.31	3318.2	3454.75	1949.93	28.09	0.13	27.99	0.59	0.20	0.30	107	0.02	ae
1454	3248.32	3322.1	3450.72	1851.53	29.42	0.27	28.56	2.34	-0.01	0.70	137	0.72	a
1551	3248.32	3327.5	3450.76	1718.10	29.64	0.25	28.94	...	...	1.82	104	0.76	a
2	3248.33	3134.6	3474.49	4548.79	27.37	1.06	23.43	0.61	-0.13	0.82	233	0.13	ae
233	3248.33	3159.3	3469.18	3930.94	28.60	0.17	28.62	...	1.21	-0.23	113	0.80	a
643	3248.34	3233.0	3459.44	3083.93	25.73	0.03	25.68	...	0.73	0.19	189	0.03	
1418	3248.34	3320.6	3448.08	1890.34	29.38	0.25	28.80	...	0.28	0.86	123	0.72	a
1086	3248.36	3301											

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
2022	3248.39	3351.8	3431.26	1107.72	27.19	0.06	27.09	...	...	1.53	112	0.27	a
265	3248.40	3201.0	3455.19	3887.36	28.37	0.14	27.94	...	...	0.57	125	0.08	a
5	3248.41	3135.7	3458.84	4520.97	28.64	0.36	28.30	-0.09	1.14	0.31	73	0.95	a
1039	3248.42	3258.3	3437.57	2449.27	27.00	0.08	26.83	0.68	0.23	0.32	166	0.02	
1675	3248.42	3333.7	3430.21	1561.90	27.85	0.11	27.69	...	...	0.48	134	0.02	a
535	3248.43	3225.0	3443.91	3285.15	29.43	0.28	28.53	-0.03	0.80	0.04	130	0.78	a
1811	3248.43	3341.0	3427.17	1377.43	28.30	0.14	28.00	...	0.62	0.40	165	0.04	a
56	3248.44	3142.8	3451.40	4344.41	27.26	0.11	26.97	-0.77	0.67	0.52	239	0.01	a
945	3248.44	3250.6	3435.77	2643.68	26.11	0.04	25.96	0.62	0.47	0.66	267	0.02	
409	3248.45	3214.3	3442.36	3554.89	27.46	0.10	27.06	2.25	-0.21	0.33	297	0.00	
1133	3248.45	3304.9	3431.05	2284.32	29.26	0.25	28.85	...	0.81	0.47	141	0.34	a
1320	3248.45	3314.9	3429.48	2032.17	29.09	0.22	28.67	0.32	0.84	0.90	163	0.22	a
1987	3248.45	3349.7	3421.06	1160.71	28.85	0.17	28.32	-0.54	-0.03	0.87	122	0.11	a
2062	3248.45	3353.9	3420.84	1056.02	27.57	0.09	27.34	0.45	0.26	0.60	169	0.08	
182	3248.46	3154.9	3445.12	4041.53	28.09	0.13	27.97	0.65	-0.43	0.36	152	0.01	a
423	3248.46	3215.2	3440.11	3532.10	28.48	0.15	28.13	...	1.84	0.51	199	0.15	aef
435	3248.46	3216.7	3440.25	3494.38	25.81	0.03	25.76	0.17	1.07	0.68	142	0.03	
1728	3248.46	3336.2	3421.39	1498.52	28.10	0.13	27.98	...	0.39	0.40	153	0.16	a
15	3248.47	3139.3	3447.53	4431.51	21.55	0.00	21.58	1.67	1.53	1.69	111	0.96	a
294	3248.47	3204.2	3441.73	3806.69	27.46	0.09	27.25	4.46	0.31	0.24	177	0.01	a
424	3248.47	3215.5	3439.49	3523.12	28.86	0.20	28.69	0.81	1.12	0.14	133	0.05	aef
776	3248.47	3241.8	3432.79	2864.30	27.08	0.08	26.69	0.26	0.17	0.06	258	0.01	
541	3248.48	3225.6	3435.35	3269.72	27.72	0.10	27.63	0.58	0.44	-0.01	147	0.01	e
569	3248.48	3228.6	3434.69	3195.14	23.85	0.01	23.80	1.11	0.28	0.74	418	0.03	
1022	3248.48	3257.1	3428.12	2479.84	29.12	0.19	29.13	...	1.27	1.23	72	0.95	a
502	3248.49	3222.1	3434.00	3356.89	28.44	0.15	28.19	...	0.06	0.38	154	0.06	a
811	3248.49	3243.8	3428.99	2814.30	28.00	0.11	27.74	0.87	0.16	0.50	134	0.25	a
1522	3248.49	3325.9	3419.25	1757.69	27.89	0.10	27.78	...	1.13	0.30	111	0.46	a
2114	3248.49	3356.0	3412.13	1002.80	29.70	0.31	29.16	-0.09	1.92	0.09	121	0.94	a
729	3248.50	3238.1	3427.96	2957.08	29.44	0.29	30.51	...	0.74	0.31	52	0.03	a
1744	3248.50	3337.1	3413.98	1476.55	27.93	0.11	27.72	-0.21	0.23	0.41	114	0.13	a
196	3248.51	3156.2	3436.02	4008.35	27.67	0.10	27.52	-0.15	0.40	0.62	180	0.23	
274	3248.52	3201.8	3433.13	3867.76	29.61	0.28	28.78	0.23	-0.15	0.21	113	0.76	a
1073	3248.52	3300.7	3419.41	2389.14	27.66	0.15	27.82	0.67	0.30	-0.09	166	0.02	a
550	3248.53	3226.2	3425.91	3255.85	28.46	0.16	28.26	1.13	0.68	0.00	152	0.03	a
1458	3248.53	3322.4	3411.65	1845.67	30.08	0.46	28.85	0.70	0.74	-0.51	140	0.43	a
48	3248.54	3142.0	3433.49	4364.14	28.07	0.19	27.91	0.02	1.31	-0.22	174	0.01	a
1102	3248.54	3302.5	3415.35	2343.85	29.60	0.27	28.79	...	-0.00	1.11	125	0.86	a
1352	3248.54	3317.1	3412.41	1979.12	26.62	0.05	26.56	...	0.85	0.27	167	0.03	a
2038	3248.54	3352.6	3403.48	1087.63	30.55	0.57	30.12	-0.76	1.82	-0.52	140	0.82	a
1791	3248.55	3340.2	3405.58	1399.17	25.42	0.02	25.36	0.49	0.09	0.17	184	0.03	
1276	3248.56	3314.0	3408.90	2057.30	23.24	0.01	23.27	0.22	0.53	0.61	161	0.04	
149	3248.57	3152.6	3424.97	4097.55	28.92	0.18	28.90	2.18	0.36	0.15	76	0.95	a
244	3248.57	3159.8	3424.80	3917.34	28.82	0.15	28.57	...	...	1.50	76	0.97	a
2190	3248.57	3400.0	3396.20	901.83	28.79	0.17	27.79	...	0.09	0.70	178	0.47	a
235	3248.58	3159.3	3421.46	3929.85	29.52	0.30	29.25	...	1.41	-0.26	92	0.69	
425	3248.59	3215.1	3416.02	3534.67	28.11	0.12	28.00	...	0.50	0.16	113	0.27	a
662	3248.59	3234.1	3411.68	3057.17	28.64	0.16	28.49	...	0.98	0.30	116	0.26	a
691	3248.59	3235.6	3411.86	3019.46	28.97	0.21	28.39	0.90	0.27	0.16	117	0.03	a
3	3248.60	3134.8	3423.65	4545.32	...	...	24.12	...	-1.58	3.59	69	0.90	ae
607	3248.60	3230.6	3411.83	3146.07	29.11	0.25	29.27	...	-0.07	0.22	140	0.18	a
459	3248.61	3219.1	3413.07	3432.67	26.81	0.06	26.72	2.01	0.79	0.21	237	0.02	
1859	3248.61	3342.9	3392.52	1330.84	28.72	0.20	28.42	2.41	0.48	-0.24	126	0.16	a
647	3248.65	3233.2	3401.05	3080.39	29.96	0.33	29.41	0.97	-0.22	0.14	103	0.81	a
703	3248.65	3237.1	3401.47	2983.21	25.39	0.02	25.35	1.50	0.07	0.13	214	0.03	
899	3248.65	3248.5	3398.64	2697.16	30.14	0.41	29.70	...	-0.08	-0.17	107	0.72	a
1350	3248.66	3316.7	3389.77	1988.35	30.02	0.41	28.92	-2.76	2.48	-0.26	163	0.71	a
10	3248.67	3136.8	3411.69	4493.65	29.07	0.39	28.58	...	2.76	0.02	104	0.97	a
353	3248.67	3208.5	3403.52	3700.01	27.13	0.07	27.05	0.63	0.08	0.24	151	0.02	
1339	3248.67	3316.0	3388.00	2006.27	29.33	0.25	28.67	-0.88	1.11	0.41	121	0.29	a
216	3248.68	3158.3	3404.99	3956.74	27.95	0.13	27.25	1.71	0.28	0.02	261	0.01	a
1130	3248.68	3304.9	3388.13	2285.51	27.78	0.11	27.30	0.60	0.91	0.45	203	0.01	a
261	3248.69	3200.8	3402.45	3893.84	26.96	0.05	26.91	2.82	1.12	1.03	103	0.87	a
2082	3248.69	3354.5	3374.83	1039.49	28.77	0.19	28.59	2.14	0.19	-0.30	120	0.43	a
146	3248.72	3152.4	3398.22	4102.71	27.38	0.09	26.95	0.18	-0.02	0.48	220	0.03	e
2128	3248.72	3356.8	3370.06	982.51	29.05	0.21	28.66	-0.31	0.29	0.51	111	0.18	
94	3248.73	3147.6	3396.61	4225.24	28.34	0.17	28.16	1.80	-0.47	0.23	192	0.01	a
492	3248.74	3221.3	3387.80	3378.42	28.17	0.12	27.78	1.92	-0.20	0.75	167	0.01	a
2548	3248.76	3416.5	3357.29	489.19	28.36	0.21	27.60	...	1.58	1.47	173	0.76	a
2049	3248.78	3353.2	3358.71	1073.98	28.84	0.19	29.11	-0.23	0.31	0.10	113	0.12	a
1699	3248.80	3334.9	3360.42	1531.67	29.67	0.34	29.07	...	-0.29	-0.02	109	0.25	ae
2431	3248.80	3411.2	3351.50	621.13	28.83	0.20	28.16	-0.38	0.38	0.97	145	0.14	a
481	3248.81	3220.6	3375.07	3396.00	27.55	0.09	27.40	2.15	-0.13	-0.03	138	0.01	
2217	3248.82	3401.0	3350.41	878.12	28.29	0.14	28.15	...	0.41	0.53	154	0.01	a
546	3248.83	3225.9	3370.84	3262.48	27.27	0.07	27.20	1.90	0.53	0.13	122	0.13	a
1273	3248.83	3313.4	3359.30	2071.98	27.38	0.08	27.34	1.46	0.27	0.14	130	0.04	a
24	3248.84	3138.9	3378.15	4441.98	27.98	0.24	27.40	...	0.05	-0.30	201	0.06	a
152	3248.84	3153.4	3376.23	4078.96	24.86	0.02	24.61	1.85	0.79	0.28	554	0.00	ef
284	3248.84	3203.6	3373.37	3822.08	24.07	0.01	24.08	0.35	0.34	0.74	191	0.03	
890	3248.84	3248.1	3362.38	2705.82	30.82	0.66	32.10	2.41	-0.04	-0.75	103	0.78	a
114													

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
109	3248.88	3148.5	3370.13	4201.25	26.82	0.06	26.73	1.98	0.13	161	0.02	
416	3248.88	3216.1	3362.71	3509.67	22.92	0.01	22.92	0.90	0.87	370	0.03	
378	3248.89	3211.6	3362.31	3622.72	27.93	0.10	27.39	-0.35	0.98	1.06	187	0.08
665	3248.89	3234.1	3357.36	3056.92	29.35	0.21	29.03	-0.70	0.76	1.19	98	0.68
1730	3248.89	3336.2	3342.53	1498.54	27.39	0.08	27.34	-0.33	0.39	0.56	118	0.02
373	3248.90	3210.9	3359.89	3639.71	28.65	0.18	28.24	1.12	-0.06	-0.18	140	0.09
1336	3248.90	3315.9	3344.76	2009.06	28.71	0.16	28.45	2.46	0.52	0.63	117	0.78
1869	3248.90	3343.4	3339.51	1319.69	29.33	0.28	29.20	2.33	0.45	-0.33	113	0.52
2285	3248.90	3404.8	3333.89	782.54	22.64	0.00	22.67	0.79	0.67	1.06	146	0.53
501	3248.91	3222.0	3356.49	3360.59	29.25	0.22	28.04	...	0.42	0.29	184	0.39
1549	3248.91	3327.3	3341.01	1722.47	29.24	0.23	28.66	0.22	-0.07	0.53	128	0.40
1933	3248.91	3346.8	3336.55	1234.88	28.52	0.14	28.33	-0.49	1.84	0.61	99	0.27
681	3248.92	3235.5	3351.14	3022.83	25.11	0.02	25.12	2.87	0.32	0.16	129	0.05
2187	3248.92	3359.8	3331.29	908.71	29.18	0.27	28.00	...	0.30	-0.03	211	0.06
530	3248.93	3224.0	3352.28	3311.53	29.24	0.25	28.66	-0.99	0.78	0.10	139	0.44
1052	3248.93	3258.8	3343.89	2437.36	27.76	0.11	27.47	3.43	0.26	0.05	122	0.27
1899	3248.95	3344.9	3330.54	1280.74	28.28	0.12	28.21	1.68	-0.14	0.63	107	0.22
1949	3248.95	3347.8	3328.12	1209.21	28.24	0.13	27.73	...	...	0.58	149	0.01
2546	3248.96	3416.4	3319.98	491.85	28.50	0.16	28.13	-0.48	-1.89	4.04	89	0.80
83	3248.98	3142.1	3353.01	4362.74	26.36	0.07	26.18	2.07	0.56	0.16	184	0.04
560	3248.98	3227.3	3342.58	3229.49	29.31	0.26	29.61	...	0.82	0.30	139	0.12
1457	3248.99	3322.3	3328.26	1847.50	27.38	0.08	27.28	...	...	0.79	157	0.01
1591	3248.99	3329.0	3326.68	1680.31	29.55	0.26	28.80	-0.14	0.05	0.75	148	0.90
1203	3249.00	3309.4	3328.91	2172.21	24.36	0.01	24.34	0.38	0.95	0.44	285	0.03
2140	3249.00	3357.4	3316.74	968.31	29.00	0.22	28.65	0.23	0.86	-0.29	117	0.22
605	3249.01	3230.4	3335.09	3150.69	28.99	0.19	29.08	0.62	-0.19	0.38	99	0.49
2051	3249.02	3353.3	3314.63	1071.63	28.84	0.19	28.32	...	0.06	0.34	127	0.16
791	3249.03	3242.1	3282.98	2857.61	29.75	0.25	29.25	1.58	0.42	1.37	114	0.78
2069	3249.03	3354.6	3312.48	1037.76	25.87	0.04	25.68	0.49	0.11	0.32	348	0.03
2406	3249.03	3411.4	3309.46	616.16	25.13	0.03	24.87	0.50	0.35	0.71	379	0.03
747	3249.04	3237.7	3328.73	2968.61	29.33	0.24	28.83	...	0.64	-0.03	101	0.24
64	3249.06	3141.6	3337.88	4374.70	27.10	0.11	26.91	3.30	0.19	0.25	222	0.02
55	3249.06	3142.5	3336.51	4351.32	29.24	0.29	28.43	...	...	0.68	122	0.96
525	3249.06	3224.5	3327.06	3298.72	24.56	0.02	24.52	0.69	0.29	0.45	346	0.03
337	3249.07	3207.7	3329.03	3720.34	28.08	0.11	28.45	-0.26	0.47	0.33	92	0.28
2468	3249.07	3412.6	3301.30	587.89	27.81	0.16	27.45	3.19	0.48	0.19	172	0.02
2388	3249.08	3409.1	3299.43	674.49	29.07	0.24	28.63	0.79	0.48	-0.30	122	0.32
2405	3249.08	3410.6	3299.24	637.26	25.68	0.04	25.63	0.82	0.13	0.08	223	0.03
303	3249.09	3205.9	3327.19	3765.14	23.77	0.01	23.77	1.28	0.18	0.19	333	0.03
835	3249.10	3245.2	3316.10	2780.48	26.88	0.06	26.85	1.28	-0.10	0.09	173	0.02
1229	3249.10	3310.9	3310.48	2134.76	29.08	0.23	28.10	0.14	0.23	0.51	196	0.06
1592	3249.10	3329.1	3305.62	1677.10	29.24	0.24	28.87	0.70	0.30	0.22	127	0.24
1487	3249.11	3324.2	3304.84	1801.31	27.84	0.11	27.11	...	0.23	0.70	244	0.01
2221	3249.12	3401.0	3294.59	877.10	30.18	0.46	29.40	...	-0.49	0.03	126	0.51
1351	3249.14	3316.7	3300.74	1988.93	29.29	0.27	28.92	...	1.34	-0.11	142	0.32
2404	3249.15	3411.8	3286.78	606.11	26.07	0.04	26.01	0.14	0.73	0.94	129	0.05
1488	3249.17	3324.6	3293.42	1790.03	27.55	0.10	27.17	0.72	0.62	0.39	182	0.02
20	3249.18	3138.8	3316.41	4446.06	29.14	0.55	28.31	...	1.43	-0.35	167	0.69
491	3249.18	3221.2	3306.92	3382.07	28.47	0.15	27.45	-1.03	1.23	0.88	325	0.08
526	3249.18	3226.0	3305.01	3261.80	23.29	0.01	23.30	2.48	0.48	0.19	304	0.03
469	3249.19	3219.5	3304.50	3424.56	28.53	0.15	28.18	-0.31	0.98	0.42	130	0.01
620	3249.20	3231.1	3299.96	3132.38	29.92	0.37	29.47	0.11	-0.10	-0.17	123	0.65
868	3249.20	3247.1	3295.83	2733.28	26.24	0.04	26.17	-1.04	2.87	1.21	159	0.03
2337	3249.20	3406.9	3279.16	730.92	26.49	0.05	26.38	0.12	-0.05	0.25	192	0.03
1978	3249.21	3349.3	3280.91	1170.54	26.49	0.05	26.42	4.10	0.34	0.31	160	0.03
2099	3249.21	3355.3	3278.89	1020.10	29.42	0.26	29.10	4.00	-0.01	0.44	96	0.95
302	3249.22	3205.6	3303.22	3773.47	25.40	0.02	25.29	1.30	0.67	0.65	191	0.03
443	3249.22	3217.3	3300.16	3480.81	29.59	0.26	29.12	0.46	0.51	0.43	123	0.68
2202	3249.22	3400.5	3275.73	891.35	28.35	0.14	28.07	...	1.85	0.24	125	0.05
331	3249.23	3207.1	3301.09	3734.49	28.28	0.15	28.07	...	0.09	0.29	131	0.01
960	3249.23	3253.4	3289.28	2573.86	22.47	0.01	22.44	0.67	0.77	0.74	651	0.03
377	3249.24	3211.6	3296.58	3622.24	27.24	0.07	26.79	2.73	0.41	0.83	201	0.01
523	3249.24	3224.0	3294.82	3311.42	27.93	0.13	27.67	1.10	-0.09	0.00	181	0.01
731	3249.24	3238.1	3291.00	2956.98	29.01	0.22	28.48	0.51	0.11	-0.06	177	0.02
673	3249.25	3243.5	3290.34	3048.48	30.06	0.34	29.48	-1.50	0.79	0.54	111	0.77
789	3249.25	3242.6	3288.09	2844.33	25.90	0.03	25.86	...	0.53	0.13	123	0.34
66	3249.26	3145.0	3299.57	4289.76	24.61	0.02	24.58	2.34	0.78	0.28	316	0.03
1329	3249.26	3315.6	3278.96	2016.61	27.85	0.10	27.41	-0.18	-0.21	0.08	127	0.02
1771	3249.26	3339.0	3274.29	1431.01	29.59	0.26	29.56	0.34	0.21	0.70	89	0.83
1799	3249.26	3340.5	3273.97	1391.42	28.28	0.14	28.04	2.58	0.16	0.05	127	0.01
1917	3249.26	3346.1	3272.47	1252.37	26.08	0.04	26.04	3.86	0.16	0.18	193	0.03
344	3249.27	3208.3	3291.82	3704.46	27.87	0.14	27.31	2.84	-0.07	0.11	268	0.00
510	3249.27	3223.1	3289.55	3334.92	26.69	0.05	26.62	0.17	-0.08	0.12	168	0.03
1416	3249.27	3321.0	3276.19	1882.54	26.29	0.05	26.22	0.02	-0.01	0.16	207	0.03
2402	3249.27	3410.2	3264.16	647.17	27.47	0.11	27.24	0.74	0.03	0.16	152	0.02
97	3249.29	3146.9	3293.12	4241.81	27.17	0.08	26.88	0.30	0.02	0.47	152	0.04
788	3249.30	3242.2	3279.95	2855.24	27.29	0.07	27.14	1.88	0.18	0.24	122	0.22
1542	3249.30	3326.8	3268.58	1736.58	29.28	0.23	28.84	...	0.72	0.33	96	0.89
1705	3249.30	3335.1	3268.03	1526.89	28.54	0.16	28.51	0.56	0.18	0.25	133	0.10
1809	3249.30	3341.0	3265.77	1380.15	28.97	0.23	28.48	0.13	0.12	-0.15	130	0.06
707	3249.31	3236.9	3279.04	2988.36	27.11	0.07	26.87	-0.27	0.63	0.54	169	0.02
4	3249.32	3135.3	3289.95	4534.06	...	...	24.62	...	-1.97	5.59	72	0.95
241	3249.32	3159.8	3285.36	3918.04	28.81	0.20	28.39	0.85	-0.00			

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1854	3249.32	3343.1	3262.18	1327.61	24.83	0.02	24.81	0.06	0.64	0.72	154	0.03 ef
1374	3249.33	3318.0	3265.37	1956.46	28.94	0.23	28.35	0.67	0.21	-0.11	175	0.15 a
1732	3249.33	3336.5	3260.71	1493.89	26.12	0.03	26.08	-0.00	0.77	0.85	128	0.04
2004	3249.33	3351.0	3258.66	1130.07	28.13	0.14	27.76	1.32	-0.24	0.45	231	0.00
108	3249.34	3149.0	3284.16	4189.41	22.94	0.00	22.97	1.98	1.51	1.04	105	0.98 a
270	3249.34	3201.6	3280.53	3874.32	29.82	0.39	28.09	...	-0.33	-0.21	320	0.18 a
857	3249.36	3246.5	3266.48	2747.54	26.33	0.05	26.21	0.19	0.26	0.79	251	0.00
309	3249.37	3205.8	3274.46	3768.93	29.49	0.26	28.34	...	-0.90	1.40	177	0.46 a
33	3249.38	3139.6	3279.45	4425.61	26.92	0.14	26.20	1.08	2.01	0.49	309	0.02 a
669	3249.38	3234.4	3265.92	3051.07	29.19	0.21	28.82	...	1.44	0.28	124	0.83 a
693	3249.38	3235.8	3265.46	3015.50	27.00	0.06	26.94	2.94	1.07	0.65	136	0.02
565	3249.40	3226.3	3265.28	3254.95	22.93	0.01	22.97	3.16	0.44	0.21	135	0.79 aef
723	3249.40	3237.6	3262.61	2970.79	29.81	0.31	28.85	...	0.55	0.45	132	0.63 a
393	3249.41	3212.6	3266.11	3597.97	29.49	0.22	28.86	...	...	2.03	105	0.56 a
404	3249.41	3213.7	3265.67	3570.33	28.66	0.17	28.57	...	0.59	0.03	144	0.00 a
1710	3249.41	3335.3	3246.88	1522.10	29.19	0.26	28.62	...	1.95	-0.10	175	0.23 a
675	3249.42	3234.9	3257.94	3039.06	27.73	0.10	27.34	0.29	0.60	0.02	160	0.01 a
528	3249.43	3224.6	3258.58	3297.42	29.00	0.19	28.38	...	-0.20	0.36	157	0.75 a
1855	3249.43	3343.8	3240.85	1310.55	24.28	0.01	24.27	0.41	0.94	0.78	194	0.03 ef
2254	3249.44	3403.1	3234.27	826.13	25.49	0.02	25.47	2.50	0.38	0.31	158	0.03
599	3249.45	3230.2	3254.14	3156.32	27.76	0.10	27.38	1.67	0.01	0.06	155	0.12 a
2427	3249.45	3411.3	3231.22	620.39	27.18	0.09	26.95	0.02	0.22	0.60	212	0.02 a
91	3249.46	3146.6	3263.24	4250.83	26.36	0.05	26.11	-0.36	1.18	1.50	217	0.03
206	3249.46	3157.8	3260.09	3968.37	26.14	0.04	25.81	-0.63	0.87	1.56	282	0.03
271	3249.47	3202.1	3256.39	3861.70	25.45	0.03	25.35	2.02	0.13	0.21	220	0.03
174	3249.48	3154.4	3256.26	4054.27	28.04	0.11	27.94	0.02	0.54	0.64	116	0.31 a
186	3249.50	3155.2	3252.39	4033.62	29.18	0.22	28.69	-0.10	0.31	0.52	117	0.14 a
1212	3249.50	3311.1	3236.23	2129.23	22.99	0.01	22.96	0.42	0.70	0.59	520	0.03
258	3249.52	3200.6	3247.89	3898.81	28.57	0.16	28.28	1.33	0.70	0.19	138	0.04 a
1303	3249.54	3314.8	3226.61	2038.16	27.69	0.11	27.38	-0.47	0.18	0.30	218	0.00 a
2175	3249.54	3359.5	3216.77	915.56	26.98	0.07	26.72	0.18	0.42	0.74	200	0.02 a
1620	3249.55	3330.4	3221.63	1646.35	26.28	0.04	26.13	0.44	0.80	0.42	172	0.03
395	3249.56	3212.9	3237.33	3591.78	28.87	0.19	28.35	3.03	0.85	0.16	161	0.18 a
713	3249.56	3237.0	3231.54	2985.51	27.59	0.09	27.47	1.39	0.35	0.23	134	0.02 a
1221	3249.56	3306.5	3225.83	2246.07	28.62	0.20	28.19	1.53	0.18	0.13	239	0.04
2085	3249.58	3339.0	3213.68	1430.40	25.65	0.03	25.60	1.30	0.07	0.09	228	0.03
753	3249.59	3239.7	3225.61	2918.31	29.82	0.33	29.69	2.26	-0.26	-0.36	92	0.96 a
883	3249.59	3248.1	3223.80	2708.13	28.21	0.14	27.84	1.84	0.32	0.06	160	0.01 a
1140	3249.59	3305.7	3220.40	2266.45	28.39	0.15	28.39	-0.20	0.42	0.54	124	0.01 a
1945	3249.59	3347.7	3211.15	1212.03	25.93	0.03	25.88	-0.19	0.02	0.59	107	0.97 a
1063	3249.60	3300.1	3220.20	2407.76	27.17	0.08	26.99	-1.64	3.22	1.04	146	0.26
2577	3249.61	3418.3	3200.62	445.06	29.17	0.40	27.71	...	1.09	0.87	121	0.93 ae
728	3249.62	3238.1	3220.79	2958.47	28.33	0.15	27.55	...	0.76	0.33	231	0.13 a
1095	3249.62	3302.2	3216.12	2354.43	29.67	0.41	30.62	0.52	-0.15	-0.04	115	0.66 a
910	3249.63	3249.0	3216.21	2685.37	28.71	0.16	28.65	-0.72	1.27	0.66	115	0.65 a
1304	3249.63	3314.6	3211.31	2043.82	28.99	0.22	28.24	-0.94	2.03	0.20	152	0.19 a
2007	3249.63	3351.3	3201.80	1122.23	25.95	0.03	25.92	1.90	1.93	0.75	97	0.99 a
2105	3249.63	3356.0	3200.51	1003.44	26.98	0.07	26.90	0.69	-0.12	0.26	176	0.02
1101	3249.64	3303.0	3211.40	2333.35	25.07	0.03	25.01	1.70	0.10	0.03	253	0.03
1872	3249.64	3343.7	3203.12	1312.51	28.17	0.11	27.82	...	0.51	1.93	131	0.43 a
14	3249.65	3138.7	3228.71	4448.05	24.80	0.05	24.35	1.25	0.15	0.28	637	0.03
2277	3249.65	3403.6	3196.20	813.12	29.04	0.23	28.63	0.06	0.33	-0.00	135	0.10 a
1011	3249.68	3256.2	3206.11	2504.58	29.15	0.31	28.20	1.57	0.72	-0.33	127	0.02 a
2043	3249.68	3353.1	3192.98	1077.09	27.51	0.09	27.19	-0.39	1.13	0.37	141	0.01 a
74	3249.69	3145.6	3219.11	4274.90	28.72	0.24	28.23	0.54	0.13	0.43	183	0.01 a
578	3249.69	3228.8	3210.72	3190.95	28.52	0.18	28.34	0.34	0.81	0.21	206	0.00 a
820	3249.69	3244.2	3206.21	2805.40	28.66	0.14	28.35	...	1.51	1.30	92	0.65 a
1474	3249.69	3233.6	3197.84	1817.68	26.45	0.04	26.40	...	0.02	-0.05	121	0.05
684	3249.71	3231.8	3206.46	3117.14	27.38	0.09	27.36	0.60	0.26	0.08	146	0.02 a
987	3249.71	3254.3	3200.61	2553.23	29.32	0.30	29.33	-0.17	0.97	-0.09	199	0.39 a
121	3249.72	3150.1	3213.38	4162.79	26.22	0.04	26.08	2.82	1.05	0.46	257	0.03
360	3249.72	3209.4	3208.84	3678.26	29.08	0.19	28.66	-0.64	-0.27	0.92	114	0.50 a
901	3249.72	3248.6	3200.70	2694.68	29.74	0.28	29.14	-0.97	0.87	0.93	92	0.84 a
1453	3249.72	3222.2	3193.10	1851.68	28.29	0.16	28.16	1.03	-0.05	-0.05	154	0.01 a
148	3249.75	3152.7	3207.79	4098.00	28.03	0.11	27.85	-1.99	1.84	0.97	124	0.08
914	3249.75	3249.1	3194.59	2683.09	29.76	0.29	29.08	...	-0.75	0.91	93	0.88 a
1190	3249.76	3304.5	3189.73	2297.71	25.12	0.02	25.03	0.22	0.64	0.83	363	0.03
1363	3249.76	3317.4	3185.75	1972.38	29.20	0.22	28.75	...	0.91	0.44	109	0.44 a
1802	3249.76	3336.5	3181.19	1494.65	28.19	0.13	27.75	-0.55	1.16	0.28	142	0.04
7	3249.79	3136.6	3202.84	4500.56	26.44	0.12	26.14	0.50	0.92	0.37	173	0.03
552	3249.80	3226.9	3190.06	3240.76	26.40	0.04	26.15	...	1.71	154	0.03	
1435	3249.80	3321.9	3178.53	1860.00	29.73	0.36	28.41	...	0.10	-0.28	199	0.75 aef
1412	3249.81	3320.5	3175.93	1894.20	26.88	0.05	26.86	1.79	0.23	0.07	119	0.17 a
1434	3249.81	3321.6	3175.27	1867.13	29.38	0.29	28.33	1.18	-0.13	-0.03	145	0.12 ef
2461	3249.81	3413.3	3164.44	570.94	23.29	0.01	23.28	0.73	0.68	1.09	259	0.03
1644	3249.82	3331.5	3170.94	1620.10	29.18	0.25	28.96	0.34	1.10	-0.14	108	0.05 a
375	3249.83	3211.0	3189.02	3637.68	28.06	0.11	27.94	-0.05	0.51	0.31	127	0.08 a
164	3249.84	3152.6	3190.47	4101.21	29.14	0.22	28.91	-1.55	1.64	0.24	99	0.96 a
446	3249.84	3217.7	3184.48	3471.43	26.56	0.05	26.54	...	0.47	0.39	186	0.03 a
664	3249.84	3234.1	3180.70	3058.52	29.55	0.23	28.27	...	1.73	207	0.78 a	
10713	3249.85	3406.2	3157.77	747.52	23.30	0.01	22.98	0.79	0.43	0.71	588	0.00
1587	3249.88	3328.9	3160.69	1684.24	29.46	0.23	28.88	...	1.77	132	0.61 a	
76	3249.89	3145.7	3182.87									

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
2443	3249.89	3411.8	3149.41	608.31	27.25	0.09	27.19	...	0.36	-0.02	140	0.03	a
671	3249.91	3234.5	3167.90	3048.69	28.53	0.14	28.45	...	0.49	0.40	112	0.21	a
217	3249.92	3158.3	3174.52	3956.98	28.95	0.21	28.57	...	0.22	0.32	186	0.23	a
796	3249.93	3242.9	3162.67	2838.89	26.45	0.05	26.41	...	0.73	0.20	203	0.03	a
330	3249.94	3207.0	3169.52	3738.74	28.92	0.17	27.67	...	1.63	188	0.21	a	
2173	3249.94	3359.2	3143.48	925.22	28.62	0.16	28.52	...	1.05	97	0.04	a	
534	3249.96	3225.3	3160.33	3280.59	27.09	0.07	26.96	1.44	0.55	0.14	205	0.02	
822	3249.97	3244.3	3154.05	2804.68	29.41	0.26	28.29	...	-0.13	-0.18	155	0.24	a
1251	3249.97	3312.2	3148.66	2104.04	28.50	0.17	27.90	-0.08	0.07	0.02	220	0.15	
1759	3249.97	3338.1	3142.65	1453.19	29.31	0.25	28.91	...	0.52	0.37	137	0.11	a
315	3249.98	3205.3	3161.15	3783.02	26.98	0.06	26.82	0.43	-0.06	0.96	158	0.02	
1358	3249.98	3317.4	3145.67	1973.38	27.49	0.09	27.24	1.50	0.36	0.12	146	0.05	
1913	3250.00	3345.2	3134.69	1276.93	23.68	0.01	23.65	0.32	0.17	0.51	368	0.03	
596	3250.01	3229.9	3150.77	3164.68	27.90	0.10	27.55	0.51	0.00	0.54	137	0.03	a
1220	3250.01	3310.5	3140.63	2147.06	28.96	0.18	28.95	-0.25	0.29	0.57	80	0.97	a
1704	3250.01	3335.1	3135.51	1529.45	29.39	0.24	29.20	...	3.78	0.62	91	0.28	
2541	3250.02	3416.5	3124.27	490.82	26.83	0.09	26.66	0.82	0.62	0.06	136	0.03	
60	3250.04	3141.5	3155.47	4380.27	27.06	0.11	26.83	0.15	-0.16	0.30	155	0.02	
882	3250.04	3247.8	3140.40	2716.85	29.67	0.28	29.85	...	-0.20	0.07	85	0.89	a
10652	3250.04	3356.8	3126.14	985.43	24.41	0.01	24.27	2.84	0.52	0.25	200	0.03	
136	3250.05	3151.6	3151.93	4125.19	27.16	0.08	27.03	...	1.67	0.19	153	0.02	a
367	3250.08	3210.3	3142.95	3656.82	28.12	0.12	27.32	0.26	-0.46	1.14	204	0.00	a
1836	3250.08	3338.9	3121.38	1434.69	25.94	0.03	25.92	3.26	0.21	0.11	123	0.15	
1029	3250.09	3257.6	3128.69	2469.45	28.19	0.14	27.84	0.04	0.02	0.12	112	0.37	a
95	3250.10	3146.7	3144.42	4248.13	28.62	0.22	28.27	...	...	0.19	139	0.08	ae
1202	3250.10	3309.1	3124.91	2182.19	28.84	0.20	28.42	-0.22	0.35	0.27	112	0.01	ae
10682	3250.10	3357.9	3114.36	957.06	27.90	0.07	25.77	...	1.24	0.42	291	0.00	
326	3250.11	3206.6	3137.58	3750.35	25.53	0.03	25.41	1.58	0.18	0.19	290	0.03	
825	3250.11	3244.6	3128.20	2795.51	28.37	0.14	28.21	1.01	0.59	0.25	120	0.05	a
1111	3250.11	3303.5	3124.40	2322.78	28.65	0.22	28.47	...	0.33	-0.01	132	0.11	a
590	3250.13	3229.5	3128.41	3175.03	27.53	0.10	27.19	1.45	0.59	0.13	204	0.02	
1017	3250.13	3257.0	3122.78	2485.52	26.98	0.07	26.83	-0.18	0.45	0.49	167	0.02	
2571	3250.13	3417.6	3103.91	463.64	29.21	0.43	28.89	...	-0.39	-0.19	129	0.96	a
804	3250.14	3243.7	3124.39	2819.07	27.36	0.07	27.14	...	...	2.14	161	0.01	
29	3250.16	3139.5	3134.77	4428.77	27.42	0.17	26.68	...	0.17	0.80	200	0.01	a
450	3250.16	3218.1	3125.42	3461.13	28.21	0.17	28.20	...	0.85	0.39	221	0.00	ae
1378	3250.16	3183.3	3112.70	1952.19	28.78	0.21	28.24	1.72	-0.01	-0.14	144	0.02	a
1181	3250.17	3308.5	3112.29	2196.04	26.60	0.06	26.45	2.28	2.33	0.95	288	0.00	
252	3250.19	3204.9	3123.70	3793.02	25.09	0.02	25.05	0.78	0.08	0.66	223	0.03	ef
1768	3250.19	3339.0	3100.84	1431.74	28.57	0.18	28.14	2.06	0.68	-0.23	125	0.02	a
140	3250.20	3152.3	3124.78	4108.12	26.45	0.06	26.02	0.20	0.39	0.55	461	0.00	
249	3250.20	3200.1	3121.68	3912.24	29.44	0.24	28.64	1.51	0.49	0.59	146	0.58	a
1057	3250.20	3259.3	3108.55	2428.89	29.67	0.27	28.92	...	2.54	1.67	98	0.85	a
1740	3250.20	3335.8	3099.78	1512.96	27.94	0.13	27.81	...	0.29	0.08	161	0.01	aef
1443	3250.21	3322.1	3102.19	1854.76	27.11	0.07	27.00	1.18	1.16	0.34	175	0.06	
884	3250.22	3248.1	3106.86	2709.92	29.56	0.31	29.10	-0.26	0.44	-0.22	131	0.93	a
1482	3250.22	3323.9	3099.56	1811.47	28.83	0.17	28.57	...	0.38	0.75	111	0.22	a
1860	3250.22	3343.2	3095.59	1325.78	26.85	0.06	26.63	...	0.32	0.70	199	0.02	
69	3250.23	3145.8	3119.57	4271.17	23.36	0.01	23.31	0.39	0.31	0.68	463	0.03	
1293	3250.23	3314.4	3099.69	2050.14	26.28	0.04	26.20	...	1.73	0.17	151	0.03	
190	3250.24	3155.6	3116.07	4025.86	29.90	0.35	28.63	...	...	0.58	140	0.06	a
200	3250.24	3156.6	3115.59	4000.62	28.76	0.20	28.35	...	1.50	0.26	190	0.01	a
10168	3250.24	3220.8	3110.48	3393.96	29.29	0.16	27.88	4.16	0.33	-0.55	125	0.68	a
201	3250.28	3156.9	3107.78	3993.67	29.26	0.27	28.11	...	0.96	0.19	231	0.15	ae
417	3250.28	3215.1	3104.39	3537.85	27.61	0.09	27.44	1.10	0.28	0.26	141	0.01	a
1215	3250.28	3311.5	3091.51	2122.13	25.65	0.03	25.59	3.10	0.41	0.11	275	0.03	f
1709	3250.28	3335.5	3085.58	1519.19	26.36	0.04	26.35	0.82	-0.02	0.07	118	0.09	aef
124	3250.29	3150.4	3107.18	4155.19	27.72	0.12	27.39	...	1.42	0.54	245	0.00	a
254	3250.29	3203.3	3105.23	3832.19	22.18	0.00	22.21	0.70	0.88	0.61	220	0.03	ef
877	3250.29	3247.5	3094.27	2724.72	28.84	0.19	27.99	1.28	0.02	0.48	183	0.09	a
939	3250.29	3251.1	3094.78	2633.28	27.90	0.11	27.27	2.27	0.09	0.07	148	0.24	a
2110	3250.29	3356.0	3078.67	1005.79	29.90	0.41	29.79	1.14	0.71	-0.42	92	0.75	a
45	3250.30	3142.1	3108.70	4365.10	27.09	0.10	26.84	...	1.45	0.57	130	0.51	a
584	3250.30	3224.3	3098.65	3306.38	28.48	0.16	27.97	2.38	1.11	0.33	192	0.01	
236	3250.31	3159.5	3102.00	3926.97	29.29	0.24	29.21	0.94	-0.04	-0.04	89	0.19	a
725	3250.31	3238.1	3093.97	2959.86	26.87	0.06	26.77	...	2.06	0.57	161	0.02	a
991	3250.31	3254.9	3088.76	2537.98	26.06	0.04	26.00	0.66	0.31	0.80	158	0.03	
631	3250.32	3232.1	3093.59	3110.63	29.17	0.23	28.44	-0.86	0.85	0.51	163	0.44	ae
1214	3250.32	3310.3	3084.67	2152.31	26.43	0.04	26.25	-1.46	4.50	1.05	228	0.02	ef
155	3250.33	3152.9	3100.74	4092.96	29.56	0.26	30.60	...	1.63	0.48	97	0.47	a
304	3250.34	3205.0	3094.88	3791.33	30.14	0.51	...	...	-0.48	91	0.03	a	
648	3250.34	3233.3	3088.07	3080.81	29.35	0.24	28.56	0.90	0.20	0.55	109	0.38	a
1370	3250.34	3317.8	3078.87	1963.54	29.05	0.19	28.90	...	0.78	0.80	97	0.73	a
1447	3250.34	3322.1	3078.47	1856.63	28.40	0.16	28.10	...	1.14	0.03	162	0.21	
1692	3250.34	3333.1	3075.37	1580.11	27.63	0.08	27.44	0.88	0.01	0.98	111	0.12	a
2474	3250.34	3413.0	3066.43	578.06	28.05	0.13	28.00	...	...	0.12	94	0.70	a
1279	3250.35	3313.6	3078.54	2069.35	27.20	0.06	27.20	0.34	0.65	0.94	110	0.10	ae
253	3250.36	3201.1	3092.47	3888.20	24.28	0.01	24.20	0.91	0.30	0.77	415	0.03	ef
580	3250.36	3229.1	3086.50	3186.54	27.59	0.09	27.50	-1.19	0.47	0.89	155	0.01	
844	3250.37	3245.6	3079.89	2772.00	28.14	0.14	28.12	2.11	0.44	0.05	153	0.01	a
685	3250.38	3235.4	3081.40	3028.73									

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1473	3250.39	3323.4	3068.36	1823.49	27.50	0.08	27.33	0.17	0.03	0.45	122	0.27
1870	3250.39	3343.5	3063.48	1319.56	29.89	0.38	29.92	0.60	0.30	-0.47	104	0.64
185	3250.40	3155.8	3085.53	4021.83	26.07	0.04	26.01	...	0.81	0.25	213	0.03
338	3250.41	3207.9	3082.09	3717.82	27.55	0.09	27.21	...	0.68	0.12	140	0.05
2313	3250.41	3405.6	3054.75	765.16	27.80	0.13	27.70	...	...	0.66	202	0.00
321	3250.42	3205.5	3080.69	3776.88	28.31	0.13	28.12	0.16	0.95	0.89	130	0.18
812	3250.42	3243.9	3072.45	2813.62	29.13	0.22	28.90	1.90	0.54	-0.21	93	0.24
1151	3250.45	3306.3	3061.66	2253.13	26.45	0.05	26.28	0.76	-0.12	0.78	196	0.03
1274	3250.45	3314.2	3059.20	2054.81	24.60	0.02	24.58	0.83	0.25	0.37	283	0.03
1464	3250.45	3222.9	3056.57	1835.92	28.60	0.17	28.54	-0.68	1.02	0.51	114	0.09
853	3250.47	3246.1	3061.65	2760.18	28.33	0.14	27.92	-1.23	0.47	0.71	167	0.00
1355	3250.48	3317.8	3052.90	1963.12	25.65	0.03	25.56	0.87	0.39	0.84	375	0.00
1861	3250.48	3343.4	3047.68	1321.64	27.35	0.08	27.34	...	...	2.06	185	0.05
503	3250.49	3222.7	3063.17	3346.73	27.11	0.07	26.96	0.25	0.61	1.83	217	0.00
775	3250.50	3231.1	3059.42	3135.28	30.03	0.32	29.60	-0.68	0.17	0.44	76	0.85
2029	3250.50	3352.4	3042.03	1094.78	28.43	0.17	27.81	2.75	0.16	-0.10	192	0.00
10663	3250.50	3400.8	3039.86	884.38	18.15	0.00	18.20	3.37	0.79	0.94	241	0.72
118	3250.51	3149.7	3067.34	4175.03	27.32	0.08	27.02	...	0.82	0.55	156	0.01
10151	3250.51	3218.8	3059.87	3445.52	19.83	0.00	19.87	1.49	-0.09	0.47	121	0.99
333	3250.53	3207.6	3060.14	3724.32	27.41	0.08	27.41	...	0.13	0.00	150	0.02
1247	3250.53	3311.9	3045.31	2110.98	29.11	0.20	29.08	-0.66	0.19	0.52	104	0.22
10659	3250.53	3357.3	3034.98	972.06	25.51	0.02	24.99	0.24	0.85	0.66	211	0.01
1050	3250.54	3258.9	3045.50	2437.53	27.16	0.09	26.75	...	0.36	0.09	217	0.02
151	3250.55	3153.1	3058.57	4089.13	28.50	0.14	28.05	...	0.61	0.51	123	0.15
1500	3250.55	3325.9	3038.32	1760.28	22.53	0.00	22.51	0.97	0.91	0.75	384	0.03
115	3250.56	3149.1	3057.49	4189.87	29.76	0.29	29.07	1.28	0.21	0.47	122	0.83
1828	3250.56	3342.1	3033.33	1354.79	25.56	0.03	25.50	0.22	0.66	0.64	207	0.03
1989	3250.56	3350.3	3030.60	1149.84	27.07	0.07	26.69	-0.80	1.37	0.67	205	0.02
2044	3250.56	3353.1	3029.53	1077.33	28.02	0.12	27.82	0.13	1.23	0.64	179	0.00
332	3250.57	3207.4	3051.31	3731.29	28.27	0.15	28.09	2.08	-0.10	-0.19	117	0.03
150	3250.58	3152.8	3054.16	4096.11	28.70	0.17	28.07	...	1.01	0.29	118	0.19
2084	3250.58	3354.8	3026.04	1036.38	27.26	0.06	27.10	...	1.54	1.37	124	0.33
334	3250.59	3208.1	3048.98	3713.83	26.50	0.05	26.37	1.39	0.12	0.25	181	0.03
2014	3250.60	3351.7	3023.24	1112.90	28.38	0.14	28.17	0.79	0.07	-0.23	97	0.41
612	3250.61	3231.0	3039.85	3139.60	28.75	0.18	28.56	4.45	0.37	0.51	126	0.01
592	3250.62	3228.1	3038.66	3210.72	29.81	0.27	29.20	-0.47	1.15	0.68	85	0.84
1960	3250.62	3348.6	3019.14	1191.96	26.90	0.08	26.83	1.20	0.24	-0.03	234	0.02
10695	3250.62	3404.0	3016.01	804.64	25.97	0.03	24.67	0.32	0.19	0.53	478	0.00
1714	3250.63	3335.8	3020.21	1512.70	28.16	0.13	27.65	-1.55	1.38	0.65	180	0.17
2568	3250.63	3417.5	3012.12	466.93	28.83	0.24	28.01	-0.29	-0.30	0.63	147	0.97
227	3250.64	3159.5	3041.13	3929.21	25.51	0.02	25.47	0.83	0.61	0.45	177	0.03
738	3250.64	3237.5	3032.69	2974.86	28.63	0.14	28.08	...	-1.63	3.09	114	0.04
38	3250.65	3140.9	3044.25	4394.79	27.56	0.16	27.11	1.08	0.74	0.17	140	0.02
1294	3250.65	3314.4	3021.57	2050.85	25.84	0.04	25.75	0.70	0.10	0.01	228	0.03
1780	3250.65	3339.6	3016.55	1418.56	28.59	0.15	28.51	...	1.30	0.36	117	0.01
2484	3250.65	3413.4	3008.18	568.44	29.59	0.34	28.42	4.70	0.94	-0.48	147	0.95
300	3250.66	3204.6	3035.31	3801.16	30.14	0.34	29.67	...	0.39	0.69	106	0.74
348	3250.68	3207.9	3032.54	3718.57	27.84	0.13	27.20	...	0.37	0.27	219	0.00
363	3250.68	3210.7	3030.32	3648.93	25.08	0.02	24.94	0.17	0.67	0.62	324	0.03
1138	3250.68	3305.5	3018.72	2273.62	29.92	0.37	29.78	-0.45	0.38	-0.27	89	0.66
1499	3250.68	3328.5	3012.65	1694.77	23.39	0.01	23.30	2.46	0.30	0.32	701	0.03
133	3250.69	3151.3	3032.97	4134.06	29.19	0.23	28.52	...	0.53	0.17	174	0.74
1625	3250.71	3330.6	3006.79	1642.20	26.86	0.06	26.74	-0.11	0.15	0.82	202	0.02
644	3250.72	3233.2	3019.33	3083.70	29.76	0.34	28.79	-0.74	0.56	0.01	120	0.63
730	3250.72	3237.7	3017.78	2971.31	26.48	0.04	26.36	0.02	0.19	0.87	142	0.04
1501	3250.72	3236.0	3007.29	1758.21	23.34	0.01	23.26	0.69	0.44	0.64	289	0.03
314	3250.73	3206.0	3023.57	3765.12	28.99	0.22	28.14	0.70	-0.11	0.08	178	0.03
2018	3250.74	3351.8	2997.61	1111.73	29.01	0.20	28.60	-0.49	0.30	0.36	121	0.16
433	3250.75	3216.4	3017.22	3504.79	29.41	0.27	28.51	1.01	-0.20	0.14	112	0.11
1092	3250.76	3302.1	3004.56	2359.51	29.96	0.55	29.52	-0.34	0.50	-0.46	87	0.68
184	3250.77	3155.3	3017.31	4033.52	26.87	0.06	26.76	0.46	0.26	0.17	155	0.02
10169	3250.78	3221.6	3010.76	3374.45	27.50	0.05	26.65	0.51	0.30	0.85	152	0.00
320	3250.79	3206.4	3012.04	3755.95	28.57	0.15	28.30	-0.38	0.80	0.63	104	0.33
1213	3250.79	3308.8	2997.19	2190.23	28.31	0.15	27.98	-1.58	1.74	0.91	162	0.00
2036	3250.79	3352.6	2987.16	1090.83	29.64	0.26	29.20	0.60	0.57	0.38	85	0.80
386	3250.80	3212.1	3008.90	3612.66	29.76	0.28	28.85	0.62	-0.32	0.74	129	0.67
981	3250.80	3254.0	2998.84	2560.78	28.24	0.13	28.18	-0.92	1.14	0.54	122	0.03
36	3250.81	3141.5	3013.10	4379.39	23.51	0.02	23.35	0.42	0.68	0.65	514	0.03
226	3250.81	3159.8	3009.53	3922.42	24.02	0.01	24.03	0.30	0.58	0.34	239	0.03
1132	3250.81	3303.8	2995.52	2315.10	29.85	0.35	30.99	-0.28	0.20	0.41	85	0.96
1900	3250.82	3345.0	2982.95	1281.71	30.22	0.39	29.01	...	-0.63	0.81	122	0.73
2053	3250.82	3353.5	2982.77	1069.95	28.75	0.17	28.00	...	-0.63	1.42	158	0.01
1966	3250.83	3348.8	2980.72	1186.49	26.23	0.04	26.10	0.23	0.18	0.81	217	0.03
1211	3250.84	3309.8	2988.82	2166.02	29.25	0.24	29.33	0.65	-0.41	0.05	103	0.72
1884	3250.85	3344.2	2978.27	1302.95	28.81	0.18	28.57	-1.43	2.13	0.62	111	0.15
1324	3250.86	3315.5	2983.34	2023.43	28.89	0.23	28.04	...	1.09	0.04	163	0.01
2103	3250.86	3355.7	2974.16	1013.10	29.55	0.32	28.90	...	0.18	-0.16	136	0.12
75	3250.87	3145.9	3001.95	4269.37	24.82	0.02	24.83	0.95	0.19	0.46	146	0.04
488	3250.87	3221.0	2992.62	3388.67	28.98	0.22	28.86	0.71	0.22	0.05	140	0.09
744	3250.87	3238.9	2988.92	2940.12	29.68	0.29	28.84	...	0.20	0.32	107	0.34
1578	3250.88	3328.6	2976.58	1693.34	28.64	0.21	28.43	0.07	0.50	-0.01	149	0.00
1125	3250.89	3304.5	2980.45	2298.54	29.07	0.21	29.01	...	0.85	74	0.94	a
2458	3250.89	3412.2	2964.46	599.40	28.43	0.16						

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
613	3250.90	3231.0	2985.37	3138.56	29.21	0.20	28.09	-0.10	-0.76	1.13	211	0.51 a
769	3250.90	3243.0	2983.11	2837.76	20.86	0.00	20.90	1.74	1.47	1.18	315	0.03
467	3250.91	3219.4	2985.59	3430.71	28.81	0.18	28.92	...	-0.12	0.15	101	0.06 a
745	3250.94	3239.2	2975.62	2932.20	29.31	0.20	28.25	...	1.33	1.39	117	0.66 a
1654	3250.95	3329.9	2963.45	1660.09	27.00	0.07	26.77	0.05	-0.12	0.43	222	0.02
2512	3250.95	3415.4	2952.54	520.31	24.04	0.01	24.05	0.43	0.96	0.55	172	0.03
129	3250.97	3150.8	2981.35	4146.69	29.12	0.19	28.80	-0.23	0.07	0.70	79	0.97 a
508	3250.97	3222.9	2974.67	3341.75	29.26	0.27	27.82	...	0.76	0.13	182	0.51 a
1268	3250.97	3314.1	2962.33	2058.08	24.03	0.01	23.99	0.21	0.62	0.47	400	0.03
10700	3250.97	3405.0	2951.89	779.49	23.65	0.01	23.35	0.50	0.17	0.63	341	0.03
2426	3250.97	3411.1	2949.81	627.98	29.66	0.29	29.48	...	0.55	0.05	72	0.92 a
288	3250.98	3203.9	2976.76	3817.92	28.08	0.13	27.98	1.11	0.01	-0.03	145	0.02 a
518	3250.98	3223.4	2972.30	3328.98	29.73	0.27	28.97	-1.39	0.98	0.90	114	0.66 a
544	3250.99	3225.8	2970.58	3268.73	29.33	0.22	29.04	-0.09	-0.45	0.84	109	0.60 a
10145	3251.00	3216.4	2971.43	3505.42	26.25	0.03	25.58	0.95	0.58	0.50	232	0.00
1345	3251.01	3316.7	2955.56	1993.23	27.59	0.11	27.42	0.49	-0.17	-0.28	199	0.02
640	3251.02	3232.7	2962.25	3096.30	27.65	0.10	27.37	...	1.84	0.45	201	0.22 a
71	3251.03	3145.2	2972.73	4288.20	29.18	0.30	29.05	-0.16	0.12	0.60	102	0.37 a
1003	3251.03	3255.6	2956.53	2520.93	29.74	0.41	28.89	...	-0.15	-0.61	135	0.39 a
2041	3251.03	3353.5	2942.94	1069.95	21.65	0.00	21.68	2.80	1.81	2.46	107	0.99 a
10719	3251.03	3405.7	2940.32	761.99	26.96	0.04	25.91	1.02	0.27	0.27	222	0.17 e
342	3251.04	3208.5	2964.39	3704.55	26.73	0.06	26.65	1.44	0.33	0.32	259	0.02
1546	3251.04	3327.2	2946.96	1730.24	28.03	0.11	27.84	3.04	-0.05	0.72	124	0.16 a
2259	3251.06	3403.3	2934.34	823.42	26.61	0.06	26.50	4.36	0.38	0.48	179	0.03 a
1188	3251.07	3308.7	2946.32	2194.42	29.24	0.22	28.72	-4.22	3.53	0.91	124	0.92 a
1956	3251.07	3348.1	2937.18	1204.39	28.39	0.12	28.22	...	4.06	1.20	107	0.06 a
396	3251.08	3212.9	2956.03	3592.58	29.54	0.26	28.41	2.06	0.29	0.86	184	0.78 a
1009	3251.08	3256.2	2946.75	2507.07	28.78	0.21	28.36	2.33	0.40	0.44	122	0.01 a
117	3251.10	3149.4	2958.24	4182.19	28.37	0.15	27.92	1.04	-0.10	0.78	177	0.01 a
1585	3251.10	3329.0	2936.39	1683.84	29.14	0.22	28.83	0.92	0.06	0.17	100	0.74 a
1156	3251.11	3306.8	2938.51	2242.04	30.63	0.71	29.16	...	0.61	-0.75	190	0.58 ae
2360	3251.11	3408.2	2925.79	700.82	23.54	0.01	23.50	1.51	1.18	0.61	452	0.03
215	3251.12	3158.6	2951.66	3951.66	25.91	0.04	25.73	0.35	0.15	0.72	329	0.00
955	3251.13	3251.9	2938.69	2615.41	29.30	0.31	28.92	0.81	-0.39	-0.08	107	0.46 a
866	3251.15	3247.0	2934.96	2738.06	29.02	0.22	28.81	...	0.28	0.11	137	0.02 a
994	3251.15	3255.0	2933.25	2537.92	27.36	0.09	27.08	...	0.40	0.15	162	0.02 a
1210	3251.15	3309.6	2931.07	2171.11	29.56	0.24	28.58	...	...	1.07	135	0.41 a
1305	3251.15	3314.7	2929.50	2042.78	28.98	0.18	28.23	...	0.15	1.17	161	0.66 a
1520	3251.15	3326.0	2927.90	1758.63	28.47	0.18	28.36	...	0.27	-0.07	144	0.01
1748	3251.15	3337.3	2923.85	1475.04	29.62	0.28	28.70	...	...	0.88	142	0.81 a
2441	3251.15	3411.9	2917.06	608.02	26.28	0.06	26.13	0.63	0.01	0.13	288	0.02
1817	3251.16	3341.5	2920.87	1370.35	28.00	0.14	27.59	...	0.93	0.18	227	0.15 a
2240	3251.16	3402.3	2916.58	849.09	28.22	0.14	28.50	...	0.23	0.50	148	0.01 a
381	3251.17	3211.9	2940.98	3619.16	28.32	0.13	28.27	0.50	0.14	0.20	125	0.03 a
1077	3251.17	3301.4	2928.77	2376.36	24.26	0.01	24.20	1.04	0.21	0.57	284	0.03
295	3251.18	3204.4	2939.39	3806.49	26.82	0.06	26.68	1.42	0.16	0.19	190	0.02
652	3251.18	3234.0	2933.97	3064.59	24.29	0.01	24.30	2.30	1.16	0.69	99	0.99 a
880	3251.18	3247.7	2930.44	2719.49	28.72	0.18	28.94	-1.56	1.72	0.40	96	0.03 a
277	3251.20	3202.7	2935.86	3848.76	26.17	0.04	26.16	0.21	0.09	0.09	196	0.03
413	3251.20	3214.4	2933.76	3554.64	28.11	0.11	27.65	...	1.38	0.81	155	0.44 a
79	3251.21	3146.1	2938.59	4264.67	28.91	0.29	27.64	1.60	2.17	0.17	250	0.02 a
47	3251.22	3142.1	2936.72	4364.98	27.99	0.19	27.63	...	0.56	1.05	150	0.02 a
1185	3251.22	3308.4	2917.49	2202.26	27.73	0.10	27.41	0.82	0.05	0.32	167	0.04 a
885	3251.23	3248.1	2921.52	2711.42	29.78	0.30	29.47	1.57	-0.27	0.19	82	0.91 a
161	3251.24	3153.8	2931.50	4072.73	25.99	0.03	25.89	0.83	0.55	0.57	157	0.03 ef
162	3251.25	3154.6	2929.28	4053.40	24.89	0.02	24.87	0.55	0.19	0.51	165	0.03 ef
774	3251.25	3241.7	2918.34	2871.50	28.85	0.23	28.10	-0.73	0.91	0.03	147	0.07 a
958	3251.25	3253.0	2916.65	2587.84	25.25	0.03	25.13	0.76	0.51	0.47	254	0.03 f
2534	3251.25	3416.3	2897.93	497.97	28.82	0.25	27.58	...	0.09	0.51	168	0.02 ae
246	3251.26	3200.4	2926.47	3906.89	25.64	0.03	25.54	-0.13	0.67	0.58	307	0.02
1556	3251.26	3279.7	2906.71	1713.03	27.58	0.08	27.34	...	...	0.57	145	0.19 a
1216	3251.28	3310.0	2906.33	2160.83	29.43	0.26	29.12	...	0.32	0.08	98	0.89 a
98	3251.29	3147.7	2924.60	4226.60	26.56	0.05	26.48	...	...	1.16	218	0.05
370	3251.29	3210.6	2918.51	3651.38	29.64	0.31	28.66	...	0.50	-0.14	140	0.54 a
439	3251.29	3217.5	2916.09	3479.20	28.03	0.14	27.97	0.61	0.15	-0.20	175	0.02
2355	3251.29	3407.6	2892.59	716.59	27.19	0.08	26.25	-0.61	1.75	1.00	394	0.00 ae
663	3251.30	3234.3	2910.93	3057.30	29.24	0.23	29.44	...	1.38	0.43	109	0.07 a
957	3251.30	3252.1	2907.48	2610.67	27.95	0.13	27.83	...	1.00	0.06	148	0.01 ef
646	3251.31	3233.4	2908.68	3080.57	28.28	0.14	27.90	1.06	0.86	0.26	147	0.01 a
1867	3251.31	3343.5	2892.63	1321.66	28.23	0.12	28.03	0.80	-0.26	0.23	108	0.86 a
2196	3251.31	3401.6	2889.91	865.54	24.77	0.02	24.75	1.13	0.33	0.27	195	0.03 ef
701	3251.33	3237.6	2903.78	2973.68	21.74	0.00	21.78	2.00	1.55	1.45	104	0.96 a
927	3251.33	3250.8	2901.83	2642.82	25.62	0.03	25.58	-0.04	0.06	0.48	310	0.02
1159	3251.33	3306.9	2898.83	2239.12	28.69	0.19	28.23	-0.34	0.84	0.40	167	0.00 a
2576	3251.33	3418.4	2881.20	444.50	27.02	0.14	26.33	...	0.51	0.24	180	0.02 a
1027	3251.35	3257.8	2895.70	2468.08	27.35	0.11	26.79	-0.03	-0.14	0.53	306	0.00
2065	3251.35	3354.1	2883.01	1055.94	28.06	0.13	27.70	-0.24	0.19	0.55	202	0.14
2369	3251.37	3408.1	2877.45	704.21	27.31	0.08	26.97	0.09	0.53	1.11	215	0.02 e
1198	3251.39	3308.9	2886.33	2188.12	30.12	0.40	29.16	...	1.14	-0.37	108	0.76 a
263	3251.40	3201.2	2899.61	3887.60	28.53	0.19	28.46	0.89	0.36	0.11	245	0.00 abe
461	3251.41	3219.1	2894.23	3438.92	29.34	0.24	28.50	0.94	0.61	0.36	129	0.40 a
2136	3251.41	3357.4	2871.24	972.99	28.69	0.16	28.27	-0.31	0.08	0.41	129	0.09 a
2195	3251.42	3400.8	2869.52	886.09</td								

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
962	3251.43	3252.2	2882.48	2607.67	29.28	0.22	28.32	...	1.38	0.78	108	0.77 a
1083	3251.43	3301.5	2880.33	2375.22	27.78	0.14	27.20	0.92	0.46	0.36	248	0.01
1298	3251.44	3314.9	2875.17	2037.75	25.00	0.02	24.97	4.85	0.35	0.17	315	0.03
2557	3251.45	3417.2	2860.72	476.45	27.17	0.10	26.68	...	...	0.61	174	0.02 aef
558	3251.46	3227.4	2882.13	3229.19	28.66	0.17	28.40	0.36	0.03	0.30	109	0.01 a
645	3251.47	3232.7	2879.20	3097.44	29.22	0.25	28.69	...	1.45	0.49	142	0.02 a
110	3251.48	3149.1	2886.99	4190.27	26.62	0.06	26.48	0.73	0.15	0.25	240	0.03
325	3251.48	3207.1	2883.99	3740.64	27.00	0.09	26.85	...	-0.05	0.11	325	0.00
1047	3251.48	3258.5	2872.66	2449.97	29.72	0.38	28.54	1.25	0.20	0.12	139	0.62 a
1261	3251.48	3313.1	2869.39	2083.74	26.70	0.05	26.63	1.18	0.34	0.44	141	0.02
1497	3251.48	3324.9	2866.18	1788.65	29.17	0.21	28.70	-1.63	2.29	0.61	124	0.12 a
1986	3251.49	3349.7	2858.11	1166.03	28.79	0.19	28.53	1.54	-0.19	0.37	132	0.01 a
1733	3251.51	3337.6	2857.22	1469.79	22.06	0.00	22.08	1.24	1.02	0.86	337	0.03
89	3251.52	3147.2	2881.48	4239.01	27.87	0.13	27.72	0.66	0.20	0.31	149	0.02 a
422	3251.52	3215.0	2874.66	3540.45	29.65	0.26	29.01	-1.50	0.75	0.68	105	0.75 a
2556	3251.52	3417.1	2846.63	477.51	26.14	0.06	25.78	...	0.47	242	0.03 f	
1051	3251.53	3258.9	2862.57	2439.73	29.36	0.28	29.41	-0.40	1.66	0.14	98	0.50 a
2050	3251.53	3353.4	2851.29	1071.51	26.81	0.06	26.69	0.88	0.02	0.60	167	0.03
463	3251.54	3218.1	2870.74	3463.54	27.72	0.10	27.13	...	2.65	1.00	228	0.00 a
585	3251.54	3224.2	2869.18	3309.41	28.82	0.18	28.27	1.45	0.69	0.14	128	0.17 a
2153	3251.54	3358.4	2847.42	947.21	26.27	0.04	26.08	1.75	0.62	1.14	204	0.02
1678	3251.55	3333.9	2850.85	1561.92	29.25	0.30	28.37	...	0.61	-0.25	197	0.03 ae
401	3251.56	3213.7	2867.93	3573.63	27.12	0.07	27.07	1.62	0.20	0.41	165	0.02 e
307	3251.57	3205.8	2867.49	3771.46	28.31	0.13	28.15	0.04	0.24	0.50	141	0.12 a
1114	3251.58	3304.0	2852.75	2312.44	29.23	0.25	28.37	0.16	-0.04	0.54	131	0.80 a
732	3251.60	3238.4	2854.86	2955.07	28.34	0.14	28.25	...	1.77	0.45	140	0.01 a
614	3251.61	3231.1	2853.97	3137.03	28.75	0.17	27.76	-0.51	0.59	0.88	206	0.13 a
1535	3251.61	3236.8	2841.47	1740.09	26.72	0.07	26.61	0.59	0.02	0.29	323	0.02
2392	3251.61	3409.4	2832.64	670.96	29.79	0.32	29.58	...	0.78	-0.08	74	0.93 a
8	3251.62	3137.0	2863.79	4494.61	...	...	24.14	-5.70	3.90	5.18	120	0.98 aef
90	3251.63	3141.8	2861.50	4374.70	27.70	0.15	27.41	-0.81	0.63	0.44	192	0.10 a
2453	3251.63	3412.2	2827.68	602.29	29.68	0.37	29.59	0.02	0.67	-0.39	124	0.95 a
255	3251.64	3200.5	2855.43	3906.49	29.76	0.32	28.58	-0.08	0.65	0.38	165	0.84 a
975	3251.64	3253.5	2844.01	2576.68	29.52	0.22	29.08	-2.35	2.30	1.60	97	0.94 a
383	3251.65	3212.6	2850.52	3601.76	23.96	0.01	23.96	0.55	0.21	0.58	231	0.03
485	3251.65	3220.8	2849.40	3395.79	29.55	0.30	28.14	-0.20	0.70	0.16	164	0.55 a
2026	3251.65	3352.1	2828.35	1105.99	29.31	0.25	28.70	0.53	-0.05	0.22	134	0.42 a
2378	3251.65	3402.4	2826.57	848.14	27.77	0.12	27.67	-0.14	0.01	0.28	242	0.00
1612	3251.66	3330.1	2831.75	1656.58	28.93	0.21	28.67	-0.18	1.68	-0.11	116	0.56 a
1142	3251.67	3306.0	2836.21	2261.42	24.36	0.01	24.33	...	1.60	1.73	171	0.03
1239	3251.68	3312.1	2831.65	2109.80	26.19	0.04	26.11	0.08	1.88	0.75	205	0.03
9	3251.71	3137.1	2847.90	4493.45	...	...	23.66	0.26	-0.23	4.62	189	0.98 aef
81	3251.72	3146.4	2843.10	4260.33	29.62	0.37	29.15	...	0.44	0.20	83	0.95 a
940	3251.72	3251.4	2829.68	2629.27	27.15	0.08	27.03	1.42	-0.04	-0.06	164	0.02
1296	3251.72	3314.6	2823.77	2045.32	24.89	0.02	24.87	0.65	0.07	0.31	263	0.03
2033	3251.72	3352.6	2815.91	1093.15	27.82	0.10	27.54	0.60	0.12	0.59	146	0.01 a
513	3251.73	3223.4	2834.74	3331.23	26.55	0.05	26.46	...	0.38	0.06	171	0.03 a
482	3251.75	3220.8	2829.80	3395.95	28.76	0.20	27.78	1.00	-0.01	0.39	244	0.04 a
1379	3251.75	3318.4	2818.49	1949.94	28.82	0.18	28.70	0.88	0.26	0.25	134	0.48 a
1616	3251.75	3330.2	2814.85	1653.87	28.95	0.21	28.53	-0.93	0.44	0.55	164	0.09 a
177	3251.76	3154.7	2835.56	4051.94	29.66	0.29	29.37	...	-0.28	-0.12	80	0.96 a
2587	3251.76	3418.7	2802.54	439.43	28.47	0.34	27.27	0.12	-0.29	0.66	207	0.95 a
105	3251.77	3148.2	2833.48	4214.42	29.68	0.35	29.03	...	0.08	-0.09	159	0.60 a
2248	3251.77	3402.6	2804.25	842.17	27.87	0.12	27.82	1.16	0.18	0.52	158	0.10 a
131	3251.78	3151.3	2832.40	4135.89	29.03	0.23	28.50	...	0.33	0.20	132	0.14 ae
847	3251.79	3245.7	2817.76	2770.96	29.18	0.21	28.85	-0.91	0.71	0.77	111	0.42 a
44	3251.80	3142.1	2830.34	4367.56	28.35	0.29	28.01	1.70	0.68	0.08	86	0.08 a
77	3251.80	3145.8	2830.10	4275.42	29.52	0.39	29.13	1.46	0.06	-0.34	89	0.74 a
2411	3251.80	3410.7	2796.81	638.86	28.94	0.21	28.42	...	1.72	0.53	129	0.62 a
765	3251.81	3240.8	2815.52	2894.05	25.85	0.03	25.76	0.08	0.35	0.37	213	0.03
938	3251.81	3251.1	2812.33	2635.76	28.73	0.19	28.07	...	0.41	-0.08	149	0.26 a
343	3251.82	3208.4	2821.02	3707.57	28.16	0.15	27.88	1.01	-0.11	0.19	166	0.01 a
1964	3251.82	3348.6	2798.54	1193.22	29.56	0.27	28.75	...	0.35	0.54	111	0.50 a
2010	3251.82	3351.7	2796.57	1114.84	26.20	0.04	26.16	0.29	0.83	0.46	219	0.03
138	3251.83	3151.9	2821.90	4122.53	25.84	0.03	25.81	1.14	-0.03	0.25	229	0.03
1448	3251.83	3322.2	2801.98	1855.23	27.76	0.10	27.74	3.72	0.06	0.04	128	0.18 a
921	3251.85	3250.4	2806.06	2653.08	26.65	0.05	26.51	...	0.36	0.24	169	0.03 a
559	3251.86	3227.7	2808.62	3222.64	26.61	0.05	26.62	...	0.45	0.19	137	0.04 a
1558	3251.86	3327.8	2795.26	1714.75	29.50	0.27	28.93	...	0.67	0.22	151	0.93 a
1745	3251.86	3337.3	2794.04	1476.70	28.61	0.16	28.31	1.28	0.03	0.89	135	0.03 a
317	3251.89	3206.0	2808.57	3768.57	24.54	0.02	24.49	2.34	0.62	0.28	364	0.03
862	3251.89	3246.7	2798.17	2745.78	29.65	0.27	29.51	...	0.98	0.45	120	0.38 a
178	3251.90	3155.0	2809.11	4044.61	27.29	0.09	27.17	0.75	-0.18	0.66	200	0.01
237	3251.90	3159.9	2808.45	3921.26	28.85	0.19	28.60	...	1.56	-0.01	152	0.01
1016	3251.90	3257.1	2794.45	2485.70	26.22	0.05	26.12	0.97	0.10	0.50	312	0.02
1373	3251.91	3318.1	2789.06	1959.14	28.17	0.13	27.95	1.47	0.03	-0.24	120	0.08
1283	3251.92	3314.1	2787.83	2060.03	27.90	0.15	27.31	0.58	0.40	0.03	261	0.00 aef
2386	3251.92	3409.2	2774.59	678.07	28.87	0.24	28.31	...	-0.03	-0.17	166	0.71 a
499	3251.93	3222.1	2797.10	3364.74	28.40	0.14	28.24	-0.18	-0.28	0.53	129	0.12 a
1842	3251.93	3338.5	2779.44	1448.07	28.70	0.15	28.45	-1.65	3.96	1.05	94	0.93 a
615	3251.94	3231.1	2792.50	3138.29	29.83	0.30	29.27	...	1.09	0.61	88	0.53 a
10020	3251.95	3144.3	2801.84	4313.38	26.62	0.05	25.78	0.36	0.06	0.40	203	0.01
2558	3251.95	3417.0	2766.68	481.48	28.56							

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
362	3251.96	3210.0	2794.37	3667.63	27.66	0.09	27.06	-0.75	0.59	0.60	161	0.01 a
10015	3251.97	3142.7	2798.80	4352.27	24.88	0.03	23.78	0.40	0.83	0.62	548	0.00 e
1284	3251.97	3314.6	2778.01	2047.35	27.56	0.12	26.90	0.26	0.03	0.37	454	0.00 f
1582	3251.98	3328.9	2772.98	1689.08	28.83	0.16	28.59	-0.06	-0.23	1.26	111	0.15 a
1697	3251.98	3335.1	2771.73	1532.32	27.63	0.09	27.34	...	1.49	185	0.01 a	
1822	3251.98	3341.7	2770.52	1367.49	29.81	0.44	29.01	-0.64	0.88	-0.77	247	0.02 ae
229	3251.99	3159.3	2790.45	3936.07	28.60	0.15	28.57	0.09	-0.19	0.19	95	0.58 a
269	3251.99	3201.5	2790.77	3880.57	30.03	0.35	29.05	-0.90	1.24	0.14	115	0.79 a
793	3252.00	3240.8	2779.29	2893.76	26.53	0.06	26.29	0.39	0.01	0.51	361	0.02 e
119	3252.01	3149.8	2789.38	4174.87	29.51	0.21	28.94	...	1.33	84	0.91 a	
289	3252.02	3204.1	2783.92	3814.39	26.25	0.04	26.18	0.27	-0.01	0.60	156	0.03 e
403	3252.02	3214.9	2781.77	3543.75	23.27	0.01	23.24	0.31	0.40	0.84	433	0.03
515	3252.02	3224.1	2780.12	3313.60	24.89	0.02	24.80	...	1.02	0.42	428	0.03
586	3252.02	3229.4	2779.31	3180.69	26.99	0.06	26.77	-0.78	1.74	1.05	179	0.01
1100	3252.02	3302.6	2771.71	2348.01	29.47	0.33	29.32	0.21	0.88	-0.09	86	0.97 a
1825	3252.03	3342.6	2759.66	1344.83	24.64	0.02	24.62	...	0.87	0.24	218	0.03
2307	3252.03	3405.8	2755.01	763.64	26.07	0.04	26.00	0.16	0.16	0.66	176	0.03
160	3252.04	3154.0	2783.17	4069.80	25.07	0.02	25.04	0.84	0.45	0.74	176	0.03 e
1128	3252.05	3304.8	2764.58	2293.00	27.69	0.10	27.83	2.88	1.36	0.56	116	0.02 a
10009	3252.06	3140.8	2781.52	4400.34	22.93	0.01	22.66	0.30	0.70	0.54	555	0.03
385	3252.06	3212.1	2774.35	3614.82	29.33	0.21	28.42	...	1.49	176	0.43 a	
106	3252.07	3148.6	2778.29	4205.46	26.67	0.05	26.57	2.93	0.19	0.16	153	0.02
705	3252.07	3237.0	2768.55	2989.48	27.59	0.10	27.52	3.94	0.75	0.23	193	0.02 a
869	3252.07	3247.4	2765.95	2729.36	26.57	0.05	26.47	0.07	0.01	0.08	145	0.03
1939	3252.07	3347.5	2751.90	1221.36	27.58	0.09	27.10	-0.24	0.00	0.76	204	0.01
2517	3252.07	3415.4	2745.71	522.74	29.48	0.38	27.97	1.21	0.11	-0.22	148	0.87 a
298	3252.09	3204.7	2772.27	3799.70	27.47	0.09	27.19	0.26	-0.12	0.02	129	0.64 ae
466	3252.09	3218.6	2768.20	3451.14	24.86	0.02	24.80	1.18	0.37	0.52	305	0.03
1325	3252.10	3315.5	2754.30	2023.96	30.21	0.42	29.29	...	0.44	0.11	108	0.45 a
10016	3252.12	3142.6	2770.60	4355.44	26.87	0.06	26.17	0.26	0.58	0.42	160	0.02
1433	3252.12	3212.8	2749.40	1865.85	28.50	0.14	28.04	-1.79	0.97	1.82	134	0.04 a
2442	3252.12	3411.7	2738.11	613.31	29.56	0.32	29.01	...	-0.53	0.14	96	0.95 a
1265	3252.13	3313.1	2749.51	2083.72	28.84	0.18	28.44	0.63	0.31	0.49	134	0.39 a
905	3252.14	3249.1	2752.80	2687.26	29.42	0.26	29.05	...	0.18	0.08	109	0.53 a
2141	3252.14	3359.6	2735.89	919.21	21.80	0.00	21.79	0.78	0.96	0.80	669	0.03 ef
2462	3252.15	3412.5	2732.37	593.72	27.41	0.09	27.23	0.80	0.50	0.88	157	0.01 a
180	3252.16	3155.1	2759.73	4041.08	26.85	0.06	26.81	0.79	0.30	0.65	165	0.02 a
1465	3252.16	3323.9	2740.62	1813.42	22.83	0.01	22.83	0.84	0.32	0.59	294	0.03
2416	3252.16	3410.9	2729.66	634.68	28.55	0.18	28.56	...	1.10	0.35	134	0.13 a
1833	3252.18	3342.2	2732.03	1355.04	29.37	0.27	28.38	1.59	1.65	0.43	148	0.22 a
2511	3252.18	3415.1	2724.95	528.39	27.96	0.14	27.69	1.90	0.05	0.17	105	0.73 a
1737	3252.20	3336.9	2730.65	1487.37	28.31	0.12	28.02	...	1.54	129	0.09	
638	3252.21	3232.6	2742.84	3101.37	29.90	0.34	28.71	...	0.58	133	0.39 ae	
1544	3252.21	3327.0	2731.18	1734.96	29.21	0.22	28.75	...	0.42	103	0.81 a	
1680	3252.21	3334.1	2729.92	1558.86	28.32	0.15	27.92	-0.23	0.29	0.58	148	0.01 ae
505	3252.22	3223.2	2742.97	3335.62	26.01	0.04	25.93	1.09	0.33	0.13	175	0.04
708	3252.22	3237.2	2740.35	2984.70	25.17	0.02	25.16	2.01	0.34	0.16	184	0.03 e
1380	3252.23	3318.4	2728.06	1951.65	29.50	0.30	28.67	...	0.59	0.01	149	0.10 a
141	3252.24	3152.8	2745.42	4099.96	23.59	0.01	23.60	1.48	0.25	0.62	233	0.03
651	3252.24	3233.8	2736.46	3070.75	28.51	0.18	28.28	-0.52	0.43	0.08	182	0.01 a
2142	3252.24	3402.7	2717.36	839.49	22.00	0.00	22.03	0.97	0.94	0.87	333	0.03 ef
1391	3252.25	3319.5	2724.17	1924.90	23.82	0.01	23.79	0.41	0.54	0.13	363	0.03
17	3252.26	3139.0	2745.91	4445.38	27.62	0.26	27.16	0.15	0.80	-0.02	142	0.09 a
127	3252.26	3151.0	2743.05	4145.01	28.17	0.14	27.39	1.14	0.28	0.37	234	0.01 a
336	3252.26	3207.8	2738.70	3724.16	29.93	0.38	29.51	-0.27	0.20	-0.43	93	0.93 a
1065	3252.26	3300.4	2726.55	2404.59	28.74	0.20	28.51	...	0.24	0.24	105	0.25 a
1087	3252.26	3301.6	2727.74	2373.33	29.46	0.34	29.20	2.44	-0.09	-0.31	115	0.88 a
496	3252.27	3221.8	2734.38	3372.07	28.72	0.20	28.19	...	-0.06	0.37	182	0.00
1901	3252.27	3345.4	2715.98	1275.19	26.62	0.05	26.30	1.46	1.33	0.74	203	0.02 a
2444	3252.27	3411.8	2710.24	612.43	27.41	0.09	26.84	-0.54	0.31	0.97	204	0.01
1155	3252.29	3308.5	2720.56	2200.32	21.04	0.00	21.02	0.65	0.78	0.72	1043	0.03
699	3252.30	3236.4	2725.99	3004.87	27.65	0.10	27.58	1.11	0.29	0.27	189	0.01 a
432	3252.31	3216.5	2727.54	3503.85	28.11	0.12	27.89	1.38	0.39	0.63	150	0.00 a
547	3252.31	3226.2	2725.50	3262.65	29.06	0.21	28.42	2.84	0.25	0.35	154	0.34 a
1124	3252.31	3304.6	2716.63	2298.47	29.22	0.29	28.77	1.32	-0.04	0.05	116	0.35 a
1760	3252.31	3338.6	2709.05	1444.42	26.46	0.05	26.39	0.74	0.21	0.11	211	0.03
1821	3252.31	3341.7	2708.88	1368.29	28.35	0.16	28.06	-0.43	0.32	0.28	183	0.00 a
1927	3252.31	3346.7	2707.99	1243.08	28.44	0.14	28.00	...	1.00	147	0.09	
1982	3252.31	3349.6	2706.41	1168.75	27.71	0.09	27.56	...	0.95	0.52	109	0.34 a
734	3252.32	3238.8	2721.06	2946.25	29.28	0.24	29.08	1.07	-0.26	0.53	123	0.17 ae
1317	3252.32	3315.2	2713.58	2031.87	28.55	0.14	27.76	...	-0.15	1.30	176	0.41 a
219	3252.34	3157.8	2726.63	3973.17	27.68	0.09	27.41	0.18	0.24	0.74	158	0.01 a
116	3252.35	3149.4	2726.66	4185.92	28.59	0.16	28.25	...	1.25	133	0.17 a	
1657	3252.35	3333.0	2703.47	1584.62	22.70	0.00	22.72	0.47	0.73	0.63	185	0.05
2531	3252.35	3416.2	2692.94	502.61	28.74	0.25	28.43	1.12	0.05	-0.18	130	0.96 a
406	3252.36	3214.2	2719.39	3562.61	27.61	0.09	27.20	0.55	1.07	0.47	160	0.05
1484	3252.37	3324.1	2702.64	1809.67	29.28	0.26	28.85	...	0.05	0.08	178	0.01 a
1580	3252.37	3328.7	2700.73	1694.07	29.03	0.20	28.48	2.56	0.34	0.92	134	0.10 a
2048	3252.38	3353.8	2694.13	1064.32	26.46	0.06	26.33	...	0.52	0.19	324	0.02
297	3252.39	3204.6	2716.59	3803.96	28.54	0.16	27.54	...	0.43	0.26	219	0.00 a
12	3252.40	3138.0	2719.07	4470.14	25.55	0.10	24.80	...	...	...	46	0.91 ae
101	3252.40	3147.9	2718.65	4222.00	29.04	0.21	28.11	0.79	-0.15	0.87	148	0.96 a
1263	3252.44	3313.1	2691.41	2085.28	29.16	0.22	28.40	0.12				

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1925	3252.45	3346.5	2682.35	1246.88	29.05	0.17	28.29	...	1.83	118	0.65	a
407	3252.46	3214.1	2701.43	3565.63	29.31	0.22	29.03	-0.61	0.68	110	0.36	a
2454	3252.46	3412.6	2674.90	593.26	25.53	0.03	25.51	2.42	-0.07	0.00	176	0.03
2599	3252.46	3419.3	2673.47	425.11	29.00	0.40	27.64	...	0.88	-0.07	171	0.97
451	3252.47	3218.6	2697.92	3453.68	27.16	0.07	26.99	0.24	0.12	0.48	171	0.02
600	3252.47	3230.3	2695.03	3159.71	30.01	0.37	29.29	...	2.45	0.14	103	0.84
1025	3252.47	3257.7	2688.79	2472.41	28.86	0.25	28.71	0.22	0.77	0.08	218	0.03
68	3252.49	3144.7	2701.45	4303.49	28.28	0.22	27.66	-4.10	3.71	0.35	199	0.01
224	3252.49	3159.1	2698.18	3942.71	28.12	0.13	28.02	1.45	1.00	0.19	137	0.05
520	3252.49	3223.7	2693.83	3323.41	29.23	0.21	28.56	0.59	2.57	0.47	117	0.09
718	3252.49	3238.0	2690.36	2965.37	24.92	0.02	24.92	0.30	0.83	0.49	230	0.03
972	3252.49	3253.2	2687.39	2584.41	29.72	0.27	28.71	-2.35	2.26	0.76	135	0.94
635	3252.50	3232.8	2689.62	3095.81	25.69	0.03	25.64	1.40	0.19	0.17	264	0.03
1888	3252.50	3338.1	2674.34	1459.32	28.78	0.20	28.02	2.23	0.35	0.26	204	0.01
10329	3252.51	3300.3	2681.75	2406.03	26.09	0.03	25.24	1.50	0.15	0.23	264	0.00
123	3252.52	3150.2	2694.59	4165.11	28.51	0.14	28.29	0.77	-0.12	0.27	104	0.17
308	3252.52	3209.3	2690.06	3684.82	25.03	0.02	24.97	-0.04	0.40	0.50	307	0.03
567	3252.52	3228.1	2685.80	3215.29	27.02	0.06	27.00	2.94	0.33	-0.06	104	0.86
1552	3252.54	3327.8	2669.56	1717.28	28.36	0.12	28.03	...	1.19	116	0.26	a
1779	3252.54	3339.8	2666.33	1415.35	27.96	0.14	27.41	2.58	0.50	0.18	216	0.00
719	3252.55	3239.0	2677.66	2940.84	26.74	0.07	26.56	3.17	0.36	-0.05	243	0.03
1755	3252.55	3338.2	2665.43	1456.86	29.09	0.24	27.98	-0.37	-0.14	0.50	225	0.17
104	3252.56	3145.2	2689.38	4291.11	27.91	0.16	27.42	-0.66	1.03	0.36	179	0.01
1999	3252.56	3350.7	2660.00	1141.11	27.65	0.09	27.44	0.54	-0.02	0.66	152	0.01
113	3252.57	3147.3	2686.58	4238.01	24.60	0.02	24.60	0.55	0.09	0.31	154	0.03
222	3252.57	3159.0	2683.27	3944.03	26.92	0.06	26.61	...	0.29	0.86	198	0.02
379	3252.57	3211.9	2681.53	3621.87	29.44	0.28	28.78	0.59	0.93	0.03	139	0.26
1333	3252.57	3316.3	2666.60	2005.44	25.56	0.03	25.52	0.17	0.51	0.17	156	0.03
2205	3252.57	3357.7	2657.99	965.92	24.72	0.02	24.64	0.40	0.25	0.49	472	0.00
2210	3252.57	3400.9	2657.05	887.04	29.49	0.24	30.01	...	0.53	0.70	65	0.93
606	3252.58	3230.7	2675.14	3149.60	28.62	0.17	28.59	-1.00	0.89	0.55	138	0.11
757	3252.60	3240.4	2668.95	2906.23	27.70	0.11	27.51	0.42	-0.19	0.06	174	0.01
10326	3252.60	3259.5	2664.65	2425.55	21.69	0.00	21.71	3.09	1.57	1.17	104	0.98
1302	3252.60	3315.1	2661.05	2035.62	24.64	0.01	24.66	3.51	1.73	0.93	100	0.99
1456	3252.60	3322.5	2659.80	1849.50	30.34	0.49	28.91	-1.49	1.66	0.24	147	0.73
419	3252.61	3215.5	2673.49	3529.41	25.01	0.02	24.94	...	0.71	0.74	235	0.03
858	3252.61	3246.5	2665.50	2752.37	28.53	0.15	27.59	-3.44	3.54	1.05	267	0.00
1761	3252.61	3338.4	2653.58	1451.84	28.96	0.20	28.38	0.31	-0.45	0.73	162	0.02
2544	3252.61	3416.9	2644.94	485.19	28.63	0.23	27.18	...	0.55	-0.01	193	0.43
942	3252.62	3251.5	2661.96	2628.64	27.70	0.10	27.15	-1.52	1.73	1.27	208	0.01
549	3252.63	3226.3	2666.02	3259.95	29.89	0.31	28.87	...	0.68	126	0.84	a
2203	3252.63	3400.7	2644.66	891.40	29.82	0.41	29.79	2.35	-0.22	-0.57	103	0.35
2238	3252.63	3402.6	2644.52	843.07	28.18	0.13	27.74	1.09	0.21	0.31	115	0.24
2412	3252.64	3410.8	2640.66	638.50	28.32	0.17	27.90	...	0.53	0.31	199	0.01
62	3252.65	3144.1	2672.27	4318.60	27.49	0.13	27.24	-0.07	0.50	0.42	141	0.02
78	3252.65	3146.1	2671.95	4269.03	28.96	0.28	28.62	...	0.11	0.36	134	0.15
1409	3252.65	3320.5	2651.15	1899.64	26.73	0.05	26.66	0.31	-0.11	0.04	131	0.03
2237	3252.65	3402.2	2642.02	853.20	27.81	0.12	27.83	0.36	0.36	0.15	149	0.01
943	3252.66	3251.9	2655.62	2616.66	26.80	0.05	26.65	...	1.19	140	0.02	
2543	3252.66	3416.6	2635.63	491.91	27.24	0.10	26.91	...	1.09	0.44	143	0.02
984	3252.67	3254.8	2653.48	2544.07	25.56	0.03	25.47	-0.43	2.54	0.82	225	0.03
1493	3252.68	3324.7	2644.13	1794.86	29.65	0.27	29.04	...	0.11	0.28	103	0.80
1905	3252.68	3345.4	2640.12	1275.73	29.25	0.26	27.87	0.62	0.07	0.18	224	0.09
102	3252.69	3148.3	2663.67	4213.52	26.77	0.08	26.42	-0.66	0.87	0.51	309	0.00
365	3252.69	3210.5	2658.70	3656.96	27.29	0.08	27.38	...	0.45	133	0.10	
486	3252.69	3221.3	2656.22	3384.69	27.52	0.09	27.33	...	-0.07	0.19	190	0.05
889	3252.69	3248.4	2650.96	2705.93	29.75	0.33	28.39	0.06	0.51	0.35	207	0.15
1255	3252.69	3307.2	2645.74	2234.26	28.78	0.19	28.42	...	1.72	0.34	169	0.13
147	3252.70	3153.2	2660.13	4089.55	24.01	0.01	24.00	0.44	0.22	0.80	322	0.03
212	3252.70	3158.0	2660.01	3970.87	29.04	0.20	28.87	2.94	-0.41	0.24	101	0.06
735	3252.70	3238.9	2650.41	2943.66	28.70	0.17	28.45	...	0.85	159	0.01	
1693	3252.70	3334.9	2638.68	1538.28	29.04	0.22	27.84	...	2.67	0.32	236	0.38
305	3252.71	3207.3	2655.97	3736.74	21.66	0.00	21.65	0.39	0.71	0.47	777	0.03
531	3252.72	3225.0	2650.23	3291.96	29.38	0.25	29.03	1.55	-0.20	0.43	88	0.59
1594	3252.74	3229.5	2631.57	1674.76	27.85	0.10	27.67	-1.34	1.07	1.00	107	0.02
2167	3252.74	3400.0	2625.73	908.33	25.84	0.03	25.83	0.70	0.20	0.03	209	0.03
941	3252.75	3251.3	2638.33	2632.31	28.09	0.12	27.89	0.96	1.10	0.03	107	0.07
31	3252.76	3138.4	2652.59	4462.71	27.49	0.33	24.52	...	4.57	69	0.86	
1414	3252.76	3320.8	2629.51	1893.51	28.84	0.20	28.41	0.34	-0.32	0.23	157	0.08
1536	3252.76	3236.8	2628.45	1742.19	29.38	0.30	28.85	...	1.68	0.32	146	0.09
540	3252.77	3225.6	2641.21	3276.55	29.16	0.26	27.96	...	0.30	0.34	205	0.07
2244	3252.77	3359.2	2620.00	928.52	27.18	0.07	26.95	...	0.69	0.74	150	0.02
2480	3252.77	3413.7	2616.63	566.17	25.93	0.04	25.83	1.03	1.16	0.83	147	0.03
266	3252.79	3201.3	2642.02	3886.55	29.15	0.23	28.53	2.39	-0.18	0.25	151	0.12
2350	3252.79	3356.7	2617.41	992.99	29.59	0.26	29.41	0.06	0.21	0.44	83	0.95
1664	3252.81	3332.5	2617.64	1598.04	30.07	0.39	29.65	2.46	-0.09	-0.07	89	0.86
2315	3252.81	3405.7	2611.99	765.72	28.41	0.17	28.45	0.23	-0.01	0.04	137	0.02
194	3252.82	3156.6	2638.30	4005.59	26.20	0.03	26.21	2.65	0.89	0.29	140	0.03
125	3252.83	3150.9	2637.23	4148.85	26.61	0.05	26.54	...	0.58	0.39	158	0.02
813	3252.83	3244.0	2626.30	2816.65	28.94	0.18	28.52	...	0.81	154	0.08	
1672	3252.83	3333.5	2614.19	1572.88	27.77	0.10	27.63	1.20	0.15	0.35	124	0.28
65	3252.85	3144.6	2634.36	4307.42	27.29	0.11	27.01	-0.68	0.53	0.33	214	0.02
372	3252.85	3210.9	2629.38	3645.84	29.62	0.31	29.22	-0.71	-0.18	0.08	115	0.30
1711	3252.85	33										

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
2024	3252.85	3352.2	2605.98	1104.43	26.92	0.05	26.88	2.38	0.05	113	0.20	a
1930	3252.86	3347.3	2606.16	1228.17	26.25	0.04	26.14	1.63	0.11	195	0.03	
511	3252.88	3223.1	2620.68	3340.18	29.62	0.25	29.13	...	1.71	44	79	0.92
1334	3252.88	3317.1	2608.43	1985.14	22.89	0.01	22.86	1.25	0.85	1.08	512	0.03
1621	3252.88	3330.1	2606.28	1659.35	28.42	0.17	28.05	4.03	0.17	0.14	95	0.12
826	3252.89	3244.7	2615.11	2797.95	29.59	0.23	29.32	...	...	0.91	85	0.86
1422	3252.89	3321.7	2606.41	1869.39	24.90	0.02	24.87	...	0.50	0.27	217	0.03
427	3252.91	3215.7	2616.89	3525.66	26.85	0.06	26.79	0.49	0.22	0.70	145	0.03
70	3252.92	3145.6	2621.51	4280.98	26.22	0.06	25.90	0.04	0.91	0.79	326	0.02
214	3252.95	3158.5	2613.70	3957.76	24.71	0.02	24.69	0.60	0.37	0.57	172	0.03
934	3252.95	3251.0	2601.45	2639.44	28.65	0.18	28.26	...	-0.11	-0.14	120	0.32
562	3252.96	3227.7	2604.68	3224.97	29.23	0.26	28.50	...	0.64	-0.48	118	0.90
2591	3252.96	3418.9	2580.95	434.52	29.25	0.40	28.75	...	0.99	-0.29	96	0.96
906	3252.97	3249.2	2597.80	2685.96	28.89	0.19	28.48	2.36	-0.27	0.11	151	0.25
1856	3252.97	3343.0	2585.73	1336.54	27.97	0.12	27.73	3.12	0.69	0.47	189	0.01
2328	3252.97	3406.6	2581.69	744.98	28.77	0.18	28.35	-0.20	0.05	0.20	130	0.26
1969	3252.98	3349.0	2583.37	1185.63	27.58	0.09	27.26	1.77	0.16	0.24	174	0.14
848	3252.99	3246.1	2596.21	2762.66	28.05	0.12	27.36	0.80	-0.25	0.90	182	0.01
1690	3252.99	3334.6	2584.54	1547.79	29.93	0.36	28.86	1.74	-0.13	0.11	151	0.83
93	3253.00	3147.6	2606.78	4231.92	28.52	0.19	27.97	0.16	-0.02	0.55	130	0.34
1477	3253.00	3323.9	2585.30	1815.92	28.87	0.21	28.39	1.49	0.07	-0.00	155	0.20
2124	3253.00	3357.0	2577.27	983.77	28.00	0.11	27.56	...	0.92	1.30	165	0.10
504	3253.01	3222.8	2597.56	3347.17	29.80	0.32	28.85	1.71	0.72	0.11	163	0.82
2179	3253.02	3359.8	2573.06	915.02	29.26	0.27	28.28	...	1.45	0.05	275	0.03
1539	3253.03	3328.5	2579.49	1698.95	22.54	0.00	22.56	0.68	0.63	1.12	248	0.03
2269	3253.03	3403.6	2570.75	820.31	29.25	0.25	28.55	1.59	-0.27	0.34	131	0.11
1045	3253.04	3258.5	2583.84	2451.44	29.93	0.42	29.20	...	-0.24	-0.52	117	0.80
1848	3253.04	3342.7	2574.60	1344.44	29.53	0.28	29.70	-1.34	1.43	0.17	132	0.13
2034	3253.04	3352.7	2570.95	1093.57	28.97	0.22	29.06	-0.42	0.78	0.18	93	0.77
2165	3253.04	3359.1	2570.96	932.91	28.31	0.16	28.17	0.68	-0.01	0.01	163	0.01
561	3253.05	3227.5	2589.33	3229.42	29.23	0.22	28.88	0.19	-0.10	0.27	108	0.54
608	3253.05	3231.4	2587.07	3131.76	25.29	0.02	25.28	1.21	0.12	0.10	163	0.03
430	3253.06	3217.1	2589.82	3490.45	23.45	0.01	23.38	0.35	0.32	0.76	723	0.03
2300	3253.06	3405.2	2565.36	778.34	28.79	0.19	28.21	0.18	0.34	0.86	151	0.14
171	3253.07	3154.7	2592.13	4052.46	26.15	0.04	26.14	1.06	0.06	0.11	166	0.03
507	3253.07	3223.0	2586.44	3342.76	28.00	0.13	28.11	2.91	0.30	0.21	140	0.01
802	3253.08	3243.5	2578.74	2828.62	27.44	0.09	27.24	1.76	0.35	0.11	203	0.02
1387	3253.08	3318.8	2572.02	1942.82	27.51	0.10	26.96	...	1.62	0.55	210	0.02
316	3253.09	3206.7	2584.98	3752.97	23.73	0.01	23.75	3.54	1.42	0.83	100	0.98
742	3253.09	3239.0	2578.39	2940.83	23.58	0.01	23.59	0.65	0.74	0.77	293	0.03
1938	3253.09	3347.2	2563.49	1230.84	30.13	0.36	29.22	...	0.34	0.53	97	0.74
543	3253.11	3225.9	2577.85	3270.28	29.61	0.25	29.45	...	...	0.51	87	0.63
154	3253.12	3152.0	2582.88	4120.78	26.29	0.05	26.24	...	0.10	0.02	231	0.03
1512	3253.12	3320.3	2564.61	1906.92	25.23	0.03	24.89	1.84	0.80	0.31	494	0.03
2465	3253.12	3412.6	2551.91	594.41	28.88	0.24	28.11	...	0.90	0.04	233	0.14
2236	3253.13	3402.1	2553.59	855.82	28.72	0.17	28.01	-1.98	2.78	0.57	144	0.18
1309	3253.14	3314.9	2561.21	2041.91	28.75	0.16	28.39	...	2.47	0.58	123	0.02
1633	3253.14	3331.4	2557.90	1628.23	27.27	0.10	26.49	...	0.66	1.10	495	0.00
1743	3253.14	3337.3	2556.62	1478.34	28.90	0.18	28.64	1.45	0.37	0.07	101	0.77
845	3253.16	3245.7	2564.51	2774.50	28.95	0.22	27.85	0.36	0.37	-0.06	204	0.10
34	3253.17	3140.6	2577.46	4406.78	27.67	0.16	27.18	2.47	0.49	0.82	149	0.20
172	3253.18	3155.0	2571.80	4045.36	26.65	0.05	26.61	1.49	-0.14	0.49	158	0.03
173	3253.19	3155.5	2569.33	4033.65	27.12	0.07	27.15	0.69	0.09	0.02	117	0.15
619	3253.19	3231.5	2561.97	3130.76	27.81	0.10	27.78	0.88	0.23	-0.08	120	0.08
1726	3253.19	3336.4	2547.74	1502.38	27.34	0.08	27.09	1.13	0.12	0.25	145	0.23
538	3253.20	3225.4	2561.99	3283.09	29.59	0.27	28.86	-0.44	1.42	0.48	129	0.55
851	3253.20	3246.0	2556.13	2765.25	29.51	0.32	28.64	...	0.52	-0.26	174	0.01
2609	3253.20	3420.2	2535.06	403.87	25.51	0.05	25.48	1.87	0.55	0.71	185	0.03
824	3253.21	3242.8	2555.39	2845.87	28.69	0.14	28.12	-0.03	0.58	1.29	153	0.37
1866	3253.21	3343.6	2541.98	1321.22	27.46	0.09	27.11	0.26	0.32	0.50	156	0.02
415	3253.22	3214.0	2561.03	3569.49	29.83	0.33	29.25	-0.28	-0.26	0.09	102	0.49
892	3253.22	3248.5	2552.91	2703.90	29.72	0.26	29.64	1.27	-0.05	0.51	76	0.93
1523	3253.22	3326.3	2543.62	1755.88	29.33	0.27	28.74	1.19	-0.17	-0.19	122	0.20
460	3253.23	3219.2	2557.18	3439.90	28.11	0.11	27.97	-0.05	-0.14	0.73	105	0.27
1396	3253.23	3320.3	2544.23	1906.33	25.09	0.03	25.06	2.08	0.66	0.23	364	0.03
228	3253.24	3159.5	2559.20	3931.83	26.04	0.04	25.95	0.61	0.17	0.23	187	0.03
2469	3253.24	3413.4	2529.65	574.65	22.80	0.00	22.83	2.33	0.67	0.39	108	0.98
2528	3253.25	3416.1	2528.20	506.53	29.58	0.37	28.44	...	0.11	132	0.94	
426	3253.27	3215.5	2549.78	3532.79	29.83	0.39	29.22	-0.08	0.35	-0.40	121	0.72
1000	3253.28	3255.5	2539.26	2526.96	27.92	0.13	27.64	-0.13	0.09	0.20	159	0.01
132	3253.29	3151.4	2552.14	4135.06	27.58	0.08	27.19	...	1.04	147	0.01	
167	3253.29	3154.5	2551.88	4062.78	29.63	0.28	27.89	-0.65	0.22	1.27	201	0.40
310	3253.29	3206.1	2548.89	3767.16	28.28	0.14	28.05	0.88	0.10	0.43	126	0.01
347	3253.29	3208.9	2547.42	3697.25	28.42	0.16	27.78	1.63	0.25	-0.11	155	0.01
574	3253.29	3228.8	2543.46	3198.21	28.57	0.15	28.15	...	1.76	-0.03	115	0.26
1688	3253.29	3334.9	2528.52	1540.12	26.33	0.04	26.04	...	1.27	1.96	227	0.02
2613	3253.29	3420.7	2518.38	391.42	27.95	0.20	26.65	0.95	0.25	0.16	214	0.95
1080	3253.30	3301.6	2533.81	2373.89	27.90	0.12	27.04	-0.36	1.07	0.82	193	0.01
92	3253.31	3145.8	2549.03	4277.42	26.37	0.08	25.59	...	2.06	0.45	592	0.00
2280	3253.31	3404.5	2518.10	796.96	25.49	0.03	25.41	0.99	-0.02	0.01	244	0.03
391	3253.32	3212.9	2542.37	3596.51	26.70	0.05	26.50	-0.06	0.52	0.62	198	0.02
1846	3253.32	3342.7	2522.02	1345.08	28.81	0.18	28.79	0.25	0.24	0.03	85	0.63
72	3253.33	3146.6	2545.13	4258.04	26.11	0.07	25.20	...	1.39	0.77	566	

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
2212	3253.33	3401.0	2516.41	886.06	29.44	0.24	28.78	-0.11	0.80	0.64	105	0.93	a
157	3253.34	3153.4	2542.82	4085.12	29.34	0.26	28.21	...	-0.14	0.47	138	0.27	a
720	3253.34	3239.3	2532.73	2934.39	22.49	0.00	22.47	0.94	0.68	0.92	495	0.03	ef
2106	3253.34	3356.1	2514.73	1006.94	28.52	0.18	27.85	0.14	0.50	0.05	159	0.01	a
1082	3253.35	3301.9	2524.91	2366.62	27.83	0.12	27.49	...	0.52	0.06	139	0.06	ef
2100	3253.35	3355.7	2514.04	1019.07	29.37	0.25	29.20	...	0.50	0.63	131	0.62	a
2549	3253.36	3416.8	2507.20	489.11	28.65	0.24	27.99	...	-0.22	0.01	135	0.66	aef
242	3253.37	3201.3	2535.30	3888.83	24.32	0.02	24.12	-0.28	1.42	1.59	469	0.03	ef
1896	3253.37	3345.1	2512.17	1283.16	27.26	0.08	27.22	...	1.46	1.00	180	0.01	a
166	3253.38	3154.3	2534.14	4062.50	29.06	0.22	28.26	...	1.17	0.44	141	0.01	a
453	3253.38	3218.6	2530.28	3455.10	29.89	0.31	28.40	0.20	0.02	0.44	243	0.71	ae
470	3253.39	3219.9	2526.45	3422.55	28.03	0.09	27.66	...	...	1.69	109	0.25	a
2550	3253.39	3417.1	2501.89	481.54	28.66	0.20	27.19	...	-0.45	0.53	286	0.90	aef
818	3253.40	3244.4	2520.97	2807.66	29.05	0.24	28.47	-0.26	0.37	-0.30	162	0.02	a
1720	3253.40	3336.1	2508.59	1509.52	28.26	0.13	28.32	1.06	-0.11	0.44	96	0.01	a
2220	3253.40	3401.4	2502.21	875.75	28.63	0.19	28.48	...	-0.19	0.30	164	0.11	
139	3253.41	3152.0	2529.09	4121.66	27.71	0.11	27.10	0.45	-0.01	0.27	251	0.01	
1081	3253.41	3301.6	2514.09	2375.55	26.50	0.06	26.28	...	0.69	0.27	206	0.03	ef
454	3253.42	3218.7	2522.87	3452.75	29.65	0.25	29.39	0.71	0.14	0.77	92	0.81	a
490	3253.42	3221.3	2521.65	3386.74	28.62	0.19	28.05	...	0.26	0.27	194	0.01	a
1160	3253.42	3307.2	2511.45	2235.13	26.52	0.06	26.36	0.84	0.15	0.20	267	0.03	
1650	3253.42	3333.4	2506.24	1578.24	23.86	0.01	23.77	0.53	0.46	0.98	581	0.02	e
1924	3253.42	3346.6	2502.80	1247.44	28.65	0.17	27.49	...	0.39	0.70	206	0.05	a
2588	3253.42	3418.9	2494.64	434.78	28.41	0.27	27.47	...	0.62	-0.23	150	0.41	aef
2589	3253.42	3419.4	2495.24	422.67	27.57	0.17	26.90	1.57	0.09	0.09	223	0.02	aef
73	3253.43	3146.1	2527.42	4270.27	25.86	0.07	25.90	0.49	0.82	0.36	434	0.00	ef
1174	3253.43	3304.0	2510.87	2316.29	27.56	0.12	27.46	...	-0.10	0.12	121	0.39	
1295	3253.43	3312.2	2507.53	2110.64	24.54	0.01	24.54	1.87	0.80	0.28	170	0.03	
1878	3253.43	3344.2	2502.09	1307.23	29.05	0.18	28.27	...	...	2.29	120	0.55	a
2590	3253.43	3420.1	2492.49	406.27	26.76	0.12	26.30	0.30	0.90	0.63	515	0.02	aef
2200	3253.44	3400.7	2496.27	893.59	28.85	0.18	28.01	...	1.79	0.83	164	0.87	a
2247	3253.44	3402.7	2494.94	843.40	28.15	0.14	28.02	-0.09	0.13	0.12	145	0.01	
18	3253.46	3139.0	2523.59	4448.25	24.98	0.39	23.60	-1.34	...	...	80	0.95	ae
2436	3253.46	3411.7	2489.10	617.59	28.62	0.18	27.89	-0.35	0.06	0.59	181	0.08	a
1199	3253.47	3309.6	2501.18	2174.48	25.45	0.03	25.40	2.78	0.66	0.23	238	0.03	
1349	3253.47	3317.1	2499.13	1985.50	27.79	0.11	27.45	1.09	0.38	0.15	170	0.01	ef
243	3253.49	3202.6	2512.59	3856.69	24.67	0.01	24.67	1.95	0.54	0.50	196	0.03	ef
536	3253.49	3225.4	2507.69	3284.83	30.00	0.33	28.82	-0.61	0.04	0.36	108	0.82	a
1885	3253.49	3344.5	2489.86	1299.33	27.88	0.13	27.55	-0.57	0.52	0.19	181	0.01	
209	3253.50	3157.8	2511.90	3975.74	28.87	0.21	28.21	1.03	1.28	0.04	134	0.06	a
597	3253.50	3230.2	2505.40	3164.26	29.59	0.31	29.31	1.50	-0.19	-0.35	91	0.96	
621	3253.50	3232.1	2503.58	3116.13	24.70	0.01	24.67	0.47	0.13	0.53	254	0.03	
54	3253.53	3142.8	2510.14	4353.60	29.36	0.42	28.71	1.42	-0.24	0.34	104	0.93	a
2316	3253.53	3402.2	2479.40	854.36	27.70	0.12	27.05	2.93	0.19	-0.19	188	0.02	
724	3253.54	3238.1	2496.00	2965.64	27.61	0.10	28.54	0.40	0.12	0.39	111	0.02	ae
82	3253.56	3146.8	2502.39	4251.25	27.22	0.14	26.98	-1.06	1.84	0.55	420	0.00	ae
220	3253.56	3159.1	2499.97	3944.44	26.04	0.03	25.94	0.05	1.05	0.34	167	0.03	ef
1489	3253.56	3324.4	2480.72	1803.55	29.37	0.27	28.72	0.88	0.46	0.25	177	0.78	a
1323	3253.59	3315.7	2477.93	2022.18	28.32	0.17	28.66	...	0.16	0.52	285	0.00	ae
46	3253.62	3141.5	2493.94	4386.07	29.04	0.43	27.96	...	0.39	0.11	196	0.21	a
221	3253.63	3159.2	2486.77	3940.07	26.84	0.05	26.75	...	0.93	0.13	148	0.02	aef
667	3253.64	3236.0	2477.54	3017.76	21.14	0.00	21.15	1.09	0.98	0.58	614	0.03	
2078	3253.64	3355.0	2460.16	1035.31	25.38	0.02	25.34	0.99	0.12	0.54	228	0.03	
1127	3253.66	3304.8	2468.21	2295.96	29.81	0.39	29.05	...	0.60	0.11	156	0.89	a
2176	3253.67	3359.8	2453.67	916.56	27.94	0.13	27.70	2.97	0.58	-0.10	199	0.01	a
2253	3253.68	3403.3	2451.62	828.81	25.28	0.02	25.25	1.18	0.17	0.23	150	0.03	
487	3253.69	3221.1	2471.54	3390.79	27.36	0.08	27.15	0.21	0.67	0.56	168	0.01	a
1078	3253.69	3301.4	2463.11	2381.52	26.24	0.05	25.88	...	0.49	0.48	299	0.03	
2133	3253.69	3357.7	2450.28	967.99	26.23	0.04	26.19	1.93	0.06	0.08	189	0.03	
306	3253.70	3206.2	2473.03	3766.19	23.32	0.01	23.28	0.39	0.97	1.29	364	0.03	
1656	3253.72	3332.4	2450.86	1602.24	28.34	0.12	28.21	...	0.14	0.94	108	0.25	a
554	3253.73	3227.4	2462.78	3234.75	29.82	0.29	29.40	...	1.29	0.57	101	0.73	a
1703	3253.74	3337.6	2445.30	1473.59	21.54	0.00	21.52	0.67	0.71	0.59	938	0.03	
1994	3253.74	3350.7	2442.61	1143.87	25.39	0.02	25.29	0.55	-0.02	0.59	226	0.03	
966	3253.75	3251.3	2454.18	2590.04	27.13	0.07	27.10	1.04	-0.06	0.83	168	0.02	
1529	3253.75	3327.0	2446.25	1738.71	27.12	0.08	26.84	3.42	0.13	0.38	438	0.00	
2211	3253.76	3401.0	2436.49	886.52	29.66	0.31	29.09	-0.30	0.94	0.13	110	0.91	a
473	3253.78	3218.6	2455.50	3453.72	26.30	0.04	26.24	...	0.49	0.15	181	0.03	
2249	3253.78	3402.7	2431.50	841.84	29.61	0.33	28.29	2.69	1.87	0.54	143	0.35	a
2335	3253.78	3416.4	2429.15	499.92	29.31	0.26	28.68	...	1.16	0.78	90	0.84	a
142	3253.79	3152.2	2459.01	4116.87	27.50	0.09	27.12	-0.45	1.05	0.74	170	0.01	a
500	3253.80	3222.3	2450.62	3363.09	28.28	0.14	28.22	-1.20	1.63	0.19	125	0.17	a
1034	3253.80	3258.5	2443.76	2453.11	25.53	0.03	25.47	1.33	0.05	0.28	187	0.03	
2583	3253.80	3419.0	2425.75	434.87	25.82	0.06	25.57	0.96	0.18	-0.07	304	0.03	f
53	3253.81	3141.4	2457.42	4387.68	29.28	0.47	29.07	-0.66	0.58	-0.16	85	0.62	a
1172	3253.81	3307.9	2439.83	2218.03	26.95	0.06	26.91	0.53	0.69	0.42	131	0.05	
997	3253.83	3255.6	2437.64	2525.74	24.93	0.02	24.89	0.80	0.06	0.18	295	0.03	
2292	3253.83	3404.9	2422.54	787.32	28.09	0.13	27.94	...	1.83	0.56	162	0.01	a
717	3253.84	3237.7	2440.02	2976.80	28.39	0.17	28.29	-0.40	0.18	0.09	163	0.00	ae
1153	3253.84	3306.5	2433.27	2254.22	28.11	0.12	27.59	...	0.47	2.37	142</td		

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
2366	3253.86	3356.9	2418.03	989.48	29.72	0.29	28.32	...	0.52	0.47	232	0.85	a
2584	3253.86	3420.2	2414.28	404.47	24.27	0.03	24.18	1.18	0.12	0.16	324	0.03	ef
2185	3253.88	3400.3	2415.23	904.58	26.65	0.05	26.51	...	0.27	0.08	132	0.21	a
57	3253.89	3143.4	2443.34	4338.73	27.38	0.16	27.25	-0.32	0.13	0.08	114	0.14	
2228	3253.89	3402.0	2412.38	860.38	24.87	0.02	24.84	1.00	0.31	0.75	272	0.03	
50	3253.90	3142.5	2440.38	4360.90	27.39	0.15	27.12	0.13	-0.05	0.26	129	0.08	
364	3253.90	3210.2	2434.26	3666.04	29.63	0.28	29.17	2.57	-0.42	0.40	123	0.90	a
35	3253.91	3140.8	2439.55	4402.77	26.22	0.11	26.42	-0.66	0.86	0.55	204	0.03	
130	3253.91	3151.2	2437.74	4142.19	28.34	0.14	28.19	0.37	0.92	0.06	116	0.07	a
1928	3253.91	3346.3	2411.25	1254.37	25.12	0.02	25.14	0.49	0.66	0.31	165	0.03	
1237	3253.92	3313.5	2417.62	2078.17	21.05	0.00	21.07	1.93	1.43	0.81	447	0.03	
2542	3253.92	3416.7	2403.15	492.35	27.89	0.16	27.62	...	0.18	0.03	181	0.01	
188	3253.93	3155.9	2432.22	4025.02	26.70	0.07	26.51	0.52	0.21	-0.00	297	0.01	
1120	3253.93	3304.6	2417.65	2301.11	27.97	0.16	27.23	-0.95	2.24	0.71	278	0.01	ae
661	3253.94	3234.3	2422.46	3060.99	28.15	0.12	28.04	-0.03	0.17	0.57	129	0.01	a
2251	3253.94	3403.0	2402.81	835.36	28.35	0.16	27.88	0.61	0.28	-0.08	143	0.10	a
32	3253.96	3139.4	2431.35	4437.74	26.91	0.13	26.89	...	...	4.37	84	0.94	ae
2148	3253.96	3358.1	2399.93	959.86	29.28	0.24	28.99	-0.04	0.11	0.29	100	0.89	a
2367	3253.96	3408.0	2397.93	709.55	29.05	0.22	28.98	1.49	0.51	0.15	113	0.31	a
2519	3253.96	3415.3	2395.45	526.77	28.29	0.17	27.90	1.16	0.19	-0.01	161	0.18	a
19	3253.97	3139.1	2428.42	4446.47	24.67	0.05	24.65	...	...	...	34	1.00	ae
103	3253.97	3148.1	2426.27	4219.75	29.31	0.30	28.46	...	0.90	0.34	129	0.95	a
860	3253.97	3246.8	2414.05	2747.50	26.64	0.05	26.54	0.39	-0.14	0.36	176	0.02	
2045	3253.97	3353.3	2399.10	1078.34	28.81	0.17	28.50	...	...	1.13	113	0.17	a
762	3253.99	3240.6	2411.88	2902.76	28.75	0.19	28.57	0.49	-0.20	0.44	119	0.14	a
1372	3254.00	3318.1	2402.35	1961.33	28.31	0.13	28.10	-0.11	0.17	0.52	110	0.51	a
1661	3254.00	3332.9	2399.05	1591.72	25.26	0.02	25.21	0.63	0.35	0.47	251	0.03	
1800	3254.00	3341.5	2396.33	1375.63	24.19	0.01	24.15	0.20	0.82	1.05	293	0.03	
445	3254.01	3217.8	2413.15	3475.30	28.12	0.12	28.04	...	0.12	-0.14	103	0.55	a
2174	3254.01	3359.7	2391.19	919.56	27.35	0.08	27.24	0.45	0.01	-0.03	126	0.31	
1123	3254.02	3305.6	2400.71	2277.03	22.71	0.01	22.72	1.18	1.33	1.05	288	0.05	
1538	3254.02	3327.1	2395.85	1737.43	26.93	0.05	26.92	1.91	0.33	0.02	117	0.05	
204	3254.03	3158.1	2413.82	3968.80	24.06	0.01	24.00	0.63	0.11	0.39	565	0.02	
1020	3254.03	3257.4	2400.75	2481.26	26.36	0.04	26.29	0.25	1.42	0.79	99	0.98	a
1346	3254.03	3316.9	2397.20	1992.42	28.81	0.20	28.38	1.71	0.51	0.05	136	0.56	a
21	3254.04	3139.1	2416.12	4446.16	...	...	24.37	...	-1.89	7.43	41	0.91	ae
823	3254.05	3244.7	2399.21	2801.17	28.03	0.11	27.73	0.70	0.06	0.48	144	0.21	a
926	3254.05	3251.7	2398.43	2624.98	22.08	0.00	22.11	0.50	0.78	0.57	261	0.05	
2596	3254.05	3419.4	2378.83	425.35	26.05	0.05	26.00	...	1.09	0.95	98	0.99	a
2039	3254.07	3353.4	2380.08	1077.12	26.86	0.07	26.74	...	0.74	0.27	268	0.01	
452	3254.08	3218.5	2400.17	3457.08	29.64	0.29	30.17	-0.79	0.79	-0.12	90	0.51	a
1834	3254.08	3342.7	2382.06	1345.07	26.78	0.06	26.73	-0.94	0.94	0.60	230	0.02	e
43	3254.09	3142.8	2405.63	4354.60	22.76	0.01	22.75	0.81	0.97	0.82	254	0.04	
2020	3254.10	3352.1	2374.63	1108.58	28.35	0.15	27.96	...	0.61	0.20	122	0.15	a
2074	3254.10	3354.6	2375.00	1046.07	29.46	0.24	28.44	-0.22	-0.11	1.04	120	0.58	a
2005	3254.11	3351.1	2373.09	1133.62	29.64	0.32	28.71	1.14	0.27	0.15	121	0.30	
591	3254.13	3230.0	2387.23	3168.24	25.26	0.02	25.23	2.13	0.54	0.25	284	0.03	
657	3254.14	3234.1	2384.68	3067.02	28.89	0.18	28.73	0.69	-0.34	0.15	110	0.36	a
1085	3254.14	3301.9	2379.93	2370.22	26.63	0.07	26.49	0.07	-0.09	0.18	229	0.26	
1636	3254.15	3331.6	2370.86	1623.78	26.46	0.05	26.39	1.18	0.13	0.08	183	0.03	
319	3254.17	3205.4	2386.04	3786.80	26.07	0.04	25.99	0.73	0.03	0.10	270	0.03	
777	3254.17	3242.2	2378.66	2863.54	27.22	0.08	26.94	1.37	0.29	0.31	233	0.02	
2376	3254.17	3409.1	2359.48	682.80	24.59	0.02	24.57	1.81	0.38	0.18	228	0.03	
545	3254.20	3226.4	2375.10	3258.65	27.02	0.07	26.99	0.51	0.01	0.48	288	0.02	
1070	3254.20	3300.8	2368.86	2396.42	29.62	0.31	28.87	...	-0.28	0.30	80	0.92	
1451	3254.20	3322.7	2364.01	1847.84	26.86	0.06	26.58	...	0.88	0.99	241	0.01	a
2351	3254.20	3407.5	2353.87	724.47	29.61	0.28	29.35	...	0.09	0.10	93	0.74	a
489	3254.24	3221.4	2368.90	3384.34	27.81	0.12	27.34	0.87	0.05	-0.00	235	0.03	
1931	3254.24	3347.3	2351.32	1230.94	26.31	0.05	26.09	0.17	0.34	0.46	206	0.03	
202	3254.25	3157.3	2372.97	3990.17	29.60	0.32	28.78	...	0.03	-0.03	139	0.07	a
458	3254.25	3219.0	2368.09	3445.45	29.93	0.38	28.94	-4.10	3.77	0.30	135	0.48	ae
1074	3254.25	3301.1	2358.21	2389.74	27.19	0.09	27.08	1.53	0.35	0.05	170	0.03	a
1983	3254.25	3350.6	2348.96	1147.86	24.62	0.02	24.53	1.49	0.87	0.32	359	0.03	e
67	3254.26	3144.7	2374.99	4306.45	28.78	0.25	27.71	0.66	0.33	0.62	296	0.97	a
1399	3254.26	3320.1	2352.55	1913.20	24.20	0.01	24.04	0.88	0.90	0.44	431	0.03	ef
1746	3254.26	3337.8	2348.25	1468.68	27.39	0.09	27.37	0.92	0.04	0.05	183	0.02	
872	3254.27	3247.5	2358.53	2731.50	29.21	0.25	28.66	-0.52	0.18	0.19	138	0.11	a
1149	3254.27	3306.3	2354.51	2259.43	28.18	0.13	27.54	0.95	-0.13	1.87	150	0.91	a
2486	3254.27	3413.8	2339.79	564.93	29.18	0.25	28.60	-1.06	1.44	0.57	172	0.47	a
807	3254.28	3244.0	2357.93	2817.32	27.06	0.07	26.92	...	2.45	0.54	167	0.02	
1006	3254.28	3256.1	2355.48	2515.42	29.55	0.33	29.25	1.13	0.12	0.02	123	0.11	a
23	3254.29	3139.3	2370.18	4441.66	23.18	0.03	23.16	-0.79	-0.85	6.93	129	0.98	ae
483	3254.29	3216.5	2360.73	3507.12	28.84	0.18	28.56	-0.70	0.04	0.75	116	0.02	ae
636	3254.29	3232.6	2358.56	3104.27	29.34	0.21	29.06	1.75	0.31	0.08	83	0.96	a
1021	3254.29	3257.7	2351.75	2475.57	25.32	0.03	25.26	2.78	0.12	0.03	195	0.09	
1679	3254.30	3334.2	2342.28	1559.43	27.22	0.07	27.21	0.42	0.05	0.39	130	0.02	
58	3254.31	3143.4	2365.55	4338.98	29.04	0.43	28.64	...	0.71	0.41	118	0.97	a
262	3254.31	3201.6	2360.32	3881.84	26.01	0.04	25.90	3.04	0.76	0.30	193	0.03	
2417	3254.31	3411.0	2332.55	635.44	28.75	0.21	28.86	...	0.35	0.37	130	0.01	a
248	3254.32	3158.1	2360.24	3968.75	26.82	0.05	26.83	1.03	0.08	0.01	112	0.06	</

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
2473	3254.33	3412.9	2328.49	587.12	26.60	0.06	26.43	...	1.11	0.48	161	0.03
2569	3254.33	3417.8	2326.63	464.75	28.68	0.20	28.00	0.59	-0.06	0.59	106	0.81
135	3254.34	3151.9	2358.27	4125.83	26.56	0.05	26.38	-0.58	0.60	0.79	195	0.02
1787	3254.34	3340.3	2334.29	1404.93	26.97	0.08	26.84	1.13	-0.00	0.06	296	0.02
1043	3254.36	3259.0	2339.34	2441.53	26.14	0.05	25.89	1.62	0.28	0.12	295	0.03
1460	3254.36	3322.9	2334.63	1842.34	29.68	0.29	29.17	...	1.31	0.91	160	0.83
2372	3254.36	3408.5	2323.00	699.17	26.34	0.05	26.25	1.32	0.04	-0.02	161	0.03
1326	3254.37	3315.9	2333.09	2018.58	26.38	0.05	26.30	0.65	0.20	0.16	219	0.03
218	3254.40	3158.8	2345.21	3953.44	26.98	0.06	27.04	1.80	0.11	-0.13	130	0.04
438	3254.41	3215.5	2338.72	3532.78	24.51	0.02	24.50	1.38	0.12	0.21	278	0.03
2256	3254.41	3403.2	2316.28	831.46	29.76	0.28	29.15	1.29	-0.15	0.33	202	0.86
291	3254.42	3204.3	2339.90	3815.34	28.21	0.13	27.82	2.09	-0.08	0.29	185	0.11
524	3254.43	3224.3	2334.36	3311.74	26.91	0.07	26.69	0.92	0.13	0.07	217	0.02
1061	3254.43	3300.4	2326.64	2407.59	26.46	0.06	26.22	1.85	0.13	0.21	206	0.03
1857	3254.43	3338.1	2317.59	1461.46	29.86	0.35	29.16	0.24	0.22	-0.06	107	0.83
107	3254.44	3149.1	2340.46	4195.95	24.98	0.02	24.96	0.96	0.54	0.71	171	0.03
2400	3254.44	3409.3	2308.30	679.18	29.19	0.27	28.77	...	-0.15	-0.19	122	0.26
2579	3254.44	3419.1	2306.88	431.77	26.29	0.08	26.06	0.96	0.04	0.10	182	0.03
251	3254.45	3200.7	2335.32	3906.04	26.40	0.05	26.17	0.06	0.77	0.79	262	0.02
1347	3254.45	3316.9	2319.26	1993.00	29.71	0.38	28.40	...	-0.16	-0.37	207	0.08
2052	3254.45	3353.6	2310.12	1071.25	28.23	0.16	28.29	0.09	0.89	0.34	158	0.00
1275	3254.46	3313.6	2317.10	2075.36	29.78	0.29	29.23	...	...	0.71	87	0.69
1826	3254.47	3342.0	2308.92	1362.99	28.18	0.13	27.85	1.00	0.07	0.30	144	0.01
329	3254.48	3207.3	2327.88	3738.64	28.22	0.13	27.99	-0.42	1.76	0.39	134	0.22
829	3254.48	3245.1	2319.57	2791.19	26.77	0.05	26.70	0.19	0.61	0.22	132	0.02
859	3254.48	3246.6	2319.65	2752.66	29.34	0.24	29.07	1.25	-0.17	0.58	126	0.19
2472	3254.48	3413.1	2300.09	582.80	29.73	0.36	28.99	...	0.03	0.17	87	0.90
234	3254.49	3160.0	2327.59	3923.21	27.14	0.06	26.94	...	...	1.94	157	0.09
773	3254.49	3241.8	2319.59	2873.49	28.36	0.15	28.31	...	1.67	0.80	168	0.00
1428	3254.49	3320.2	2310.37	1910.35	29.65	0.31	30.79	...	...	0.54	79	0.21
281	3254.50	3203.0	2325.62	3847.28	28.46	0.14	28.43	-2.22	2.07	1.23	138	0.19
506	3254.50	3222.4	2321.98	3361.78	26.22	0.03	26.15	-0.09	0.08	0.53	135	0.08
624	3254.50	3231.8	2320.08	3123.94	28.74	0.15	28.57	3.74	-0.19	0.89	113	0.22
1449	3254.50	3322.4	2308.35	1856.33	28.92	0.20	28.67	-0.49	0.36	0.32	107	0.06
1450	3254.50	3322.9	2307.35	1843.14	28.39	0.17	28.16	0.32	0.44	-0.23	137	0.05
1873	3254.50	3344.0	2303.40	1312.29	29.27	0.23	28.91	1.69	-0.23	0.56	88	0.76
2181	3254.50	3400.0	2299.99	911.38	27.96	0.13	27.44	0.44	0.25	0.21	186	0.01
748	3254.51	3239.6	2315.34	2929.05	29.90	0.31	28.51	...	0.62	0.63	135	0.39
457	3254.52	3216.2	2319.93	3516.81	29.36	0.33	29.36	...	...	0.26	-727	0.00
1485	3254.52	3324.5	2303.92	1803.47	25.16	0.02	25.14	0.52	0.74	0.45	143	0.03
2578	3254.52	3418.7	2291.37	441.95	26.22	0.06	26.06	0.86	0.39	0.28	138	0.03
532	3254.54	3225.3	2312.62	3287.63	28.43	0.14	28.40	-0.44	0.17	0.56	120	0.09
468	3254.55	3219.9	2311.84	3423.11	27.29	0.07	27.27	1.08	0.64	0.36	129	0.27
833	3254.55	3241.2	2308.57	2887.98	25.82	0.03	25.82	...	0.69	0.21	130	0.04
1569	3254.55	3328.4	2298.22	1704.99	29.80	0.30	29.52	...	-0.42	0.12	100	0.89
1950	3254.55	3348.0	2294.06	1212.30	30.43	0.46	29.30	-1.00	1.12	0.07	146	0.86
809	3254.56	3244.2	2306.36	2813.99	26.56	0.05	26.48	1.05	0.81	0.40	164	0.02
688	3254.58	3235.8	2304.44	3023.60	27.99	0.11	27.78	1.57	0.00	0.21	120	0.09
722	3254.58	3237.9	2303.61	2970.58	29.24	0.21	28.49	1.43	-0.17	0.76	188	0.35
871	3254.58	3247.4	2300.41	2733.70	29.09	0.21	28.95	0.68	0.98	-0.04	108	0.48
1068	3254.58	3300.7	2298.30	2399.29	29.65	0.38	28.08	-0.77	0.19	0.15	190	0.42
1772	3254.58	3339.7	2290.37	1422.55	26.53	0.06	26.46	0.91	-0.03	0.28	249	0.02
1600	3254.60	3329.8	2288.58	1669.23	27.74	0.11	27.60	3.38	-0.03	0.00	162	0.02
2086	3254.61	3355.0	2281.00	1038.30	29.23	0.21	28.70	-0.44	0.42	1.24	92	0.86
245	3254.62	3200.2	2304.53	3918.01	29.99	0.29	29.61	0.11	1.00	0.38	67	0.86
389	3254.62	3212.5	2302.01	3608.51	29.77	0.28	30.22	0.62	-0.23	0.33	89	0.86
434	3254.62	3216.8	2299.98	3501.25	28.52	0.18	28.11	-0.06	-0.03	0.84	80	0.00
1887	3254.62	3345.1	2280.74	1286.99	28.00	0.12	27.62	1.81	0.62	-0.01	134	0.01
1601	3254.63	3330.1	2281.97	1661.68	28.79	0.19	28.93	1.73	-0.10	-0.03	99	0.24
878	3254.64	3248.1	2290.65	2716.59	25.94	0.04	25.83	1.77	0.21	0.15	248	0.03
122	3254.65	3147.2	2300.78	4243.74	28.28	0.19	28.84	...	0.37	1.12	17	0.01
1018	3254.65	3257.1	2285.79	2489.30	29.01	0.23	28.55	1.09	-0.01	-0.15	155	0.10
2134	3254.65	3357.6	2272.88	972.64	28.53	0.17	27.73	...	0.10	0.54	222	0.12
754	3254.66	3240.1	2288.54	2916.33	29.19	0.21	29.48	0.50	0.02	0.04	86	0.60
1847	3254.67	3342.7	2272.00	1345.83	29.44	0.29	28.99	...	2.06	0.57	118	0.15
2604	3254.67	3419.7	2264.28	418.15	29.15	0.31	29.20	2.25	3.47	0.23	62	0.94
1635	3254.68	3333.2	2271.68	1585.41	21.24	0.00	21.25	1.58	0.78	0.49	556	0.07
2019	3254.68	3352.1	2267.69	1110.38	27.93	0.10	27.73	1.23	-0.16	0.82	104	0.34
870	3254.69	3247.4	2280.98	2734.47	29.04	0.22	28.58	1.08	-0.03	-0.06	114	0.23
1700	3254.69	3335.5	2270.56	1526.71	27.94	0.15	30.37	...	1.44	0.58	196	0.00
1718	3254.69	3336.4	2270.39	1503.71	26.34	0.04	26.31	-1.90	2.97	1.18	197	0.03
1886	3254.69	3344.8	2268.52	1293.76	26.78	0.06	26.74	1.44	-0.03	0.12	197	0.03
96	3254.70	3147.9	2292.24	4227.21	29.33	0.34	28.21	...	1.73	1.04	134	0.18
165	3254.71	3154.0	2288.09	4074.29	29.59	0.24	28.52	-1.41	1.55	0.80	144	0.90
479	3254.71	3220.8	2282.06	3401.68	29.37	0.24	29.29	2.74	0.16	0.09	98	0.56
949	3254.71	3251.8	2276.79	2623.55	29.57	0.25	28.54	...	0.72	0.93	176	0.83
2067	3254.72	3354.3	2259.70	1055.60	29.54	0.24	29.12	-2.29	2.69	0.72	81	0.90
797	3254.73	3242.9	2273.47	2845.87	29.93	0.38	29.07	...	0.63	-0.30	132	0.78
842	3254.73	3245.7	2273.30	2777.16	29.41	0.26	29.01	...	0.27	-0.07	99	0.97
1288	3254.73	3314.2	2267.30	2060.23	28.85	0.19	28.38	0.53	0.52	0.58	120	0.03
1835	3254.73	3342.5	2260.79	1352.24	28.33	0.16	28.62	0.48	0.71	0.42	185	0.00
1968	3254.74	3349.2	2275.51	1182.98	27.11	0.08	26.89	2.87	0.46	-0.05	204	0.02
335	3254.74	3208.1	2272.25	3720.56	25.98	0.04	25.84	2.33				

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
512	3254.78	3223.7	2268.49	3327.29	25.13	0.02	25.09	0.43	0.42	0.88	174	0.03
1139	3254.78	3305.8	2259.39	2271.97	29.35	0.35	29.11	...	-0.05	-0.03	184	0.60
579	3254.79	3229.1	2266.79	3193.20	23.80	0.01	23.76	0.30	0.19	0.62	602	0.00
88	3254.80	3147.3	2273.62	4241.04	28.27	0.23	27.55	...	1.52	0.87	212	0.01
690	3254.81	3236.0	2260.14	3019.77	27.14	0.08	26.71	-0.10	1.66	0.30	286	0.01
1895	3254.82	3344.9	2244.11	1290.84	27.62	0.10	27.56	2.45	0.90	0.73	146	0.06
2487	3254.82	3414.1	2238.21	558.11	25.99	0.05	25.83	1.32	0.83	1.41	202	0.03
700	3254.83	3236.9	2256.72	2998.40	28.63	0.17	28.47	-0.46	1.20	0.30	134	0.04
743	3254.83	3239.5	2257.26	2932.24	28.43	0.14	27.52	...	0.32	1.49	207	0.00
1137	3254.83	3305.8	2250.61	2272.35	28.87	0.26	27.88	0.00	-0.20	0.51	212	0.04
978	3254.84	3254.5	2251.15	2554.56	25.48	0.03	25.36	0.58	0.03	0.37	251	0.03
1469	3254.84	3323.7	2245.84	1822.60	26.18	0.04	26.03	0.28	0.12	0.37	202	0.03
831	3254.85	3245.1	2251.86	2790.63	28.58	0.15	28.39	-0.70	1.32	0.52	111	0.12
120	3254.87	3150.1	2259.22	4170.90	29.16	0.26	28.58	1.39	0.21	0.07	154	0.48
1827	3254.87	3342.2	2234.81	1359.89	25.75	0.03	25.74	2.99	-0.07	-0.02	113	0.94
208	3254.88	3157.9	2255.82	3974.60	27.26	0.08	27.27	...	0.40	-0.10	165	0.02
10017	3254.90	3144.1	2255.47	4321.34	...	...	18.75	3.48	1.21	1.51	144	0.78
256	3254.90	3200.8	2252.54	3903.78	28.38	0.13	28.24	...	0.74	0.39	126	0.04
311	3254.90	3206.1	2250.21	3769.18	29.28	0.19	28.34	-1.31	0.86	1.28	137	0.82
2075	3254.91	3354.8	2225.26	1042.67	27.64	0.13	26.93	1.14	-0.04	0.00	327	0.00
357	3254.92	3209.7	2247.30	3680.94	29.60	0.34	29.45	0.84	-0.12	-0.07	195	0.01
666	3254.92	3234.6	2240.77	3056.13	29.98	0.35	28.80	-1.69	1.18	0.18	258	0.77
2362	3254.92	3408.0	2220.41	712.21	28.19	0.17	27.53	-6.31	6.30	0.91	154	0.01
1719	3254.95	3336.8	2220.83	1493.49	24.80	0.03	24.69	0.11	0.92	1.01	683	0.00
2308	3254.95	3405.7	2214.81	769.82	27.42	0.10	27.52	1.32	0.13	-0.02	114	0.03
587	3254.97	3229.4	2233.71	3186.50	26.55	0.05	26.44	1.10	0.02	0.11	154	0.03
1315	3254.98	3315.2	2220.72	2036.10	29.84	0.37	29.31	...	-0.01	-0.27	106	0.57
1557	3254.98	3228.9	2217.67	1692.89	23.67	0.01	23.64	1.77	0.65	1.36	296	0.03
1944	3254.98	3348.0	2213.39	1214.16	26.09	0.04	26.07	1.72	0.33	0.12	146	0.03
2552	3254.98	3417.1	2207.31	484.91	28.58	0.24	27.98	0.03	0.25	0.26	132	0.68
264	3254.99	3201.1	2235.11	3895.11	29.78	0.28	29.32	...	1.00	0.21	93	0.89
356	3255.00	3209.5	2232.28	3684.17	28.13	0.13	27.88	-0.40	0.00	0.84	185	0.00
974	3255.00	3253.6	2222.43	2579.32	29.55	0.25	29.20	...	-0.05	0.61	90	0.86
441	3255.01	3217.7	2228.50	3480.12	26.16	0.03	26.14	1.25	1.27	0.98	96	0.98
2076	3255.02	3354.8	2204.42	1043.57	28.08	0.15	27.60	0.26	0.31	-0.04	168	0.01
1169	3255.03	3307.8	2213.73	2221.85	29.25	0.30	28.26	6.53	0.12	0.06	217	0.69
1496	3255.03	3235.4	2209.92	1779.68	24.97	0.02	24.93	1.13	0.22	0.22	215	0.03
2025	3255.03	3352.2	2202.82	1109.05	30.09	0.43	28.76	...	0.78	-0.07	138	0.85
397	3255.04	3213.3	2223.31	3590.00	28.85	0.18	28.39	-1.46	1.08	0.79	154	0.01
1291	3255.04	3313.9	2210.10	2069.07	27.83	0.12	27.33	...	0.63	0.89	265	0.00
10024	3255.06	3146.9	2224.72	4251.29	26.78	0.06	25.95	0.09	0.72	0.31	186	0.00
792	3255.06	3242.7	2213.05	2851.45	28.26	0.13	27.61	1.90	0.49	0.80	180	0.03
930	3255.06	3251.0	2211.92	2643.91	27.13	0.07	26.89	0.17	0.49	0.55	190	0.02
388	3255.07	3212.5	2217.67	3609.64	28.69	0.17	28.51	...	-0.28	0.09	130	0.13
198	3255.08	3156.8	2220.42	4002.53	26.87	0.06	26.82	0.60	-0.11	0.24	123	0.04
352	3255.10	3209.8	2213.87	3678.42	27.33	0.08	27.18	0.27	0.23	0.01	159	0.03
1164	3255.11	3307.6	2198.73	2227.27	27.41	0.08	26.92	...	1.38	1.90	144	0.08
1452	3255.11	3322.8	2194.68	1846.24	26.64	0.06	26.37	0.07	0.69	0.51	243	0.02
340	3255.12	3209.0	2210.34	3697.96	25.71	0.04	25.49	0.71	0.18	0.32	417	0.03
1110	3255.12	3303.7	2196.79	2325.95	27.11	0.09	26.81	...	1.40	0.20	166	0.26
410	3255.13	3214.5	2206.92	3559.71	28.15	0.12	27.92	0.53	-0.20	0.32	123	0.01
418	3255.13	3215.2	2206.80	3540.99	29.08	0.23	28.89	0.88	0.12	-0.25	96	0.64
1691	3255.13	3335.1	2189.40	1538.31	26.08	0.04	25.97	0.26	0.32	0.92	275	0.02
1218	3255.14	3310.7	2191.42	2149.26	29.52	0.30	28.67	-1.11	1.29	0.21	129	0.38
917	3255.16	3249.9	2192.36	2671.56	29.65	0.25	28.95	-2.52	2.24	0.94	102	0.55
1417	3255.16	3321.0	2186.43	1890.65	27.87	0.14	27.22	1.74	0.14	0.29	411	0.00
339	3255.19	3208.0	2197.45	3722.25	28.81	0.17	28.15	-0.12	0.43	0.41	157	0.84
384	3255.19	3212.3	2196.66	3614.82	28.93	0.19	28.09	0.17	0.24	-0.06	120	0.15
440	3255.19	3217.5	2194.94	3485.53	29.43	0.22	28.98	...	3.82	0.87	86	0.86
1793	3255.19	3340.4	2177.31	1404.38	29.40	0.22	28.79	-1.52	1.27	1.55	80	0.90
205	3255.20	3157.7	2196.79	3982.23	28.26	0.14	27.80	0.79	0.98	0.81	199	0.02
714	3255.20	3237.5	2187.74	2981.70	27.30	0.08	27.01	0.56	0.01	0.61	189	0.02
2389	3255.22	3410.2	2164.68	658.46	23.45	0.01	23.42	0.81	0.36	0.87	329	0.03
474	3255.23	3220.4	2186.28	3411.72	27.72	0.10	27.56	1.11	0.09	0.25	147	0.01
630	3255.23	3232.3	2184.13	3113.23	27.95	0.12	27.66	2.98	0.95	0.72	250	0.01
993	3255.23	3255.1	2178.41	2541.14	28.71	0.19	27.92	...	0.20	0.36	211	0.04
1292	3255.24	3314.4	2173.26	2058.29	28.67	0.19	28.49	3.58	0.42	0.13	109	0.05
1310	3255.24	3315.4	2173.46	2032.65	27.80	0.13	27.62	1.89	0.08	0.04	251	0.01
1598	3255.24	3329.7	2169.35	1672.08	26.88	0.07	26.65	0.79	0.75	0.49	179	0.02
2305	3255.24	3407.5	2160.58	725.28	22.94	0.01	22.87	0.44	0.64	0.40	672	0.03
1067	3255.26	3300.8	2172.14	2398.88	29.02	0.27	27.88	-0.02	1.48	-0.22	181	0.39
111	3255.28	3149.2	2184.94	4194.21	29.00	0.25	28.78	0.30	-0.21	-0.08	84	0.98
462	3255.31	3219.5	2171.84	3435.18	29.23	0.24	28.97	...	1.24	0.62	169	0.17
564	3255.31	3227.9	2170.06	3222.91	29.38	0.26	28.68	1.01	0.36	0.36	141	0.31
351	3255.32	3209.1	2172.68	3695.60	29.38	0.25	28.75	...	3.14	0.46	143	0.09
380	3255.35	3212.0	2165.87	3622.80	29.39	0.23	28.57	0.40	0.02	0.69	167	0.19
642	3255.35	3233.1	2161.48	3094.30	28.70	0.20	28.38	...	-0.20	-0.11	123	0.78
2072	3255.36	3355.0	2142.22	1039.55	23.30	0.01	23.31	0.27	1.44	2.14	105	0.98
268	3255.38	3202.0	2162.45	3873.61	26.21	0.04	26.13	...	1.08	0.92	222	0.03
950	3255.38	3252.2	2152.57	2614.15	28.03	0.14	27.68	1.79	-0.07	0.34	205	0.01
238	3255.39	3200.0	2160.68	3923.58	29.11	0.21	28.20	0.53	0.23	0.84	198	0.15
286	3255.41	3204.1	2157.48	3820.64	27.17	0.07	27.22	...	0.25	-0.09	154	0.02
2096	3255.42	3355.7	2130.66	1021.80	28.42	0.20						

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
1197	3255.44	3309.2	2137.99	2188.00	28.76	0.19	28.47	1.94	0.33	0.40	94	0.76	a
213	3255.45	3158.2	2151.59	3970.45	29.25	0.23	28.74	...	0.49	0.14	153	0.41	a
1788	3255.45	3340.2	2128.53	1409.20	26.56	0.07	26.40	0.75	0.73	0.33	160	0.21	a
225	3255.46	3159.3	2149.10	3942.76	28.35	0.12	28.13	-0.43	0.30	0.72	108	0.92	a
2311	3255.46	3405.9	2120.82	765.97	27.31	0.08	27.33	1.49	0.06	0.26	117	0.04	a
181	3255.47	3155.3	2148.35	4041.95	27.44	0.08	27.20	-0.70	1.39	0.72	137	0.01	
1028	3255.47	3258.0	2134.39	2469.39	29.16	0.27	28.46	...	1.28	0.22	168	0.48	a
84	3255.48	3146.9	2148.23	4253.97	28.33	0.17	27.54	0.41	0.27	0.84	199	0.30	a
1478	3255.48	3324.0	2127.13	1817.09	28.33	0.14	27.90	...	...	1.12	128	0.06	a
51	3255.50	3142.9	2144.27	4353.23	28.55	0.34	26.97	...	1.13	0.01	306	0.07	a
968	3255.50	3253.6	2129.92	2580.27	26.66	0.06	26.44	-0.67	1.55	1.38	304	0.02	
2129	3255.50	3357.4	2116.21	978.44	25.90	0.03	25.87	0.24	-0.16	0.04	115	0.91	a
128	3255.53	3151.1	2137.38	4147.47	29.65	0.30	29.45	1.17	0.26	0.22	88	0.93	a
144	3255.53	3152.4	2137.15	4114.28	30.04	0.36	29.02	-1.15	1.06	0.35	108	0.65	a
478	3255.54	3217.6	2129.53	3482.99	23.16	0.01	23.15	0.16	0.63	0.48	400	0.03	f
398	3255.55	3213.2	2128.66	3591.87	29.20	0.20	28.92	...	0.46	1.09	91	0.51	a
49	3255.56	3142.5	2133.62	4363.86	28.24	0.32	27.43	...	0.04	0.52	185	0.85	a
63	3255.60	3144.2	2127.03	4319.46	27.17	0.14	26.97	-0.41	0.25	0.30	159	0.02	
195	3255.60	3154.9	2124.33	4053.31	26.73	0.05	26.63	2.50	0.19	0.21	134	0.06	
1383	3255.60	3318.9	2105.97	1944.88	27.53	0.11	26.97	1.04	0.52	0.70	271	0.01	e
1395	3255.61	3319.4	2103.07	1933.18	27.78	0.13	27.37	...	...	0.58	195	0.01	ae
2299	3255.62	3405.3	2090.71	779.79	29.54	0.33	28.58	0.91	0.11	0.09	139	0.19	af
355	3255.64	3209.4	2113.00	3688.96	29.64	0.33	28.40	...	...	0.26	167	0.65	a
706	3255.64	3237.1	2107.87	2994.08	28.81	0.18	28.97	0.66	0.01	0.21	100	0.89	a
2329	3255.64	3406.8	2088.14	743.37	27.19	0.07	27.17	1.55	0.64	1.05	134	0.11	a
514	3255.66	3223.7	2105.51	3329.55	27.34	0.09	27.12	0.72	0.16	-0.03	194	0.02	
1116	3255.67	3303.6	2094.89	2329.80	28.18	0.17	27.81	-1.29	1.57	1.47	136	0.03	a
1053	3255.69	3259.5	2093.72	2432.68	26.33	0.06	26.28	0.96	0.33	0.17	204	0.03	
158	3255.71	3153.7	2103.15	4083.11	29.59	0.24	29.03	-0.19	-0.52	1.19	92	0.81	a
358	3255.72	3211.5	2098.81	3637.14	21.55	0.00	21.58	2.35	1.84	1.47	257	0.03	ef
2080	3255.74	3355.2	2070.86	1033.14	29.36	0.30	28.00	-0.49	0.04	0.19	236	0.26	af
1655	3255.75	3333.8	2074.98	1572.32	23.49	0.01	23.42	0.39	0.54	0.51	705	0.00	
1173	3255.76	3308.1	2079.04	2215.78	27.97	0.17	27.67	1.86	0.48	-0.16	129	0.95	a
312	3255.77	3206.3	2089.13	3767.45	28.69	0.15	27.80	...	...	1.92	161	0.13	a
382	3255.77	3213.5	2087.68	3584.93	23.92	0.01	23.89	0.58	0.52	0.75	452	0.03	ef
947	3255.77	3252.1	2079.52	2618.65	25.29	0.03	25.27	2.10	0.52	0.25	198	0.03	
749	3255.78	3239.7	2080.83	2927.77	29.67	0.33	28.54	0.46	0.13	0.03	179	0.23	a
247	3255.80	3200.5	2086.38	3912.38	27.97	0.11	27.69	0.59	-0.07	0.25	128	0.02	a
737	3255.80	3239.1	2077.84	2942.51	28.91	0.18	28.26	0.35	-0.05	1.00	121	0.57	a
1815	3255.80	3341.9	2064.22	1367.91	26.51	0.05	26.38	...	0.82	0.60	168	0.19	
1163	3255.81	3307.6	2069.87	2228.30	28.92	0.39	27.99	-0.81	0.33	0.32	203	0.92	a
1240	3255.81	3312.4	2067.10	2109.08	25.47	0.06	25.08	-0.25	0.15	0.79	406	0.03	
2335	3255.81	3407.0	2056.19	739.00	29.47	0.24	29.62	1.03	-0.08	0.26	75	0.62	a
894	3255.82	3248.8	2071.94	2700.92	28.56	0.14	28.42	...	...	1.10	89	0.78	a
1781	3255.82	3339.9	2059.46	1417.31	27.52	0.08	27.45	0.17	0.17	0.65	98	0.72	a
2079	3255.82	3355.0	2056.27	1040.54	28.49	0.19	27.53	-0.47	1.03	0.51	322	0.08	ae
741	3255.83	3232.6	2072.43	3106.74	24.91	0.02	24.87	2.95	0.39	0.24	250	0.03	
832	3255.83	3241.3	2070.31	2888.69	29.09	0.19	28.16	...	0.55	1.23	243	0.50	a
1577	3255.83	3330.2	2060.34	1661.42	23.77	0.01	23.74	1.41	0.67	0.39	520	0.03	e
2414	3255.83	3411.0	2050.60	638.50	28.80	0.16	28.36	...	0.95	0.91	120	0.89	a
2326	3255.85	3406.7	2049.58	747.19	28.68	0.17	28.69	1.94	0.09	-0.21	93	0.73	a
189	3255.86	3156.0	2074.94	4026.27	28.31	0.15	27.96	1.51	0.07	-0.07	134	0.01	a
2003	3255.86	3351.4	2049.74	1130.75	23.89	0.01	23.92	...	1.69	1.26	112	0.94	a
2538	3255.86	3416.7	2044.74	494.07	26.76	0.06	26.64	...	0.27	0.11	135	0.18	aef
168	3255.87	3154.5	2073.70	4061.62	29.62	0.36	29.36	0.41	-0.06	-0.25	129	0.08	a
1348	3255.87	3317.8	2055.94	1973.96	22.97	0.01	22.93	0.46	0.68	0.63	408	0.03	
2093	3255.89	3355.8	2043.09	1020.77	25.63	0.03	25.56	1.66	0.23	0.47	220	0.03	
2168	3255.91	3359.4	2038.39	928.50	27.95	0.12	27.52	...	0.04	0.11	176	0.01	ef
583	3255.92	3229.8	2056.38	3178.43	26.42	0.05	26.32	...	0.50	0.29	195	0.03	
898	3255.92	3249.0	2053.09	2695.54	28.83	0.26	27.47	4.11	0.66	0.17	238	0.01	abe
2131	3255.92	3357.3	2038.37	981.02	29.82	0.36	28.92	...	0.27	0.40	134	0.88	a
2533	3255.93	3416.7	2030.96	494.92	27.44	0.10	27.22	3.40	0.15	0.18	161	0.02	aef
421	3255.94	3216.1	2056.46	3521.11	27.66	0.08	27.69	...	2.39	0.82	115	0.06	aef
1089	3255.95	3302.0	2043.82	2370.18	29.50	0.39	27.93	-0.73	1.17	0.37	158	0.94	a
2631	3255.95	3423.0	2026.32	336.24	28.71	0.26	24.46	...	4.81	1.45	133	0.95	a
359	3255.96	3210.0	2053.50	3673.03	27.05	0.08	26.40	0.55	0.48	0.52	274	0.00	
1801	3255.96	3341.3	2033.25	1382.94	28.75	0.20	28.18	0.98	-0.00	0.10	135	0.01	a
2021	3255.98	3352.2	2028.31	1109.83	29.09	0.23	28.62	...	0.14	0.30	110	0.05	a
156	3255.99	3153.4	2052.39	4091.67	28.78	0.20	28.74	2.70	-0.10	0.29	122	0.15	a
2130	3255.99	3357.3	2025.44	982.98	29.24	0.27	28.42	...	0.64	-0.02	225	0.01	a
2169	3256.00	3359.8	2022.88	919.71	25.94	0.03	25.80	0.74	0.56	0.66	204	0.03	f
327	3256.01	3207.3	2045.32	3741.51	29.62	0.25	28.38	...	-0.23	1.14	169	0.46	a
420	3256.01	3215.6	2043.89	3533.01	26.44	0.05	26.27	0.54	-0.02	0.46	250	0.03	f
2094	3256.01	3355.5	2020.99	1027.69	29.57	0.26	29.48	...	-0.46	0.26	56	0.95	a
1126	3256.03	3304.8	2028.18	2298.57	29.18	0.40	28.14	...	...	0.59	115	0.96	a
1634	3256.04	3331.2	2020.53	1636.10	29.94	0.41	29.40	-0.39	0.06	-0.12	108	0.88	a
399	3256.05	3213.8	2036.47	3578.96	27.40	0.10	27.03	...	0.14	-0.12	248	0.02	a
476	3256.05	3220.6	2034.49	3409.29	22.41	0.00	22.39	0.27	0.58	0.51	666	0.03	f
959	3256.05	3252.4	2028.78	2610.83	28.22	0.18	27.41	1.24	-0.32	0.22	214	0.01	a
1941	3256.05	3347.7	2016.19	1222.72	28.68	0.15	28.43	...	...	1.39	114	0.28	a
8													

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
2467	3256.08	3414.2	2004.93	558.91	22.07	0.00	22.08	0.51	0.61	336	0.03	
183	3256.11	3155.5	2028.49	4037.70	27.52	0.10	27.24	0.58	0.07	195	0.03	a
517	3256.11	3223.7	2023.43	3329.35	28.88	0.20	28.93	-0.64	0.11	35	115	0.46
677	3256.11	3232.1	2022.00	3120.81	29.15	0.22	28.43	0.16	1.59	93	149	0.94
1843	3256.11	3342.7	2006.46	1348.13	31.08	0.81	29.41	0.88	0.08	-0.79	104	0.79
576	3256.12	3229.2	2019.71	3191.78	28.19	0.13	28.03	0.07	0.68	0.54	134	0.25
603	3256.12	3230.7	2020.53	3155.22	29.71	0.30	29.36	1.86	0.18	0.38	79	0.87
563	3256.14	3228.0	2016.00	3222.06	27.61	0.10	27.44	0.75	0.03	0.02	121	0.01
1010	3256.14	3256.9	2011.08	2498.70	23.77	0.01	23.78	2.35	0.61	0.45	99	0.98
886	3256.15	3248.3	2010.07	2712.42	30.15	0.49	29.50	0.83	0.60	-0.22	100	0.82
2422	3256.16	3411.7	1989.49	620.27	25.98	0.04	26.04	1.70	0.12	-0.04	208	0.03
191	3256.17	3156.5	2018.21	4011.99	24.41	0.01	24.41	1.87	1.45	2.38	109	0.95
285	3256.18	3204.0	2015.09	3824.90	28.33	0.15	28.22	3.72	0.73	-0.14	130	0.02
1904	3256.18	3345.4	1991.52	1280.51	31.13	0.86	29.91	4.01	0.17	-0.95	103	0.82
1131	3256.19	3305.4	1999.23	2284.01	26.39	0.07	26.11	-0.07	0.65	0.50	247	0.03
2008	3256.19	3351.5	1989.20	1127.34	30.02	0.32	28.86	...	0.93	162	0.76	a
2092	3256.19	3355.4	1987.95	1029.35	27.19	0.06	26.94	-1.99	2.79	1.97	141	0.01
632	3256.20	3232.4	2003.84	3113.63	30.15	0.40	29.88	-1.46	1.96	-0.12	74	0.88
1608	3256.20	3330.1	1992.37	1664.39	28.80	0.18	28.76	1.35	0.71	0.09	106	0.14
2201	3256.20	3400.3	1986.07	907.35	26.08	0.03	26.03	2.02	0.05	0.10	153	0.03
1963	3256.21	3348.8	1986.26	1195.17	29.00	0.21	28.75	1.00	-0.01	-0.10	102	0.06
2562	3256.21	3417.8	1978.93	469.17	26.94	0.07	26.70	...	0.03	0.26	153	0.02
349	3256.22	3209.5	2005.33	3687.18	25.02	0.02	24.94	0.69	0.34	0.62	259	0.03
1623	3256.22	3330.6	1988.10	1652.55	29.83	0.38	29.36	...	0.03	144	0.77	a
2194	3256.22	3359.7	1980.94	921.50	28.90	0.17	28.13	-0.02	-0.66	0.79	116	0.62
1183	3256.23	3308.5	1990.79	2205.77	28.51	0.19	27.57	-0.26	-0.13	1.13	175	0.15
231	3256.25	3159.6	2002.84	3934.34	28.69	0.17	28.26	1.12	-0.24	0.16	122	0.27
318	3256.26	3206.8	1998.22	3754.10	27.51	0.10	27.57	3.38	0.81	0.07	138	0.04
1230	3256.26	3311.4	1984.06	2135.18	29.11	0.29	28.10	...	3.29	0.03	270	0.12
2115	3256.27	3356.5	1972.90	1001.76	29.89	0.29	29.29	-0.75	0.56	0.52	90	0.83
1683	3256.28	3334.5	1975.86	1555.62	29.11	0.22	29.09	0.64	-0.23	0.09	132	0.01
2359	3256.28	3407.8	1968.50	719.24	29.10	0.22	27.95	0.01	0.87	0.78	186	0.13
145	3256.29	3152.1	1997.53	4122.59	28.49	0.18	27.79	0.41	-0.27	0.55	226	0.14
1376	3256.31	3318.5	1974.16	1956.53	30.28	0.53	33.96	-0.48	0.31	-0.70	103	0.90
1934	3256.31	3347.4	1967.78	1231.15	29.01	0.19	27.69	-1.93	1.13	1.15	680	0.05
390	3256.32	3212.9	1985.82	3601.18	29.31	0.30	28.66	-0.45	0.40	-0.50	136	0.12
533	3256.33	3225.4	1982.81	3287.26	27.98	0.11	27.68	-1.51	1.67	0.78	120	0.22
1831	3256.33	3342.4	1965.46	1356.62	28.39	0.16	27.60	1.26	-0.16	0.37	185	0.03
990	3256.34	3255.2	1974.42	2514.74	23.99	0.01	24.00	3.71	1.35	1.12	80	0.98
929	3256.35	3250.9	1972.64	2648.95	29.32	0.28	28.40	...	0.36	0.15	124	0.97
573	3256.36	3229.0	1975.10	3198.98	28.92	0.25	28.17	-0.33	0.55	0.09	189	0.15
464	3256.37	3216.6	1976.02	3508.06	26.76	0.06	26.54	1.05	-0.15	0.12	261	0.02
1607	3256.37	3330.3	1960.07	1660.05	26.89	0.06	26.56	1.47	0.36	0.21	193	0.03
59	3256.38	3144.3	1982.58	4320.20	23.95	0.02	23.91	...	0.92	0.50	284	0.03
292	3256.38	3204.5	1976.74	3812.45	28.62	0.20	29.55	...	0.90	-0.26	133	0.02
341	3256.38	3208.2	1976.33	3720.49	29.37	0.22	29.87	0.55	-0.93	1.28	88	0.63
239	3256.39	3200.0	1976.35	3924.37	28.39	0.14	28.27	0.78	-0.41	0.42	107	0.30
1245	3256.39	3312.2	1960.61	2113.53	30.20	0.42	29.89	-0.51	0.18	0.05	89	0.59
1430	3256.39	3322.1	1958.67	1865.57	27.21	0.09	27.11	1.37	0.77	0.18	231	0.02
493	3256.41	3221.8	1968.83	3378.17	28.96	0.23	28.52	-0.72	0.86	0.43	118	0.01
1851	3256.41	3343.0	1950.60	1341.12	30.24	0.53	28.33	3.41	-0.19	-0.51	206	0.85
1990	3256.41	3350.4	1948.15	1155.29	29.57	0.28	29.17	0.14	0.28	-0.14	124	0.93
2294	3256.42	3405.4	1944.13	779.23	25.94	0.03	25.85	0.80	0.02	0.71	134	0.04
2545	3256.42	3417.0	1941.75	489.32	27.56	0.10	27.35	0.54	0.09	-0.13	130	0.21
366	3256.43	3210.6	1966.79	3659.67	29.29	0.26	28.56	...	0.64	0.56	123	0.95
557	3256.43	3227.7	1963.85	3231.68	29.94	0.39	29.01	-0.39	0.12	0.00	143	0.86
1060	3256.43	3259.9	1955.30	2424.10	27.98	0.17	27.52	...	0.87	0.56	182	0.69
641	3256.44	3233.1	1959.84	3094.69	27.74	0.14	27.69	0.80	-0.14	0.51	92	0.82
1615	3256.44	3330.6	1948.11	1653.08	27.74	0.09	27.44	...	0.68	1.70	170	0.05
179	3256.45	3155.3	1966.56	4043.61	27.69	0.11	27.90	...	1.35	0.26	172	0.01
275	3256.45	3202.6	1965.05	3859.43	29.70	0.42	29.18	0.84	0.36	-0.71	185	0.10
1632	3256.45	3332.0	1944.62	1618.64	26.13	0.04	26.03	0.18	1.04	0.74	300	0.02
1075	3256.46	3301.3	1950.51	2388.86	27.91	0.17	27.51	1.02	1.19	0.30	174	0.14
571	3256.47	3228.9	1955.60	3201.79	27.93	0.20	27.85	-0.20	0.20	-0.27	197	0.01
1566	3256.50	3238.4	1937.44	1707.60	28.94	0.18	28.92	...	0.34	1.39	124	0.54
625	3256.52	3231.9	1945.83	3125.94	29.02	0.25	28.54	...	1.52	91	0.93	a
2224	3256.52	3401.8	1925.67	869.00	29.02	0.21	28.68	-2.77	2.15	1.09	134	0.08
1479	3256.53	3324.0	1932.61	1817.21	29.92	0.36	28.81	-0.03	-0.16	0.09	238	0.79
126	3256.54	3152.8	1949.87	4107.38	21.49	0.00	21.55	1.44	0.37	0.24	119	0.92
392	3256.54	3213.2	1946.71	3595.19	27.90	0.12	27.97	0.86	0.81	0.29	141	0.05
1717	3256.54	3336.6	1927.25	1501.38	24.94	0.02	24.92	1.29	0.56	0.31	188	0.03
924	3256.55	3250.5	1929.38	2658.36	28.21	0.14	28.03	0.34	-0.12	0.94	105	0.81
674	3256.61	3235.2	1928.21	3043.34	28.12	0.14	28.06	0.57	0.59	0.11	85	0.94
1408	3256.61	3320.7	1918.80	1902.06	28.85	0.21	28.53	-1.24	1.49	-0.13	145	0.11
839	3256.63	3245.8	1921.59	2777.37	25.94	0.05	25.92	0.40	-0.01	0.15	200	0.03
272	3256.64	3202.3	1930.54	3868.77	28.72	0.21	27.38	...	0.39	0.37	240	0.02
2521	3256.64	3416.6	1901.38	499.06	25.81	0.04	25.67	...	0.49	0.14	291	0.03
1540	3256.65	3327.8	1908.57	1723.74	25.89	0.04	25.76	0.53	-0.14	0.32	310	0.03
588	3256.66	3229.7	1920.62	3180.83	28.86	0.09	26.59	...	1.14	0.63	134	0.04
778	3256.66	3242.1	1917.26	2871.05	28.08	0.16	28.09	-0.42	-0.11	0.51	155	0.29
1364	3256.66	3317.9	1909.11	1971.22	28.67	0.18	28.45	2.29	0.03	-0.04	111	0.09
2483	3256.67	3413.9	1895.70	567.17	27.20	0.07	26.99	1.15	0.31	0.23	175	0.02
257	3256.68	3158.3	1922.53	3969.61	28.60	0.20	28.05</					

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1735	3256.72	3337.4	1893.47	1481.93	25.34	0.02	25.29	0.82	0.65	0.43	166	0.03
176	3256.73	3155.0	1915.37	4052.35	29.21	0.25	28.16	-1.06	0.95	0.50	266	0.83
1758	3256.73	3338.5	1892.65	1454.84	27.51	0.08	27.26	...	1.33	0.69	118	0.03
509	3256.74	3223.4	1907.26	3340.21	25.88	0.07	25.83	0.51	0.52	0.42	112	0.61
808	3256.75	3244.0	1899.61	2821.33	29.19	0.25	28.44	-2.50	1.17	0.76	120	0.98
2630	3256.75	3422.9	1878.67	339.90	28.84	0.26	28.13	...	...	1.61	89	0.91
2107	3256.76	3356.3	1882.57	1009.10	29.48	0.24	29.13	0.24	1.10	0.49	95	0.61
572	3256.77	3228.8	1900.17	3203.48	29.35	0.43	28.39	...	...	0.67	146	0.94
766	3256.77	3240.8	1896.94	2901.52	28.36	0.19	28.21	...	0.90	0.21	131	0.77
874	3256.78	3247.9	1894.01	2723.93	25.71	0.03	25.70	0.92	0.32	0.77	114	0.44
477	3256.79	3220.8	1898.74	3404.32	27.11	0.17	27.03	-0.48	0.72	0.67	122	0.13
1953	3256.81	3348.4	1875.07	1206.81	28.00	0.13	27.54	0.45	0.27	0.27	185	0.01
1631	3256.82	3331.6	1876.40	1627.64	25.22	0.02	25.09	0.39	1.06	1.54	245	0.03
61	3256.83	3144.0	1897.82	4328.33	27.85	0.21	27.46	...	0.84	0.80	123	0.39
2006	3256.83	3351.3	1870.09	1133.52	28.70	0.16	28.55	-0.03	-0.15	0.36	98	0.28
1915	3256.84	3346.0	1870.78	1266.22	28.69	0.18	28.52	0.27	0.18	0.10	131	0.00
187	3256.86	3155.7	1890.73	4035.14	29.73	0.38	28.47	...	...	1.11	118	0.75
290	3256.87	3204.3	1886.14	3817.30	28.65	0.38	...	...	...	-0.27	107	0.01
1311	3256.87	3315.2	1870.61	2038.72	29.19	0.20	28.81	1.66	0.67	1.21	110	0.46
374	3256.89	3212.1	1881.45	3623.18	24.07	0.04	23.45	0.13	0.12	0.24	314	0.03
2225	3256.89	3401.9	1857.74	868.96	28.59	0.16	27.92	0.25	-0.00	0.77	130	0.11
42	3256.92	3142.1	1882.11	4375.00	28.24	0.37	25.41	-3.12	1.02	2.29	84	0.94
948	3256.93	3251.8	1864.83	2625.86	29.83	0.36	28.13	...	1.29	0.26	224	0.93
2447	3256.93	3412.3	1847.38	608.10	29.28	0.24	28.03	...	-0.28	0.94	229	0.32
922	3256.94	3250.5	1864.47	2660.49	29.01	0.21	28.68	...	0.07	0.98	77	0.96
1765	3256.95	3339.3	1850.62	1436.44	28.36	0.13	28.10	...	1.32	0.03	96	0.89
629	3256.96	3232.5	1864.15	3111.67	26.69	0.08	26.43	0.04	0.35	0.19	149	0.39
1975	3256.96	3350.0	1846.18	1167.58	25.79	0.04	25.43	0.27	0.32	0.77	375	0.00
913	3256.98	3249.7	1855.90	2680.72	28.84	0.22	28.47	1.61	0.23	0.81	141	0.95
1289	3256.99	3314.6	1849.51	2054.37	26.21	0.04	26.13	0.25	0.22	0.61	126	0.24
1689	3256.99	3335.0	1845.19	1542.92	26.13	0.03	26.10	0.15	0.65	0.59	157	0.03
10692	3257.00	3405.7	1836.19	772.53	...	...	18.61	1.76	-0.07	0.59	185	0.94
1508	3257.01	3325.7	1842.36	1776.45	27.56	0.08	27.37	0.92	-0.11	0.60	112	0.04
683	3257.02	3235.7	1852.63	3030.32	28.73	0.21	27.66	...	-0.54	1.49	183	0.76
819	3257.02	3244.6	1850.57	2806.99	27.61	0.11	26.99	3.13	0.37	0.11	121	0.05
799	3257.03	3243.3	1849.30	2840.53	28.73	0.16	28.61	...	-0.93	1.66	74	0.95
982	3257.04	3254.4	1845.24	2561.98	28.91	0.26	28.98	-1.16	2.18	-0.42	91	0.97
1091	3257.04	3302.4	1842.75	2360.84	28.95	0.22	28.43	-1.17	2.01	0.65	111	0.97
1881	3257.04	3344.5	1833.89	1305.94	29.44	0.25	29.06	0.44	0.44	0.32	91	0.63
752	3257.06	3240.6	1842.98	2907.68	27.00	0.07	26.91	-0.52	1.01	0.68	130	0.11
1429	3257.06	3323.0	1835.19	1843.74	22.76	0.01	22.79	0.45	0.35	0.59	227	0.07
1775	3257.08	3340.0	1826.82	1417.52	28.13	0.12	27.50	...	0.67	0.16	156	0.03
654	3257.09	3234.0	1838.92	3072.96	28.77	0.20	28.32	0.62	-0.06	0.26	131	0.85
751	3257.09	3240.1	1838.93	2921.54	28.16	0.18	28.25	-1.11	1.93	0.19	137	0.01
1554	3257.10	3328.9	1826.64	1696.25	23.96	0.01	23.90	...	0.95	1.61	286	0.03
1774	3257.10	3339.7	1823.37	1426.49	29.60	0.29	29.69	...	1.02	0.33	92	0.54
134	3257.11	3152.1	1844.77	4124.61	22.36	0.01	21.73	0.43	1.32	0.87	325	0.07
817	3257.13	3244.7	1830.09	2805.10	27.23	0.09	26.68	...	0.41	0.24	192	0.03
2570	3257.13	3418.1	1810.46	461.23	27.69	0.12	27.49	0.59	0.52	0.36	143	0.01
1609	3257.14	3330.2	1818.81	1664.34	29.80	0.32	30.58	...	0.06	0.55	42	0.09
772	3257.19	3242.2	1819.04	2867.52	25.40	0.04	25.26	1.26	0.28	0.25	271	0.03
2009	3257.19	3351.7	1804.67	1124.49	28.84	0.19	27.93	-1.78	1.36	0.23	156	0.17
1342	3257.20	3316.7	1810.59	2001.99	29.36	0.24	29.06	...	0.13	0.15	119	0.53
963	3257.22	3252.8	1812.24	2603.05	26.67	0.06	26.53	-0.59	0.25	0.76	117	0.18
1171	3257.22	3305.5	1808.05	2283.22	22.84	0.01	22.82	0.41	0.35	0.81	362	0.03
1602	3257.22	3330.0	1803.78	1670.02	26.95	0.06	26.80	-0.37	1.10	0.42	147	0.02
2628	3257.24	3423.1	1788.15	336.24	25.86	0.07	25.73	0.56	0.34	0.52	281	0.03
755	3257.25	3238.0	1808.67	2974.73	28.60	0.19	28.55	1.05	-0.11	0.17	79	0.98
1360	3257.25	3317.8	1799.54	1975.33	29.98	0.41	28.92	0.79	0.02	-0.45	135	0.48
1438	3257.25	3322.2	1799.83	1864.34	28.83	0.17	27.77	-0.03	-0.29	1.32	180	0.41
1517	3257.25	3325.2	1798.99	1788.21	27.60	0.08	27.52	...	-0.03	0.16	103	0.33
1272	3257.27	3313.7	1797.28	2077.45	29.11	0.21	28.36	-0.15	0.11	0.46	128	0.32
2618	3257.27	3422.1	1783.72	361.27	26.73	0.09	26.66	1.74	0.41	0.34	149	0.03
2530	3257.28	3416.4	1781.61	505.99	29.37	0.26	28.93	...	-0.11	0.46	95	0.87
946	3257.29	3251.9	1797.93	2625.24	27.16	0.08	27.14	0.92	0.11	0.03	87	0.97
2122	3257.29	3357.2	1784.58	986.56	29.57	0.22	29.10	...	-0.78	1.98	78	0.74
610	3257.31	3231.3	1799.46	3142.89	28.80	0.23	27.97	...	...	1.03	129	0.97
655	3257.32	3234.2	1797.23	3069.20	28.75	0.21	28.88	...	...	1.14	192	0.97
855	3257.32	3246.5	1793.53	2760.16	29.83	0.49	28.26	1.94	-0.11	-0.26	127	0.95
1573	3257.32	3282.7	1785.58	1700.52	28.46	0.21	28.80	3.17	-0.05	-0.63	186	0.01
988	3257.33	3254.9	1791.19	2550.26	28.49	0.21	27.68	...	0.68	0.03	140	0.74
2390	3257.33	3410.1	1773.46	664.11	26.48	0.05	26.53	0.64	-0.12	0.20	162	0.03
1225	3257.34	3311.2	1785.57	2140.90	28.05	0.15	27.44	1.52	0.22	-0.25	200	0.01
1505	3257.34	3326.1	1781.92	1767.68	25.18	0.02	25.14	1.91	0.48	0.29	233	0.03
1937	3257.34	3347.4	1776.81	1231.64	29.69	0.28	28.95	4.71	0.93	-0.01	97	0.89
2560	3257.34	3417.9	1770.50	468.15	26.44	0.07	26.41	...	0.22	0.18	299	0.03
763	3257.35	3241.7	1788.99	2881.70	24.39	0.02	24.40	1.40	0.17	0.24	336	0.03
1721	3257.35	3336.6	1776.97	1504.35	27.38	0.09	27.39	1.12	0.15	0.10	178	0.02
10710	3257.35	3405.7	1772.02	774.62	27.32	0.05	26.28	...	0.59	-0.14	260	0.07
622	3257.36	3231.8	1790.76	3129.91	28.69	0.25	27.82	3.98	0.21	0.08	153	0.98
1099	3257.40	3302.9	1775.21	2348.56	28.01	0.16	28.02	0.01	0.18	0.41	187	0.01
1439	3257.40	3322.4	1772.20	1860.88	28.14	0.12	28.11	...	0.71	0.66	132	0.07
668	3257.41	3235.0	1780.48	3048.60	26.76	0.07	26.70	...	0.05	-0.03	135	0.24
1217	325											

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1258	3257.41	3313.3	1772.36	2088.18	26.21	0.04	26.12	0.20	0.79	0.63	180	0.03
1424	3257.41	3321.7	1770.15	1877.08	28.31	0.13	27.95	...	1.24	165	0.12	a
1490	3257.41	3324.5	1768.57	1807.89	26.90	0.06	26.83	-1.25	2.13	1.13	145	0.02
1876	3257.42	3338.9	1765.16	1445.94	29.20	0.19	28.85	...	2.51	1.65	122	0.60
1550	3257.43	3328.2	1764.35	1715.36	26.25	0.04	26.17	1.39	0.00	0.00	170	0.05
2407	3257.44	3410.7	1753.28	647.09	27.87	0.09	27.86	0.58	0.47	0.81	102	0.05
2617	3257.46	3421.8	1748.50	369.49	27.47	0.14	26.79	...	1.17	200	0.01	ae
1004	3257.47	3256.1	1763.70	2518.79	28.82	0.21	28.93	...	0.10	0.23	96	0.94
1322	3257.47	3315.6	1759.86	2030.86	29.33	0.22	28.48	0.12	0.86	0.63	108	0.93
2101	3257.47	3356.2	1751.24	1012.97	28.76	0.19	28.53	1.64	0.73	0.08	124	0.12
1653	3257.48	3332.5	1754.46	1605.43	27.84	0.09	27.79	2.07	0.27	-0.10	94	0.90
1971	3257.48	3349.4	1751.53	1181.65	28.12	0.12	28.19	-0.10	0.08	0.38	112	0.02
2112	3257.48	3356.6	1749.97	1001.99	28.80	0.18	28.62	0.00	-0.01	0.39	107	0.19
2636	3257.49	3423.6	1742.62	324.45	28.43	0.18	28.23	...	...	45	0.92	a
1643	3257.50	3331.9	1751.38	1621.32	27.77	0.09	27.75	0.48	-0.21	0.07	98	0.94
979	3257.51	3254.3	1757.37	2565.30	28.17	0.17	27.25	0.33	0.16	0.63	194	0.02
1545	3257.51	3327.4	1751.12	1734.08	29.16	0.24	29.10	2.04	0.83	-0.25	103	0.13
1946	3257.51	3348.5	1745.08	1205.82	26.23	0.04	26.08	...	1.78	0.30	185	0.03
1226	3257.52	3311.1	1752.27	2142.39	28.84	0.21	29.24	0.16	0.92	-0.08	103	0.15
2597	3257.52	3419.6	1737.73	425.75	27.55	0.13	27.34	0.07	0.34	0.13	207	0.01
2352	3257.53	3407.7	1737.02	724.49	29.66	0.28	29.20	2.88	0.01	0.35	84	0.93
566	3257.54	3228.2	1756.55	3220.44	27.34	0.16	26.72	...	0.30	0.37	133	0.02
709	3257.54	3237.4	1754.93	2990.16	26.39	0.05	26.36	1.20	1.40	0.30	97	0.99
1112	3257.54	3306.1	1748.50	2269.70	20.44	0.00	20.44	0.79	0.77	0.75	591	0.06
2547	3257.54	3417.1	1734.67	488.52	26.68	0.06	26.49	0.46	-0.14	0.22	178	0.03
800	3257.56	3243.4	1751.19	2838.85	27.69	0.12	27.62	...	0.57	0.24	137	0.02
1713	3257.56	3336.2	1739.75	1514.95	29.25	0.21	28.48	0.75	0.10	0.45	104	0.67
2208	3257.56	3401.1	1733.95	888.87	29.46	0.31	28.40	2.40	1.50	-0.20	150	0.09
1327	3257.58	3315.9	1739.23	2022.64	29.74	0.34	29.06	-0.69	0.47	-0.03	115	0.92
715	3257.59	3237.7	1746.47	2982.29	28.96	0.23	28.25	...	1.32	0.50	120	0.97
1359	3257.60	3318.3	1734.74	1962.76	25.13	0.02	25.07	0.36	0.71	0.46	213	0.03
1413	3257.60	3321.0	1734.79	1895.98	28.88	0.19	28.55	0.04	0.96	0.17	114	0.01
702	3257.63	3237.1	1738.87	2997.26	28.88	0.25	28.56	...	0.97	-0.14	100	0.97
1227	3257.63	3311.1	1730.77	2142.81	28.60	0.18	27.53	0.51	0.59	0.27	246	0.73
2626	3257.64	3423.1	1714.57	338.03	27.60	0.20	27.16	0.75	-0.16	-0.14	151	0.02
519	3257.65	3223.9	1738.01	3328.50	28.56	0.45	28.92	-0.37	-0.32	0.01	24	0.78
935	3257.66	3251.2	1730.73	2642.18	29.00	0.23	28.92	-0.10	-0.23	0.25	82	0.96
973	3257.67	3253.6	1727.02	2582.14	28.55	0.14	27.79	...	...	2.11	101	0.97
1341	3257.68	3316.8	1720.23	2000.75	26.67	0.04	26.60	0.39	0.21	0.65	109	0.53
2507	3257.68	3415.4	1707.74	530.71	27.71	0.10	27.32	...	0.64	0.82	188	0.01
1105	3257.69	3303.4	1721.86	2336.60	28.13	0.16	27.25	1.12	-0.75	2.34	198	0.10
2364	3257.72	3408.7	1702.21	699.99	23.01	0.00	23.04	1.82	1.87	2.27	102	0.98
985	3257.73	3254.7	1716.45	2555.78	29.69	0.34	29.26	...	0.33	-0.19	61	0.93
1681	3257.73	3334.7	1707.82	1552.57	26.64	0.06	26.48	-0.21	0.72	0.20	267	0.00
1864	3257.74	3342.5	1703.95	1357.10	28.16	0.11	28.00	1.96	-0.17	0.46	102	0.35
852	3257.75	3241.5	1715.84	2887.02	29.77	0.44	29.48	...	0.38	-0.69	77	0.94
627	3257.76	3233.0	1716.59	3098.90	22.01	0.00	22.02	0.62	0.85	0.73	269	0.03
739	3257.76	3239.3	1713.76	2942.05	28.71	0.18	28.41	...	-0.27	0.68	93	0.91
1410	3257.76	3320.9	1704.71	1898.68	27.92	0.10	27.66	...	...	1.03	149	0.11
2144	3257.76	3358.1	1697.80	963.91	29.50	0.28	29.06	2.57	-0.43	0.35	119	0.09
1750	3257.77	3337.9	1700.65	1472.14	30.12	0.37	29.40	...	1.56	0.31	104	0.72
834	3257.79	3245.7	1707.37	2781.54	26.67	0.07	27.03	0.38	0.81	0.29	186	0.03
1362	3257.79	3318.0	1699.60	1970.64	28.25	0.14	27.93	0.32	0.33	0.52	171	0.01
2600	3257.79	3419.6	1686.59	425.99	29.63	0.34	29.33	...	1.09	-0.03	138	0.97
2551	3257.80	3417.3	1685.75	483.52	27.19	0.07	27.05	0.52	0.30	1.02	141	0.02
601	3257.81	3230.7	1706.91	3156.75	27.28	0.11	27.39	...	0.13	0.35	89	0.98
1532	3257.81	3327.0	1695.61	1745.75	27.69	0.09	27.59	0.39	0.02	0.04	131	0.02
2031	3257.81	3353.0	1689.70	1092.82	28.02	0.11	27.78	0.14	0.11	0.19	122	0.04
516	3257.84	3223.7	1702.69	3333.10	29.37	0.73	28.41	...	0.40	-0.05	22	0.77
1238	3257.85	3312.0	1690.86	2121.34	29.86	0.33	28.75	...	1.54	0.46	116	0.81
893	3257.87	3249.1	1692.28	2695.24	26.07	0.05	25.98	-0.17	0.24	0.81	224	0.03
2017	3257.87	3352.2	1677.55	1112.92	29.31	0.23	29.21	0.05	0.33	0.00	80	0.94
1942	3257.90	3349.1	1673.16	1190.24	23.21	0.01	23.14	0.42	0.93	0.48	815	0.03
548	3257.91	3226.5	1690.19	3264.31	29.13	0.49	30.29	1.53	2.65	0.33	69	0.95
2207	3257.92	3401.1	1667.07	890.82	30.04	0.39	29.02	...	0.16	-0.23	99	0.52
626	3257.93	3232.1	1684.53	3122.51	28.24	0.18	27.34	...	-0.31	1.23	42	0.02
1404	3257.93	3320.3	1673.54	1913.73	27.48	0.08	27.28	1.81	1.95	1.02	167	0.03
1584	3257.95	3329.4	1668.25	1683.94	28.58	0.16	28.42	-2.01	2.45	0.51	160	0.02
2370	3257.95	3408.7	1660.67	700.41	26.47	0.04	26.42	0.50	0.09	0.71	159	0.03
2553	3257.95	3417.3	1658.47	484.67	28.34	0.15	28.12	-1.07	2.62	0.61	119	0.07
1829	3257.98	3342.3	1659.30	1362.12	28.19	0.13	27.92	-0.65	3.32	0.59	144	0.05
2189	3257.98	3400.5	1655.98	905.91	29.68	0.37	28.57	...	-0.32	-0.23	154	0.34
628	3257.99	3234.3	1672.56	3067.21	21.36	0.00	21.33	1.36	0.83	1.16	716	0.03
2157	3258.02	3359.0	1649.52	942.91	27.52	0.11	27.35	1.14	-0.06	-0.11	226	0.00
2505	3258.02	3415.4	1645.17	530.33	26.62	0.05	26.56	1.16	0.03	0.25	170	0.03
1046	3258.06	3259.0	1653.98	2448.48	24.93	0.02	24.93	...	1.22	2.58	74	0.98
2177	3258.06	3359.9	1640.77	921.25	29.10	0.22	29.38	...	-0.01	-0.20	73	0.63
908	3258.08	3249.9	1653.43	2677.29	24.94	0.02	24.85	-0.23	1.68	1.39	187	0.78
1097	3258.08	3303.0	1650.90	2347.14	26.94	0.09	26.81	...	0.62	0.26	202	0.03
1270	3258.10	3313.7	1643.39	2079.17	28.02	0.12	27.82	-0.37	1.69	-0.08	114	0.44
1724	3258.11	3337.4	1637.42	1485.48	23.07	0.00	23.12	2.13	0.68	0.49	97	0.98
2030	3258.11	3352.8	1633.56	1097.53	28.83	0.16	28.04	...	...	1.72	156	0.09
768	3258.12	3241.0	1646.62	2898.63	28.92	0.23	28.73	0.40	-0.78	0.17	81	0.97

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
1515	3258.16	3326.1	1629.67	1768.95	29.66	0.28	29.21	-1.35	1.49	-0.07	84	0.90	a
1384	3258.17	3319.0	1630.59	1945.28	28.80	0.18	28.34	0.62	-0.21	0.70	134	0.05	a
1121	3258.18	3304.8	1630.75	2303.71	28.09	0.16	28.05	...	...	0.50	120	0.41	a
1301	3258.19	3314.8	1627.37	2051.55	29.59	0.24	29.22	-0.42	-0.17	0.95	99	0.81	ae
873	3258.20	3247.7	1631.03	2732.93	29.65	0.36	28.90	-0.77	0.58	0.31	100	0.95	a
1306	3258.20	3315.2	1625.79	2040.62	27.04	0.05	26.93	-0.94	2.57	1.45	97	0.98	a
1186	3258.22	3309.0	1622.83	2196.52	28.17	0.17	27.80	5.05	0.34	0.06	168	0.01	a
1603	3258.22	3331.6	1618.73	1629.49	22.01	0.00	21.98	0.57	0.89	0.50	700	0.03	
1784	3258.23	3340.2	1615.16	1415.53	28.17	0.12	27.81	0.01	-0.21	0.72	109	0.34	a
1472	3258.24	3323.7	1615.62	1828.79	28.25	0.11	27.99	-0.48	1.23	1.21	115	0.21	a
522	3258.25	3224.2	1626.45	3320.27	28.08	0.26	27.52	...	...	1.80	59	0.74	a
582	3258.25	3229.5	1626.42	3188.77	28.53	0.25	28.29	-0.04	0.14	0.75	105	0.97	a
887	3258.25	3248.5	1622.33	2710.87	29.35	0.25	29.07	-1.02	-0.73	1.31	97	0.83	a
1513	3258.25	3326.0	1613.12	1771.48	28.54	0.16	28.04	-0.90	0.73	0.48	147	0.10	a
1706	3258.25	3336.1	1612.39	1516.66	27.38	0.10	26.49	1.02	0.19	0.59	554	0.00	ae
2520	3258.25	3416.1	1603.41	514.20	29.16	0.28	28.55	...	0.64	-0.36	150	0.38	a
771	3258.27	3241.8	1618.92	2879.64	26.81	0.06	26.71	-0.85	0.43	0.66	101	0.99	a
918	3258.27	3250.5	1617.17	2660.89	27.49	0.12	27.23	0.04	0.11	0.41	216	0.01	a
2102	3258.27	3356.5	1603.79	1006.40	26.18	0.04	26.16	0.24	0.15	0.67	222	0.03	
2632	3258.27	3423.2	1597.58	335.64	27.57	0.12	27.36	...	...	1.60	78	0.97	a
1118	3258.28	3304.5	1612.30	2309.88	28.83	0.24	28.64	...	0.29	0.67	116	0.72	a
1403	3258.29	3320.1	1607.70	1918.49	29.87	0.32	29.53	0.43	-0.07	0.17	117	0.82	a
1567	3258.29	3329.0	1604.85	1695.51	24.93	0.02	24.82	3.13	0.29	0.40	363	0.03	
10617	3258.30	3351.7	1599.24	1127.38	21.34	0.00	21.36	2.66	1.63	2.17	99	0.98	a
1921	3258.31	3346.9	1597.39	1246.01	24.85	0.02	24.84	0.35	0.07	0.44	219	0.03	
888	3258.33	3248.7	1607.55	2708.00	29.65	0.30	29.74	-1.54	0.65	0.51	62	0.85	a
2491	3258.33	3414.2	1588.63	562.66	29.90	0.35	28.31	...	...	-0.04	259	0.68	a
954	3258.34	3252.3	1604.51	2616.47	28.22	0.16	28.00	-1.33	0.57	0.25	99	0.96	a
937	3258.35	3251.5	1603.04	2637.16	29.11	0.27	28.83	-0.61	0.93	-0.14	97	0.94	a
965	3258.37	3253.2	1598.69	2594.55	28.12	0.18	27.82	...	0.19	-0.22	170	0.22	a
1593	3258.39	3239.7	1586.53	1678.94	29.44	0.30	28.86	...	-0.03	0.18	100	0.02	e
2261	3258.42	3403.9	1573.91	820.68	27.55	0.10	27.15	...	0.32	-0.03	191	0.01	a
10623	3258.45	3351.7	1570.25	1126.98	25.94	0.02	25.46	...	0.20	0.12	153	0.01	
1048	3258.46	3259.1	1580.14	2446.19	27.91	0.15	27.64	0.37	0.01	-0.23	109	0.50	a
1119	3258.46	3304.6	1578.85	2308.11	29.33	0.38	29.31	...	1.42	-0.43	96	0.81	a
1187	3258.46	3307.7	1578.31	2231.19	22.71	0.01	22.74	2.58	1.46	1.05	97	0.99	a
1506	3258.46	3252.8	1574.24	1777.28	27.92	0.11	27.56	-0.67	0.43	1.24	182	0.00	a
10629	3258.47	3352.7	1567.12	1101.60	26.41	0.03	25.98	...	0.33	0.07	187	0.00	
2320	3258.48	3406.3	1562.71	759.38	29.97	0.31	29.38	...	2.65	0.61	98	0.78	a
1961	3258.49	3348.9	1563.58	1197.00	28.32	0.14	27.98	-0.27	0.29	0.42	169	0.02	a
2497	3258.49	3414.8	1558.55	547.31	29.30	0.24	28.69	0.37	-0.14	0.63	130	0.39	a
1064	3258.50	3300.7	1572.98	2406.24	26.34	0.07	26.11	...	-0.05	0.53	455	0.02	ae
1808	3258.50	3424.0	1564.59	1369.78	25.87	0.04	25.72	0.64	-0.03	0.27	288	0.03	
2229	3258.50	3402.0	1558.85	867.31	29.32	0.24	28.75	-0.94	2.03	0.31	117	0.89	a
1192	3258.51	3309.3	1569.34	2190.11	28.63	0.24	28.79	...	0.51	0.05	126	0.01	a
1698	3258.51	3335.5	1563.55	1533.65	28.63	0.13	28.48	...	...	1.04	106	0.97	a
1920	3258.51	3346.4	1561.21	1259.29	29.55	0.29	28.32	0.41	0.42	0.60	110	0.26	ae
2199	3258.51	3400.9	1558.86	895.88	28.55	0.13	28.29	...	-0.08	1.04	92	0.73	a
1150	3258.55	3306.6	1563.17	2257.30	26.36	0.06	26.29	0.07	0.53	0.95	216	0.03	e
2585	3258.56	3419.1	1545.32	438.58	27.33	0.08	27.08	1.29	0.00	0.10	131	0.35	a
841	3258.57	3241.5	1563.14	2887.48	29.52	0.31	28.30	-1.47	0.87	0.05	231	0.97	a
2345	3258.58	3407.7	1543.34	725.80	28.29	0.14	27.82	3.28	0.05	0.39	137	0.03	a
1108	3258.60	3303.6	1555.25	2334.40	29.89	0.42	29.48	...	-0.03	-0.05	74	0.90	a
1244	3258.60	3310.8	1551.89	2152.25	25.63	0.03	25.59	1.19	0.22	0.23	149	0.03	
1912	3258.60	3346.6	1543.88	1255.13	25.56	0.03	25.12	0.65	1.97	1.59	326	0.03	
2374	3258.60	3409.0	1539.76	692.19	26.01	0.03	25.84	...	2.95	0.75	205	0.03	a
879	3258.61	3248.1	1556.07	2722.36	28.98	0.21	28.87	...	1.77	0.61	81	0.98	a
2262	3258.61	3403.8	1538.05	822.63	28.07	0.12	27.73	...	0.33	0.19	155	0.03	a
1090	3258.62	3302.2	1551.13	2367.43	27.64	0.12	27.32	0.34	0.62	1.04	198	0.01	a
598	3258.64	3230.6	1553.71	3160.93	26.20	0.06	26.28	...	0.15	0.08	84	0.98	a
1663	3258.64	3333.3	1539.21	1587.27	26.80	0.05	26.68	-0.08	0.44	0.69	132	0.04	ef
2183	3258.64	3400.3	1533.98	910.29	28.74	0.22	28.08	1.13	-0.09	-0.35	141	0.01	a
692	3258.65	3236.3	1549.54	3017.78	28.88	0.27	28.48	1.47	0.43	-0.20	140	0.77	a
1316	3258.65	3315.5	1541.90	2034.14	28.82	0.19	28.48	...	-0.09	-0.07	120	0.59	a
1662	3258.65	3333.0	1537.38	1596.57	28.63	0.17	28.72	1.16	0.50	-0.33	90	0.97	aef
2058	3258.65	3354.1	1534.37	1066.80	29.75	0.28	28.86	0.50	-0.04	0.26	103	0.88	a
1146	3258.66	3306.4	1542.92	2264.03	29.16	0.29	28.64	...	-0.03	0.96	128	0.86	ae
1507	3258.66	3325.8	1537.16	1777.22	28.42	0.13	28.01	...	1.51	0.45	110	0.21	a
575	3258.67	3229.1	1547.89	3198.34	29.41	0.43	28.67	...	1.51	0.52	96	0.94	abe
1530	3258.67	3327.1	1535.26	1744.15	26.05	0.03	25.98	0.76	0.89	0.48	159	0.03	a
1816	3258.67	3341.8	1532.73	1374.96	28.38	0.13	28.29	-0.17	-0.04	0.41	95	0.95	a
827	3258.68	3245.1	1542.77	2796.52	29.18	0.27	28.22	...	...	1.25	113	0.96	abe
1129	3258.68	3305.5	1538.53	2285.38	25.77	0.05	25.64	1.69	0.65	0.55	242	0.03	
2324	3258.68	3406.7	1525.02	751.67	30.09	0.40	28.76	-1.21	2.27	-0.17	147	0.74	a
2452	3258.68	3412.6	1524.36	603.32	29.37	0.24	29.01	...	-0.05	0.31	120	0.79	a
1335	3258.70	3316.5	1532.38	2009.53	29.21	0.24	28.04	-0.50	0.05	0.41	203	0.12	a
1638	3258.71	3331.7	1526.83	1629.37	29.68	0.25	28.85	...	...	1.28	89	0.63	a
2524	3258.71	3416.6	1517.85	503.43	26.00	0.04	25.84	0.60	0.91	1.21	200	0.03	
1365	3258.73	3318.1	1527.01	1970.23	29.30	0.24	29.40	...	-0.07	-0.10	98	0.94	a
2137	3258.74	3358.0	1516.45	968.96	28.44	0.14	27.73	0.57	0.05	0.64	197	0.01	a

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
2455	3258.79	3412.7	1504.22	599.21	27.48	0.07	27.40	1.08	0.05	0.32	108	0.38 a
1918	3258.81	3346.4	1505.58	1258.90	28.87	0.17	28.32	...	-0.07	1.86	150	0.27 a
900	3258.83	3249.2	1513.88	2696.22	28.62	0.18	28.58	...	0.87	0.17	68	0.98 a
1222	3258.83	3311.1	1509.95	2146.07	28.62	0.19	28.40	-0.14	0.22	0.52	123	0.10 a
2424	3258.83	3411.7	1497.31	625.56	26.85	0.05	26.75	0.43	-0.11	0.37	134	0.02 a
814	3258.84	3244.4	1513.65	2815.12	29.16	0.27	27.94	-1.25	-0.10	0.88	170	0.88 a
2252	3258.84	3403.2	1496.84	837.86	29.51	0.28	29.30	3.81	0.86	-0.40	82	0.89 a
1147	3258.87	3306.8	1502.65	2253.42	25.37	0.03	25.27	0.23	0.62	0.50	223	0.03 a
2572	3258.87	3417.8	1487.16	471.30	28.15	0.15	27.90	2.36	0.17	0.38	210	0.00 a
637	3258.88	3233.6	1508.53	3087.40	24.41	0.02	24.32	0.43	0.56	0.72	289	0.03 a
1947	3258.88	3348.2	1492.60	1214.95	28.97	0.22	28.38	2.51	0.20	0.09	240	0.13 a
2615	3258.88	3421.9	1485.89	368.65	25.76	0.03	25.74	0.29	1.35	1.25	102	0.98 aef
983	3258.91	3254.6	1497.66	2560.01	29.13	0.24	28.36	...	...	1.23	133	0.85 ae
2423	3258.92	3411.5	1479.26	629.30	29.29	0.24	28.86	0.85	-0.32	0.35	101	0.36 a
2614	3258.93	3421.6	1476.31	377.22	27.52	0.12	26.39	...	0.31	0.29	365	0.33 aef
2178	3258.94	3400.1	1478.98	917.40	26.46	0.04	26.47	0.43	1.82	0.29	98	0.98 a
577	3258.95	3229.3	1495.64	3193.35	28.41	0.27	28.02	0.32	0.03	-0.09	109	0.80 a
2119	3258.97	3356.8	1472.98	998.46	29.66	0.31	29.07	...	-0.11	0.18	118	0.24 a
2382	3258.98	3409.3	1469.87	684.62	26.72	0.06	26.51	0.56	0.03	0.22	213	0.02 a
1241	3258.99	3312.3	1480.07	2116.24	28.92	0.24	28.48	6.79	0.02	-0.39	142	0.05 a
697	3259.02	3236.5	1481.44	3013.62	29.09	0.21	28.68	...	...	1.51	114	0.95 a
1427	3259.02	3322.1	1471.14	1870.37	27.06	0.06	26.67	...	0.95	0.31	173	0.02 a
649	3259.03	3234.1	1481.18	3075.43	27.52	0.13	27.07	0.06	0.17	0.92	151	0.01 a
1371	3259.03	3318.4	1471.45	1962.64	28.85	0.18	28.74	-1.63	2.10	0.19	97	0.95 a
1461	3259.03	3323.4	1469.21	1837.55	26.28	0.04	26.28	0.23	-0.10	0.23	121	0.03 a
2243	3259.03	3358.3	1462.37	962.09	28.16	0.14	27.54	0.63	0.07	0.19	162	0.01 a
2290	3259.03	3406.3	1460.31	761.84	26.07	0.04	25.90	0.89	0.48	0.35	196	0.03 ef
1526	3259.04	3326.8	1466.98	1753.08	27.67	0.08	27.60	...	2.18	0.68	118	0.15 a
2358	3259.04	3407.9	1458.76	720.22	27.62	0.10	27.10	0.77	-0.20	0.60	203	0.01 a
2536	3259.05	3416.8	1455.00	498.86	29.36	0.28	28.91	1.19	-0.39	-0.11	92	0.96 a
1005	3259.06	3256.3	1470.94	2518.39	29.22	0.26	28.88	1.99	0.04	0.47	103	0.96 a
1267	3259.06	3313.6	1466.44	2083.63	30.01	0.35	29.09	...	1.01	0.27	135	0.85 a
1498	3259.06	3325.5	1464.63	1785.86	27.07	0.07	26.90	1.79	0.68	0.03	156	0.19 a
2042	3259.06	3353.7	1457.12	1076.91	26.19	0.03	26.19	2.28	-0.02	-0.11	125	0.04 a
2493	3259.06	3414.7	1453.25	550.30	24.60	0.01	24.58	0.95	0.16	0.60	180	0.03 a
931	3259.07	3251.1	1468.85	2646.68	28.33	0.16	27.92	-0.67	2.50	0.47	96	0.97 a
1803	3259.08	3341.8	1457.25	1376.39	25.38	0.03	25.31	0.49	0.61	0.42	230	0.03 a
2289	3259.11	3405.4	1446.53	784.16	25.44	0.03	25.36	...	0.73	0.25	392	0.03 f
633	3259.13	3232.8	1461.74	3106.05	27.77	0.15	26.89	1.62	0.36	0.78	225	0.01 ae
616	3259.15	3232.0	1458.41	3127.76	25.94	0.05	25.76	-1.97	2.24	0.93	236	0.03 a
660	3259.17	3234.7	1454.48	3060.42	27.00	0.10	26.81	0.05	0.30	0.09	198	0.03 a
2063	3259.17	3354.5	1438.27	1057.02	28.04	0.13	27.46	...	0.39	0.29	186	0.00 a
1207	3259.19	3306.9	1444.37	2251.13	28.54	0.19	28.15	0.38	0.47	0.33	113	0.73 a
2109	3259.20	3357.5	1432.10	980.97	24.76	0.02	24.63	1.25	0.82	0.70	523	0.04 a
1561	3259.22	3328.5	1432.82	1710.37	29.68	0.32	28.94	2.37	-0.40	0.19	120	0.15 a
1170	3259.23	3308.1	1436.34	2222.43	28.55	0.20	27.66	...	-0.46	0.89	173	0.17 a
1932	3259.24	3346.9	1425.87	1246.95	26.83	0.05	26.65	1.72	1.74	0.43	147	0.02 a
1686	3259.25	3334.8	1427.71	1552.59	28.29	0.12	27.62	0.86	0.01	0.78	137	0.16 a
2015	3259.26	3352.3	1421.40	1113.88	29.76	0.37	28.83	-0.30	0.81	-0.14	166	0.13 abe
896	3259.27	3249.0	1433.36	2699.65	29.49	0.28	27.98	...	-0.16	0.86	241	0.96 a
1419	3259.27	3321.4	1425.03	1888.57	29.71	0.25	29.33	-0.09	0.07	0.59	75	0.78 a
1559	3259.27	3328.4	1424.68	1711.75	29.40	0.25	28.60	1.19	0.49	0.65	116	0.74 a
998	3259.28	3255.5	1429.42	2536.53	28.90	0.24	29.23	...	-0.44	0.21	97	0.96 a
2434	3259.28	3412.1	1412.71	616.45	28.57	0.18	28.25	-0.45	0.22	0.32	206	0.02 a
672	3259.31	3235.1	1427.58	3049.32	29.21	0.31	28.75	0.77	-0.19	-0.03	93	0.97 a
639	3259.32	3232.2	1426.54	3122.31	29.69	0.49	29.25	-0.25	0.75	-0.41	91	0.95 a
710	3259.32	3237.4	1425.32	2990.93	28.01	0.15	28.23	0.36	0.50	-0.00	102	0.98 a
2322	3259.33	3406.7	1405.02	751.44	27.33	0.08	27.11	2.09	0.83	-0.10	155	0.02 a
2379	3259.33	3409.2	1405.24	688.11	27.18	0.08	26.95	1.56	0.01	0.07	146	0.02 a
849	3259.35	3246.3	1418.32	2768.44	29.47	0.33	29.07	...	-0.27	-0.29	87	0.89 a
1307	3259.35	3315.3	1413.03	2042.35	28.38	0.13	28.06	0.51	0.76	0.80	138	0.53 aef
1332	3259.35	3316.5	1412.01	2010.93	27.19	0.06	27.25	0.74	1.84	0.98	90	0.97 a
805	3259.36	3244.2	1416.72	2822.37	29.63	0.30	29.29	4.02	-0.05	1.10	125	0.80 a
821	3259.36	3244.9	1417.51	2804.74	27.63	0.09	27.71	-3.20	2.41	2.10	70	0.96 a
1023	3259.36	3257.9	1414.14	2477.87	27.72	0.14	27.59	...	0.07	-0.10	178	0.02 a
944	3259.37	3251.8	1413.82	2631.59	29.46	0.26	28.05	...	...	1.68	125	0.83 a
1940	3259.37	3348.2	1402.18	1216.63	25.64	0.03	25.60	1.66	0.10	0.13	199	0.03 a
980	3259.38	3254.3	1411.51	2566.97	28.58	0.19	28.08	...	0.11	0.18	91	0.98 a
1308	3259.39	3315.3	1404.75	2042.37	28.93	0.16	28.68	...	1.02	1.08	106	0.44 af
1929	3259.39	3345.1	1398.38	1294.62	27.34	0.07	27.20	0.72	0.14	-0.07	118	0.22 a
1141	3259.40	3306.3	1405.97	2267.53	27.70	0.14	27.85	1.34	0.20	0.35	167	0.01 a
2070	3259.42	3355.1	1390.56	1043.86	25.69	0.03	25.69	1.02	0.03	0.18	138	0.03 ef
2275	3259.42	3403.0	1389.89	845.38	29.70	0.25	29.05	...	-0.60	0.81	102	0.82 a
2346	3259.42	3407.7	1388.06	72.05	29.42	0.33	29.22	0.58	0.50	-0.19	135	0.00 ae
687	3259.43	3236.0	1406.72	3027.48	28.40	0.19	28.28	-0.66	-0.15	0.12	125	0.35 a
1753	3259.43	3339.8	1393.08	1425.99	22.02	0.00	21.99	0.68	0.72	0.55	709	0.03 a
733	3259.44	3240.2	1403.46	2922.24	22.74	0.01	22.71	0.29	1.14	0.92	596	0.03 a
2071	3259.44	3356.1	1387.31	1017.68	24.45	0.01	24.41	0.24	0.13	0.64	336	0.03 f
1026	3259.45	3258.0	1397.96	2474.83	28.32	0.15	28.44	...	0.26	0.38	66	0.97 a
897	3259.46	3249.1	1398.20	2698.37	28.61	0.21	28.26	...	-0.04	-0.02	91	0.87 a
1560	3259.46	3328.9	1388.73	1698.93	24.19	0.01	24.19	0.58	0.22	0.66	185	0.03 a
1645	3259.46	3332.1	1388.07	1618.78	29.68	0.32	29.26	2.08	1.05	-0.20	97	0.59 a
604												

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1734	3259.47	3337.2	1386.10	1491.06	28.54	0.15	28.31	2.71	0.08	0.31	110	0.30 a
1527	3259.48	3326.8	1385.81	1753.98	29.74	0.29	29.50	0.35	-0.31	0.24	74	0.82 a
2314	3259.49	3406.3	1376.54	760.63	26.11	0.03	26.11	0.89	0.05	0.10	110	0.56 a
1340	3259.51	3316.8	1383.14	2003.65	27.93	0.10	27.52	1.29	1.07	1.19	144	0.02 a
2163	3259.51	3359.3	1372.93	938.59	29.64	0.29	28.18	...	0.28	0.76	184	0.74 a
716	3259.52	3237.9	1388.17	2980.49	28.61	0.24	29.12	1.40	-0.06	-0.06	122	0.53 a
1055	3259.52	3259.6	1385.17	2435.23	28.33	0.17	28.55	-5.21	4.32	1.03	132	0.97 a
2218	3259.52	3401.7	1371.36	877.33	28.24	0.12	28.20	-0.35	-0.05	0.57	143	0.01 a
2567	3259.52	3418.2	1367.86	462.53	27.36	0.09	26.89	-0.09	-0.21	0.38	224	0.02
1985	3259.53	3350.1	1371.36	1169.54	29.71	0.33	28.38	-1.10	1.79	0.01	167	0.28 a
694	3259.56	3236.6	1381.89	3012.00	26.60	0.07	26.48	1.29	0.19	0.20	171	0.05
2602	3259.56	3420.6	1359.81	403.33	24.02	0.01	23.94	1.82	0.88	1.51	334	0.03
2450	3259.57	3412.6	1359.13	603.44	28.77	0.17	28.47	-0.48	-0.13	0.19	98	0.94 a
1491	3259.58	3325.6	1367.17	1784.22	25.00	0.02	24.90	1.41	0.14	0.19	459	0.03
999	3259.61	3255.7	1369.29	2532.10	28.26	0.17	27.83	3.35	0.18	0.21	129	0.11 a
2384	3259.62	3409.5	1350.92	680.56	29.45	0.27	29.10	...	2.23	0.91	112	0.39 abe
1113	3259.63	3304.2	1362.14	2319.24	26.22	0.04	26.19	...	1.37	1.36	85	0.98 a
2332	3259.64	3407.1	1347.24	742.12	29.94	0.36	29.61	...	4.02	-0.19	87	0.61 a
787	3259.65	3242.7	1363.79	2860.65	29.67	0.43	29.49	0.86	-0.09	-0.92	78	0.97 a
1627	3259.67	3331.0	1349.36	1647.70	29.66	0.28	29.22	...	0.35	0.39	112	0.88 a
1651	3259.67	3333.4	1349.54	1588.69	26.34	0.06	26.12	0.63	0.30	0.37	479	0.00
861	3259.68	3247.1	1357.07	2750.09	28.56	0.20	28.66	...	1.23	-0.06	100	0.67 a
696	3259.69	3236.5	1357.61	3013.94	26.48	0.05	26.38	0.91	0.07	0.18	105	0.99 a
836	3259.69	3245.8	1355.12	2782.90	29.15	0.32	29.76	...	-0.34	-0.23	69	0.67 af
992	3259.69	3255.3	1353.99	2544.18	29.02	0.24	29.11	-0.88	0.55	0.03	65	0.97 a
783	3259.70	3242.5	1354.04	2863.94	28.78	0.22	28.33	0.15	0.03	-0.07	117	0.97 a
2336	3259.75	3407.5	1327.99	733.25	26.80	0.06	26.78	0.33	-0.14	0.17	150	0.12
1935	3259.77	3347.7	1327.16	1229.11	27.02	0.07	26.80	-0.10	0.21	0.70	224	0.02
2387	3259.77	3410.4	1323.04	660.61	25.36	0.03	25.30	0.53	0.05	0.12	256	0.03
1300	3259.78	3314.9	1332.67	2052.30	30.08	0.41	29.27	...	0.64	-0.21	120	0.61 a
1696	3259.78	3335.5	1327.81	1534.74	28.44	0.13	28.34	0.01	0.70	0.39	99	0.72 a
1071	3259.79	3301.2	1334.53	2396.81	29.05	0.31	28.02	1.15	0.12	-0.21	130	0.97 a
2054	3259.79	3354.2	1322.75	1066.62	28.03	0.12	27.85	...	2.23	0.62	172	0.01
2118	3259.79	3357.0	1323.03	996.25	27.73	0.10	27.44	...	0.62	0.55	186	0.01
1103	3259.81	3303.3	1329.20	2342.99	28.98	0.24	28.43	-1.41	0.50	1.12	99	0.93 a
1749	3259.81	3337.9	1323.07	1474.41	28.92	0.16	28.49	...	1.22	0.97	97	0.23 a
1256	3259.83	3313.0	1324.00	2099.51	29.93	0.34	28.34	...	-0.03	0.62	146	0.79 a
1107	3259.84	3303.6	1323.81	2335.16	28.99	0.24	28.51	...	1.34	0.90	90	0.97 a
2233	3259.85	3402.2	1310.58	864.37	29.34	0.21	28.96	-2.11	2.31	1.09	103	0.78 a
2281	3259.85	3405.5	1309.82	783.00	23.94	0.01	23.92	1.66	0.33	0.72	370	0.03
1144	3259.86	3306.3	1320.38	2266.89	28.30	0.18	27.88	-0.54	0.48	0.64	116	0.41 a
676	3259.88	3235.5	1322.97	3039.95	28.53	0.21	30.31	...	1.34	0.72	88	0.06 ae
828	3259.88	3245.3	1319.88	2795.28	28.56	0.20	28.11	-0.22	-0.15	0.82	140	0.09 a
2601	3259.88	3420.0	1301.16	419.05	28.44	0.18	27.62	-0.70	1.67	0.29	188	0.07 a
1280	3259.89	3314.3	1313.68	2068.24	27.63	0.10	27.45	0.84	-0.15	0.07	161	0.01
2040	3259.89	3353.5	1304.14	1084.52	28.12	0.12	28.01	...	0.41	0.50	133	0.06 a
846	3259.90	3246.3	1317.21	2769.64	28.85	0.25	27.37	-0.50	0.68	0.31	243	0.25 a
656	3259.91	3234.4	1317.69	3068.90	29.16	0.38	28.19	0.34	-0.32	-0.08	123	0.59 ae
1462	3259.93	3323.3	1302.70	1840.85	29.12	0.25	28.85	...	0.15	-0.50	115	0.28 a
2077	3259.93	3355.1	1296.22	1043.73	29.79	0.29	29.08	1.05	-0.83	0.54	95	0.81 a
2582	3259.93	3419.0	1292.15	442.82	28.81	0.22	28.47	0.51	0.08	0.25	143	0.02 a
553	3259.95	3227.6	1311.19	3239.51	28.28	0.26	28.17	...	0.40	0.87	95	0.95 a
1161	3259.95	3307.9	1302.52	2227.17	24.75	0.02	24.74	0.58	0.59	0.29	150	0.04
2380	3259.97	3409.1	1286.68	693.22	29.38	0.27	28.41	1.50	1.17	-0.00	140	0.43 a
1106	3259.99	3304.0	1296.85	2325.38	24.16	0.01	24.16	0.61	0.12	0.51	164	0.03
1820	3259.99	3342.1	1288.31	1370.67	29.04	0.20	28.35	2.39	0.47	0.25	126	0.29 a
850	3260.00	3246.5	1298.72	2764.89	26.78	0.07	26.54	-0.15	0.16	0.51	213	0.02
1739	3260.00	3334.0	1287.39	1573.13	24.91	0.02	24.86	...	1.03	1.71	159	0.03
1013	3260.02	3257.1	1293.19	2498.65	28.34	0.16	28.41	2.93	0.36	0.05	86	0.97 a
2073	3260.02	3355.1	1279.95	1044.44	27.28	0.07	27.25	0.14	0.37	0.25	135	0.02
2321	3260.02	3406.7	1277.11	752.58	27.44	0.09	27.33	0.12	0.36	0.37	162	0.01 a
2573	3260.02	3418.7	1274.46	450.44	26.94	0.06	26.91	...	0.29	0.26	134	0.17 a
840	3260.03	3245.7	1293.00	2784.52	28.84	0.19	28.23	-2.06	0.51	1.29	81	0.97 a
2463	3260.04	3413.1	1272.46	591.61	26.71	0.06	26.60	0.06	0.11	0.50	197	0.02
1534	3260.07	3327.2	1276.03	1744.51	28.59	0.16	27.99	-0.13	0.02	0.44	129	0.14 a
1035	3260.09	3258.5	1279.38	2463.02	28.59	0.21	28.18	...	-0.13	0.15	122	0.53 a
1862	3260.09	3343.8	1270.22	1326.18	30.10	0.38	29.52	...	4.07	0.16	113	0.78 a
953	3260.10	3252.3	1278.50	2619.64	29.48	0.30	29.74	...	0.57	0.83	91	0.91 a
2283	3260.10	3404.6	1262.70	804.71	29.45	0.24	28.48	-2.75	2.67	0.64	122	0.93 a
1980	3260.12	3350.3	1262.65	1163.83	26.33	0.05	26.15	0.35	0.92	0.45	248	0.03
1368	3260.15	3319.0	1263.27	1949.39	23.22	0.01	23.21	0.32	0.41	0.72	285	0.03
2448	3260.15	3412.5	1252.48	606.29	27.50	0.07	27.37	0.16	0.26	0.71	108	0.23 a
1019	3260.20	3237.4	1259.36	2490.98	29.21	0.26	28.79	-1.77	2.35	0.39	84	0.98 a
2620	3260.20	3422.5	1241.40	357.10	28.50	0.21	27.69	-2.07	2.96	0.41	174	0.42 aef
1926	3260.21	3347.0	1246.82	1247.95	29.86	0.27	29.37	...	-0.08	1.99	103	0.77 a
2373	3260.21	3408.7	1241.84	702.25	28.65	0.17	28.45	1.45	0.99	-0.18	97	0.20 a
2619	3260.21	3422.2	1238.99	363.03	28.74	0.22	28.14	-0.47	0.97	0.06	120	0.97 aef
551	3260.22	3227.8	1260.84	3234.76	26.16	0.10	26.06	3.05	0.07	0.64	211	0.43 a
967	3260.23	3253.4	1253.39	2592.66	29.02	0.26	28.55	-1.50	0.69	0.23	103	0.97 a
617	3260.24	3233.9	1255.95	3080.13	20.59	0.00	20.59	0.79	0.97	0.61	769	0.03
1684	3260.24	3334.6	1243.91	1557.63	29.65	0.27	28.63	3.59	0.66	0.62	137	0.78 a
1736	3260.25	3337.4	1241.85	1488.93	27.19	0.07	27.07	1.18	0.09	0.10	120	0.10
2566	3260.25											

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
1804	3300.27	3341.5	1237.16	1385.99	29.75	0.33	29.45	...	0.17	-0.05	118	0.53	a
761	3300.28	3241.0	1247.82	2904.22	29.75	0.43	29.27	...	1.69	0.13	139	0.90	ae
1062	3300.28	3300.6	1243.87	2411.55	26.14	0.04	26.08	2.10	0.87	1.04	80	0.97	a
602	3300.30	3231.2	1246.44	3150.26	25.75	0.06	25.68	0.57	0.39	0.21	192	0.07	e
1898	3300.30	3344.3	1229.75	1314.55	28.75	0.18	28.30	...	0.34	0.80	172	0.56	a
2475	3300.30	3413.6	1224.76	579.03	29.32	0.22	28.88	...	0.99	107	0.20	a	
1790	3300.33	3340.9	1225.52	1400.17	27.30	0.10	26.94	0.86	-0.19	0.20	279	0.02	
911	3300.34	3249.9	1235.12	2679.16	26.80	0.07	26.67	1.56	0.21	0.00	134	0.53	aef
995	3300.34	3255.6	1234.09	2535.93	27.45	0.10	27.53	-0.24	0.23	0.04	86	0.98	a
1208	3300.34	3310.0	1231.08	2176.64	29.97	0.53	29.09	-0.08	0.69	-0.63	103	0.69	a
2000	3300.34	3351.1	1221.38	1144.90	29.92	0.33	28.79	...	0.51	148	0.79	a	
2410	3300.34	3411.2	1216.60	640.30	28.89	0.19	27.73	...	5.31	0.80	250	0.10	ae
1629	3300.35	3331.2	1223.67	1643.01	29.98	0.37	28.90	...	0.03	-0.15	133	0.81	a
1423	3300.36	3321.8	1224.67	1879.07	29.05	0.19	28.12	0.73	0.34	1.53	169	0.44	a
1731	3300.37	3337.0	1218.59	1498.19	28.86	0.19	28.12	-0.22	1.14	0.48	239	0.01	a
2419	3300.37	3411.4	1211.84	635.18	30.64	0.69	30.67	...	0.44	-1.15	113	0.87	ae
928	3300.38	3251.1	1226.28	2650.16	28.02	0.15	27.59	-1.36	0.01	1.00	137	0.02	a
2627	3300.39	3423.2	1206.58	340.48	27.84	0.15	27.41	-0.38	2.74	0.60	146	0.02	a
912	3300.41	3250.1	1222.10	2676.06	26.79	0.08	26.38	5.18	0.21	0.24	205	0.12	aef
790	3300.43	3242.9	1220.27	2856.31	27.95	0.15	28.18	...	-0.09	0.33	165	0.97	af
2158	3300.43	3359.2	1203.50	941.38	28.86	0.18	27.85	0.64	-0.73	0.89	173	0.12	a
1059	3300.46	3301.3	1210.15	2394.63	27.00	0.11	26.82	...	0.26	0.03	177	0.02	aef
1200	3300.46	3309.6	1208.85	2184.64	28.79	0.22	29.07	0.29	-0.01	0.55	115	0.70	a
1058	3300.47	3300.5	1207.64	2414.61	25.42	0.04	25.39	1.55	0.25	0.14	253	0.03	af
2537	3300.49	3417.7	1188.70	477.28	23.32	0.01	23.30	-0.61	1.93	1.59	267	0.03	
1024	3300.50	3258.4	1203.47	2466.61	24.11	0.01	24.09	0.62	0.93	1.12	177	0.03	
837	3300.51	3245.6	1204.00	2789.06	29.13	0.30	28.44	-0.35	0.20	0.04	98	0.97	a
1012	3300.51	3257.0	1202.32	2502.67	28.89	0.22	28.19	...	0.70	79	0.93	a	
2347	3300.51	3407.8	1186.63	724.77	27.61	0.08	27.58	...	-0.25	0.16	111	0.43	a
2633	3300.51	3423.3	1184.41	335.75	29.78	0.44	28.50	-1.33	0.75	0.45	101	0.89	a
1806	3300.52	3341.6	1190.65	1382.47	28.52	0.13	28.11	0.83	-0.02	1.11	113	0.16	a
2097	3300.52	3356.0	1187.17	1022.61	29.50	0.28	29.38	...	0.97	-0.26	151	0.74	a
2147	3300.52	3358.6	1187.50	955.60	27.57	0.10	27.61	0.82	-0.06	0.22	218	0.00	
2478	3300.53	3412.1	1182.07	618.06	29.52	0.23	29.08	...	4.22	1.65	84	0.86	a
1766	3300.54	3339.4	1187.67	1437.35	29.47	0.22	29.46	...	0.42	0.30	96	0.70	a
2282	3300.57	3404.7	1176.70	804.60	29.48	0.28	29.00	-1.00	2.10	-0.35	102	0.60	a
542	3300.58	3226.3	1194.92	3273.27	27.19	0.15	26.64	-0.84	-1.74	4.30	96	0.94	a
1574	3300.58	3328.8	1181.55	1703.68	29.85	0.31	29.67	0.46	0.83	0.21	160	0.61	a
976	3300.60	3254.3	1185.35	2568.76	27.65	0.14	27.29	...	0.48	-0.10	147	0.02	a
2334	3300.60	3407.2	1170.23	740.12	29.96	0.36	29.40	...	0.52	-0.15	157	0.81	a
815	3300.62	3244.7	1184.55	2811.27	26.78	0.07	26.64	0.76	0.68	0.67	110	0.89	a
2206	3300.62	3401.1	1167.03	894.07	28.29	0.13	27.89	-2.20	2.59	1.13	151	0.00	a
2428	3300.64	3412.0	1162.61	621.82	28.04	0.11	27.74	...	0.62	0.70	131	0.02	a
537	3300.67	3225.8	1179.60	3285.56	28.09	0.40	27.98	-1.39	0.20	0.05	98	0.95	aef
904	3300.67	3249.5	1173.41	2690.06	28.95	0.19	28.77	...	-0.20	1.72	88	0.86	a
1148	3300.68	3306.5	1167.88	2263.14	27.64	0.16	27.41	-0.85	0.31	0.52	107	0.17	a
2634	3300.68	3423.7	1152.75	327.78	28.78	0.27	27.49	1.80	0.17	0.46	152	0.83	a
736	3300.69	3239.5	1172.44	2942.38	28.20	0.18	27.78	...	0.57	0.23	140	0.07	a
2132	3300.69	3357.9	1155.60	973.36	28.26	0.15	27.45	-0.35	0.12	0.50	212	0.00	
969	3300.70	3253.5	1167.60	2589.37	29.38	0.32	28.52	-0.62	-0.31	0.62	154	0.92	a
1911	3300.70	3346.1	1155.74	1270.91	29.89	0.28	28.95	...	1.67	0.62	126	0.77	a
2213	3300.70	3402.0	1152.60	872.45	25.80	0.03	25.65	4.44	0.41	0.39	271	0.03	
2598	3300.70	3419.8	1149.00	424.69	28.47	0.16	27.50	-0.35	1.06	0.85	237	0.02	a
803	3300.72	3244.0	1165.10	2828.58	26.84	0.08	26.69	0.59	-0.27	0.46	146	0.02	
1397	3300.74	3319.8	1153.96	1931.47	29.24	0.20	28.85	...	1.31	100	0.57	a	
1812	3300.75	3342.2	1147.02	1368.16	24.06	0.01	24.08	0.46	-0.03	0.25	114	0.92	a
2348	3300.77	3407.9	1138.82	723.89	28.21	0.14	27.91	1.29	0.23	-0.10	130	0.20	a
1166	3300.79	3308.4	1146.96	2216.65	27.92	0.15	27.87	4.18	0.69	0.36	116	0.02	aef
1850	3300.79	3343.4	1139.64	1337.66	27.21	0.07	27.15	1.99	0.11	-0.05	138	0.02	a
1093	3300.80	3302.8	1146.88	2357.95	27.17	0.18	26.79	0.30	-0.18	0.27	129	0.17	a
2016	3300.81	3339.9	1137.15	1426.28	24.78	0.02	24.75	1.67	0.22	0.25	285	0.03	
2293	3300.82	3405.8	1130.05	777.22	25.39	0.02	25.32	0.85	0.02	0.31	259	0.03	
556	3300.85	3227.9	1145.81	3232.64	27.67	0.18	26.82	...	...	2.51	135	0.95	a
1002	3300.85	3256.2	1139.77	2523.26	28.36	0.32	27.41	0.56	-0.72	1.52	111	0.94	a
1277	3300.85	3314.4	1135.02	2065.75	24.92	0.02	24.91	1.40	0.11	0.23	145	0.03	
1401	3300.85	3320.1	1134.51	1921.82	28.87	0.18	28.65	-1.09	1.80	0.46	104	0.21	a
1641	3300.85	3332.2	1131.94	1620.56	27.32	0.08	27.11	0.48	-0.02	-0.11	147	0.02	
865	3300.86	3247.6	1138.81	2738.73	26.77	0.13	26.55	...	-0.01	0.56	210	0.06	a
2090	3300.87	3357.2	1122.66	993.39	23.93	0.01	23.87	0.66	0.19	0.53	441	0.03	
1165	3300.88	3308.2	1131.31	2222.30	26.19	0.06	26.07	4.18	0.79	0.29	148	0.11	af
1481	3300.88	3325.9	1127.21	1777.11	23.49	0.01	23.47	0.46	0.13	0.65	586	0.03	
2272	3300.88	3404.2	1119.64	815.59	26.43	0.04	26.39	...	2.01	0.84	129	0.04	a
653	3300.89	3234.4	1136.95	3070.48	28.04	0.21	27.67	...	-0.14	0.14	222	0.07	a
623	3300.90	3232.2	1135.45	3125.31	27.86	0.22	27.72	...	-0.03	0.08	99	0.73	a
838	3300.91	3245.6	1129.64	2787.58	28.29	0.29	27.52	...	...	1.19	121	0.95	a
1390	3300.91	3319.3	1123.41	1943.47	30.10	0.36	28.85	...	0.22	0.49	155	0.87	a
1789	3300.92	3340.5	1116.05	1411.71	29.31	0.21	28.87	...	0.35	2.17	134	0.14	a
764	3300.93	3241.1	1128.24	2902.74	29.38	0.44	27.26	-2.92	2.03	0.93	239	0.90	ae
750	3300.94	3240.1	1126.57	2926.96	28.45	0.26	27.46	...	...	1.18	151	0.97	ae
1054	3300.94	3259.6	1120.98	2437.66	28.61	0.41	28.05	...	0.26	0.25	86	0.73	ae
1088	3300.94	3302.											

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
2342	3300.97	3407.8	1101.55	727.57	28.39	0.15	28.21	...	0.21	-0.01	133	0.16	a
695	3300.98	3236.4	1119.08	3019.57	28.66	0.27	27.64	...	0.78	1.38	124	0.94	a
678	3301.00	3235.7	1116.25	3036.01	28.79	0.33	29.27	...	...	0.41	127	0.95	abe
779	3301.01	3242.5	1112.20	2865.54	26.73	0.14	26.41	...	...	2.57	102	0.95	a
1959	3301.01	3348.8	1097.99	1202.04	28.38	0.13	28.22	1.29	0.16	0.70	122	0.01	a
2258	3301.01	3403.7	1095.13	828.61	29.69	0.32	29.46	...	0.52	-0.08	88	0.84	a
2638	3301.01	3425.0	1089.82	294.27	27.37	0.15	27.08	0.48	-0.12	0.53	122	0.09	a
1991	3301.03	3350.7	1093.73	1155.42	29.85	0.29	29.12	...	...	1.05	115	0.77	a
2186	3301.03	3400.5	1092.18	908.95	28.20	0.13	28.05	-0.08	0.32	0.34	125	0.06	a
1254	3301.04	3313.1	1101.03	2100.12	26.93	0.06	26.89	...	0.74	0.32	128	0.15	
589	3301.06	3230.1	1105.04	3177.80	26.19	0.10	25.75	-0.21	0.95	0.16	216	0.03	e
2485	3301.06	3414.4	1084.25	561.32	25.23	0.02	25.11	0.65	0.10	0.65	355	0.03	
2554	3301.06	3417.5	1082.73	484.17	29.46	0.27	29.24	0.51	-0.01	-0.07	94	0.89	a
2581	3301.07	3419.2	1081.57	440.89	27.82	0.12	27.73	1.45	0.13	0.09	197	0.01	
1658	3301.10	3332.9	1084.39	1601.76	29.69	0.22	28.50	...	...	2.27	119	0.73	a
1204	3301.11	3304.8	1089.57	2307.42	25.60	0.07	25.58	0.62	1.04	0.39	162	0.03	
1405	3301.11	3320.6	1086.42	1910.87	28.74	0.19	28.05	-1.04	0.72	0.54	260	0.10	aef
2594	3301.11	3419.7	1073.55	428.19	29.05	0.26	28.78	1.07	0.81	-0.31	162	0.04	ae
1770	3301.19	3339.8	1066.38	1430.34	27.80	0.11	27.62	0.78	-0.25	0.31	161	0.09	a
2066	3301.19	3354.7	1063.20	1054.80	29.19	0.26	28.11	0.84	0.52	-0.09	209	0.00	a
1381	3301.22	3319.1	1065.23	1947.61	28.06	0.10	27.43	...	2.23	1.09	152	0.07	a
1290	3301.23	3314.6	1065.67	2060.44	29.62	0.27	28.96	...	...	1.07	113	0.78	a
2309	3301.34	3406.5	1034.16	760.24	24.84	0.02	24.80	0.85	0.41	0.97	251	0.03	
1665	3301.35	3330.3	1084.89	1667.26	29.61	0.27	28.27	...	3.17	0.85	166	0.83	a
1278	3301.37	3314.2	1039.47	2071.82	27.75	0.10	27.54	0.67	0.81	0.24	133	0.07	a
1951	3301.37	3348.6	1031.78	1209.54	28.62	0.15	28.00	...	0.75	0.80	142	0.01	a
2430	3301.38	3412.1	1025.51	618.70	26.73	0.05	26.59	-0.52	1.09	1.33	158	0.02	a
2513	3301.38	3415.8	1024.71	527.48	29.45	0.25	29.21	-0.53	0.64	0.13	84	0.95	a
1193	3301.41	3309.5	1031.78	2189.72	28.49	0.21	27.68	-0.18	-0.21	0.59	184	0.01	a
2126	3301.43	3357.0	1019.58	997.21	28.27	0.12	27.83	...	0.87	0.67	170	0.03	a
2037	3301.44	3353.7	1017.31	1081.86	29.34	0.24	29.30	-0.82	0.69	0.94	110	0.78	af
1832	3301.45	3342.8	1018.49	1355.65	29.23	0.24	28.95	...	0.07	0.58	156	0.51	a
2540	3301.46	3417.8	1009.76	475.62	26.62	0.05	26.14	0.34	0.68	1.23	266	0.02	ef
1511	3301.47	3326.0	1017.27	1776.34	28.78	0.19	28.17	0.24	-0.02	0.28	160	0.25	ae
1707	3301.51	3336.0	1007.64	1524.76	26.87	0.05	26.74	...	5.17	1.10	114	0.27	a
2451	3301.51	3412.8	1001.10	602.92	28.94	0.23	28.53	-2.77	2.88	0.58	188	0.00	ae
2539	3301.51	3417.1	1000.44	493.54	26.37	0.04	26.27	1.23	0.08	0.16	162	0.03	ef
1756	3301.53	3338.7	1004.50	1457.95	29.12	0.20	28.55	-0.29	0.22	0.64	126	0.78	a
1509	3301.54	3326.0	1004.76	1775.04	28.90	0.22	29.01	1.25	-0.20	-0.15	158	0.00	
2394	3301.55	3410.8	993.54	653.38	23.48	0.01	23.45	0.39	0.38	0.89	405	0.03	e
2526	3301.55	3416.5	992.34	508.72	29.23	0.21	28.91	-2.69	2.38	1.52	114	0.77	a
1518	3301.57	3326.5	1000.02	1764.30	29.70	0.32	29.56	-0.25	-0.03	-0.04	90	0.14	ae
2381	3301.58	3409.2	987.86	692.01	29.22	0.23	29.41	...	1.79	0.79	108	0.11	a
2271	3301.62	3402.5	982.24	860.05	29.26	0.22	28.77	1.16	-0.39	0.34	110	0.93	a
1266	3301.63	3313.6	991.47	2086.52	30.18	0.42	30.04	-0.54	0.56	-0.03	101	0.87	a
1135	3301.65	3306.3	988.74	2270.93	26.71	0.12	26.33	0.96	0.10	-0.13	189	0.03	
2001	3301.65	3351.2	979.71	1144.66	29.67	0.27	29.23	-0.38	0.83	0.21	94	0.84	a
1742	3301.66	3333.7	981.96	1582.29	29.40	0.24	28.87	0.09	-0.64	0.83	88	0.52	a
1919	3301.66	3346.6	978.27	1259.60	29.38	0.27	28.95	1.66	0.57	-0.30	114	0.75	a
1605	3301.69	3332.3	976.48	1619.29	24.70	0.02	24.59	3.06	0.37	0.53	416	0.03	ef
2055	3301.71	3354.2	968.22	1068.45	27.85	0.11	27.52	...	...	0.62	154	0.03	a
2027	3301.72	3352.9	966.52	1102.52	29.18	0.25	29.22	-0.78	0.87	0.08	113	0.59	af
2239	3301.73	3402.8	961.74	853.75	28.99	0.19	28.85	-2.30	1.97	0.49	111	0.09	a
2640	3301.73	3425.0	957.26	296.81	28.23	0.23	27.51	0.19	-0.34	0.66	105	0.90	a
1459	3301.74	3323.2	967.84	1846.02	29.76	0.26	29.36	1.96	-0.37	0.41	70	0.89	a
1965	3301.77	3349.2	957.05	1193.38	29.21	0.21	28.70	...	0.12	1.14	126	0.89	a
1992	3301.77	3350.8	956.92	1154.36	28.63	0.16	28.42	2.78	0.46	0.16	95	0.54	a
2438	3301.77	3413.5	952.85	585.50	22.49	0.01	22.45	1.05	0.57	1.13	605	0.03	e
2501	3301.77	3415.3	952.96	538.83	29.59	0.29	...	-0.52	0.27	0.79	95	0.22	a
2375	3301.78	3358.2	954.71	968.18	29.15	0.19	28.68	-0.82	0.89	1.08	111	0.73	a
2357	3301.78	3408.2	951.82	717.29	27.13	0.07	26.69	0.40	-0.11	0.21	217	0.02	
1923	3301.79	3346.9	954.45	1251.52	28.55	0.15	28.70	1.50	0.93	0.26	102	0.14	a
1366	3301.80	3318.3	958.85	1969.92	29.47	0.29	30.17	-0.78	0.44	0.32	105	0.00	a
1604	3301.82	3331.6	952.30	1635.08	24.69	0.02	24.61	2.20	0.33	0.43	594	0.00	ef
1879	3301.83	3344.8	948.29	1305.73	29.64	0.32	29.02	0.15	1.25	-0.25	124	0.91	a
1844	3301.84	3343.1	945.91	1346.88	28.71	0.17	28.64	...	0.37	0.10	104	0.03	
2398	3301.86	3410.7	935.98	655.53	25.78	0.04	25.68	0.32	1.02	0.46	286	0.00	f
1281	3301.87	3314.3	947.13	2069.75	28.61	0.17	28.85	3.48	-0.58	1.22	155	0.00	a
1610	3301.88	3330.5	941.15	1664.46	28.43	0.17	29.35	...	0.68	0.44	142	0.01	
1285	3301.89	3316.4	941.67	2017.29	21.69	0.00	21.71	1.18	0.95	0.63	339	0.06	
1666	3301.89	3333.2	938.73	1595.17	29.85	0.34	29.66	...	1.19	0.32	98	0.26	a
1976	3301.91	3350.1	931.94	1171.57	26.00	0.03	25.96	0.68	0.76	0.69	152	0.03	
1524	3301.92	3326.8	935.05	1756.98	29.78	0.28	28.67	...	-0.51	0.55	127	0.79	a
1253	3301.95	3312.5	931.19	2114.70	25.38	0.03	25.32	1.05	0.39	1.00	224	0.03	
2399	3301.95	3411.1	919.10	644.82	27.40	0.09	26.91	0.40	0.85	0.84	195	0.02	aef
1143	3301.97	3306.6	929.93	2264.14	26.50	0.09	26.18	...	0.56	0.48	164	0.03	a
2028	3302.00	3352.8	914.67	1105.45	28.01	0.11	27.88	...	0.39	-0.24	97	0.87	a
1262	3302.01	3304.4	923.14	2319.82	28.68	0.56	27.56	0.00	1.40	-0.09	118	0.74	a
1807	3302.02	3341.7	913.21	1382.20	28.79	0.16	28.64	-0.43	0.04	0.58	93	0.61	a
2616	3302.03	3421.8	903.32	377.58	28.52	0.18	28.17	0.79	-0.03	0.36	123	0.76	a
25													

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
1243	3302.12	3312.1	899.75	2126.88	29.14	0.28	28.35	1.76	0.27	-0.15	169	0.10	a
1674	3302.12	3335.0	895.55	1552.09	23.85	0.01	23.82	0.42	0.71	0.59	469	0.03	
2263	3302.12	3404.0	889.85	823.18	28.40	0.14	28.35	0.72	-0.24	0.24	120	0.04	
2242	3302.16	3357.2	883.05	994.08	29.91	0.34	28.82	...	0.28	0.16	176	0.39	a
1486	3302.18	3324.8	887.22	1807.88	28.73	0.18	28.61	-0.52	2.23	0.56	168	0.13	a
1954	3302.19	3348.6	879.28	1209.77	29.02	0.20	29.34	0.44	0.18	-0.27	74	0.96	a
2391	3302.21	3410.2	871.34	667.18	27.90	0.11	27.45	...	-0.09	0.71	203	0.01	
1415	3302.24	3321.4	875.86	1893.37	28.00	0.12	27.93	0.25	-0.35	0.88	195	0.01	
2645	3302.25	3425.5	862.23	285.26	27.97	0.24	27.06	...	0.21	-0.16	204	0.28	a
2606	3302.26	3420.4	860.06	412.11	29.44	0.27	28.64	0.98	0.41	0.45	104	0.81	a
2276	3302.28	3404.3	860.31	816.32	29.75	0.27	28.90	...	...	3.47	100	0.72	a
2595	3302.30	3419.9	853.16	425.60	27.92	0.12	26.98	...	3.14	0.35	252	0.10	a
1475	3302.31	3324.3	863.03	1820.01	29.00	0.22	28.59	...	0.39	0.55	140	0.01	a
2559	3302.31	3417.8	851.43	476.80	29.01	0.23	28.64	...	0.40	0.08	116	0.15	a
1962	3302.33	3349.2	854.01	1194.59	28.19	0.12	27.93	...	0.37	1.04	132	0.01	a
1357	3302.34	3318.0	859.09	1977.38	28.86	0.19	28.49	0.21	-0.14	-0.21	104	0.58	a
2439	3302.39	3412.4	837.91	613.60	29.06	0.20	28.74	-2.13	2.52	0.59	107	0.21	a
2509	3302.39	3414.8	838.15	552.88	29.77	0.28	30.74	1.55	-0.05	0.03	69	0.92	a
2522	3302.39	3416.7	837.11	506.11	27.10	0.08	26.94	0.23	0.18	0.05	200	0.02	
1795	3302.40	3341.1	842.54	1399.01	30.27	0.37	29.67	-0.55	0.26	0.28	77	0.72	a
1752	3302.42	3338.5	839.91	1465.04	29.31	0.26	28.87	-0.50	0.52	0.06	137	0.37	a
1805	3302.43	3341.6	836.92	1385.37	29.38	0.23	28.94	...	0.63	1.29	113	0.49	a
1178	3302.44	3308.8	841.44	2208.66	26.55	0.09	26.14	-0.11	1.04	0.53	268	0.03	
1467	3302.44	3324.0	838.76	1827.33	27.27	0.08	27.42	...	0.38	-0.00	137	0.02	a
2647	3302.44	3425.6	825.36	281.36	27.35	0.15	27.38	2.54	-0.24	-0.02	150	0.02	a
1889	3302.45	3346.5	832.11	1262.69	22.29	0.00	22.28	0.37	0.49	0.69	473	0.03	a
2648	3302.50	3426.3	814.53	264.26	26.56	0.11	25.27	1.39	-0.05	0.26	272	0.03	ae
1503	3302.52	3325.9	824.68	1778.93	27.61	0.09	27.61	-0.10	0.41	0.80	127	0.02	
1521	3302.52	3326.9	823.73	1754.79	26.92	0.06	26.87	0.05	0.02	0.71	186	0.02	
1981	3302.52	3350.4	819.37	1166.40	26.25	0.04	26.11	...	1.90	1.25	171	0.15	a
2464	3302.52	3413.1	813.07	594.74	28.41	0.15	28.21	...	0.15	0.09	116	0.01	
2492	3302.53	3412.3	812.53	616.02	29.12	0.23	28.76	...	0.69	0.75	131	0.05	a
2529	3302.53	3416.6	811.95	508.02	29.89	0.31	29.48	-1.18	0.57	0.44	85	0.51	a
2161	3302.54	3359.6	812.65	934.56	26.55	0.05	26.44	0.43	0.10	0.22	214	0.03	
2635	3302.55	3424.1	806.96	320.43	25.51	0.04	25.36	1.53	0.35	0.80	168	0.03	a
2116	3302.59	3357.6	803.91	984.30	26.03	0.03	26.03	0.80	0.40	0.26	178	0.03	ef
2515	3302.61	3416.0	795.99	523.48	27.42	0.07	27.30	2.05	1.23	1.26	96	0.98	a
2418	3302.64	3411.7	792.95	631.02	26.28	0.04	26.09	...	1.28	0.73	193	0.03	
1194	3302.67	3310.3	799.12	2172.03	26.57	0.09	26.16	0.06	0.10	0.22	435	0.00	
2304	3302.67	3405.9	788.51	776.04	29.44	0.23	29.39	0.07	-0.04	0.92	97	0.78	a
1314	3302.68	3312.3	796.26	2120.61	29.61	0.33	28.10	-2.26	1.38	0.22	175	0.60	a
2395	3302.68	3410.3	784.88	665.85	28.38	0.15	28.01	-0.07	0.33	0.05	129	0.02	a
2561	3302.71	3417.9	777.89	475.91	28.81	0.17	28.58	...	0.07	0.53	99	0.35	a
2117	3302.74	3358.3	776.96	967.19	24.63	0.02	24.51	1.97	0.17	0.34	441	0.01	ef
2098	3302.75	3356.3	775.39	1018.26	28.30	0.13	28.21	...	0.66	0.44	131	0.10	a
10427	3302.76	3322.1	779.59	1875.98	20.35	0.00	20.34	1.67	1.45	1.03	454	0.03	a
1640	3302.76	3332.8	778.41	1608.13	25.33	0.03	25.16	0.78	1.02	0.60	352	0.03	
1897	3302.77	3345.6	773.85	1285.02	28.31	0.12	27.87	0.70	0.20	1.16	143	0.05	
1182	3302.78	3308.8	779.94	2209.94	29.78	0.53	29.38	...	-0.50	-0.40	80	0.94	a
1916	3302.78	3346.4	772.08	1266.65	28.88	0.18	29.09	...	0.27	0.55	79	0.97	a
2607	3302.80	3420.9	761.42	400.07	26.54	0.05	26.46	0.19	0.01	0.11	167	0.03	
1394	3302.81	3325.2	771.17	1798.04	22.86	0.01	22.79	1.49	0.28	0.59	748	0.03	ef
1727	3302.83	3337.5	764.12	1489.41	24.64	0.02	24.52	0.85	0.27	0.74	662	0.00	
1830	3302.87	3342.7	755.13	1359.76	27.96	0.12	27.99	0.18	0.26	0.43	179	0.00	
2188	3302.88	3400.9	750.09	903.79	26.79	0.06	26.63	0.50	0.16	0.18	157	0.03	
1673	3302.90	3334.2	750.98	1572.42	29.16	0.20	28.80	0.12	-0.43	1.10	125	0.17	a
2266	3302.90	3404.1	746.24	822.84	28.50	0.15	28.08	4.70	0.49	0.00	136	0.30	a
10423	3302.94	3320.0	747.43	1929.12	25.78	0.02	25.11	0.88	0.16	0.63	382	0.00	
2343	3302.94	3407.9	736.84	726.77	28.58	0.16	28.32	2.04	-0.18	0.27	117	0.36	a
2623	3302.95	3423.0	732.87	349.39	26.25	0.05	26.13	1.39	-0.01	0.25	197	0.03	ef
2135	3302.96	3358.4	736.41	965.69	25.26	0.02	25.21	2.59	0.80	0.37	250	0.03	e
2624	3302.97	3423.6	728.71	333.06	26.12	0.05	25.58	...	1.22	1.12	332	0.03	ef
1581	3302.98	3329.5	738.28	1689.34	28.36	0.16	28.10	0.19	-0.23	0.66	202	0.00	a
1231	3302.99	3311.7	740.42	2137.56	29.79	0.46	28.65	-0.38	0.35	-0.52	99	0.97	a
1682	3303.01	3334.8	731.19	1558.72	30.42	0.54	30.57	1.75	0.28	-0.79	121	0.82	a
2032	3303.01	3353.7	727.14	1083.94	25.56	0.03	25.30	2.83	0.33	0.28	331	0.03	
1206	3303.07	3310.9	724.82	2158.15	27.46	0.13	27.32	...	1.16	0.16	247	0.02	aef
1205	3303.08	3310.3	723.77	2171.71	26.56	0.07	26.40	0.72	0.45	0.37	179	0.03	ef
1502	3303.08	3325.9	719.77	1780.41	27.70	0.08	27.36	...	...	0.68	123	0.03	
2593	3303.08	3419.8	708.16	427.66	27.61	0.10	26.99	2.03	0.12	0.61	196	0.01	a
2470	3303.10	3413.7	705.78	582.99	27.77	0.11	26.85	0.63	1.79	0.81	342	0.01	
2267	3303.11	3404.1	706.52	823.28	29.01	0.19	28.37	...	1.11	0.85	197	0.43	a
2644	3303.14	3425.8	697.60	278.22	25.59	0.08	25.55	0.09	0.26	0.29	222	0.03	
2415	3303.15	3411.5	698.64	636.17	27.75	0.10	27.25	0.55	0.18	0.49	156	0.05	a
1639	3303.16	3332.1	703.64	1626.28	27.90	0.09	27.68	...	0.65	0.98	93	0.61	a
2565	3303.17	3418.3	692.38	467.66	26.72	0.05	26.56	...	0.83	0.49	132	0.12	
1563	3303.21	3329.7	694.58	1686.10	23.24	0.01	23.25	1.99	0.30	0.33	281	0.04	
1223	3303.27	3311.4	688.70	2145.14	27.07	0.08	26.77	...	-0.07	0.89	153	0.02	a
2383	3303.27	3409.9	676.73	678.38	27.31	0.09	27.13	-0.37	0.70	0.66	207	0.01	
1122	3303.30	3305.0	684.22	2306.83	27.31	0.30	27.32	-1.62	-1.21	4.22	85	0.91	ae
2476	3303.30	3414.1	669.42	570.									

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
2246	3303.32	3403.2	668.90	845.07	28.60	0.16	28.20	...	0.37	0.50	102	0.81	a
1134	3303.36	3306.2	672.21	2276.14	27.34	0.21	27.05	0.24	0.10	0.34	137	0.04	a
1738	3303.36	3337.8	665.22	1483.81	29.44	0.28	28.68	...	-0.00	0.27	144	0.80	a
2310	3303.39	3406.2	655.13	769.50	29.07	0.20	27.93	...	0.14	0.86	231	0.32	a
2622	3303.39	3423.0	650.17	349.38	26.68	0.07	26.54	2.14	0.26	-0.13	179	0.03	
1375	3303.42	3319.3	658.55	1947.39	25.95	0.03	25.88	1.27	1.07	0.43	174	0.03	
2172	3303.42	3359.9	650.50	927.71	29.18	0.19	28.88	...	0.68	0.66	92	0.94	a
2527	3303.42	3416.7	647.52	506.22	27.95	0.10	27.62	...	1.86	118	0.03	a	
1547	3303.44	3328.0	652.48	1729.70	28.95	0.18	28.36	...	3.06	0.69	140	0.84	a
1659	3303.46	3333.6	647.73	1589.07	25.53	0.03	25.46	1.15	0.15	0.18	216	0.03	e
2646	3303.48	3425.6	633.85	284.00	28.55	0.26	27.85	...	0.11	0.61	153	0.96	a
1248	3303.50	3313.1	644.34	2103.21	26.86	0.07	26.78	1.55	0.27	0.77	143	0.08	ef
2143	3303.53	3358.4	630.66	965.09	28.96	0.20	28.46	0.15	-0.26	0.18	134	0.07	a
2605	3303.53	3420.6	625.21	408.49	27.70	0.12	27.31	1.38	0.41	-0.13	196	0.01	a
2081	3303.55	3355.4	627.41	1042.69	29.89	0.37	29.75	...	0.12	-0.32	117	0.94	a
2555	3303.55	3417.8	621.97	480.01	27.73	0.10	27.73	0.48	0.97	-0.13	112	0.02	a
1669	3303.56	3333.9	629.82	1581.42	28.56	0.18	27.77	...	-0.08	0.06	189	0.18	ae
1249	3303.57	3313.4	632.10	2096.33	27.50	0.09	27.42	0.25	0.70	0.40	133	0.01	ef
1701	3303.57	3335.9	626.62	1531.15	29.49	0.26	28.29	-0.28	0.16	0.85	166	0.16	a
1754	3303.58	3341.7	625.38	1385.85	20.06	0.00	20.07	1.44	1.09	0.73	622	0.03	
2643	3303.59	3425.5	614.40	286.64	26.41	0.08	25.88	-0.15	0.18	0.60	278	0.03	e
2649	3303.59	3426.5	613.07	260.66	25.35	0.05	25.17	2.82	0.50	0.22	221	0.03	
1514	3303.61	3326.4	622.09	1768.53	29.12	0.21	28.48	...	0.42	0.31	153	0.04	a
2264	3303.61	3404.1	614.96	824.23	29.63	0.27	29.45	-0.76	1.08	0.47	93	0.57	ae
2516	3303.62	3416.3	609.04	516.20	26.22	0.04	26.06	0.91	0.68	1.04	171	0.03	
2255	3303.63	3403.7	610.83	832.51	30.22	0.46	29.05	...	1.56	-0.57	91	0.94	a
1321	3303.64	3316.2	618.40	2023.99	26.93	0.06	26.73	2.10	0.42	0.67	215	0.01	a
1576	3303.65	3330.6	614.03	1664.43	20.19	0.00	20.23	...	1.53	1.68	106	0.98	a
1392	3303.66	3319.9	613.37	1932.35	26.03	0.04	25.77	...	0.98	0.50	227	0.03	
1330	3303.71	3316.5	605.57	2017.40	29.29	0.24	29.45	1.77	-0.13	0.22	94	0.86	ae
2088	3303.71	3356.1	596.80	1023.13	25.70	0.03	25.74	1.78	0.06	0.00	261	0.03	ef
2459	3303.71	3413.1	594.62	598.03	27.84	0.12	27.61	-0.04	0.10	0.80	211	0.00	a
2611	3303.71	3420.9	592.70	402.81	28.70	0.17	28.25	-0.42	0.17	0.94	143	0.40	a
1555	3303.74	3328.7	597.72	1710.70	26.68	0.05	26.38	...	1.89	1.78	0.02	ae	
1157	3303.75	3307.6	599.84	2240.74	28.11	0.22	27.30	0.14	-0.50	0.98	174	0.33	a
1470	3303.75	3324.0	596.08	1830.90	29.02	0.19	28.53	-1.65	1.33	0.71	137	0.51	a
1541	3303.76	3327.6	594.48	1739.99	29.86	0.26	28.93	...	0.56	1.24	113	0.77	a
2011	3303.76	3352.1	589.92	1124.35	29.55	0.28	29.04	1.39	0.50	0.32	103	0.81	a
2184	3303.76	3400.6	587.40	911.49	28.41	0.15	28.25	0.60	0.79	0.69	157	0.01	a
2471	3303.76	3413.6	584.11	585.24	27.95	0.12	27.74	0.29	0.53	0.56	168	0.01	a
1993	3303.81	3351.0	580.00	1151.74	28.00	0.12	27.59	...	1.18	165	0.00	a	
2139	3303.83	3358.3	575.38	969.97	28.62	0.16	27.81	0.39	0.41	0.53	191	0.26	a
2385	3303.83	3409.8	571.83	680.12	29.11	0.21	28.57	...	2.46	1.22	129	0.04	a
1236	3303.86	3308.8	579.99	2211.78	23.06	0.01	22.97	0.62	0.40	0.96	651	0.03	ef
1715	3303.86	3336.6	574.45	1513.63	29.07	0.20	28.75	...	0.56	0.37	114	0.56	a
2510	3303.87	3416.5	564.02	513.36	25.01	0.02	24.92	0.57	0.10	0.62	342	0.03	
2087	3303.88	3356.0	565.82	1027.10	25.35	0.03	25.26	1.89	0.31	0.37	366	0.03	ef
1425	3303.89	3322.2	571.04	1876.24	28.76	0.18	28.30	-0.09	0.53	0.65	127	0.15	a
1747	3303.90	3338.2	566.17	1473.83	27.90	0.11	27.74	...	1.61	0.51	129	0.16	a
1892	3303.90	3345.5	565.24	1289.70	27.22	0.08	26.76	...	2.79	0.55	239	0.02	a
1611	3303.91	3331.2	566.41	1648.57	26.34	0.05	26.01	0.06	0.04	0.61	325	0.01	e
2056	3303.91	3354.4	561.70	1068.19	29.02	0.20	28.69	...	1.22	0.16	111	0.87	a
1297	3303.92	3315.3	567.39	2047.02	26.37	0.05	25.91	1.27	0.79	0.62	293	0.01	e
1252	3303.93	3313.9	565.75	2083.78	24.38	0.02	24.32	1.99	0.35	0.22	338	0.03	
1533	3303.95	3327.4	558.46	1744.06	28.67	0.16	28.38	0.14	-0.19	0.84	128	0.03	a
2371	3303.95	3408.9	550.65	703.42	28.94	0.19	28.57	...	1.84	0.21	151	0.09	a
2574	3303.97	3418.9	545.33	453.12	28.48	0.15	28.01	0.50	0.47	0.73	171	0.03	
1233	3304.00	3307.6	552.94	2241.75	25.41	0.04	25.23	-0.01	0.19	0.65	184	0.03	ef
1343	3304.01	3317.5	549.44	1993.36	26.99	0.06	26.70	...	1.27	1.24	221	0.01	a
1589	3304.02	3330.0	546.17	1679.30	28.87	0.21	28.78	-0.15	1.15	0.25	133	0.02	a
2182	3304.03	3400.9	537.79	904.09	25.68	0.03	25.64	1.02	0.84	0.44	186	0.03	
1441	3304.09	3322.7	534.52	1863.02	30.01	0.30	28.78	-1.48	0.72	1.32	129	0.73	a
1177	3304.13	3308.8	528.83	2210.76	26.71	0.11	26.50	-0.47	0.82	0.73	171	0.03	
2586	3304.13	3419.6	515.20	436.39	28.24	0.16	27.71	2.73	0.02	0.30	231	0.04	a
1219	3304.15	3311.3	525.46	2147.93	28.34	0.20	28.10	0.39	0.85	0.81	145	0.01	ae
2226	3304.15	3402.5	514.46	864.83	26.51	0.05	26.32	-0.59	0.59	0.60	289	0.02	
2525	3304.16	3416.7	509.76	507.20	28.32	0.15	28.10	0.40	-0.27	0.13	141	0.01	a
2150	3304.17	3358.8	511.65	956.16	28.37	0.16	27.94	1.94	-0.21	0.19	219	0.00	
1382	3304.19	3319.3	515.48	1947.37	27.94	0.11	27.89	...	1.66	-0.15	102	0.56	a
1492	3304.21	3325.8	511.01	1786.06	26.24	0.05	26.17	0.81	0.20	0.14	267	0.03	
1531	3304.22	3327.4	508.94	1746.16	27.57	0.09	27.32	3.32	0.04	-0.05	107	0.34	a
1564	3304.22	3328.8	509.31	1710.74	29.74	0.27	29.21	0.61	0.13	0.68	121	0.87	a
2302	3304.22	3406.8	501.75	757.78	24.54	0.02	24.41	0.43	0.13	0.61	598	0.03	
1741	3304.25	3337.9	500.52	1481.19	28.00	0.11	27.65	...	-0.20	0.08	144	0.03	a
2160	3304.26	3359.7	494.61	935.75	26.48	0.05	26.42	1.59	1.15	0.21	167	0.03	
1597	3304.27	3331.8	498.38	1635.03	23.77	0.01	23.75	1.39	0.96	0.60	423	0.03	f
2479	3304.27	3414.7	490.74	559.23	25.76	0.03	25.69	0.58	-0.02	0.43	195	0.03	
1158	3304.28	3307.8	502.49	2236.70	26.33	0.09	26.19	0.59	-0.05	0.33	216	0.03	
1398	3304.29	3320.1	497.54	1929.02	29.14	0.26	28.70	-0.83	1.00	-0.18	142	0.01	a
1865	3304.29	3334.2	494.65	1575.11	26.47	0.05	26.35	0.74	0.90	0.51	196	0.03	
1810	3304.29	3342.0	493.92	1									

Table 6—Continued

ID	HDF5_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a	
1189	3304.35	3307.2	489.12	2253.07	29.27	0.49	28.43	...	0.24	0.34	186	0.92	a
1906	3304.37	3346.1	477.68	1277.33	29.95	0.34	29.71	0.32	0.05	0.07	98	0.79	a
2575	3304.37	3418.9	470.64	452.23	28.58	0.19	28.19	...	2.77	0.09	161	0.17	a
1466	3304.38	3324.7	479.52	1811.99	24.87	0.02	24.86	4.74	0.55	0.27	276	0.03	
2162	3304.40	3359.5	468.35	940.73	29.32	0.21	28.59	0.16	-1.35	1.95	153	0.49	a
2580	3304.42	3419.2	461.44	445.38	29.26	0.28	29.28	1.99	0.21	-0.13	121	0.11	ae
1588	3304.43	3329.9	468.91	1682.93	30.21	0.47	29.88	...	0.17	-0.53	87	0.71	ae
1722	3304.43	3336.9	468.84	1506.04	27.49	0.07	27.33	1.69	1.18	0.65	112	0.16	a
2349	3304.44	3409.0	459.10	702.82	23.84	0.01	23.81	0.81	0.68	0.68	366	0.03	
1874	3304.45	3338.7	464.92	1460.84	29.22	0.24	28.20	...	0.34	0.14	145	0.10	aef
2490	3304.45	3414.5	457.27	562.70	30.01	0.33	29.20	...	...	0.59	129	0.78	a
2625	3304.45	3423.2	455.76	344.65	28.35	0.16	27.56	...	0.86	1.11	167	0.71	a
1882	3304.49	3339.0	456.04	1453.53	28.02	0.12	27.58	-0.41	0.08	0.35	165	0.01	af
1571	3304.50	3329.4	456.67	1695.50	26.15	0.04	26.01	1.71	0.02	0.05	264	0.03	ef
2323	3304.50	3406.9	448.71	753.44	29.25	0.23	29.03	2.60	0.08	0.03	104	0.96	a
1154	3304.52	3307.4	457.59	2246.42	26.55	0.14	26.24	0.54	-0.19	0.42	295	0.03	a
2641	3304.52	3425.5	441.77	287.11	25.47	0.05	24.93	0.40	0.47	0.74	429	0.02	
1426	3304.54	3322.5	450.92	1867.91	24.08	0.01	24.10	3.05	1.45	0.95	103	0.99	a
1767	3304.55	3340.3	446.00	1420.75	25.96	0.04	25.80	4.10	0.16	0.17	275	0.03	
2180	3304.55	3400.5	441.05	915.36	28.70	0.17	28.31	...	0.27	0.76	116	0.07	a
2151	3304.57	3358.8	436.98	958.69	29.19	0.22	28.95	...	0.16	0.32	132	0.59	a
1893	3304.58	3345.4	438.66	1295.04	29.52	0.22	28.17	...	-0.35	2.37	142	0.81	a
1572	3304.59	3329.6	439.72	1689.76	27.48	0.09	27.30	2.22	-0.12	0.11	135	0.16	aef
1624	3304.59	3331.1	439.38	1652.14	29.54	0.28	28.87	1.02	-0.29	0.24	112	0.88	a
1762	3304.60	3339.2	436.60	1450.76	29.11	0.26	29.65	5.33	0.06	-0.27	134	0.01	a
2563	3304.60	3418.3	427.73	469.45	28.10	0.13	27.85	...	-0.22	-0.03	147	0.01	a
1599	3304.62	3330.3	434.65	1673.65	28.34	0.14	28.32	1.36	-0.25	-0.16	95	0.32	a
1385	3304.63	3319.4	434.35	1946.71	28.97	0.20	28.27	-1.57	0.73	0.53	139	0.10	a
2046	3304.64	3354.0	426.76	1077.86	29.11	0.24	28.93	...	0.33	-0.22	120	0.15	a
1794	3304.66	3341.2	425.50	1399.26	29.16	0.26	28.85	-0.65	0.91	0.25	102	0.01	a
2506	3304.66	3415.6	417.71	536.17	29.91	0.31	29.31	...	1.35	0.32	102	0.45	a
1868	3304.68	3344.3	421.32	1320.97	28.39	0.14	28.17	1.14	3.51	0.33	117	0.22	a
1369	3304.69	3318.7	423.13	1965.09	28.01	0.10	27.63	-0.04	0.50	0.91	152	0.01	a
1723	3304.69	3337.0	419.65	1506.07	29.21	0.21	28.92	1.98	0.05	0.92	108	0.49	a
2146	3304.71	3358.6	411.91	963.48	29.27	0.21	29.45	-0.41	0.23	1.25	71	0.74	ae
2353	3304.71	3408.2	409.17	721.35	29.24	0.25	28.45	...	2.21	0.28	153	0.10	a
1179	3304.76	3309.0	412.68	2207.97	27.03	0.11	26.58	...	...	1.07	128	0.10	a
2089	3304.79	3355.9	397.33	1030.48	26.91	0.06	26.82	1.15	1.34	0.28	188	0.02	
2312	3304.79	3406.5	394.89	765.72	27.12	0.07	27.03	...	0.57	0.25	147	0.02	a
1716	3304.82	3336.7	396.55	1512.04	28.45	0.16	27.61	1.39	-0.16	0.15	193	0.01	a
1778	3304.82	3340.4	395.39	1419.30	28.64	0.19	28.00	0.71	0.42	0.14	152	0.02	a
1890	3304.84	3345.3	391.43	1295.79	28.50	0.15	28.20	-2.98	3.38	1.44	147	0.00	a
1712	3304.85	3336.3	391.21	1523.26	29.63	0.25	29.89	-0.16	1.76	0.63	79	0.86	a
2401	3304.85	3410.8	384.33	655.98	28.28	0.14	27.42	0.91	-0.28	0.44	186	0.16	a
2460	3304.85	3413.3	382.60	594.63	26.71	0.06	26.57	0.08	0.26	0.22	194	0.03	
2518	3304.85	3416.3	382.75	518.15	27.07	0.06	26.93	-0.21	0.74	0.68	132	0.04	
2057	3304.86	3354.6	384.46	1064.69	28.95	0.21	28.88	...	0.20	1.00	206	0.09	a
2496	3304.87	3415.0	378.62	551.41	29.83	0.29	29.08	...	0.15	0.48	152	0.80	a
2612	3304.87	3421.1	377.58	400.05	29.99	0.38	29.35	0.79	0.85	-0.10	91	0.92	a
1167	3304.88	3308.4	391.62	2223.62	28.00	0.19	27.96	1.61	-0.09	0.41	79	0.98	a
2250	3304.89	3403.7	377.84	835.95	28.50	0.20	28.30	...	0.76	1.25	-2332	0.00	ae
2440	3304.89	3412.6	375.09	613.00	28.82	0.20	27.86	...	0.70	2.17	0.01	a	
1590	3304.90	3330.7	381.72	1663.47	24.16	0.01	24.13	9.12	0.23	0.15	335	0.03	
2341	3304.90	3408.4	375.70	717.84	24.34	0.01	24.33	1.08	0.14	0.20	229	0.03	
2642	3304.91	3425.1	369.63	298.13	29.27	0.35	28.66	-1.24	1.15	0.32	106	0.95	a
1420	3304.96	3322.2	372.41	1877.40	25.98	0.04	25.87	...	0.94	0.79	268	0.03	
1751	3304.96	3338.6	370.30	1466.19	29.61	0.31	28.88	-0.18	0.71	0.08	109	0.65	a
1837	3304.96	3343.0	368.51	1353.89	28.60	0.17	27.83	...	0.00	1.33	276	0.57	a
1908	3304.96	3346.2	368.48	1274.73	30.04	0.31	29.39	-2.14	2.11	0.62	89	0.83	a
2629	3304.96	3423.4	361.40	340.17	28.36	0.20	27.55	...	0.10	-0.20	179	0.13	a
1232	3305.00	3311.9	368.55	2134.79	28.60	0.22	28.61	...	0.60	0.63	123	0.03	a
1626	3305.01	3331.5	362.15	1644.22	28.90	0.23	28.84	1.70	-0.09	0.05	178	0.17	e
1823	3305.01	3342.6	359.19	1365.45	29.02	0.23	28.30	...	0.75	0.51	167	0.01	ae
2013	3305.01	3352.6	357.54	1113.63	27.36	0.08	27.00	...	1.17	0.69	229	0.01	e
1	3305.01	3427.8	351.08	230.75	24.76	0.04	23.76	1.51	0.40	0.62	292	0.03	e
1312	3305.02	3316.2	364.16	2028.49	25.58	0.03	25.52	...	0.94	0.32	244	0.03	
1494	3305.03	3325.6	358.87	1792.63	28.64	0.20	28.45	0.26	0.13	-0.21	189	0.08	a
1970	3305.03	3349.7	354.10	1187.30	29.43	0.22	29.15	...	0.52	71	0.67	a	
10666	3305.04	3400.8	350.13	907.81	19.20	0.00	19.24	3.77	1.29	1.27	125	0.99	a
2608	3305.04	3420.7	345.88	409.09	28.43	0.17	28.34	...	1.09	101	0.97	a	
1579	3305.06	3329.4	352.71	1697.07	29.38	0.24	28.66	...	1.19	180	0.46	af	
1853	3305.06	3343.9	349.50	1331.42	26.50	0.05	26.53	...	0.24	0.02	149	0.03	e
2064	3305.08	3354.9	344.41	1057.39	27.93	0.11	27.74	0.19	-0.19	0.19	121	0.12	
2274	3305.09	3404.1	341.43	826.00	27.97	0.13	28.27	0.67	0.68	0.19	103	0.01	ae
2477	3305.09	3414.3	338.41	570.16	27.48	0.10	27.23	1.72	0.38	0.13	162	0.02	a
1271	3305.10	3314.1	348.94	2081.29	29.64	0.33	28.81	0.91	0.19	0.70	138	0.84	a
1902	3305.10	3346.2	342.43	1274.29	25.93	0.03	25.82	0.37	1.22	1.92	197	0.03	
2650	3305.11	3426.9	332.57	252.47	...	...	26.00	0.90	-0.06	-0.01	192	0.04	ae
1613	3305.12	3330.9	342.57	1657.96	29.43	0.27	29.26	-1.25	0.67	0.60	124	0.57	a
1845	3305.12	3343.3	339.72	1348.58	29.27	0.30	29.24	1.34	-0.13	0.02	82	0.01	ae
1769	3305.13	3334.2	338.66	1576.75	26.57	0.05	26.49	0.4					

Table 6—Continued

ID	HDFS_J22r-60d	x	y	m_i	$\sigma(m_i)$	m_a	$u - b$	$b - v$	$v - i$	r_h	s/g	Flags ^a
1234	3305.15	3312.1	339.46	2131.12	28.20	0.21	27.67	2.88	-0.04	0.27	169	0.09 a
1725	3305.16	3337.1	333.46	1503.12	28.97	0.20	28.35	1.80	-0.27	0.68	139	0.27 a
1617	3305.17	3331.5	332.41	1642.55	27.19	0.08	26.81	0.30	-0.03	0.10	222	0.03
2603	3305.19	3420.4	318.30	415.77	26.73	0.07	26.20	-0.26	0.89	2.41	239	0.02 a
1838	3305.20	3343.1	324.64	1351.88	29.20	0.29	29.78	...	0.76	0.65	-591	0.00 ae
1972	3305.20	3350.0	322.77	1180.56	27.89	0.15	...	...	1.28	1.02	263	0.02 ae
1337	3305.24	3317.5	321.66	1995.45	24.44	0.01	24.44	0.78	0.57	0.30	212	0.03
1824	3305.27	3342.5	312.35	1367.31	29.09	0.23	...	-1.23	1.14	1.26	-1277	0.12 ae
2564	3305.27	3418.2	305.04	472.66	29.26	0.29	29.47	-0.83	1.07	0.33	101	0.96 a
1773	3305.28	3340.5	310.83	1419.06	27.72	0.13	...	...	1.87	0.88	285	0.00 e
10675	3305.28	3400.8	306.97	909.90	25.28	0.02	24.89	0.06	-0.07	0.31	155	0.24 a
1440	3305.30	3322.8	310.63	1862.77	28.98	0.21	27.16	-0.69	0.32	1.00	368	0.09 ae
1948	3305.30	3349.5	304.37	1193.16	28.30	0.19	26.75	-0.94	1.43	0.27	157	0.01 aef
1568	3305.32	3329.0	304.55	1706.03	26.08	0.03	25.97	0.39	-0.04	0.40	146	0.03
1195	3305.35	3309.7	304.10	2189.93	28.61	0.34	28.52	...	0.70	-0.22	118	0.46 a
1180	3305.36	3308.9	301.23	2212.14	29.17	0.44	28.35	8.67	-0.04	-0.23	76	0.95 a
1671	3305.38	3334.5	292.42	1568.23	25.46	0.03	25.25	-0.56	0.59	0.83	439	0.00
1957	3305.38	3348.8	290.84	1210.10	27.57	0.10	26.83	...	1.61	0.36	211	0.00 aef
2610	3305.38	3421.0	283.74	403.00	27.15	0.19	26.31	-7.96	2.76	0.81	261	0.14 ae
2637	3305.39	3424.1	281.39	323.32	...	...	...	7.44	-2.73	...	73	1.00 ae
10570	3305.43	3342.7	281.74	1363.67	26.02	0.03	25.25	2.04	0.15	0.06	207	0.02
2639	3305.47	3425.1	266.03	300.33	28.30	0.34	26.68	...	...	1.90	131	0.95 ae
1286	3305.48	3315.1	278.12	2056.63	26.78	0.07	26.67	...	0.73	0.13	166	0.03 a
10684	3305.50	3401.9	265.34	880.48	26.47	0.06	25.47	...	0.19	0.03	220	0.01
2204	3305.50	3401.9	264.63	881.15	25.57	0.06	25.60	...	0.07	0.04	256	0.03 e
1406	3305.52	3321.3	270.33	1900.92	23.18	0.01	23.21	1.44	0.57	0.83	152	0.86 a
1757	3305.52	3339.0	266.51	1456.75	28.10	0.13	27.48	-0.00	0.14	0.32	111	0.01 a
2125	3305.54	3357.4	259.34	994.97	28.17	0.17	27.31	-0.85	0.59	1.31	157	0.97 ae
1446	3305.56	3323.1	262.37	1855.72	26.71	0.05	26.62	...	1.95	1.24	144	0.03 a
2514	3305.56	3416.0	251.51	527.41	...	...	...	...	2.86	...	43	0.91 ae
1586	3305.57	3329.8	259.60	1686.17	30.22	0.45	29.73	...	...	-0.24	98	0.83 a
1476	3305.61	3324.5	252.91	1820.96	28.56	0.14	28.15	...	...	1.56	102	0.50 ae
1903	3305.61	3346.2	247.56	1274.25	25.40	0.03	24.20	...	1.38	0.63	353	0.03 ae
2166	3305.62	3400.6	242.92	914.50	24.20	0.04	24.06	-1.04	0.43	0.46	510	0.03 ae
1175	3305.63	3309.1	252.77	2205.85	25.78	0.08	25.39	1.51	0.21	0.26	317	0.03
2257	3305.63	3358.2	242.26	974.55	21.11	0.00	21.15	0.81	1.61	1.73	103	0.99 a
2368	3305.64	3408.8	238.23	708.18	27.75	0.29	27.03	...	-0.67	0.42	114	0.17 ae
1250	3305.65	3313.0	247.32	2109.65	28.22	0.18	27.87	0.33	1.96	0.31	175	0.24 a
1480	3305.65	3324.8	245.57	1813.30	27.90	0.12	27.35	0.19	-0.07	0.37	153	0.14 a
2377	3305.66	3409.4	233.62	692.92	27.24	0.23	27.53	-1.02	0.42	0.16	140	0.18 ae
1224	3305.69	3311.4	240.29	2147.63	29.19	0.28	28.81	0.81	0.48	1.04	95	0.95 a
1606	3305.73	3330.6	229.81	1667.93	28.24	0.15	28.32	1.11	0.89	0.30	104	0.20 a
1445	3305.77	3323.3	222.66	1850.37	27.01	0.08	26.97	1.42	0.25	0.15	209	0.02 a
1763	3305.78	3341.4	218.24	1395.31	20.27	0.00	20.28	0.69	1.57	0.86	328	0.03 aef
2197	3305.79	3357.3	213.06	996.35	28.36	0.31	27.87	...	...	0.47	240	0.97 ae
1519	3305.80	3326.8	216.89	1763.04	29.57	0.41	28.02	...	0.44	-0.37	183	0.57 a
1764	3305.82	3350.3	208.97	1173.31	...	...	18.02	-0.87	0.63	0.50	1752	0.03 aef
2152	3305.83	3358.9	205.17	958.09	29.07	0.51	28.68	...	...	-1.73	49	0.69 ae
1622	3305.85	3331.2	206.57	1653.20	28.10	0.26	27.00	-2.04	2.39	1.17	219	0.82 a
1260	3305.87	3313.8	206.70	2088.47	29.28	0.32	27.81	1.41	-0.51	0.24	168	0.96 a
1235	3305.97	3312.2	187.54	2129.03	26.24	0.10	25.99	...	...	0.74	168	0.03 ae
1543	3306.01	3327.8	177.09	1736.68	26.31	0.09	26.01	-0.95	0.92	1.19	127	0.20 a
1328	3306.22	3316.4	140.99	2024.50	28.97	0.35	29.18	...	...	1.72	92	0.93 ae

^aFlags: a) Object has near neighbors (more than 10% of mag_auto area overlaps detected objects); b) Object was originally blended with another; c) At least one pixel is saturated; d) Object's aperture data is incomplete or corrupted; e) Object is off the image, or within 30 pixels of the edge; f) Object lies on top of a diffraction spike; g) Photometry is from the second run of SExtractor. Each flag is set if the condition is satisfied in at least one filter.