

We are grateful to C. Harris, D. C. Leonard, D. Poznanski, N. Smith and S. E. Woosley for comments and discussion, and to T. Pursimo for assistance with the polarimetry measurements.

Support for I. Arcavi was provided by the National Aeronautics and Space Administration (NASA) through the Einstein Fellowship Program, grant PF6-170148. D.A.H., G.H., and C.M. are supported by the U.S. National Science Foundation (NSF) grant AST-1313484. This research is funded in part by the Gordon and Betty Moore Foundation through Grant GBMF5076 to L.B. and D.K. and by the NSF under grant PHY-1125915. A.G.-Y. is supported by the EU via ERC grants No. 307260 and 725161, the Quantum Universe I-Core program by the Israeli Committee for Planning and Budgeting, and the ISF; a Binational Science Foundation “Transformative Science” grant; and by a Kimmel award. J.S. gratefully acknowledges support from the Knut and Alice Wallenberg Foundation. P.E.N. acknowledges support from the DOE through DE-FOA-0001088, Analytical Modeling for Extreme-Scale Computing Environments. K.M. acknowledges funding from the Hintze Trust. K.J.S. is supported by the NASA Astrophysics Theory Program (grants NNX15AB16G and NNX17AG28G). X.W., T.Z., and J.Z. are supported by Major State Basic Research Development Program (2013CB834903), the National Natural Science Foundation of China (NSFC grants: 11325313, 11403096 and 11633002), and the Strategic Priority Research Program of Emergence of Cosmological Structures of the Chinese Academy of Sciences (grant No. XDB09000000). B.S. is supported by NASA through Hubble Fellowship grant HF-51348.001 awarded by the Space Telescope Science Institute, which is operated by the Association of Universities for Research in Astronomy, Inc., for NASA, under contract NAS 5-26555. T.W.-S.H. is

supported by the U.S. Department of Energy Computational Science Graduate Fellowship, grant number DEFG02-97ER25308. A.V.F.'s supernova group at U.C. Berkeley has been supported by Gary & Cynthia Bengier, the Christopher R. Redlich Fund, the TABASGO Foundation, NSF grant AST-1211916, and the Miller Institute for Basic Research in Science. M.S. acknowledges support from EU/FP7-ERC grant 615929. Research support to I. Andreoni is provided by the Australian Astronomical Observatory (AAO).

The Intermediate Palomar Transient Factory project is a scientific collaboration among the California Institute of Technology, Los Alamos National Laboratory, the University of Wisconsin (Milwaukee), the Oskar Klein Center, the Weizmann Institute of Science, the TANGO Program of the University System of Taiwan, and the Kavli Institute for the Physics and Mathematics of the Universe. LANL participation in iPTF was funded by the U.S. Department of Energy as part of the Laboratory Directed Research and Development program. Part of this research was carried out at the Jet Propulsion Laboratory, California Institute of Technology, under a contract with NASA. This paper made use of data from Las Cumbres Observatory global network of telescopes; the W. M. Keck Observatory, which is operated as a scientific partnership among the California Institute of Technology, the University of California, and NASA (the observatory was made possible by the generous financial support of the W. M. Keck Foundation); the Nordic Optical Telescope, operated by the Nordic Optical Telescope Scientific Association at the Observatorio del Roque de los Muchachos, La Palma, Spain, of the Instituto de Astrofísica de Canarias; ALFOSC, which is provided by the Instituto de Astrofísica de Andalucía (IAA) under a joint agreement with the University of Copenhagen and NOTSA; DOLoRes on TNG; the Discovery Channel Telescope (DCT)

at Lowell Observatory. Lowell is a private, nonprofit institution dedicated to astrophysical research and public appreciation of astronomy and operates the DCT in partnership with Boston University, the University of Maryland, the University of Toledo, Northern Arizona University and Yale University. The upgrade of the DeVeny optical spectrograph has been funded by a generous grant from John and Ginger Giovale. We thank the support of the staffs at *Swift*, the Keck Observatory, AMI-LA, the Xinglong Observatory (part of the National Astronomical Observatories of China), and the Lijiang Observatory (part of the Yunnan Observatories of China) for assistance with the observations. The AMI is supported by the European Research Council. Development of ASAS-SN has been supported by NSF grant AST-0908816 and CCAPP at the Ohio State University. ASAS-SN is supported by NSF grant AST-1515927, the Center for Cosmology and AstroParticle Physics (CCAPP) at OSU, the Mt. Cuba Astronomical Foundation, George Skestos, and the Robert Martin Ayers Sciences Fund. ASAS-SN thanks LCO and its staff for their continued support. The Digitized Sky Surveys were produced at the Space Telescope Science Institute under U.S. Government grant NAG W-2166. The National Geographic Society Palomar Observatory Sky Atlas (POSS-I) was made by the California Institute of Technology with grants from the National Geographic Society. The Second Palomar Observatory Sky Survey (POSS-II) was made by the California Institute of Technology with funds from the NSF, the National Geographic Society, the Sloan Foundation, the Samuel Oschin Foundation, and the Eastman Kodak Corporation. This research used resources of the National Energy Research Scientific Computing Center, a DOE Office of Science User Facility supported by the Office of Science of the U.S. Department of Energy under Contract No. DE-AC02-05CH11231.