



Dr. Stephen Levine

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Dr. Levine is a staff astronomer at the United States Naval Observatory in Flagstaff, AZ (USNOFS). His primary research interests center on studies of the structure and evolution of disk and irregular galaxies, with emphasis on understanding the dynamics of lopsided galaxies, and a sideline investigating gravitational microlensing. He also maintains an active interest in stellar occultation studies of outer solar system objects.

At the USNOFS, he has worked with the Digital Catalogs division, helping to produce the USNO-A2, USNO-B and NOMAD all-sky astrometric reference catalogs. He built and runs the USNO image and catalog server (<http://www.nofs.navy.mil/data/fchpix>), which provides access to these catalogs, along with digital copies of the Schmidt camera photographic images from which they were derived. He served as senior

personnel and the USNO representative to the US National Virtual Observatory. In support of observational work, he has written CCD and guider video camera control and acquisition software. He has also programmed the latest version of the USNOFS telescope control system, and helped set up a CCD characterization system at the AAVSO.

Education:

Ph.D. in Astronomy from the University of Wisconsin, Madison, WI

Memberships / Organizations:

American Association of Variable Star Observers

American Astronomical Society

International Astronomical Union

ABSTRACT: NEAIC 2010

Traditionally, astronomical data were taken for a particular project, and when the project was finished, the data were relegated to "the archives", rarely to be seen again. In this age of digital data and virtual observatories, it has become much easier to re-use and share data. For this to happen, the data need to be well described; the more complete the meta-data, or description of the observations, the more useful they can be in the future, or to other projects now. Considering the work involved in obtaining good astronomical data, the additional effort to ensure that those data can be valuable beyond their original purpose is minimal. We'll look at some historical examples, at how good meta-data can make your work more useful in the long run, and to existing collaborations, and discuss some of the possible consequences of missing meta-data. In the process, we examine some of the kinds of things you will want to do.

