Some appreciation for large surveys



This is a mosaic of different pointings, so seeing is variable (DES will merge 10 observations of same field with different seeing). Surveys may also use PSF model fitting, color for star-galaxy separation.



Databases and Catalogs

Object Catalogs

NED (NASA/IPAC Extragalactic Database): database of known extragalactic (and Galactic) objects including source properties, various derived quantities, links to some data and images. Also includes links to literature on the object and various software tools.

SIMBAD Astronomical Database: similar to NED

VizieR Catalog Service: allows you to search (some) catalogs published in the literature

Public Data

Optical/UV

MAST (Mikulski Archive for Space Telescopes formerly known as the Multimission Archive at STScI) data from HST, GALEX, Kepler, the VLA FIRST survey and others.

intrared:

IRSA (NASA/IPAC Infrared Science Archive) archive for infrared and sub-mm data including WISE, Spitzer, Planck, 2MASS, and the multiwavelength COSMOS survey.

X–ray, Gamma–ray, Microwave:

HEASARC (High Energy Astrophysics Science Archive Research Center) data from NASA and other missions from the extreme UV through gamma-ray. The Legacy Archive for Microwave Background Data Analysis (LAMBDA) merged with HEASARC.

All of these sites also host related software and other good stuff.

Surveys

2MASS: J, H, K band all-sky survey. In NED and VizieR. Data through the IRSA website.

SDSS: Now on data release 9 with 14,500 square degrees of imaging. Catalog Archive Server for catalog-level info and Science Archive Server for actual data. Also, several value added catalogs.

ROSAT All-Sky Survey (RASS): All-sky soft X-ray survey (0.1-2.4 keV). Images through HEASARC and NED. Also released source catalogs.

VLA FIRST: VLA 20cm survey of 9,900 square degrees of the North Galactic Cap.

NRAO VLA Sky Survey (NV55): VLA 1.4 GHz survey of sky north of -40 degrees. Images in NED.

Virtual Astronomical Observatory

http://www.usvao.org/

Literature

arXiv preprint server: http://arxiv.org/

ADS abstract service: http://adsabs.harvard.edu/abstract_service.html

SPIRES: http://www.slac.stanford.edu/spires/