



# **Imagery Data**

Digitized Sky Survey (color) - default



Type: Sky survey Published: 1994

Created by: Space Telescope Science Institute (STScI) Catalogs and Surveys Group Imaged by: Northern sky taken by the National Geographic Palomar Observatory in California and Southern sky taken by the UK Schmidt telescope in Australia Observation period: Northern sky from 1948-1958 and the Southern sky from 1973 to 1988. Wavelength observed: Visible

### **Hipparcos Catalog**



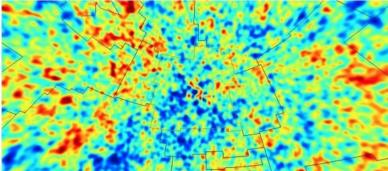
Name: Hipparcos is the name of a European Space Agency Mission and Satellite Observation period: 1989 to 1993 Catalogued: 118,218 stars VLSS: VLA Low-frequency Sky Survey (Radio)



Type: Sky survey Observation period: Ongoing Survey contains: 358 overlapping images covering the entire sky north of the -30° declination

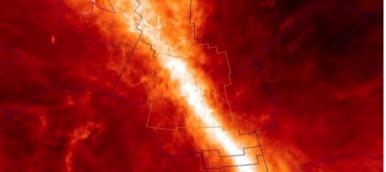
Identified: Over 70,000 sources of radio waves Wavelength observed: Radio

# Wilkinson Microwave Anisotropy Probe (WMAP) ILC 5-year Cosmic Microwave Background

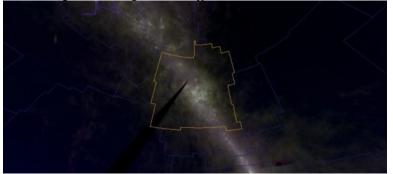


Type: All-sky survey Observation period: 3 years, concluded in 2006 Wavelength observed: Microwave

## SFD Dust Map (Infrared)



SFD: Schlegel, Finkbeiner, and Davis Type: All-sky survey Wavelength observed: Infrared **IRIS: Improved Reprocessing of IRAS** 



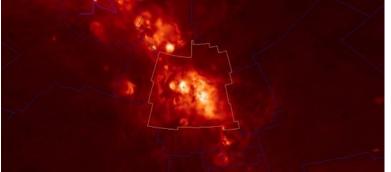
IRAS: Infrared Astronomical Satellite Type: Sky survey (98% of the sky) Started: 1983 Created by: Joint project of the US, UK, and the Netherlands Wavelength observed: Infrared

# 2MASS: Catalog (Synthetic)



2MASS: Two Micron All Sky Survey Catalogued: 470,992,970 sources Created: 2MASS Point Source Catalog by the University of Massachusetts and the Infrared Processing and Analysis Center Imaged by: Two 1.3-meter telescopes one at Mt. Hopkins, Arizona and one at Cerro Tololo Inter-American Observatory (CTIO), Chile Begin: Northern facility in 19997 and the Southern facility in 1998 Wavelength observed: Infrared

#### Hydrogen Alpha Full Sky Map



Type: All-sky survey

Generated by: Princeton University

Images by: Northern sky from Virginia Tech Spectral line Survey (VTSS) and the Southern H-Alpha Sky Survey Atlas (SHASSA). SHASSA images were taken by the CTIO in Chile. Light observed: Red end of the visible

#### SDSS: Sloan Digital Sky Survey (optical)



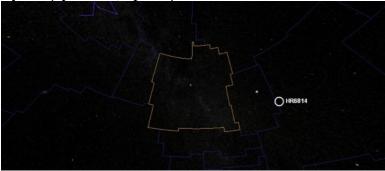
Type: Sky survey (more than a quarter of the sky) Started: 2000

Observation period: Ongoing

Telescope: 2.4-meter at Apache Point Observatory, New Mexico

Catalogue: 3-dimensional maps containing more than 930,000 galaxies and 120,000 quasars

#### Tycho (Synthetic, optical)



Data: 1991 European Space Agency's Hipparcos satellite, Tycho 1 catalog, and over 140 other astrometric catalogs. Also the corrected data for the Tycho-1 stars. Catalogue: 2,539,913 stars

USNOB: US Naval Observatory B 1.0 (Synthetic, optical)



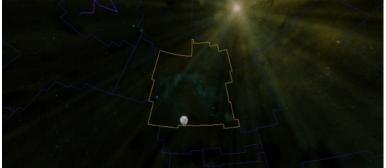
Catalogue: 1,042,618,261 objects Data: 7,435 Schmidt plates Observation by: Precision Measuring Machine (PMM) at the US Naval Observatory in Flagstaff, AZ. Observation period: 50 years

#### GALEX (Ultraviolet)



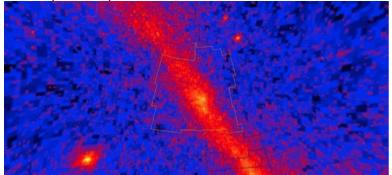
GALEX: Galaxy Evolution Explorer Launched: 2003 Light observed: Ultraviolet Sky coverage: 2/3 Imaged: Over half-billion objects

# RASS: ROSAT All Sky Survey (X-ray)



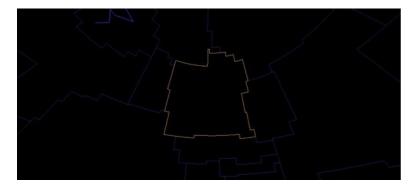
Released: March 2000 By: Max Planck Institut für extraterrestriche Physik Type: All-sky survey Light observed: X-ray Catalogue: Faint source – 105,924 and the bright source – 18, 811

Fermi (Gamma)



Launched: 2008 Telescope: Fermi Gamma-ray Space Telescope Light observed: Gamma-ray

#### Black Sky Background



Sets the entire background black

For more information go to "Sky Surveys" section in the WorldWide Telescope User guide: <u>http://www.worldwidetelescope.org/docs/worldwidetelescopeuserguide.html</u>

For more information on the Virtual Astronomical Observatory (VAO), visit: <u>www.virtualobservatory.org</u>

For more WWT education resources, visit the WWT education page: <u>http://www.worldwidetelescope.org/Experiencelt/Experiencelt.aspx?Page=Educators</u>

For more WWT Ambassadors education resources, visit the WWT Ambassadors page: https://wwtambassadors.org