

What is NED?

NED is a comprehensive multiwavelength database for extragalactic objects, providing a systematic, ongoing fusion of information integrated from hundreds of large sky surveys and tens of thousands of research publications. The contents and services span the entire observed spectrum from gamma rays through radio frequencies.

As new observations are published, they are cross-identified or statistically associated with previous data and integrated into a unified database to simplify queries and retrieval. Seamless connectivity to data in NASA's astrophysics mission archives (IRSA, HEASARC, MAST), ADS, and other data centers around the world is also provided.

Objects can be queried *By Name*, *Near Name* or *Near Position* (cone search), *By Reference*, and *By Author*. Galaxy samples can be constructed *By Parameter* constraints on Redshift, Sky Area, Object Types, Survey Names, or Flux Density, or *By Classifications and Attributes*.

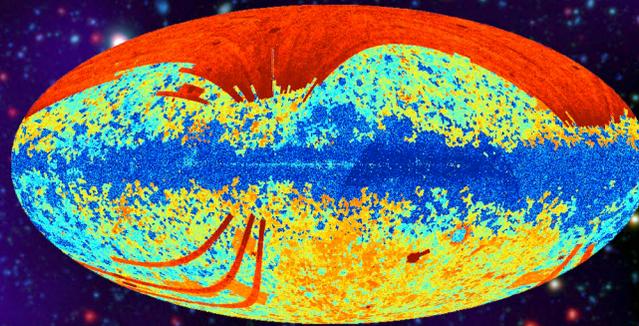
The LEVEL 5 Knowledgebase enhances review articles in extragalactic astrophysics and cosmology with direct links from object names and graphical content to related database queries.

Current Holdings

Sources from Very Large Catalogs	514,652,774
Distinct Astrophysical Objects	214,695,830
Multiwavelength Object Cross-IDs	254,681,848
Object Associations	1,413,595
Redshifts	5,178,967
Photometric Data Points	1,969,546,956
Diameters	608,833,152
References	93,904
Images	2,612,666
Spectra	554,521
Object Notes	75,221
Classifications	229,792
Redshift-independent Distances	77,508

NED Team & Contributors

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The number density of objects in NED across the entire sky plotted in Galactic coordinates using a nonlinear color scale. The least dense regions are in dark blue, while the densest regions are in dark red, representing a number density of up to 2 million objects per square degree.

Image Credits:

Front Panel (Messier 031): GALEX, NASA/JPL-Caltech

Contact Us

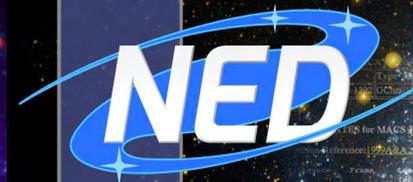
To submit questions and comments, or to contribute data sets (images, spectra, etc.), please email us at ned@ipac.caltech.edu

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Communications & Education
and NED teams

Caltech



NASA/IPAC Extragalactic Database

ned.ipac.caltech.edu



Caltech



Sources & Objects

Nearly 471 million 2MASS PSC Near-IR sources* from The 2-Micron All Sky Survey Point Source Catalog (Skrutskie, M. F. et al., 2006AJ....131.1163S).

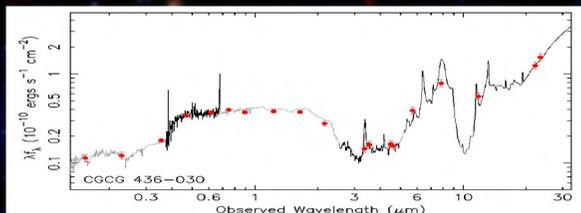
42 million IR sources from The Spitzer Source List (Capak, P. et al., 2013SSTSLC4.2....0C).

1.6 million IR Sources from WINGS: a Wide-field nearby Galaxy-cluster survey. III. Deep near-infrared photometry of 28 nearby clusters (Valentinuzzi, T. et al., 2009A&A...501..851V).

14 million new cross-IDs and 8.4 million new objects with NUV and FUV photometry for 22,243,735 UV sources from The GALEX Medium-Deep Sky Catalog (Seibert, M., 2012GMSC..C...0000S).

*In NED, a source denotes an astronomical observation that has not been cross-matched and fully integrated into NED's representation of the universe; an object represents a physical existence in the universe that either has a single source detection or has cross-identifications among multiple sources.

Spectra



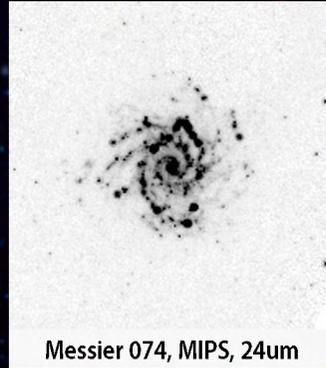
129 spectra from An Atlas of Galaxy Spectral Energy Distributions from the Ultraviolet to the Mid-infrared (Brown et al. 2014ApJS..212...18B).

152 spectra from 2MTF - II. New Parkes 21-cm observations of 303 southern galaxies (Hong, Tao et al., 2013MNRAS.432.1178H).

146 spectra from Optical Spectroscopic Atlas of the MOJAVE/2cm AGN Sample (Torrealba, J. et al., 2012RMxAA..48....9T)

Featured Additions

Images



Messier 074, MIPS, 24um

Orientation Variations and Superluminal Motion in Active Galactic Nuclei (Lister, M. L. et al., 2013AJ....146..120L).

2549 images from An Atlas of Galaxy Spectral Energy Distributions from the Ultraviolet to the Mid-infrared (Brown, M. et al., 2014ApJS..212...18B).

1738 images from MOJAVE. X. Parsec-scale Jet

Photometry

Radio: 1285 sources with GMRT 325 MHz fluxes from 325-MHz observations of the ELAIS-N1 field using the Giant Metrewave Radio Telescope (Sirothia, S. K. et al. 2009MNRAS.395..269S)

IR: 7284 sources with AKARI 2-24 microns fluxes from The AKARI NEP-Deep survey: a mid-infrared source catalogue (Takagi, T. et al., 2012A&A...537A..24T)

UV, Visual and NIR: 4629 sources with HST magnitudes from The Cluster Lensing and Supernova Survey with Hubble: An Overview (Postman, Marc et al. 2012ApJS..199...25P)

X-ray: 1873 sources with Fermi 0.1-100 GeV fluxes from Fermi Large Area Telescope Second Source Catalog (Nolan, P.L. et al 2012ApJS..199...31N)

LEVEL 5 Knowledgebase

Secular Evolution in Disk Galaxies (Kormendy, John, 2013seg..book....1K)

What Triggers Star Formation in Galaxies? (Elmegreen, Bruce G., 2012IAUS..284..317E)

The Evolution of Galaxy Structure Over Cosmic Time (Conselice, Christopher J., 2014ARA&A..52..291C)

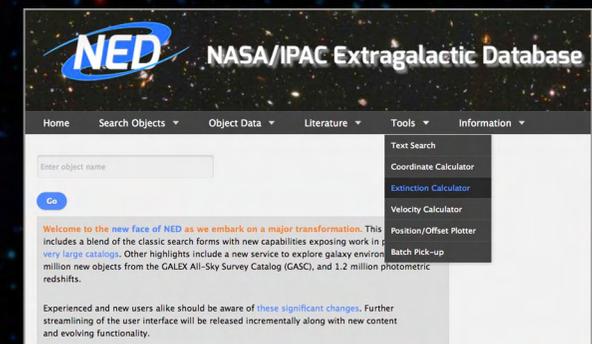
Galaxy Morphology (Buta, Ronald J., 2013seg..book..155B)

Observational Probes of Cosmic Acceleration (Weinberg, David H. et al., 2013PhR...530...87W)

The Epoch of Reionization (Zaroubi, Saleem, 2013ASSL..396...45Z)

New User Interface

The NED Next Generation Interface (ned.ipac.caltech.edu/ngi) provides drop down menus to quickly access searches for objects, data, or literature. The most popular *By Name* search may be typed directly into a prominently featured query box. *Search Objects, With Unprocessed Catalog Sources* leads to a new style interface, which performs cone searches for objects in NED and sources from very large catalogs that are configured for cross-matching and full integration into NED.



RADIO

MICROWAVE

INFRARED

VISIBLE

ULTRAVIOLET

X-RAY

GAMMA RAY