

What is NED?

NED is the world's largest database of multi-wavelength data for extragalactic objects, providing a systematic 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 *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 (Magnitude)*, or by filtering galaxy *Classifications and Attributes*.

The LEVEL5 Knowledgebase augments review articles in extragalactic astrophysics and cosmology with object names and graphical content within the articles linked directly to relevant database queries.

Current Holdings

- 169.5 million objects
- 180.6 million multiwavelength cross-IDs
- 1.1 million object associations
- 3.5 million redshifts
- 1.72 billion photometric measurements with SEDs
- 609 million diameter measurements
- 9.5 million objects linked to 80 thousand journal articles
- 2.7 million images, maps and external links
- 340 thousand spectra
- 68 thousand object notes
- 57 thousand journal article abstracts
- 43 thousand redshift-independent distances for 10,519 objects

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NASA/IPAC Extragalactic Database

Operated by the Jet Propulsion Laboratory,
California Institute of Technology, under contract
with the National Aeronautics and Space
Administration.

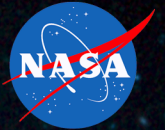
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II Zw 96 (left panel): NASA/JPL-Caltech/STScI/H. Inami
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M63 (front panel): NASA/JPL-Caltech/SINGS Team



NASA/IPAC Extragalactic Database

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<http://ned.ipac.caltech.edu>

Highlights of New NED Content and Functionality

Some Featured Additions

397,065 compact groups and member galaxies identified in SDSS DR6 (McConnachie et al. 2009, MNRAS, 395, 255)

11,611 Spitzer MIPS sources around the galaxy cluster Abell 1763 (Edwards et al. 2010, AJ, 139, 434)

2,533 star cluster candidates around M81 (Nantais et al. 2010, AJ, 139, 1413)

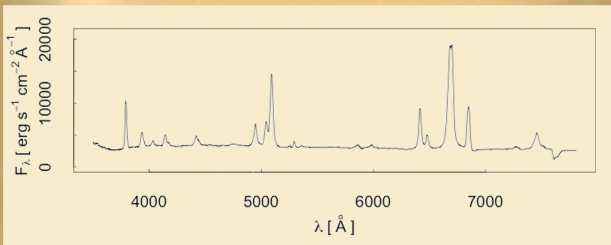
Supernovae reported in IAU Central Bureau for Astronomical Telegrams published through September 2011

UV photometry for 18,545 QSO candidates (Hutchings & Bianchi 2010, AJ, 140, 1987)

New review articles in Level 5 linked to NED queries, including "Why Are Ring Galaxies Interesting?" (Higdon & Higdon 2010, ASPC, 423, 12)

2.9 million cross-identifications and 12,929 associations over multiple spectral regions

Thousands of New Spectra

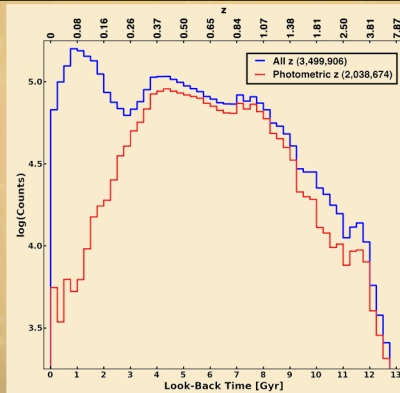
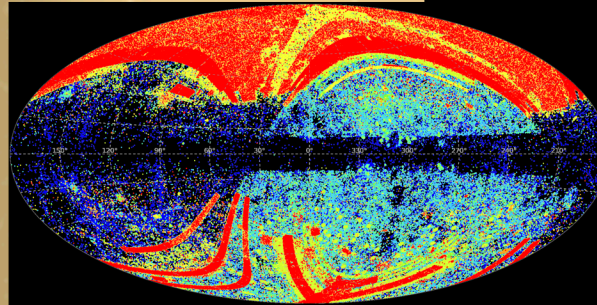


3C 84 (NGC 1275), an example of 109 spectra recently added to NED from "An optical spectroscopic survey of the 3CR sample of radio galaxies with $z < 0.3$. I. Presentation of the data" (Buttiglione et al. 2009, A&A, 495, 1033).

1.6 Million New Redshifts

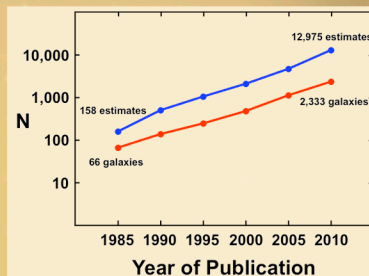
Redshifts for over 1.6 million objects have been added to NED since December 2010, bringing the current total to 3.5 million objects with at least one redshift measurement.

•	$z < 0.050$
•	$0.050 \leq z < 0.085$
•	$0.085 \leq z < 0.125$
•	$0.125 \leq z < 0.184$
•	$0.184 \leq z < 0.400$
•	$0.400 \leq z < 0.910$
•	$0.910 \leq z < 1.725$
•	$1.725 \leq z$



Updates to NED-D

8,248 redshift-independent distance measurements for 1,374 objects have been recently added, bringing the current total to 43,301 distance measurements for 10,519 objects.



The number of primary distance estimates (blue) and the number of galaxies with those measurements (red) in NED-D as a function of the date of publication in the astrophysics literature.

NEW! Enhancements to User-Customized Data Tables

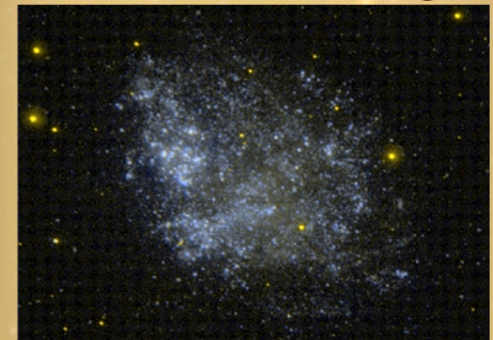
Combine photometry and diameter measurements from major surveys, along with classifications and basic data, into a single table

Vastly simplifies analysis of multiwavelength data for galaxy samples

Accessible via forms that search input object lists *By Name* and *Near Name/Position* (cross-matching with objects in NED), and also via queries for objects *By Classification*

New options to include foreground Galactic extinction and redshift-independent distances

Thousands of New Images



Combined NUV+FUV image of IC 1613 (Gil de Paz et al. 2007, ApJS, 173, 185). FITS images for this galaxy and 43 others have recently been added to NED from "GALEX Ultraviolet Imaging of Dwarf Galaxies and Star Formation Rates" (Hunter et al. 2010, AJ, 139, 447).

For more news, see http://ned.ipac.caltech.edu/help/whats_new.html

How to Contribute Data

Data from the current astrophysics literature and new sky survey catalogs are being incorporated on an ongoing basis. If you would like to make your images, spectra, or other data available for use by other researchers via NED, please contact us at ned@ipac.caltech.edu.

RADIO

MICROWAVE

INFRARED

VISIBLE

ULTRAVIOLET

X-RAY

GAMMA RAY