NED's New API

(Released in May 2026)

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Vision: The NASA/IPAC Extragalactic Database (NED) aims to capture the most reliable census of extragalactic objects and provide essential data and tools to facilitate astrophysics research and exploration.

Mission: NED accelerates science discovery in astrophysics within NASA's strategic plan by providing a census of extragalactic objects augmented with data joined from across the electromagnetic spectrum for use by the research and lay communities worldwide with access through computer query protocols and user-friendly interfaces. This data synthesis is continually updated by the fusion of fundamental data, prioritizing objects with measured redshifts and distances in refereed publications and major catalogs, and by providing external links to additional data. NED provides its reliable compendium and suite of query tools to support many research areas including spectral energy distributions, statistical studies, and time-domain astronomy.

Data in NED (October 2026) From peer reviewed journal articles and published catalogs	
Distinct Objects	> 1.1 B
Multiwavelength Cross-IDs	> 1.5 B
Distinct References	> 140 K
Photometry Data Points	> 13 B
Diameters	> 609 M
Redshifts	> 19 M
Objects with Redshifts	> 11 M
Redshift-Independent Distances	> 252 K
Objects with Redshift-Independent Distances	> 152K

Please switch to the new API described below. The old /cgi-bin/ style API is deprecated and will be discontinued in June 2027.

API released in May 2026 https://ned.ipac.caltech.edu/Docs::API/

OverviewOfObject (was byname search) required: Target
https://ned.ipac.caltech.edu/NED::API/OverviewOfObject?TARGET=m31

Cone searches default, radius: 1arcmin, csys: Equatorial

ConeSearchByTarget, required: target
https://ned.ipac.caltech.edu/NED::API/ConeSearchByTarget?TARGET=m31&RADIUS=1

ConeSearchByPosition, required: Lon, Lat
https://ned.ipac.caltech.edu/NED::API/ConeSearchByPosition?LON=10.684793d&LAT=41.269065&CSYS=Equatorial&EQUINOX=J2000.0&RADIUS=1&MAXREC=2

ConeSearchByIAUstyle, required: IAU_name
https://ned.ipac.caltech.edu/NED::API/ConeSearchByIAUstyle?IAU_NAME=05771%2B05772

ObjectsInRefcod, required: refcode/bibcode
https://ned.ipac.caltech.edu/NED::API/ObjectsInRefcode?refcode=2024ApJ...964..117S

Details for single object required: Target
CrossidsOfObject, https://ned.ipac.caltech.edu/NED::API/CrossidsOfObject?TARGET=MESSIER+031
PositionsOfObject, RedshiftsOfObject, DistancesOfObject, ClassificationsOfObject, ExtinctionAtTarget, NotesOfObject, DiametersOfObject, PhotometryOfObject, ReferencesOfObject, ExternalLinksOfObject,

Tools:
ExtinctionsAtPosition required: Lon, Lat
https://ned.ipac.caltech.edu/NED::API/ExtinctionAtPosition?csys=Equatorial&equinox=J2000.0&lon=10.68479292d&lat=41.269065d

CoordinateConversion default in_csys: Equatorial In_equinox/output_equinox: J2000, required: Lon, Lat, out_csys
https://ned.ipac.caltech.edu/NED::API/CoordinateConversion?in_csys=Equatorial&IN_EQUINOX=B1950.0&lon=1h2m4s&lat=1d2m4&pa=28.1&out_csys=Supergalactic

VelocityConversion required: Lon, Lat, Vel
https://ned.ipac.caltech.edu/NED::API/VelocityConversion?in_csys=Equatorial&in_equinox=J2000.0&lon=01h02m10.23s&lat=%2B69d40m46s&vel=0.0&vfrom=Heliocentric&user_defined=yes&a_csys=Equatorial&a_equinox=J2000.0&alon=110d&alat=12d&avel=0.0

Astroquery.ipac.ned Python package has been updated to use the new API