An official website of the United States government
Here's how you know

{ NASA APIs }

Welcome to the NASA API portal. The objective of this site is to make NASA data, including imagery, eminently accessible to application developers. This catalog focuses on broadly useful and user friendly APIs and does not hold every NASA API.

Get Started

Browse APIs

🛰 { APIs }   ...

Your API key for **kkorchyts@gmail.com** has been e-mailed to you. You can use your API key to begin making web service requests immediately.

If you don't receive your API Key via e-mail within a few minutes, please contact us.

For additional support, please contact us. When contacting us, please tell us what API you're accessing and provide the following account details so we can quickly find you:

Account Email: kkorchyts@gmail.com
Account ID: 2f735197-b97b-4103-9253-70720f40c754

Authentication

You do not need to authenticate in order to explore the NASA data. However, if you will be intensively using the APIs to, say, support a mobile application, then you should sign up for a NASA

developer key.

Web Service Rate Limits

Limits are placed on the number of API requests you may make using your API key. Rate limits may vary by service, but the defaults are:

- Hourly Limit: 1,000 requests per hour

For each API key, these limits are applied across all api.nasa.gov API requests. Exceeding these limits will lead to your API key being temporarily blocked from making further requests. The block will automatically be lifted by waiting an hour. If you need higher rate limits, contact us.

DEMO_KEY Rate Limits

In documentation examples, the special DEMO_KEY api key is used. This API key can be used for initially exploring APIs prior to signing up, but it has much lower rate limits, so you're encouraged to signup for your own API key if you plan to use the API (signup is quick and easy). The rate limits for the DEMO_KEY are:

- Hourly Limit: 30 requests per IP address per hour

- Daily Limit: 50 requests per IP address per day

How Do I See My Current Usage?

Your can check your current rate limit and usage details by inspecting the `X-RateLimit-Limit` and `X-RateLimit-Remaining` HTTP headers that are returned on every API response. For example, if an API has the default hourly limit of 1,000 request, after making 2 requests, you will receive this HTTP header in the response of the second request:

`X-RateLimit-Remaining: 998`

The hourly counters for your API key reset on a rolling basis.

Example: If you made 500 requests at 10:15AM and 500 requests at 10:25AM, your API key would become temporarily blocked. This temporary block of your API key would cease at 11:15AM, at which point you could make 500 requests. At 11:25AM, you could then make another 500 requests.

Anyone can register for an api.nasa.gov key, which can be used to access data across federal agencies.

API Key Recovery

Please <u>contact us</u> for help recovering an old API key

Browse APIs

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APOD: Astronomy Picture of the Day

Asteroids NeoWs: Near Earth Object Web Service

DONKI: Space Weather Database Of Notifications, Knowledge, Information

Earth: Unlock the significant public investment in earth observation data

EONET: The Earth Observatory Natural Event Tracker

EPIC: Earth Polychromatic Imaging Camera

Exoplanet: Programmatic access to NASA's Exoplanet Archive database

Open Science Data Repository: Programmatic interface for the Open Science Data Repository website

Insight: Mars Weather Service API

Mars Rover Photos: Image data gathered by NASA's Curiosity, Opportunity, and Spirit rovers on Mars

NASA Image and Video Library: API to access the NASA Image and Video Library site at images.nasa.gov

TechTransfer: Patents, Software, and Tech Transfer Reports

Satellite Situation Center: System to cast geocentric spacecraft location information into a framework of (empirical) geophysical regions

SSD/CNEOS: Solar System Dynamics and Center for Near-Earth Object Studies

Techport: API to make NASA technology project data available in a machine-readable format

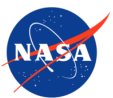**TLE API:** Two line element data for earth-orbiting objects at a given point in time

Vesta/Moon/Mars Trek WMTS: A Web Map Tile Service for the Vesta, Moon, and Mars Trek imagery projects

If you find a bug, please note that this page acts as a central catalog and key service for public APIs. It does not hold the actual API code. For bugs in the APIs, please look for a link to the individual API pages and reach out there. For a problem in this page, please add an issue or pull request to the GitHub repository.

code.nasa.gov

data.nasa.gov

api.nasa.gov

Open Innovation Team

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