

{ 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. The api.nasa.gov catalog is growing.

Get Started

Browse APIs



. . .

Your API key for **sfdecoteau@gmail.com** is:

eXHTFbJRcauaHCLWNR0a4bN4YdycDenrIsArDy5m

You can start using this key to make web service requests. Simply pass your key in the URL when making a web request. Here's an example:

https://api.nasa.gov/planetary/apod?api_key=eXHTFbJRcauaHCLWNROa4bN4Yd

For additional support, please <u>contact us</u>. 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: sfdecoteau@gmail.com

Account ID: 1b8c4210-f614-4407-83f0-090242cb0cfa

Authentication

https://api.nasa.gov

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 <u>NASA</u> 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.

https://api.nasa.gov

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

API Key Recovery

Please contact us for help recovering an old API key

Browse APIs

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

GeneLab: Programmatic interface for GeneLab's public 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

https://api.nasa.gov

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

code.nasa.gov

data.nasa.gov

api.nasa.gov

open.nasa.gov



Open Innovation Team

Privacy FOIA NASA Official: Brian Thomas

Office of the Chief Information Officer

nasa-data@lists.arc.nasa.gov