

Weather API

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Please, [sign up](#) to use our fast and easy-to-work weather APIs. As a start to use OpenWeather products, we recommend our [One Call API 3.0](#). For more functionality, please consider our products, which are included in [professional collections](#).

One Call API 3.0

[API doc](#)[Subscribe](#)

Pay as you call

Make an API call to receive access to the various data:

- **Current weather and forecasts:**
 - minute forecast for 1 hour
 - hourly forecast for 48 hours
 - daily forecast for 8 daysand government weather alerts
- **Weather data for any timestamp** for 40+ years historical archive and 4 days ahead forecast
- **Daily aggregation** of weather data for 45 years archive and 1.5 years ahead forecast
- **Weather overview** with a human-readable weather summary for today and tomorrow's forecast

1,000 API calls per day for free
0.0012 GBP per API call over the daily limit

[Subscribe](#)

This is a separate subscription plan, which includes only One Call API.

Read more about this API and subscription plan in the [FAQ](#).

Professional collections

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You can read the [How to Start](#) guide and enjoy using our powerful weather APIs right now.

Current & Forecast weather data collection

Current Weather Data

[API doc](#)[Subscribe](#)

- Access current weather data for any location
- We collect and process weather data from different sources such as global and local weather models, satellites, radars and a vast network of weather stations
- JSON, XML, and HTML formats
- Included in both free and paid subscriptions

Hourly Forecast 4 days

[API doc](#)[Subscribe](#)

- Hourly forecast is available for 4 days
- Forecast weather data for 96 timestamps
- JSON and XML formats
- Included in the Developer, Professional and Enterprise subscription plans

Daily Forecast 16 days

[API doc](#)[Subscribe](#)

- 16 days forecast is available for any location on the globe
- 1-day step for 16 days
- JSON and XML formats
- Included in all paid subscription plans

Climatic Forecast 30 days

[API doc](#)[Subscribe](#)

- Forecast weather data for 30 days
- JSON format
- Included in the Developer, Professional and Enterprise subscription plans

Bulk Download

[API doc](#)[Subscribe](#)

- Current weather, a variety of weather forecasts and their 7-day archive via regularly updated files
- Weather bulks are grouped by types of weather data and location lists (global city lists or ZIP code lists of EU, UK, and

Global Weather Alerts Push notifications

[Doc](#)[Subscribe](#)

- Get all the **warnings from national weather agencies**
- Weather alerts are pushed to your endpoint as soon as they occur
- Data feed provides all

5 Day / 3 Hour Forecast

[API doc](#)[Subscribe](#)

- 5 day forecast for any location on the globe
- 5 day forecast with a 3-hour step
- JSON and XML formats
- Included in both free and paid subscriptions

Road Risk API

[Doc](#)[Get a quote](#)

- Specify your route and get weather data and national alerts for the point of destination and along the route
- Current, forecast for 5 days and historical weather data for 1 year for your route
- Weather data are available for any point on the globe
- To receive information on price and get a quote, please [contact us](#)

Solar Irradiance & Energy Prediction service

Solar Irradiance API

[Doc](#)[Subscribe](#)

Get the solar data by particular location and calculate energy generation!

- **GHI**, **DNI**, **DHI** indices for clear sky and cloudy sky models
- Current data and forecast for 15 days ahead solar irradiation data
- 40+ years of historical data (from January 1, 1979)
- Daily aggregation for every day with 1 hour and 15 minutes step detalization for specified day

Solar Panel Energy Prediction

[Doc](#)[Subscribe](#)

Get the particular solar panel power output, based on the panel's technical characteristics!

- Create unlimited number of solar panels for particular location with the desired specifications
- Current and forecast for 15 days ahead solar panel power output data
- 40+ years of historical data (from January 1, 1979)
- Daily aggregation for every day with 1 hour and 15 minutes step detalization for specified

History API

[API doc](#)[Subscribe](#)

- Through our API we provide historical weather data for any location on the globe
- Weather data have 1-hour step
- The depth of historical data depends on your [subscription plan](#)
- JSON format

History Bulk

[Doc](#)[Get](#)

- History Bulk provides weather data for **any** location for more than 40 years back (from January 01, 1979).
- Available through our [Marketplace](#)
- CSV and JSON formats

History Forecast Bulk

[Doc](#)[Get](#)

- Historical archive of 16-days forecast weather data
- Historical forecast data is available from October 7, 2017
- CSV and JSON formats
- You can purchase the product from our [Marketplace](#)

Statistical Weather Data API

[API doc](#)[Subscribe](#)

- Statistical data on main weather parameters for any day and month of the year
- The statistics is calculated based on our [Historical weather data](#)
- JSON format
- The weather data updated every hour
- Included in Medium and Advanced subscription plans

Accumulated Parameters

[API doc](#)[Subscribe](#)

- Accumulated temperature and precipitation data
- Accumulated parameters are available for 1 month back with Starter plan and for 1 year back with Medium plan
- JSON format
- More opportunities for agriculture in our [Agricultural API](#)

More collection

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3-hour step

[API doc](#)[Subscribe](#)

- Forecast, Historical, Current weather maps with 3-hour step
- 15 weather map layers
- The maps can be used as layers in Direct Tiles, OpenLayers, Leaflet, and Google Maps
- Included in Developer, Professional and Enterprise subscription plans

NEW

1-hour step

[API doc](#)[Get a quote](#)

- Forecast, Historical, Current weather maps with 1-hour step
- 14 weather map layers
- The maps can be used as layers in Direct Tiles, OpenLayers, Leaflet, and Google Maps
- Please **contact us** to get a quote

[API doc](#)[Subscribe](#)

- Weather maps include precipitation, clouds, pressure, temperature, wind, and more
- Integrate our weather maps to your mobile applications and websites
- Use as layers in Direct Tiles, OpenLayers, Leaflet, and Google Maps
- Included in both free and paid subscriptions

Global Precipitation Maps Historical data

[API doc](#)[Subscribe](#)

- Current and historical weather maps for the previous 2 days
- Historical precipitation data with 10-minutes step
- Resolution higher than 1 km
- Use as layers in Direct Tiles, OpenLayers, Leaflet, and Google Maps
- Included in Professional and Enterprise subscription plans

Global Precipitation Maps Historical & Forecast data

[API doc](#)[Get a quote](#)

- Current, forecast and historical precipitation maps
- Forecast is available for the next 6 hours for the US territory and for the next 2 hours for other global areas
- The historical weather map for the previous 2 days
- Data update period is every 10 minutes
- Resolution higher than 1 km
- Use as layers in Direct

Relief Maps

[API doc](#)[Subscribe](#)

- The combination of a layer tint (colored raster) and a hillshade
- Customizable color palette
- Use as layers in Direct Tiles, OpenLayers, Leaflet, and Google Maps
- Included in Developer, Professional and Enterprise subscription plans

Maps

[API doc](#)[Get a quote](#)

- Current and 5 days daily forecast fire weather index maps
- Use as layers in Direct Tiles, OpenLayers, Leaflet, and Google Maps
- Please [contact us](#) to get a quote

Other weather API's collection

Air Pollution API

[API doc](#)[Subscribe](#)

- Current, forecast and historical air pollution data
- Forecast for 4 days ahead with 1-hour step
- Air Pollution API includes both Air Quality Index and indices for CO, NO, NO₂, O₃, SO₂, NH₃, PM_{2.5}, PM₁₀
- Included in both free and paid subscriptions

Fire Weather Index API

[API doc](#)[Get a quote](#)

- Current fire index and daily forecast for 5 days are available for any geo location (lat/lon)
- JSON format
- Please [contact us](#) to get a quote

Geocoding API

[API doc](#)[Subscribe](#)

- Geocoding API supports both the direct and reverse methods, working at the level of city names, areas and districts, countries and states
- You can cap how many locations with the same name or the nearby geographic coordinates will be seen in the API response
- Included in both free and paid subscriptions

Weather Stations

[API doc](#)[Subscribe](#)

UV Index [Deprecated](#)

[API doc](#)[Subscribe](#)

Weather Triggers

[API doc](#)[Subscribe](#)

- Included in both free and paid subscriptions
- available for any geo location (lat/lon)
- Interpretation of the UV Index and recommended protection are provided
- JSON format
- period of time
- The alerts will be generated in our service once the conditions set in the trigger are met
- Included in both free and paid subscriptions

API documentation

How to start

FAQ

Support

Current weather data

- Call current weather data for one location
 - How to make an API call
- API response
 - JSON format API response example
 - JSON format API response fields
 - XML format API response example
 - XML format API response fields
 - List of weather condition codes

One Call API 3.0

- Current and forecasts weather data
 - How to make an API call
 - Example of API response
 - Fields in API response
- Weather data for timestamp
 - How to make an API call
 - Example of API response
 - Fields in API response
- Daily aggregation
 - How to make an API call
 - Example of API response
 - Fields in API response
- Other features
 - List of weather

Bulk downloading

- About
- How to use the service
- Types of bulk files
 - Current weather bulks
 - Forecast bulks
 - 7-day archives of bulk files

Weather maps 1.0

- URL format
- Examples of weather map layers
- Map styles legend
- Google Maps JavaScript API based on OpenWeatherMap API
- Libraries to connect weather layers
 - Clouds
 - Precipitation
 - Sea level pressure
 - Wind speed

- Built-in API request by city name
- Built-in API request by city ID
- Built-in API request by ZIP code
- Format
- Units format
- Multilingual support
- Call back function for JavaScript code

5 day / 3 hour weather forecast

- Call 5 day / 3 hour forecast data
 - How to make an API call
- API response
 - JSON format API response example
 - JSON format API response fields
 - XML format API response example
 - XML format API response fields
 - List of weather condition codes
 - Min/max temperature in current weather API and forecast API
- Bulk downloading
- Other features
 - Geocoding API
 - Built-in geocoding

Hourly forecast for 4 days

- Call back function for JavaScript code
- Call Hourly forecast data
 - How to make an API call
- API response
 - JSON format API response example
 - JSON format API response fields
 - XML format API response example
 - XML format API response fields
 - List of weather condition codes
 - Min/max temperature in our weather API
- Other features
 - Geocoding API
 - Built-in geocoding
 - Built-in API request by city name
 - Built-in API request by city ID
 - Built-in API request by ZIP code
 - Format
 - Limitation of result
 - Units of measurement
 - Multilingual support
 - Call back function

- How to get current, forecast and historical weather maps using only 'Date' parameter?
- What layers are there in the new weather maps?
- How to pass my palette in the map?
- Default palettes
- Examples of Weather maps
- Libraries to connect weather layers

Global Precipitation Maps

- Features of Global Precipitation Map
- URL format and parameters
- Libraries to connect weather layers

Global Weather Alerts

- Features of Global Weather Alerts
- How to get access
- Description of alert
 - Fields in alert notifications
 - List of alerts sources

Solar Irradiance API

- Product concept
- How to get access
- Call Solar Irradiance API

- Built-in API request by ZIP code
- Format
- Limitation of result
- Units format
- Multilingual support
- Call back function for JavaScript code

16 day / daily weather forecast

- Call 16 day / daily forecast data
 - How to make an API call
- API response
 - JSON format API response example
 - JSON format API response fields
 - XML format API response example
 - XML format API response fields
 - List of weather condition codes
 - Min/max temperature in current weather API and forecast API
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 - Built-in API request by city name
 - Built-in API request by city ID

- Example of API response
- Fields in API response
- List of weather condition codes
- Min/max temperature in historical weather API and forecast API

- Other features
 - Geocoding API
 - Built-in geocoding
 - Built-in API request by city name
 - Built-in API request by city ID

History Bulk

- Features of History Bulk
- How to get historical weather data
- Sample data
- Weather fields in History Bulk
 - JSON example
 - List of weather condition codes

Geocoding API

- Product description
- Direct geocoding
 - Coordinates by location name
 - How to make an API call
 - Example of

Solar Panel Energy Prediction

- Product concept
- How to use the service
 - Step 1: Manage my location
 - Step 2: Operations with solar panels
 - Step 3: Get solar panel power output and solar irradiance data by location

Partners and solutions of API use

- Google solutions, Ubuntu mobile, Android, Java, PHP, big library on GitHub and others

- Multilingual support
- Call back function for JavaScript code
- API response
 - Fields in API response
- Reverse geocoding
 - How to make an API call
 - Example of API response
 - Fields in API response

Product Collections

Subscription

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