**API call**

[https://api.openweathermap.org/data/2.5/weather?lat={lat}&lon={lon}&appid](https://api.openweathermap.org/data/2.5/weather?lat=%7blat%7d&lon=%7blon%7d&appid)={API key}

|  |  |  |
| --- | --- | --- |
| **Parameters** | | |
| **lat** | **required** | **Latitude. If you need the geocoder to automatic convert city names and zip-codes to geo coordinates and the other way around, please use our**[**Geocoding API**](https://openweathermap.org/api/geocoding-api) |
| **lon** | **required** | **Longitude. If you need the geocoder to automatic convert city names and zip-codes to geo coordinates and the other way around, please use our**[**Geocoding API**](https://openweathermap.org/api/geocoding-api) |
| **appid** | **required** | **Your unique API key (you can always find it on your account page under the**[**"API key" tab**](https://home.openweathermap.org/api_keys)**)** |
| **mode** | **optional** | **Response format. Possible values are xml and html. If you don't use the mode parameter format is JSON by default.**[**Learn more**](https://openweathermap.org/current#format) |
| **units** | **optional** | **Units of measurement. standard, metric and imperial units are available. If you do not use the units parameter, standard units will be applied by default.** [**Learn more**](https://openweathermap.org/current#data) |
| **lang** | **optional** | **You can use this parameter to get the output in your language.**[**Learn more**](https://openweathermap.org/current#multi) |
|  |  |  |

**API response**

**JSON**

JSON format API response example

{

"coord": {

"lon": 10.99,

"lat": 44.34

},

"weather": [

{

"id": 501,

"main": "Rain",

"description": "moderate rain",

"icon": "10d"

}

],

"base": "stations",

"main": {

"temp": 298.48,

"feels\_like": 298.74,

"temp\_min": 297.56,

"temp\_max": 300.05,

"pressure": 1015,

"humidity": 64,

"sea\_level": 1015,

"grnd\_level": 933

},

"visibility": 10000,

"wind": {

"speed": 0.62,

"deg": 349,

"gust": 1.18

},

"rain": {

"1h": 3.16

},

"clouds": {

"all": 100

},

"dt": 1661870592,

"sys": {

"type": 2,

"id": 2075663,

"country": "IT",

"sunrise": 1661834187,

"sunset": 1661882248

},

"timezone": 7200,

"id": 3163858,

"name": "Zocca",

"cod": 200

}

**JSON format API response fields**

* **coord**
  + **coord.lon Longitude of the location**
  + **coord.lat Latitude of the location**
* **weather (more info**[**Weather condition codes**](https://openweathermap.org/weather-conditions)**)**
  + **weather.id Weather condition id**
  + **weather.main Group of weather parameters (Rain, Snow, Clouds etc.)**
  + **weather.description Weather condition within the group. Please find more**[**here.**](https://openweathermap.org/current#list)**You can get the output in your language.**[**Learn more**](https://openweathermap.org/current#multi)
  + **weather.icon Weather icon id**
* **base Internal parameter**
* **main**
  + **main.temp Temperature. Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit**
  + **main.feels\_like Temperature. This temperature parameter accounts for the human perception of weather. Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit**
  + **main.pressure Atmospheric pressure on the sea level, hPa**
  + **main.humidity Humidity, %**
  + **main.temp\_min Minimum temperature at the moment. This is minimal currently observed temperature (within large megalopolises and urban areas). Please find more info**[**here.**](https://openweathermap.org/current#min)**Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit**
  + **main.temp\_max Maximum temperature at the moment. This is maximal currently observed temperature (within large megalopolises and urban areas). Please find more info**[**here.**](https://openweathermap.org/current#min)**Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit**
  + **main.sea\_level Atmospheric pressure on the sea level, hPa**
  + **main.grnd\_level Atmospheric pressure on the ground level, hPa**
* **visibility Visibility, meter. The maximum value of the visibility is 10 km**
* **wind**
  + **wind.speed Wind speed. Unit Default: meter/sec, Metric: meter/sec, Imperial: miles/hour**
  + **wind.deg Wind direction, degrees (meteorological)**
  + **wind.gust Wind gust. Unit Default: meter/sec, Metric: meter/sec, Imperial: miles/hour**
* **clouds**
  + **clouds.all Cloudiness, %**
* **rain**
  + **rain.1h (where available) Rain volume for the last 1 hour, mm. Please note that only mm as units of measurement are available for this parameter**
  + **rain.3h (where available) Rain volume for the last 3 hours, mm. Please note that only mm as units of measurement are available for this parameter**
* **snow**
  + **snow.1h(where available) Snow volume for the last 1 hour, mm. Please note that only mm as units of measurement are available for this parameter**
  + **snow.3h (where available)Snow volume for the last 3 hours, mm. Please note that only mm as units of measurement are available for this parameter**
* **dt Time of data calculation, unix, UTC**
* **sys**
  + **sys.type Internal parameter**
  + **sys.id Internal parameter**
  + **sys.message Internal parameter**
  + **sys.country Country code (GB, JP etc.)**
  + **sys.sunrise Sunrise time, unix, UTC**
  + **sys.sunset Sunset time, unix, UTC**
* **timezone Shift in seconds from UTC**
* **id City ID. Please note that built-in geocoder functionality has been deprecated. Learn more**[**here**](https://openweathermap.org/current#builtin)
* **name City name. Please note that built-in geocoder functionality has been deprecated. Learn more**[**here**](https://openweathermap.org/current#builtin)
* **cod Internal parameter**