Weather and Geolocation API - Weather and Geolocation API JSON and XML

Getting Started

You need to signup and then you can find your API key under your account, and start using API right away!

Try our weather API by using interactive API Explorer or use Swagger Tool.

We also have SDK for popular framework/languages available on Github for quick integrations.

Want to choose which weather field to return in the API response? Change it from API response fields.

If you find any features missing or have any suggestions, please contact us.

Authentication

API access to the data is protected by an API key. If at anytime, you find the API key has become vulnerable, please regenerate the key using Regenerate button next to the API key.

Authentication to the WeatherAPI.com API is provided by passing your API key as request parameter through an API .

key parameter

key=<YOUR API KEY>

Request

Request URL

Request to WeatherAPI.com API consists of base url and API method. You can make both HTTP or HTTPS request to our API.

Base URL: http://api.weatherapi.com/v1

API	API Method
Current weather	/current.json or /current.xml
Forecast	/forecast.json or /forecast.xml
Search or Autocomplete	/search.json or /search.xml
History	/history.json or /history.xml
Marine	/marine.json or /marine.xml
Future	/future.json or /future.xml
Time Zone	/timezone.json or /timezone.xml
Sports	/sports.json or /sports.xml
Astronomy	/astronomy.json or /astronomy.xml
IP Lookup	/ip.json or /ip.xml

Request Parameters

Parameter		Description
key	Required	API Key
q	Required	Query parameter based on which data is sent back. It could be following: • Latitude and Longitude (Decimal degree) e.g: q=48.8567,2.3508 • city name e.g.: q=Paris • US zip e.g.: q=10001 • UK postcode e.g: q=SW1 • Canada postal code e.g: q=G2J • metar:<metar code> e.g: q=metar:EGLL • iata:<3 digit airport code> e.g: q=iata:DXB • auto:ip IP lookup e.g: q=auto:ip • IP address (IPv4 and IPv6 supported) e.g: q=100.0.0.1 • bulk New

<table>
<tr><td>days</td><td>Required only with forecast API method.</td><td>Number of days of forecast required.
days parameter value ranges between 1 and 14. e.g: days=5
If no days parameter is provided then only today's weather is returned.</td></tr>
<tr><td>dt (Required for History and Future API)</td><td>Restrict date output for Forecast and History API method.</td><td>For history API 'dt' should be on or after 1st Jan, 2010 in yyyy-MM-dd format (i.e. dt=2010-01-01)
For forecast API 'dt' should be between today and next 14 day in yyyy-MM-dd format (i.e. dt=2010-01-01)
For future API 'dt' should be between 14 days and 300 days from today in the future in yyyy-MM-dd format (i.e. dt=2023-01-01)</td></tr>
<tr><td>(Optional) unixdt</td><td>Unix Timestamp used by Forecast and History API method.</td><td>unixdt has same restriction as 'dt' parameter. Please either pass 'dt' or 'unixdt' and not both in same request. e.g.: unixdt=1490227200</td></tr>
<tr><td>(Optional) end_dt (Available for History API)</td><td>Restrict date output for History API method.</td><td>For history API 'end_dt' should be on or after 1st Jan, 2010 in yyyy-MM-dd format (i.e. dt=2010-01-01)
'end_dt' should be greater than 'dt' parameter and difference should not be more than 30 days between the two dates.
Only works for API on Pro plan and above.</td></tr>
<tr><td>(Optional) unixend_dt</td><td>Unix Timestamp used by History API method.</td><td>unixend_dt has same restriction as 'end_dt' parameter. Please either pass 'end_dt' or 'unixend_dt' and not both in same request. e.g.: unixend_dt=1490227200</td></tr>
<tr><td>(Optional) hour</td><td>Restricting forecast or history output to a specific hour in a given day.</td><td>Must be in 24 hour. For example 5 pm should be hour=17, 6 am as hour=6</td></tr>
<tr><td>(Optional) alerts New</td><td>Disable alerts in forecast API output</td><td>alerts=yes or alerts=no</td></tr>
<tr><td>(Optional) aqi New</td><td>Enable/Disable Air Quality data in forecast API output</td><td>aqi=yes or aqi=no</td></tr>
<tr><td>(Optional) tides New</td><td>Enable/Disable Tide data in Marine API output</td><td>tides=yes or tides=no</td></tr>
<tr><td>(Optional) tp New</td><td>Get 15 min interval data for Forecast and History API. Available for Enterprise clients only.</td><td>tp=15</td></tr>
<tr><td>(Optional) lang</td><td>Returns 'condition:text' field in API in the desired language</td><td>Please pass 'lang code' from below table. e.g.: lang=fr
<table>
<tr><th>Language</th><th>lang code</th></tr>
<tr><td>Arabic</td><td>ar</td></tr>
<tr><td>Bengali</td><td>bn</td></tr>
<tr><td>Bulgarian</td><td>bg</td></tr>
<tr><td>Chinese Simplified</td><td>zh</td></tr>
<tr><td>Chinese Traditional</td><td>zh_tw</td></tr>
<tr><td>Czech</td><td>cs</td></tr>
<tr><td>Danish</td><td>da</td></tr>
<tr><td>Dutch</td><td>nl</td></tr>
<tr><td>Finnish</td><td>fi</td></tr>
<tr><td>French</td><td>fr</td></tr>
<tr><td>German</td><td>de</td></tr>
<tr><td>Greek</td><td>el</td></tr>
<tr><td>Hindi</td><td>hi</td></tr>
<tr><td>Hungarian</td><td>hu</td></tr>
<tr><td>Italian</td><td>it</td></tr>
<tr><td>Japanese</td><td>ja</td></tr>
<tr><td>Javanese</td><td>jv</td></tr>
<tr><td>Korean</td><td>ko</td></tr>
<tr><td>Mandarin</td><td>zh_cmn</td></tr>
<tr><td>Marathi</td><td>mr</td></tr>
<tr><td>Polish</td><td>pl</td></tr>
<tr><td>Portuguese</td><td>pt</td></tr>
</table></td></tr>
</table>

Punjabi	pa
Romanian	ro
Russian	ru
Serbian	sr
Sinhalese	si
Slovak	sk
Spanish	es
Swedish	sv
Tamil	ta
Telugu	te
Turkish	tr
Ukrainian	uk
Urdu	ur
Vietnamese	vi
Wu (Shanghainese)	zh_wuu
Xiang	zh_hsn
Yue (Cantonese)	zh_yue
Zulu	zu

Location Object

Location object is returned with each API response. It is actually the matched location for which the information has been returned.

It returns information about the location including geo points, name, region, country and time zone information as well.

When using Search or Autocomplete API following fields are NOT returned tz_id, localtime_epoch and localtime.

Field	Data Type	Description
lat	decimal	Latitude in decimal degree
lon	decimal	Longitude in decimal degree
name	string	Location name
region	string	Region or state of the location, if availa
country	string	Location country
tz_id	string	Time zone name
localtime_epoch	int	Local date and time in unix time
localtime	string	Local date and time

Weather Alerts

Forecast API returns alerts and warnings issued by government agencies (USA, UK, Europe and Rest of the World) as an array if available for the location provided through the Forecast API.

By default alerts are not returned. To get alerts back in the response from Forecast API, pass the parameter **alerts=yes**.

Note: Some of the alerts may be in local language of the location.

Field	Data Type	Description
headline	string	Alert headline
msgType	string	Type of alert
severity	string	Severity of alert
urgency	string	Urgency
areas	string	Areas covered
category	string	Category
certainty	string	Certainty
event	string	Event
note	string	Note

effective	date	Effective
expires	string	Expires
desc	string	Description
instruction	string	Instruction

Example response of alerts


```
"alerts":{
   "alert":[
      {
      "headline":"Flood Warning issued January 05 at 9:47PM EST until January 07 at 6:15AM EST by NWS",
      "msgtype":"Alert",
      "severity":"Moderate",
      "urgency":"Expected",
      "areas":"Calhoun; Lexington; Richland",
      "category":"Met",
      "certainty":"Likely",
      "event":"Flood Warning",
      "note":"Alert for Calhoun; Lexington; Richland (South Carolina) Issued by the National Weather Service",
      "effective":"2021-01-05T21:47:00-05:00",
      "expires":"2021-01-07T06:15:00-05:00",
      "desc":"...The Flood Warning continues for the following rivers in South\nCarolina...\nCongaree River At
Carolina Eastman affecting Richland, Calhoun\nand Lexington Counties.\nCongaree River At Congaree National Park-
Gadsden affecting\nCalhoun and Richland Counties.\nNorth Fork Edisto River At Orangeburg affecting Orangeburg
County.\n...The Flood Warning is now in effect until Thursday morning...\nThe Flood Warning continues for\nthe
Congaree River At Carolina Eastman.\n* Until Thursday morning.\n* At 9:28 PM EST Tuesday the stage was 115.6
feet.\n* Flood stage is 115.0 feet.\n* Minor flooding is occurring and minor flooding is forecast.\n* Recent
Activity...The maximum river stage in the 24 hours ending\nat 9:28 PM EST Tuesday was 118.2 feet.\n* Forecast...The
river will rise to 115.7 feet just after midnight\ntonight. It will then fall below flood stage tomorrow morning
to\n114.2 feet and begin rising again tomorrow evening. It will rise\nto 114.3 feet early Thursday morning. It will
then fall again and\nremain below flood stage.\n* Impact...At 115.0 feet, Flooding occurs in low lying areas of
the\nCarolina Eastman Facility and at the Congaree National Park.\n* Flood History...This crest compares to a
previous crest of 116.3\nfeet on 12/03/2020.\n&&",
      "instruction":"A Flood Warning means that flooding is imminent or occurring. All\ninterested parties should
take necessary precautions immediately.\nMotorists should not attempt to drive around barricades or drive\ncars
through flooded areas.\nCaution is urged when walking near riverbanks.\nAdditional information is available at
www.weather.gov.\nThe next statement will be issued Wednesday morning at 1000 AM EST."
      },
      {
      "headline":"Flood Warning issued January 05 at 9:47PM EST until January 09 at 4:00AM EST by NWS",
      "msgtype":"Alert",
      "severity":"Moderate",
      "urgency":"Expected",
      "areas":"Calhoun; Richland",
      "category":"Met",
      "certainty":"Likely",
      "event":"Flood Warning",
      "note":"Alert for Calhoun; Richland (South Carolina) Issued by the National Weather Service",
      "effective":"2021-01-05T21:47:00-05:00",
      "expires":"2021-01-09T04:00:00-05:00",
      "desc":"...The Flood Warning continues for the following rivers in South\nCarolina...\nCongaree River At
Carolina Eastman affecting Richland, Calhoun\nand Lexington Counties.\nCongaree River At Congaree National Park-
Gadsden affecting\nCalhoun and Richland Counties.\nNorth Fork Edisto River At Orangeburg affecting Orangeburg
County.\n...The Flood Warning is now in effect until early Saturday morning...\nThe Flood Warning continues for\nthe
Congaree River At Congaree National Park-Gadsden.\n* Until late Friday night.\n* At 9:00 PM EST Tuesday the stage
was 16.5 feet.\n* Flood stage is 15.0 feet.\n* Minor flooding is occurring and minor flooding is forecast.\n* Recent
Activity...The maximum river stage in the 24 hours ending\nat 9:00 PM EST Tuesday was 17.2 feet.\n* Forecast...The
river is expected to fall below flood stage early\nFriday morning and continue falling to 12.4 feet Sunday
evening.\n* Impact...At 15.0 feet, Flooding begins in the Congaree National\nPark. This will begin to produce
flooding of portions of the lower\nboardwalk.\n* Impact...At 17.0 feet, The access road to the Sandy
```

```
Run\nsubdivision becomes flooded. The lower boardwalk in the Congaree\nNational Park becomes flooded by Cedar
Creek.\n* Impact...At 18.0 feet, Several homes in the Sandy Run subdivision\nalong the river become flooded. At 18
feet the river covers the\nWeston Lake overlook in the Congaree National Park. Between 18 and\n18.5 feet the river
begins to cover sections of the elevated\nboardwalk.\n* Flood History...This crest compares to a previous crest of
16.3\nfeet on 12/03/2020.\n&&",
        "instruction":"A Flood Warning means that flooding is imminent or occurring. All\ninterested parties should
take necessary precautions immediately.\nMotorists should not attempt to drive around barricades or drive\ncars
through flooded areas.\nCaution is urged when walking near riverbanks.\nAdditional information is available at
www.weather.gov.\nThe next statement will be issued Wednesday morning at 1000 AM EST."
        }
    ]
}
```


Air Quality Data

Air Quality data is returned in the Forecast API and Realtime API response. Depending upon your subscription plan we provide current and 3 day air quality data for the given location in json and xml.

It provides air quality index (see below) data on major pollutant gases like Carbon monoxide (CO), Ozone (O3), Nitrogen dioxide (NO2), Sulphur dioxide (SO2), PM 2.5 and PM 10.

By default air quality data is not returned. To get air quality data back in the response from Forecast API and Realtime API, pass the parameter **aqi=yes**.

Field	Data Type	Description
co	float	Carbon Monoxide (µg/m3)
o3	float	Ozone (µg/m3)
no2	float	Nitrogen dioxide (µg/m3)
so2	float	Sulphur dioxide (µg/m3)
pm2_5	float	PM2.5 (µg/m3)
pm10	float	PM10 (µg/m3)
us-epa-index	integer	US - EPA standard. • 1 means Good • 2 means Moderate • 3 means Unhealthy for sensitive group • 4 means Unhealthy • 5 means Very Unhealthy • 6 means Hazardous
gb-defra-index	integer	UK Defra Index (See table below)

UK DEFRA INDEX Table

Index	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Band	Low	Low	Low	Moderate	Moderate	Moderate	High	High	High	Very High
µgm^{-3}	0-11	12-23	24-35	36-41	42-47	48-53	54-58	59-64	65-70	71 or more

Bulk Request

If you are on Pro+, Business or Enterprise plan then you may use our bulk weather option to send multiple locations to get weather for all the locations sent in a single request.

Each location sent in bulk operation is counted as 1 call. It works for all the API methods except Search API.

For bulk you need to pass in the querysting q=bulk and then pass a json body with utf-8 encoding. All the the other request parameters will be passed as query as usual.

Json format for sending multiple locations in the body.

```
{
```

```
    "locations": [
        {
            "q": "53,-0.12",
            "custom_id": "my-id-1"
        },
        {
            "q": "London",
            "custom_id": "any-internal-id"
        },
        {
            "q": "90201",
            "custom_id": "us-zipcode-id-765"
        }
    ]
}
```

Json format explanation

Parameter	Description
q (required)	You may pass lat and lon, US zipcode, UK postcode, city name, IP, etc.
custom_id (optional)	We will return this custom_id back in the response for you to use it at your end. It is for better management at your end. We don't use this id for anything.

Bulk Request Example

```
curl --location --request GET 'http://api.weatherapi.com/v1/current.json?key=YOUR_API_KEY&q=bulk' \
--header 'Content-Type: application/json' \
--data-raw '{
    "locations": [
        {
            "q": "53,-0.12",
            "custom_id": "my-id-1"
        },
        {
            "q": "London",
            "custom_id": "any-internal-id"
        },
        {
            "q": "90201",
            "custom_id": "us-zipcode-id-765"
        }
    ]
}'
```

Bulk Response

```
{
    "bulk": [
        {
            "query": {
                "custom_id": "my-id-1",
                "q": "53,-0.12",
```

```
            "location": {
                "name": "Boston",
                "region": "Lincolnshire",
                "country": "United Kingdom",
                "lat": 53.0,
                "lon": -0.12,
                "tz_id": "Europe/London",
                "localtime_epoch": 1673620218,
                "localtime": "2023-01-13 14:30"
            },
            "current": {
                "last_updated_epoch": 1673620200,
                "last_updated": "2023-01-13 14:30",
                "temp_c": 8.7,
                "temp_f": 47.7,
                "is_day": 1,
                "condition": {
                    "text": "Partly cloudy",
                    "icon": "//cdn.weatherapi.com/weather/64x64/day/116.png",
                    "code": 1003
                },
                "wind_mph": 24.2,
                "wind_kph": 38.9,
                "wind_degree": 260,
                "wind_dir": "W",
                "pressure_mb": 1005.0,
                "pressure_in": 29.68,
                "precip_mm": 0.0,
                "precip_in": 0.0,
                "humidity": 74,
                "cloud": 75,
                "feelslike_c": 4.4,
                "feelslike_f": 39.9,
                "vis_km": 10.0,
                "vis_miles": 6.0,
                "uv": 2.0,
                "gust_mph": 33.1,
                "gust_kph": 53.3
            }
        }
    },
    {
        "query": {
            "custom_id": "any-internal-id",
            "q": "London",
            "location": {
                "name": "London",
                "region": "City of London, Greater London",
                "country": "United Kingdom",
                "lat": 51.52,
                "lon": -0.11,
                "tz_id": "Europe/London",
                "localtime_epoch": 1673620218,
                "localtime": "2023-01-13 14:30"
            },
            "current": {
                "last_updated_epoch": 1673620200,
                "last_updated": "2023-01-13 14:30",
                "temp_c": 11.0,
                "temp_f": 51.8,
                "is_day": 1,
                "condition": {
```

```
            "text": "Partly cloudy",
            "icon": "//cdn.weatherapi.com/weather/64x64/day/116.png",
            "code": 1003
        },
        "wind_mph": 23.0,
        "wind_kph": 37.1,
        "wind_degree": 270,
        "wind_dir": "W",
        "pressure_mb": 1010.0,
        "pressure_in": 29.83,
        "precip_mm": 0.0,
        "precip_in": 0.0,
        "humidity": 58,
        "cloud": 75,
        "feelslike_c": 8.1,
        "feelslike_f": 46.5,
        "vis_km": 10.0,
        "vis_miles": 6.0,
        "uv": 2.0,
        "gust_mph": 22.4,
        "gust_kph": 36.0
    }
  }
},
{
    "query": {
        "custom_id": "us-zipcode-id-765",
        "q": "90201",
        "location": {
            "name": "Bell",
            "region": "California",
            "country": "USA",
            "lat": 33.97,
            "lon": -118.17,
            "tz_id": "America/Los_Angeles",
            "localtime_epoch": 1673620220,
            "localtime": "2023-01-13 6:30"
        },
        "current": {
            "last_updated_epoch": 1673620200,
            "last_updated": "2023-01-13 06:30",
            "temp_c": 10.0,
            "temp_f": 50.0,
            "is_day": 0,
            "condition": {
                "text": "Clear",
                "icon": "//cdn.weatherapi.com/weather/64x64/night/113.png",
                "code": 1000
            },
            "wind_mph": 2.2,
            "wind_kph": 3.6,
            "wind_degree": 10,
            "wind_dir": "N",
            "pressure_mb": 1020.0,
            "pressure_in": 30.13,
            "precip_mm": 0.0,
            "precip_in": 0.0,
            "humidity": 74,
            "cloud": 0,
            "feelslike_c": 10.3,
            "feelslike_f": 50.5,
            "vis_km": 16.0,
```

```
                    "vis_miles": 9.0,
                    "uv": 1.0,
                    "gust_mph": 3.6,
                    "gust_kph": 5.8
                }
            }
        }
    ]
}
```


API Error Codes

If there is an error, API response contains error message including error code for following 4xx HTTP Status codes.

HTTP Status Code	Error code	Description
401	1002	API key not provided.
400	1003	Parameter 'q' not provided.
400	1005	API request url is invalid
400	1006	No location found matching parameter 'q'
401	2006	API key provided is invalid
403	2007	API key has exceeded calls per month quota.
403	2008	API key has been disabled.
403	2009	API key does not have access to the resource. Please check pricing page for what is allowed in your API subscription plan.
400	9000	Json body passed in bulk request is invalid. Please make sure it is valid json with utf-8 encoding.
400	9001	Json body contains too many locations for bulk request. Please keep it below 50 in a single request.
400	9999	Internal application error.

Realtime API

Current weather or realtime weather API method allows a user to get up to date current weather information in json and xml. The data is returned as a Current Object.

Current object contains current or realtime weather information for a given city.

Field	Data Type	Description
last_updated	string	Local time when the real time data was updated.
last_updated_epoch	int	Local time when the real time data was updated in unix time.
temp_c	decimal	Temperature in celsius
temp_f	decimal	Temperature in fahrenheit
feelslike_c	decimal	Feels like temperature in celsius
feelslike_f	decimal	Feels like temperature in fahrenheit
condition:text	string	Weather condition text
condition:icon	string	Weather icon url
condition:code	int	Weather condition unique code.
wind_mph	decimal	Wind speed in miles per hour
wind_kph	decimal	Wind speed in kilometer per hour
wind_degree	int	Wind direction in degrees
wind_dir	string	Wind direction as 16 point compass. e.g.: NSW
pressure_mb	decimal	Pressure in millibars
pressure_in	decimal	Pressure in inches
precip_mm	decimal	Precipitation amount in millimeters

precip_in	decimal	Precipitation amount in inches
humidity	int	Humidity as percentage
cloud	int	Cloud cover as percentage
is_day	int	1 = Yes 0 = No Whether to show day condition icon or night icon
uv	decimal	UV Index
gust_mph	decimal	Wind gust in miles per hour
gust_kph	decimal	Wind gust in kilometer per hour

Forecast API

Forecast weather API method returns, depending upon your price plan level, upto next 14 day weather forecast and weather alert as json or xml. The data is returned as a Forecast Object.

Forecast object contains astronomy data, day weather forecast and hourly interval weather information for a given city.

forecastday: Parent element

forecastday -> day: 'day' element inside forecastday contains max/min temperature, average temperature

forecastday -> astro
forecastday -> hour:

Forecastday	Parent element
forecastday -> day	day element contains: • Max, min and average temperature • Max wind speed • Total precipitation • Day weather condition
forecastday -> astro	astro element contains sunrise, sunset, moonrise and moonset data
forecastday -> hour	hour element contains hour by hour weather forecast information

forecastday

Field	Data Type	Description
date	string	Forecast date
date_epoch	int	Forecast date as unix time.
day	element	See day element
astro	element	See astro element
hour	element	See hour element

day Element

Field	Data Type	Description
maxtemp_c	decimal	Maximum temperature in celsius for the day.
maxtemp_f	decimal	Maximum temperature in fahrenheit for the day
mintemp_c	decimal	Minimum temperature in celsius for the day
mintemp_f	decimal	Minimum temperature in fahrenheit for the day
avgtemp_c	decimal	Average temperature in celsius for the day
avgtemp_f	decimal	Average temperature in fahrenheit for the day
maxwind_mph	decimal	Maximum wind speed in miles per hour
maxwind_kph	decimal	Maximum wind speed in kilometer per hour
totalprecip_mm	decimal	Total precipitation in milimeter
totalprecip_in	decimal	Total precipitation in inches
avgvis_km	decimal	Average visibility in kilometer
avgvis_miles	decimal	Average visibility in miles

avghumidity	int	Average humidity as percentage
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
uv	decimal	UV Index

astro Element

Field	Data Type	Description
sunrise	string	Sunrise time
sunset	string	Sunset time
moonrise	string	Moonrise time
moonset	string	Moonset time
moon_phase	string	Moon phases. Value returned: • New Moon • Waxing Crescent • First Quarter • Waxing Gibbous • Full Moon • Waning Gibbous • Last Quarter • Waning Crescent
moon_illumination	decimal	Moon illumination as %

hour Element

Field	Data Type	Description
time_epoch	int	Time as epoch
time	string	Date and time
temp_c	decimal	Temperature in celsius
temp_f	decimal	Temperature in fahrenheit
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
wind_mph	decimal	Maximum wind speed in miles per hour
wind_kph	decimal	Maximum wind speed in kilometer per hour
wind_degree	int	Wind direction in degrees
wind_dir	string	Wind direction as 16 point compass. e.g.: NSW
pressure_mb	decimal	Pressure in millibars
pressure_in	decimal	Pressure in inches
precip_mm	decimal	Precipitation amount in millimeters
precip_in	decimal	Precipitation amount in inches
humidity	int	Humidity as percentage
cloud	int	Cloud cover as percentage
feelslike_c	decimal	Feels like temperature as celcius
feelslike_f	decimal	Feels like temperature as fahrenheit
windchill_c	decimal	Windchill temperature in celcius
windchill_f	decimal	Windchill temperature in fahrenheit
heatindex_c	decimal	Heat index in celcius
heatindex_f	decimal	Heat index in fahrenheit
dewpoint_c	decimal	Dew point in celcius

dewpoint_f	decimal	Dew point in fahrenheit
will_it_rain	int	1 = Yes 0 = No Will it will rain or not
will_it_snow	int	1 = Yes 0 = No Will it snow or not
is_day	int	1 = Yes 0 = No Whether to show day condition icon or night icon
vis_km	decimal	Visibility in kilometer
vis_miles	decimal	Visibility in miles
chance_of_rain	int	Chance of rain as percentage
chance_of_snow	int	Chance of snow as percentage
gust_mph	decimal	Wind gust in miles per hour
gust_kph	decimal	Wind gust in kilometer per hour
uv	decimal	UV Index

History API

History weather API method returns, depending upon your price plan level, historical weather for a date on or after 1st Jan, 2010 as json and xml. The data is returned as a Forecast Object.

Forecast object contains astronomy data, day weather forecast and hourly interval weather information for a given city.

forecastday: Parent element

forecastday -> day: 'day' element inside forecastday contains max/min temperature, average temperature

forecastday -> astro
forecastday -> hour:

Forecastday	Parent element
forecastday -> day	day element contains: • Max, min and average temperature • Max wind speed • Total precipitation • Day weather condition
forecastday -> astro	astro element contains sunrise, sunset, moonrise and moonset data
forecastday -> hour	hour element contains hour by hour weather forecast information

forecastday

Field	Data Type	Description
date	string	Forecast date
date_epoch	int	Forecast date as unix time.
day	element	See day element
astro	element	See astro element
hour	element	See hour element

day Element

Field	Data Type	Description
maxtemp_c	decimal	Maximum temperature in celsius for the day.
maxtemp_f	decimal	Maximum temperature in fahrenheit for the day
mintemp_c	decimal	Minimum temperature in celsius for the day
mintemp_f	decimal	Minimum temperature in fahrenheit for the day
avgtemp_c	decimal	Average temperature in celsius for the day
avgtemp_f	decimal	Average temperature in fahrenheit for the day
maxwind_mph	decimal	Maximum wind speed in miles per hour

maxwind_kph	decimal	Maximum wind speed in kilometer per hour
totalprecip_mm	decimal	Total precipitation in milimeter
totalprecip_in	decimal	Total precipitation in inches
avgvis_km	decimal	Average visibility in kilometer
avgvis_miles	decimal	Average visibility in miles
avghumidity	int	Average humidity as percentage
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
uv	decimal	UV Index

astro Element

Field	Data Type	Description
sunrise	string	Sunrise time
sunset	string	Sunset time
moonrise	string	Moonrise time
moonset	string	Moonset time
moon_phase	string	Moon phases. Value returned: • New Moon • Waxing Crescent • First Quarter • Waxing Gibbous • Full Moon • Waning Gibbous • Last Quarter • Waning Crescent
moon_illumination	decimal	Moon illumination as %

hour Element

Field	Data Type	Description
time_epoch	int	Time as epoch
time	string	Date and time
temp_c	decimal	Temperature in celsius
temp_f	decimal	Temperature in fahrenheit
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
wind_mph	decimal	Maximum wind speed in miles per hour
wind_kph	decimal	Maximum wind speed in kilometer per hour
wind_degree	int	Wind direction in degrees
wind_dir	string	Wind direction as 16 point compass. e.g.: NSW
pressure_mb	decimal	Pressure in millibars
pressure_in	decimal	Pressure in inches
precip_mm	decimal	Precipitation amount in millimeters
precip_in	decimal	Precipitation amount in inches
humidity	int	Humidity as percentage
cloud	int	Cloud cover as percentage
feelslike_c	decimal	Feels like temperature as celcius
feelslike_f	decimal	Feels like temperature as fahrenheit

windchill_c	decimal	Windchill temperature in celcius
windchill_f	decimal	Windchill temperature in fahrenheit
heatindex_c	decimal	Heat index in celcius
heatindex_f	decimal	Heat index in fahrenheit
dewpoint_c	decimal	Dew point in celcius
dewpoint_f	decimal	Dew point in fahrenheit
will_it_rain	int	1 = Yes 0 = No Will it will rain or not
will_it_snow	int	1 = Yes 0 = No Will it snow or not
is_day	int	1 = Yes 0 = No Whether to show day condition icon or night icon
vis_km	decimal	Visibility in kilometer
vis_miles	decimal	Visibility in miles

Marine Weather API

Marine weather API method returns upto next 7 day (depending upon your price plan level) marine and sailing weather forecast and tide data (depending upon your price plan level) as json or xml. The data is returned as a Marine Object.

Marine object, depending upon your price plan level, contains astronomy data, day weather forecast and hourly interval weather information and tide data for a given sea/ocean point.

forecastday: Parent element

forecastday -> day: 'day' element inside forecastday contains max/min temperature, average temperature

forecastday -> astro
forecastday -> tide
forecastday -> hour:

Forecastday	Parent element
forecastday -> day	day element contains: • Max, min and average temperature • Max wind speed • Total precipitation • Day weather condition
forecastday -> astro	astro element contains sunrise, sunset, moonrise and moonset data
forecastday -> tides	tides element contains high and low tide data
forecastday -> hour	hour element contains hour by hour weather forecast information

forecastday

Field	Data Type	Description
date	string	Forecast date
date_epoch	int	Forecast date as unix time.
day	element	See day element
astro	element	See astro element
tides	element	See tides element
hour	element	See hour element

day Element

Field	Data Type	Description
maxtemp_c	decimal	Maximum temperature in celsius for the day.
maxtemp_f	decimal	Maximum temperature in fahrenheit for the day
mintemp_c	decimal	Minimum temperature in celsius for the day
mintemp_f	decimal	Minimum temperature in fahrenheit for the day

avgtemp_c	decimal	Average temperature in celsius for the day
avgtemp_f	decimal	Average temperature in fahrenheit for the day
maxwind_mph	decimal	Maximum wind speed in miles per hour
maxwind_kph	decimal	Maximum wind speed in kilometer per hour
totalprecip_mm	decimal	Total precipitation in milimeter
totalprecip_in	decimal	Total precipitation in inches
avgvis_km	decimal	Average visibility in kilometer
avgvis_miles	decimal	Average visibility in miles
avghumidity	int	Average humidity as percentage
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
uv	decimal	UV Index

astro Element

Field	Data Type	Description
sunrise	string	Sunrise time
sunset	string	Sunset time
moonrise	string	Moonrise time
moonset	string	Moonset time
moon_phase	string	Moon phases. Value returned: • New Moon • Waxing Crescent • First Quarter • Waxing Gibbous • Full Moon • Waning Gibbous • Last Quarter • Waning Crescent
moon_illumination	decimal	Moon illumination as %

tides Element

Field	Data Type	Description
tide_time	string	Local tide time
tide_height_mt	float	Tide height in mt
tide_type	string	Type of tide i.e. High or Low

hour Element

Field	Data Type	Description
time_epoch	int	Time as epoch
time	string	Date and time
temp_c	decimal	Temperature in celsius
temp_f	decimal	Temperature in fahrenheit
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
wind_mph	decimal	Maximum wind speed in miles per hour
wind_kph	decimal	Maximum wind speed in kilometer per hour
wind_degree	int	Wind direction in degrees

wind_dir	string	Wind direction as 16 point compass. e.g.: NSW
pressure_mb	decimal	Pressure in millibars
pressure_in	decimal	Pressure in inches
precip_mm	decimal	Precipitation amount in millimeters
precip_in	decimal	Precipitation amount in inches
humidity	int	Humidity as percentage
cloud	int	Cloud cover as percentage
feelslike_c	decimal	Feels like temperature as celcius
feelslike_f	decimal	Feels like temperature as fahrenheit
windchill_c	decimal	Windchill temperature in celcius
windchill_f	decimal	Windchill temperature in fahrenheit
heatindex_c	decimal	Heat index in celcius
heatindex_f	decimal	Heat index in fahrenheit
dewpoint_c	decimal	Dew point in celcius
dewpoint_f	decimal	Dew point in fahrenheit
will_it_rain	int	1 = Yes 0 = No Will it will rain or not
will_it_snow	int	1 = Yes 0 = No Will it snow or not
is_day	int	1 = Yes 0 = No Whether to show day condition icon or night icon
vis_km	decimal	Visibility in kilometer
vis_miles	decimal	Visibility in miles
chance_of_rain	int	Chance of rain as percentage
chance_of_snow	int	Chance of snow as percentage
gust_mph	decimal	Wind gust in miles per hour
gust_kph	decimal	Wind gust in kilometer per hour
sig_ht_mt	decimal	Significant wave height in metres
swell_ht_mt	decimal	Swell wave height in metres
swell_ht_ft	decimal	Swell wave height in feet
swell_dir	decimal	Swell direction in degrees
swell_dir_16_point	decimal	Swell direction in 16 point compass
swell_period_secs	decimal	Swell period in seconds
water_temp_c	decimal	Water temperature in Celcius
water_temp_f	decimal	Water temperature in Fahrenheit
uv	decimal	UV Index

Future Weather API

Future weather API method returns weather in a 3 hourly interval in future for a date between 14 days and 300 days from today in the future.

Forecast object contains astronomy data, day weather forecast and hourly interval weather information for a given city.

forecastday: Parent element

forecastday -> day: 'day' element inside forecastday contains max/min temperature, average temperature

forecastday -> astro
forecastday -> hour:

Forecastday	Parent element

forecastday -> day	day element contains: • Max, min and average temperature • Max wind speed • Total precipitation • Day weather condition
forecastday -> astro	astro element contains sunrise, sunset, moonrise and moonset data
forecastday -> hour	hour element contains hour by hour weather forecast information

forecastday

Field	Data Type	Description
date	string	Forecast date
date_epoch	int	Forecast date as unix time.
day	element	See day element
astro	element	See astro element
hour	element	See hour element

day Element

Field	Data Type	Description
maxtemp_c	decimal	Maximum temperature in celsius for the day.
maxtemp_f	decimal	Maximum temperature in fahrenheit for the day
mintemp_c	decimal	Minimum temperature in celsius for the day
mintemp_f	decimal	Minimum temperature in fahrenheit for the day
avgtemp_c	decimal	Average temperature in celsius for the day
avgtemp_f	decimal	Average temperature in fahrenheit for the day
maxwind_mph	decimal	Maximum wind speed in miles per hour
maxwind_kph	decimal	Maximum wind speed in kilometer per hour
totalprecip_mm	decimal	Total precipitation in milimeter
totalprecip_in	decimal	Total precipitation in inches
avgvis_km	decimal	Average visibility in kilometer
avgvis_miles	decimal	Average visibility in miles
avghumidity	int	Average humidity as percentage
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
uv	decimal	UV Index

astro Element

Field	Data Type	Description
sunrise	string	Sunrise time
sunset	string	Sunset time
moonrise	string	Moonrise time
moonset	string	Moonset time
moon_phase	string	Moon phases. Value returned: • New Moon • Waxing Crescent • First Quarter • Waxing Gibbous • Full Moon • Waning Gibbous • Last Quarter

		• Waning Crescent
moon_illumination	decimal	Moon illumination as %

hour Element

Field	Data Type	Description
time_epoch	int	Time as epoch
time	string	Date and time
temp_c	decimal	Temperature in celsius
temp_f	decimal	Temperature in fahrenheit
condition:text	string	Weather condition text
condition:icon	string	Weather condition icon
condition:code	int	Weather condition code
wind_mph	decimal	Maximum wind speed in miles per hour
wind_kph	decimal	Maximum wind speed in kilometer per hour
wind_degree	int	Wind direction in degrees
wind_dir	string	Wind direction as 16 point compass. e.g.: NSW
pressure_mb	decimal	Pressure in millibars
pressure_in	decimal	Pressure in inches
precip_mm	decimal	Precipitation amount in millimeters
precip_in	decimal	Precipitation amount in inches
humidity	int	Humidity as percentage
cloud	int	Cloud cover as percentage
feelslike_c	decimal	Feels like temperature as celcius
feelslike_f	decimal	Feels like temperature as fahrenheit
windchill_c	decimal	Windchill temperature in celcius
windchill_f	decimal	Windchill temperature in fahrenheit
heatindex_c	decimal	Heat index in celcius
heatindex_f	decimal	Heat index in fahrenheit
dewpoint_c	decimal	Dew point in celcius
dewpoint_f	decimal	Dew point in fahrenheit
will_it_rain	int	1 = Yes 0 = No Will it will rain or not
will_it_snow	int	1 = Yes 0 = No Will it snow or not
is_day	int	1 = Yes 0 = No Whether to show day condition icon or night icon
vis_km	decimal	Visibility in kilometer
vis_miles	decimal	Visibility in miles

Search/Autocomplete API

WeatherAPI.com Search or Autocomplete API returns matching cities and towns as an array of Location object.

IP Lookup API

IP Lookup API method allows a user to get up to date information for an IP address in json and xml.

Field	Data Type	Description
ip	string	IP address
type	string	ipv4 or ipv6
continent_code	string	Continent code
continent_name	string	Continent name
country_code	string	Country code

country_name	string	Name of country
is_eu	bool	true or false
geoname_id	string	Geoname ID
city	string	City name
region	string	Region name
lat	decimal	Latitude in decimal degree
lon	decimal	Longitude in decimal degree
tz_id	string	Time zone

Astronomy API

Astronomy API method allows a user to get up to date information for sunrise, sunset, moonrise, moonset, moon phase and illumination in json and xml.

Field	Data Type	Description
sunrise	string	Sunrise local time
sunset	string	Sunset local time
moonrise	string	Moonrise local time
moonset	string	Moonset local time
moon_phase	string	Moon phases
moon_illumination	int	Moon illumination

Time Zone API

Time Zone API method allows a user to get up to date time zone and local time information in json and xml.

Field	Data Type	Description
tz_id	string	Time zone id
localtime_epoch	int	Local time in epoch.
localtime	string	Local time in yyyy-MM-dd HH:mm format

Sports API

Sports API method allows a user to get listing of all upcoming sports events for football, cricket and golf in json and xml.

Field	Data Type	Description
stadium	string	Name of stadium
country	int	Country
region	string	Region
tournament	string	Tournament name
start	string	Start local date and time for event in yyyy-MM-dd HH:mm format.
match	string	Match name

Example

WeatherAPI.com API is so easy to implement. Look at following examples on how you can form a request to get data either through a web browser or in your application.

So to get current weather for London: JSON: http://api.weatherapi.com/v1/current.json?key=<YOUR_API_KEY>&q=London

XML: http://api.weatherapi.com/v1/current.xml?key=<YOUR_API_KEY>&q=London
To get 7 day weather for US Zipcode 07112: JSON: http://api.weatherapi.com/v1/forecast.json?key=<YOUR_API_KEY>&q=07112&days=7

XML: http://api.weatherapi.com/v1/forecast.xml?key=<YOUR_API_KEY>&q=07112&days=7
Search for cities starting with Lond: JSON: http://api.weatherapi.com/v1/search.json?key=<YOUR_API_KEY>&q=lond
XML: http://api.weatherapi.com/v1/search.xml?key=<YOUR_API_KEY>&q=lond

Integrations

Please use our API Explorer to see how the request is formed and what response to expect.

We also have SDK for popular framework/languages available on Github for quick integrations.

Weather Icons and Codes

In the JSON response we return a condition:code which is a code for describing weather. For example clear, sunny, etc.

You may retrieve the whole condition list as JSON to implement different weather icons or apply other logic to your application. It also includes multi-language translations of weather condition text.

Multilingual Condition list URL: https://www.weatherapi.com/docs/conditions.json

English Condition list URL (CSV): https://www.weatherapi.com/docs/weather_conditions.csv

English Condition list URL (JSON): https://www.weatherapi.com/docs/weather_conditions.json

English Condition list URL (XML): https://www.weatherapi.com/docs/weather_conditions.xml

Please download the list and use it offline instead of directly linking into your application.

Weather Icons

You are also free to download WeatherAPI.com weather icons and use it in your application or website.
Download Weather Icons (.zip)

Link Back

If you are on our free plan we would appreciate if you could provide a link back to our service.

HTML LINK BACK CODE EXAMPLES

You may choose any of the below HTML code and place it on the website you have provided during the Free plan upgrade.

Text

```
Powered by <a href="https://www.weatherapi.com/" title="Free Weather API">WeatherAPI.com</a>
```

Preview

Powered by WeatherAPI.com

Image

```
<a href="https://www.weatherapi.com/" title="Free Weather API"><img src='//cdn.weatherapi.com/v4/images
/weatherapi_logo.png' alt="Weather data by WeatherAPI.com" border="0"></a>
```

Preview