



Geography: Global

Recent Lightning Strikes for Global - v3
Domain Portfolio: Observations | Domain: Historical | Usage Classification: **Limited Availability**
Attribution Required: N/A **Attribution Requirements:** N/A

Overview

The Lightning API provides the ability to lookup lightning strikes that happened for a given period of time in the specified region. This API provides data for the recent lightning strikes that occurred around the globe for the specified period.

HTTP Headers and Data Lifetime - Caching and Expiration

For details on appropriate header values as well as caching and expiration definitions, please see [The Weather Company Data | API Common Usage Guide](#).

Atomic Endpoints	Aggregate Product Name
/v3/wx/lightning/recent/global/15seconds	v3-wx-lightning-recent-global-15seconds
/v3/wx/lightning/recent/global/1minute	v3-wx-lightning-recent-global-1minute
/v3/wx/lightning/recent/global/5minute	v3-wx-lightning-recent-global-5minute

URL Construction

Request by Geocode: Required Parameters: startTime , format , units , apiKey Optional Parameters: strikeType https://api.weather.com/v3/wx/lightning/recent/global/15seconds?startTime=<startTime>&format=<format>&units=<units>&apiKey=yourApiKey
https://api.weather.com/v3/wx/lightning/recent/global/15seconds?startTime=20170921120515&format=json&units=e&apiKey=yourApiKey

Valid Parameter Definitions

Parameter	Description	Example
startTime	<p>Start date time of period request in UTC. The start date time must be within the past 1 hour from the current time. For example, if the current time is "13-Dec-2017 09:27:21", then a valid startTime would be between "13-Dec-2017 08:27:21" and "13-Dec-2017 09:27:21"</p> <p>For 15seconds endpoint, the format must be YYYYMMDDHHmmss and seconds (ss) value must be an interval of 15. For example: 00, 15, 30, 45.</p> <p>For 1minute endpoint, the format must be YYYYMMDDHHmm and minute (mm) value must be any value from 00 to 59.</p> <p>For 5minute endpoint, the format must be YYYYMMDDHHmm and minute (mm) value must be an interval of 5. For example: 00, 05, 10, ... , 50, 55.</p>	20170925120015 201709251201 201709251205

format	The format in which the response is to be returned.	json
units	For units = e, the output fields errorMajor and errorMinor will be in miles. For units = m, the output fields errorMajor and errorMinor will be in kilometers.	e
strikeType	strikeTypeCode of cloud = cloud to cloud strike type strikeTypeCode of ground = cloud to ground strike type strikeTypeCode of all = both cloud to cloud AND cloud to ground strike types	cloud

Data Elements & Definitions

Note: Field names are sorted alphabetically in the table below for presentation purposes. The table below does not represent the sort order of the API response.

Field Name	Description	Type	Range	Sample	Nulls Allowed
“lightning”		[array]			
errorAzimuth	Azimuth of error ellipse, in degrees. Clockwise bearing from 0 degrees north.	[decimal]	0 to 180.0	23.37	N
errorMajor	Error ellipse semi-major axis length	[decimal]	0 to 50.0 km for units = m and 0 to 80.0 mi for units = e	1.2116768	N
errorMinor	Error ellipse semi-minor axis length	[decimal]	0 to 50.0 km for units = m and 0 to 80.0 mi for units = e	1.1060435	N
detectedTimeUtc	Time when the strike was made available, UTC timezone.	[string]	ISO 8601 with milliseconds precision	2017-03-30T13:57:39.458+00:00	N
intensity	Magnitude and polarity of strike	[decimal]	Any integer	15000	N
latitude	Latitude of strike location up to five (5) decimals	[decimal]	-90.0 to 90.0	-1.79979	N
longitude	Longitude of strike location up to five (5) decimals	[decimal]	-180.0 to 180.0	-44.54565	N
sensorsInvolved	Number of sensors involved in detecting the lightning strike.	[integer]	Any integer greater than 0.	3	N
strikeTypeCode	Cloud indicator	[integer]	0 or 1: 0 means cloud to ground, 1 means cloud to cloud	0	N
validTimeUtc	Valid time of strike (the time the lightning strike actually occurred), UTC timezone	[string]	ISO 8601 with milliseconds precision	2017-03-30T13:57:31.231+00:00	N

JSON Sample

<pre>{ "metadata": { "status_code": 200, "version": "1.0", "transaction_id": "1506003035369:1667353793", "units": "e", "expire_time_gmt": 1506006635 }, "success": true,</pre>
--

```
"lightning": {  
  "intensity": [  
    -10000,  
    -38000  
  ],  
  "sensorsInvolved": [  
    1,  
    4  
  ],  
  "strikeTypeCode": [  
    0,  
    0  
  ],  
  "errorAzimuth": [  
    29.4,  
    36.1  
  ],  
  "errorMajor": [  
    1.2116768,  
    1.1246847  
  ],  
  "errorMinor": [  
    1.1060435,  
    0.9258454  
  ],  
  "latitude": [  
    18.206506,  
    18.247723  
  ],  
  "longitude": [  
    75.542999,  
    75.676939  
  ],  
  "validTimeUtc": [  
    "2017-09-21T13:59:14.221+0000",  
    "2017-09-21T13:59:14.268+0000"  
  ],  
  "detectedTimeUtc": [  
    "2017-09-21T14:00:09.000+0000",  
    "2017-09-21T14:00:09.000+0000"  
  ]  
}  
}
```