Weather Company Data for Advanced Analytics | 15 Minute Forecast - v1

Domain Portfolio: Forecast | Domain: Short-Range Forecast | API Name: 15 Minute Forecast - v1

Standard HTTP Cache-Control headers are used to define caching length. The TTL value is provided in the HTTP Header as an absolute time value using the “Expires” parameter. Example: “Expires: Fri, 12 Jul 2013 12:00:00 GMT”. The response provides a data element expire_time_gmt, this should be used to expire and remove a record from your system.

Geography: Global **Attribution Required:** NO **Attribution Requirements:** N/A

Overview

The short range 15 Minute Forecast API is sourced from the TWC Forecast system. This API returns weather content consisting of forecasted weather for the next 15 minutes increment time steps out to 7 hours.

Understanding the 15-Minute Forecasts

Implementing our forecasts requires your applications to perform basic processing in order to properly ingest the forecast data feeds.

Forecast Composition

The TWC 15 Minute forecast product can contain up to 28 short range forecasts for each location. You should discard all previous hourly forecasts for a given forecast location when a new record is received.

Forecast Implementation

To request and display the 15 Minute Forecast product there is no need to pass a parameter to select an hour. Each request will return the full 15 Minute Forecast.

Translated Fields:

This TWC API handles the translation of phrases. However, when formatting a request URL a valid language must be passed along (see the language code table for the supported codes).

- dow
- golf_category
- phrase_32char
- uv_desc
- wdir_cardinal

Unit of Measure Requirement

The unit of measure for the response. The following values are supported:

- e = English units
- m = Metric units
- h = Hybrid units (UK)

URL Construction

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.

Request by Geocode (Latitude & Longitude): Required Parameters: language, units, geocode, postal code apiKey=**yourApiKey**
https://api.weather.com/v1/geocode/34.063/-84.217/forecast/fifteenminute.json?language=en-US&units=e&apiKey=yourApiKey

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
class	Data identifier	string		fod_short_range_fifteen_minute	N
clds	Average cloud cover expressed as a percentage for the 15-minute period.	integer	0 to 100	82	N

day_ind	This data field indicates whether it is daytime or nighttime based on the Local Apparent Time of the location.	string	D = Day, N = Night, X = missing (for extreme northern and southern hemisphere	D	N
dewpt	Dew point for the 15-minute forecast period The temperature which air must be cooled at constant pressure to reach saturation. The Dew Point is also an indirect measure of the humidity of the air. The Dew Point will never exceed the Temperature. When the Dew Point and Temperature are equal, clouds or fog will typically form. The closer the values of Temperature and Dew Point, the higher the relative humidity.	integer	-80 to 100 (°F) or -62 to 37 (°C)	63	N
dow	Day of week	string		Thursday	N
expire_time_gmt	Expiration time in UNIX seconds	epoch		1369252800	N
fcst_valid	Time forecast is valid in UNIX seconds	epoch		1369252800	N
fcst_valid_local	Time forecast is valid in local apparent time.	ISO	ISO 8601 - YYYY-MM-DDTHH:MM:SS-NNNN; NNNN=GMT offset	2014-08-20T10:47:59-05:00	N
feels_like	15-minute feels like temperature. An apparent temperature. It represents what the air temperature “feels like” on exposed human skin due to the combined effect of the wind chill or heat index.	integer		84	N
gust	The maximum expected wind gust speed.	integer		7	Y
hi	15-minute maximum heat index. An apparent temperature. It represents what the air temperature “feels like” on exposed human skin due to the combined effect of warm temperatures and high humidity. When the temperature is 70°F or higher, the Feels Like value represents the computed Heat Index. For temperatures between 40°F and 70°F, the Feels Like value and Temperature are the same, regardless of wind speed and humidity, so use the Temperature value.	integer		84	Y
icon_code	This number is the key to the weather icon lookup. The data field shows the icon number that is matched to represent the observed weather conditions. Please refer to the Forecast Icon Code, Weather Phrases and Images document.	integer		26	N
icon_extd	Code representing explicit full set sensible weather. Please refer to the Forecast Icon Code, Weather Phrases and Images document.	integer		5500	N
mslp	Mean sea level pressure	decimal		30.21	N
num	This data field is the sequential number that identifies each of the forecasted days in the API. They start on day 1, which is the forecast for the current day. Then the forecast for tomorrow uses number 2, then number 3 for the day after tomorrow, and so forth.	Integer	1 - 15	1	N
phrase_12char	15-minute sensible weather phrase	string		Cloudy	N
phrase_22char	15-minute sensible weather phrase	string		Cloudy	N
phrase_32char	15-minute sensible weather phrase	string		Fog Late	N
pop	15-minute maximum probability of precipitation	integer	0 to 100	20	N
precip_rate	The forecasted hourly precipitation rate calculated for the 15-minute period. As this is a standard hourly rate, the approximate expected precipitation forecast for the 15-Minute period is the displayed valued divided by 4.	decimal		0.13	N
precip_type	The short text describing the expected type accumulation associated with the Probability of Precipitation (POP) display for the 15-minute period.	string	rain,snow, precip	rain	N
rh	The relative humidity of the air, which is defined as the ratio of the amount of water vapor in the air to the	integer	0 to 100	83	N

	amount of vapor required to bring the air to saturation at a constant temperature. Relative humidity is always expressed as a percentage.				
severity	A code denoting how impactful is the forecasted weather for this 15-minute period.	integer	0 = no threat 6 = dangerous / life threatening	2	N
snow_rate	The forecasted hourly snow accumulation during the 15-minute period. The forecasted hourly snow accumulation during the 15-minute period. As this is a standard hourly rate, the approximate expected snowfall forecast for the 15-Minute period is the displayed valued divided by 4.	decimal		0.2	N
subphrase_pt1	Part 1 of 3-part 15-minute sensible weather phrase	string		Cloudy	N
subphrase_pt2	Part 2 of 3-part 15-minute y sensible weather phrase	string		Late	N
subphrase_pt3	Part 3 of 3-part 15-minute sensible weather phrase	string		Thunder	N
temp	Temperature for the 15-minute forecast period. The temperature of the air, measured by a thermometer 1.5 meters (4.5 feet) above the ground that is shaded from the other elements. You will receive this data field in Fahrenheit degrees or Celsius degrees.	integer	-140 to 140 (F)	68	N
uv_desc	The UV Index Description which complements the UV Index value by providing an associated level of risk of skin damage due to exposure. -2 is Not Available -1 is No Report, 0 to 2 is Low, 3 to 5 is Moderate, 6 to 7 is High, 8 to 10 is Very High, 11 to 16 is Extreme	string	-2 to 16	Low	N
uv_index	Maximum UV index for the 15-minute period.	integer		2	N
uv_index_raw	The non-truncated UV Index which is the intensity of the solar radiation based on a number of factors.	decimal		2.22	N
uv_warning	TWC-created UV warning based on UV index of 11 or greater.	integer		0	N
vis	Prevailing hourly visibility	decimal	0 to 999	5.2	N
wc	15-minute minimum wind chill. An apparent temperature. It represents what the air temperature “feels like” on exposed human skin due to the combined effect of the cold temperatures and wind speed. When the temperature is 61°F or lower the Feels Like value represents the computed Wind Chill so display the Wind Chill value. For temperatures between 61°F and 75°F, the Feels Like value and Temperature are the same, regardless of wind speed and humidity, so display the Temperature value.	integer		68	N
wdir	Average wind direction in magnetic notation for the 15-minute period.	integer	0 to 359	145	N
wdir_cardinal	Average wind direction in cardinal notation for the 15-minute period.	string	N , NNE , NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, NNW, CALM, VAR	SE	N
wspd	The maximum forecasted hourly wind speed for the 15-minute period. The wind is treated as a vector; hence, winds must have direction and magnitude (speed). The wind information reported in the hourly current conditions corresponds to a 10-minute average called the sustained wind speed. Sudden or brief variations in the wind speed are known as “wind gusts” and are reported in a separate data field. Wind directions are always expressed as "from whence the wind blows" meaning that a North wind blows from North to South. If you face North in a North wind the wind is at your face. Face southward and the North wind is at your back.	integer		5	N
wxman	Code combining Hourly sensible weather and temperature conditions	string		wx4400	N

JSON Sample

```
// Response Collapsed for Presentation Purposes
{
   "metadata": {
      "language": "en-US",
      "transaction_id": "1473207176956:-15066738",
      "version": "1",
      "latitude": 34.06,
      "longitude": -84.21,
      "units": "e",
      "expire_time_gmt": 1473207296,
      "status_code": 200
   },
   "forecasts": [
      {
         "class": "fod_short_range_fifteen_minute",
         "expire_time_gmt": 1473207206,
         "fcst_valid": 1473207300,
         "fcst_valid_local": "2016-09-06T20:15:00-0400",
         "num": 1,
         "day_ind": "N",
         "temp": 81,
         "dewpt": 58,
         "hi": 82,
         "wc": 81,
         "feels_like": 82,
         "icon_extd": 3100,
         "wxman": "wx1500",
         "icon_code": 31,
         "dow": "Tuesday",
         "phrase_12char": "Clear",
         "phrase_22char": "Clear",
         "phrase_32char": "Clear",
         "subphrase_pt1": "Clear",
         "subphrase_pt2": "",
         "subphrase_pt3": "",
         "pop": 0,
         "precip_type": "rain",
         "precip_rate": 0,
         "snow_rate": 0,
         "rh": 46,
```

```
      "wspd": 1,
      "wdir": 255,
      "wdir_cardinal": "WSW",
      "uv_desc": "Low",
      "uv_index": 0,
      "gust": null,
      "clds": 8,
      "vis": 10,
      "mslp": 30.13,
      "uv_index_raw": 0,
      "uv_warning": 0,
      "severity": 1
    },
```