Weather Company Data - Core | Site-Based Observations - v1

Domain Portfolio: Observations | Domain: Current Conditions | API Name: Site-Based Observations - v1

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

Overview

Current Conditions are sourced from physical site-based observation stations. This API returns the latest weather observation for the location supplied to include current temperatures, winds, pressure and other observed weather information. Weather observations are reported from physical devices deployed worldwide (weather data collected from METAR, SYNOP, BUOY, CMAN devices).

Current Condition: Access to retained site-based data will be distributed when requested in Current Conditions data feeds. Observations per station within a 24 hour period varies due to station operation requirements (i.e. modified operating hours, number of observations recorded per hour, maintenance issues, etc). The recent observations data will be continuously updated and replaced with a first-in / first-out methodology, (rotating data with newest observation and moving the oldest observations to the archive storage) based on date/time stamping of the observations. The amount of data retained and available from any given station may be more than a single observation or more than 24 individual observation reports for any given station id. The number of observations is determined by the type of observation it is, i.e. NWS, etc.

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**.

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).

- pressure_desc
- uv_desc
- wx_phrase
-

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

Atomic API URL Examples:	**Aggregate Product Name**	v2obs
Request by Geocode (Latitude & Longitude): Required Parameters: geocode, language, format, units, apiKey=**yourApiKey**		
https://api.weather.com/v1/geocode/34.063/-84.217/observations.json?language=en-US&units=e&apiKey=yourApiKey		
Request by Postal Code: Required Parameters: language, format, units, postal code apiKey=**yourApiKey** The Postal Code has a TWC proprietary location type (4) with the following format: location/<postal code>:<location type>:<country code>		
https://api.weather.com/v1/location/30075:4:US/observations.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
blunt_phrase	Weather description qualifier short phrase	string		Warmer than yesterday.	Y
class	data identifier	string	default	observation	N
clds	Cloud cover description code	string	SKC, CLR, SCT, FEW, BKN, OVC	SKC	Y
day_ind	Daytime or nighttime of the local apparent time of the location	string	D = Day, N = Night, X = Missing (for extreme northern and southern hemisphere	D	Y
dewpt	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)	60	Y
expire_time_gmt	Expiration time in UNIX seconds	epoch		1369252800	N
feels_like	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	-140 to 140	60	Y
gust	Wind gust speed. This data field contains information about sudden and temporary variations of the average Wind Speed. The report always shows the maximum wind gust speed recorded during the observation period. It is a required display field if Wind Speed is shown. The speed of the gust can be expressed in miles per hour or kilometers per hour.	integer		35	Y
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		70	Y
icon_extd	The four-digit number to represent the observed weather conditions. Refer to the Icon Code, Weather Phrases and Images document	integer		5500	Y
key	Primary data field to group or access data	string	same as observation ID	KATL	N
max_temp	High temperature in the last 24 hours	integer	-140 to 140	81	Y
min_temp	Low temperature in the last 24 hours	integer	-140 to 140	48	Y
obs_id	Observation station ID	string		KATL	N
obs_name	Observation station name	string		Hartsfield-Jackson Airport	N
precip_hrly	Precipitation for the last hour	decimal	0.00 to 99.99	0.5	Y
precip_total	Precipitation amount in the last rolling 24 hour period	decimal	0.00 to 99.99	0.3	Y
pressure	Barometric pressure is the pressure exerted by the atmosphere at the earth's surface, due to the weight of the air. This value is read directly from an instrument called a mercury barometer and its units are expressed in millibars (equivalent to HectoPascals).	double		30.06	Y
pressure_desc	A phrase describing the change in the barometric pressure reading over the last hour.	string	Steady, Rising, Rising Rapidly, Falling,	Steady	Y

			Falling Rapidly		
pressure_tend	The change in the barometric pressure reading over the last hour expressed as an integer.	integer	0 = Steady 1 = Rising or Rising Rapidly 2 = Falling or Falling Rapidly	0	Y
qualifier	Weather description qualifier code	string		QQ0063	Y
qualifier_svrty	Weather description qualifier severity	string	1 (low) to 6 (high)	1	Y
rh	The relative humidity of the air, which is defined as the ratio of the amount of water vapor in the air to the amount of vapor required to bring the air to saturation at a constant temperature. Relative humidity is always expressed as a percentage.	integer	0 to 100	91	Y
snow_hrly	Snow increasing rapidly in inches or centimeters per hour depending on whether or not the snowfall is reported by METAR or TECCI (synthetic observations). METAR snow accumulation for the last hour is in inches and TECCI is in centimeters.	decimal	0 to 15	1	Y
temp	The temperature of the air, at the time of the observation, measured by a thermometer 1.5 meters (4.5 feet) above the ground that is shaded from the other elements.	integer	-140 to 140	62	Y
terse_phrase	Weather description qualifier terse phrase	string		Dangerous wind chills. Limit outdoor exposure.	Y
uv_desc	Ultraviolet index description	string	Extreme, Very High, High, Low, Minimal, Moderate, No Report, Not Available	High	Y
uv_index	Ultraviolet index	integer	0 to 11 and 999	7	Y
valid_time_gmt	Valid time of observation as a Unix epoch value (seconds since start of 1970, UTC)	epoch		1369252800	N
vis	The horizontal visibility at the observation point. Visibilities can be reported as fractional values particularly when visibility is less than 2 miles. Visibilities greater than 10 statute miles(16.1 kilometers) which are considered “unlimited” are reported as “999” in your feed. You can also find visibility values that equal zero. This occurrence is not wrong. Dense fogs and heavy snows can produce values near zero. Fog, smoke, heavy rain and other weather phenomena can reduce visibility to near zero miles or kilometers.	double	0 to 999 or null; For greater than 1 = no decimal. For less than 1 = 2 (Metric) & 2 (Imperial) decimal places.	10, 0.25 (Metric) 0.25 (Imperial)	Y
wc	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	Use only if temperature is below 40 degrees Fahrenheit OR below 5 degrees Celsius	-25	Y
wdir	The direction from which the wind blows expressed in degrees. The magnetic direction varies from 1 to 360 degrees, where 360° indicates the North, 90° the East, 180° the South, 270° the West, and so forth. A ‘null’ value represents no determinable wind direction.	integer	1 to 360	45	Y
wdir_cardinal	This field contains the cardinal direction from which the wind blows in an abbreviated form. 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.	string	N , NNE , NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, NNW, CALM, VAR	ENE	Y
wspd	Wind Speed. 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	integer		15	Y

	and the North wind is at your back.				
wx_icon	The two-digit number to represent the observed weather conditions. Refer to the Icon Code, Weather Phrases and Images document	integer	0 to 48	47	Y
wx_phrase	A text description of the observed weather conditions at the reporting station	string	257 phrases	Mostly sunny	Y
water_temp	Water temperature	integer	25 to 100	80	Y
primary_wave_period	Primary wave period	integer	0-99	13	Y
primary_wave_height	Primary wave height	decimal	0-99.99	3.28	Y
primary_swell_period	Primary swell period	integer	0-99	13	Y
primary_swell_height	Primary swell height	decimal	0-99.99	1.64	Y
primary_swell_direction	Primary swell direction	integer	0 to 359	190	Y
secondary_swell_period	Secondary swell period	integer	0-99	null	Y
secondary_swell_height	Secondary swell height	decimal	0-99.99	null	Y
secondary_swell_direction	Secondary swell direction	integer	0 to 359	null	Y

JSON Sample


```
{
   "metadata": {
      "language": "en-US",
      "transaction_id": "1473201321183:-1106734720",
      "version": "1",
      "latitude": 34.06,
      "longitude": -84.21,
      "units": "e",
      "expire_time_gmt": 1473207900,
      "status_code": 200
   },
   "observation": {
      "key": "T72227031",
      "class": "observation",
      "expire_time_gmt": 1473207900,
      "obs_id": "T72227031",
      "obs_name": "Duluth",
      "valid_time_gmt": 1473200700,
      "day_ind": "D",
      "temp": 90,
      "wx_icon": 32,
      "icon_extd": 3200,
      "wx_phrase": "Sunny",
      "pressure_tend": 0,
      "pressure_desc": "Steady",
      "dewPt": 54,
```

```
      "heat_index": 88,
      "rh": 29,
      "pressure": 30.18,
      "vis": 10,
      "wc": 90,
      "wdir": 70,
      "wdir_cardinal": "ENE",
      "gust": null,
      "wspd": 1,
      "max_temp": 92,
      "min_temp": 63,
      "precip_total": 0,
      "precip_hrly": 0,
      "snow_hrly": 0,
      "uv_desc": "Low",
      "feels_like": 88,
      "uv_index": 1,
      "qualifier": "OQ0047",
      "qualifier_svrty": "1",
      "blunt_phrase": "Hot.",
      "terse_phrase": "Hot.",
      "clds": "SKC",
      "water_temp": null,
      "primary_wave_period": null,
      "primary_wave_height": null,
      "primary_swell_period": null,
      "primary_swell_height": null,
      "primary_swell_direction": null,
      "secondary_swell_period": null,
      "secondary_swell_height": null,
      "secondary_swell_direction": null
    }
}
```