Limited Availability - Daily Forecast

API User Document

Version 1.0

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Audience

This API is intended for web and mobile platforms.

Geography

Worldwide.

Background Technology

This API is a REST-based web service.

Response Format

This TWC API can return either JSON or XML formatted responses.

Icon Codes, Weather Phrases and Images

For the mapping of icon codes, weather phrases and images please refer to the Icon Code, Weather Phrases and Images document.

Translations

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).

Fields Translated

- narrative
- dow
- wind_phrase
- wdir_cardinal
- daypart_name
- temp_phrase
- shortcast
- long_daypart_name
- golf_category
- phrase_32char
- lunar_phase

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**.

URL Construction

Please refer to the TWC API Common Usage document for a tutorial on URL construction and URL references.

Overview

The Standard Daily Forecast API is sourced from the The Weather Company (TWC) Forecast system. This TWC API returns weather forecasts for the current day up to 9 days out. Your content licensing agreement with TWC determines the number of days returned in the API response and is constrained by the API Key that is provided to your company. Please refer to the Data Elements section later in this document for more details.

Your content licensing agreement with TWC determines the specific endpoint authorized by the API Key entitlements that is provided to your company. Each time segment duration (3, 5, 7, 10, 15) is an atomic API endpoint. Your API key must be authorized for each atomic API endpoint to successfully request a given API endpoint. For example if your API key is authorized for only the 10 Day, and you attempt to request a 5 Day duration, you will get an error stating that [Api not allowed for this api key].

Understanding Daily Forecasts

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

Forecast Composition

The TWC daily forecast product can contain multiple days of daily forecasts for each location. Each day of a forecast can contain up to three "temporal segments" meaning three separate forecasts. For any given forecast day we offer day, night, and a 24-hour forecast.

Forecast Implementation

The data values in this API are correctly populated into Day, Night, or 24-hour temporal segments. These segments are separate objects in the XML or JSON responses.

PLEASE NOTE: The Day object will no longer appear in the API after 3:00pm Local Apparent Time. At 3pm Local Apparent Time, we recommend that your application no longer displays the Day object.

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 Format

Atomic API URL Examples:
Your content licensing agreement with TWC determines the number of days returned in the API response and is constrained by the API Key that is provided to your company.

Request by Geocode (Latitude & Longitude): https://api.weather.com/v1/**geocode/34.063/-84.217**/forecast/daily/3day.**json?language=en-US**&**units=e**&**apiKey=yourApiKey**	**Required Parameters:** geocode, language, format

https://api.weather.com/v1/geocode/34.063/-84.217/**forecast/daily/3day**.json?language=en-US&units=e&apiKey=**yourApiKey**

https://api.weather.com/v1/geocode/34.063/-84.217/**forecast/daily/5day**.json?language=en-US&units=e&apiKey=**yourApiKey**

https://api.weather.com/v1/geocode/34.063/-84.217/**forecast/daily/7day**.json?language=en-US&units=e&apiKey=**yourApiKey**

https://api.weather.com/v1/geocode/34.063/-84.217/**forecast/daily/10day**.json?language=en-US&units=e&apiKey=**yourApiKey**

Request by Postal Code: 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**/forecast/daily/3day.**json?language=en-US**&**units=e**&**apiKey=yourApiKey**	**Required Parameters:** postal code:4:country code, language, format

https://api.weather.com/v1/location/30075:4:US/**forecast/daily/3day**.json?language=en-US&units=e&apiKey=**yourApiKey**

https://api.weather.com/v1/location/30075:4:US/**forecast/daily/5day**.json?language=en-US&units=e&apiKey=**yourApiKey**

https://api.weather.com/v1/location/30075:4:US/**forecast/daily/7day**.json?language=en-US&units=e&apiKey=**yourApiKey**

https://api.weather.com/v1/location/30075:4:US/**forecast/daily/10day**.json?language=en-US&units=e&apiKey=**yourApiKey**

Data Elements & Rule Definitions

Each data element has three rules associated with it as defined below.

This Rule ...	… does this ...	… answers this ...
Usage Rule	Determines whether a data element is required or optional. If it is optional, determines whether or not you can substitute it with a different data element.	Must I use this data element or can I replace it with a different one?
Processing Rule	Defines how to process a data element so the results are correct.	If I use this data element, how do I process it?
Display Rule	Defines the proper display format for a data element.	How do I display this data element?

Data Element Descriptions

Outbound JSON/XML	Description	Type	Length	Range	Null	Sample	Usage	Processing	Display
Metadata									
Metadata fields including echo parameters are defined in API Common Usage & Style Guide									
Daily Forecast	**This section will repeat up to 11 times (current + 10 days)**								
Daily – 24 Hour Period									
class	Data identifier	string			N	fod_long_range_daily	required	none	do not display
expire_time_gmt	Expiration time in UNIX seconds	epoch	11		N	1373914800	required	none	do not display
fcst_valid	Time forecast is valid in UNIX seconds	epoch	10		N	1369306800	required	none	do not display
fcst_valid_local	Time forecast is valid in local apparent time.	ISO			N	2013-08-06T07:00:00-0400	required	none	do not display
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	2	1 - 15	N	1	optional	none	display as provided

max_temp	Daily maximum temperature	integer	4		Y	82	required	none	Display as provided in degrees Fahrenheit or degrees Celsius based on the Unit of Measure in the API request. Always display the unit of temperature (°F or °C) with the value.
min_temp	Daily minimum temperature	integer	4		N	59	required	none	Display as provided in degrees Fahrenheit or degrees Celsius based on the Unit of Measure in the API request. Always display the unit of temperature (°F or °C) with the value.
torcon	The estimate of the likelihood of tornado activity during a given 24 hour forecast period.	integer	2	0 to 10	Y	0	optional	none	display as provided
stormcon	The estimate of the likelihood of winter storm activity during a given 24 hour forecast period.	integer	2	0 to 10	Y	0	optional	none	display as provided
blurb	A handwritten local or regional text forecast created by a meteorologist to supplement the system-generated forecast.	string	512		Y	The Palomar fire is now about 45% contained. Smoke remains a significant problem in the LA basin.	required	none	display as provided
blurb_author	The name initials of the meteorologist who authored the forecast blur.	string	5		Y	SO	required	none	display as provided
dow	Day of week	string	10		N	Thursday	required	You must display this field in your application. According to the space limits of your application to show text, use the name of the week in its abbreviated form. **Examples**: Monday MON Mon. M Tuesday TUE Tue. Tu Wednesday WED Wed.W Thursday THU Thur. Th Friday FRI Fri. F Saturday SAT Sat. Sa Sunday SUN Sun. Su	display as processed by your system
lunar_phase_code	3 character short code for lunar phases	string	3		N	WNG=Waning Gibbous WXC=Waxing Crescent FQ=First Quarter WNC=Waning Crescent LQ=Last Quarter F=Full Moon WXG=Waxing Gibbous N=New Moon	required	none	do not display

lunar_phase	Description phrase for the current lunar phase	string	30		N	Waning Gibbous	required	none	display as provided
lunar_phase_day	Day number within monthly lunar cycle	integer	2	0 through 29	N	lunar_phase_day = 0 or 29 - "New Moon" lunar_phase_day > 0 and < 7 - "Waxing Crescent" lunar_phase_day = 7 - "First Quarter" lunar_phase_day > 7 and < 14 - "Waxing Gibbous" lunar_phase_day = 14 or 15 - "Full Moon" lunar_phase_day > 15 and < 22 - "Waning Gibbous" lunar_phase_day = 22 - "Last Quarter" lunar_phase_day > 22 and < 29 - "Waning Crescent"	required	none	display as provided
sunrise	The local time of the sunrise. It reflects any local daylight savings conventions. For a few Arctic and Antarctic regions, the Sunrise and Sunset data values may be null to reflect conditions where a sunrise or sunset does not occur.	ISO			Y	2013-08-06T07:00:00-0400	required	none	display as provided
sunset	The local time of the sunset. It reflects any local daylight savings conventions. For a few Arctic and Antarctic regions, the Sunrise and Sunset data values may be null to reflect conditions where a sunrise or sunset does not occur.	ISO			Y	2013-08-06T07:00:00-0400	required	none	display as provided
moonrise	First moonrise in local time. It reflects daylight savings time conventions.	ISO			Y	2013-08-06T07:00:00-0400	optional	none	display as provided
moonset	First Moonset in local time. It reflects daylight savings time conventions.	ISO			Y	2013-08-07T01:00:00-0400	optional	none	display as provided
qualifer_code	A code for special forecasted weather criteria for the 12 and 24 hour dayparts	string	5		Y	Q9015	required	none	do not display
qualifier	A phrase associated to the qualifier_code describing special forecasted weather criteria for the 24 hour dayparts.	string	100		Y	Winds could occasionally gust over 70 mph.	required	none	display as provided
narrative	The narrative forecast for the 24 hour period.	string	256		N	A few thunderstorms possible. Lows overnight in the low 60s.	required	none	display as provided
qpf	The forecasted measurable precipitation (liquid or liquid equivalent) during 24 hour period.	decimal	5,2		N	0.06	required	none	Display as provided with the correct unit of measure (inches or millimeters).

snow_qpf	The forecasted measurable precipitation as snow during the 24 hour forecast period.	decimal	5,1		N	1.3	optional	none	Display as provided with the correct unit of measure (inches or centimeters).
snow_range	The expected amount of snow for the 24 hour period.	string	Up to 7		N	6 - 12	optional	none	Display as provided with the correct unit of measure (in. or cm.)
snow_phrase	A shortened text description of the forecasted snow accumulation during the forecast period (24 hours).	string			N	Potential for 6-12 inches of snow.	optional	none	Display as provided with the correct unit of measure (inches or centimeters).
snow_code	Snow accumulation code for the 24 hour forecast period.	string	5		N	A9015	optional	none	do not display
Daily – Daytime									
class	Data identifier	string			N	fod_long_range_daily	required	none	do not display
expire_time_gmt	Expiration time in UNIX seconds	epoch	11		N	1373914800	required	none	do not display
fcst_valid	Time forecast is valid in UNIX seconds	epoch	10		N	1369306800	required	none	do not display
fcst_valid_local	Time forecast is valid in local apparent time.	ISO			N	2013-08-06T07:00:00-0400	required	none	do not display
day_ind	Day or night indicator	string	1		N	D	required	none	do not display
thunder_enum	The enumeration of thunderstorm probability within an area for a 12 hour daypart.	integer	2	0 - 5	N	3	optional	none	display as provided
thunder_enum_phrase	The description of probability thunderstorm activity in an area for 12 hour daypart.	string	34	0 = "No thunder"; 1 = "Thunder possible"; 2 = "Thunder expected"; 3 = "Severe thunderstorms possible"; 4 = "Severe thunderstorms likely"; 5 = "High risk of severe thunderstorms"	N	Severe thunderstorms possible	optional	none	display as provided
daypart_name	The name of a 12 hour daypart not including day names in the first 48 hours.	String	20	Today, Tonight	N	Today	required	none	display as provided
long_daypart_name	The named time frame for the valid weather forecast in an expanded format. The named time frame can be either for 12-hour periods or 24-hour periods.	string	20	Monday, Monday Night, Tuesday, Tuesday Night, Wednesday, Wednesday Night, Thursday, Thursday Night, Friday, Friday Night, Saturday, Saturday Night, Sunday, Sunday Night	N	Tuesday Night	optional	none	display as provided

alt_ daypart_name	A specialized version of the Daypart Name field. Certain holidays or historic events may replace the usual daypart name.	string	64		N	Christmas Day	optional	none	display as provided
num	The sequential number that identifies each of the forecasted days in your feed. 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	2		N	1	optional	day 1 is the first day in the series	do not display
temp	The maximum temperature between 7am and 7pm for daytime temperature and the minimum temperature between 7pm and 7am for nighttime temperature. Minimum temperature also incorporates hourly forecasts up to and including 8am the next morning, to better capture morning lows.	integer	4		N	81	required	none	Display as provided in degrees Fahrenheit or degrees Celsius based on the Unit of Measure in the API request. Always display the unit of temperature (°F or °C) with the value.
temp_phrase	The short phrase containing the forecasted high or low temperature for 12 hour forecast period.	string	75		N	High 81F	optional	none	display as provided
hi	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. Below 65°F, it is set = to the temperature. Units - Expressed in fahrenheit when units=e, expressed in celsius when units=m, s, or h.	integer	4		N	84	optional	Display Heat Index only when the Heat Index value in your data feed is above 65°F (or equivalent).	Use either Celsius degrees **or** Fahrenheit degrees **or** both. Always display the unit of temperature (°F or °C) with the value.
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. Above 65°F, it is set = to the temperature. Units - Expressed in fahrenheit when units=e, expressed in celsius when units=m, s, or h.	integer	4		N	68		Display Wind Chill only when the Wind Chill value in your data feed is 65°F (or equivalent) or lower.	Use either Celsius degrees **or** Fahrenheit degrees **or** both. Always display the unit of temperature (°F or °C) with the value.
pop	Daytime maximum probability of precipitation.	integer	3		N	20	required	none	Display the percent **%** sign after the value.
pop_phrase	Daytime probability of precipitation phrase.	string	25		N	Chance of snow 90%	optional	none	display as provided
icon_extd	Code representing explicit full set sensible weather. Please refer to the Forecast Icon Code, Weather Phrases and Images document.	integer	4		N	2600	required	none	do not display
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	2		N	26	required	none	do not display

wxman	The code to enable the Weather Man animation for forecast period. TWC use only.	string	6		N	wx4400	optional	none	do not display
phrase_32char	Daytime sensible weather phrase	string	32		N	Heavy Rain/Wind	required	none	display as provided
phrase_22char	Daytime sensible weather phrase	string	22		N	Cloudy	required	none	display as provided
phrase_12char	Daytime sensible weather phrase	string	12		N	Windy	required	none	display as provided
subphrase_pt1	Part 1 of 3-part daytime sensible weather phrase	string	9		N	Cloudy	optional	none	The three parts are to be displayed one after another in numerical order. display as provided
subphrase_pt2	Part 2 of 3-part daytime sensible weather phrase	string	9		N	windy	optional	none	The three parts are to be displayed one after another in numerical order. display as provided
subphrase_pt3	Part 3 of 3-part daytime sensible weather phrase	string	9		N	Thunder	optional	none	The three parts are to be displayed one after another in numerical order. Display as provided
precip_type	Type of precipitation to display with the probability of precipitation (pop) data element.	string	6	rain, snow, precip	N	rain	required	none	display as provided
rh	The average daytime 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	3	0 to 100	N	83	required	none	You must display the percent sign “%” after the value.
wspd	The maximum forecasted daytime 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 and the North wind is at your back.	integer	3		N	7	required	none	Display the Wind Speed with its Wind Direction. Use the value as it appears in the data feed (numeric value) and always display its unit of measure, either the fully spelled version or its abbreviation. **Examples** ***Wind:*** *from the Southeast at 8 miles per hour.* ***Wind:*** *from the Northwest at 12 kilometers/hour.*
wdir	Daytime average wind direction in true heading notation.	integer	4	0 to 359	N	148	required	none	Display the Wind Speed with its Wind Direction. Use the value as it appears in the data feed (numeric value) and always display its unit of

									measure, either the fully spelled version or its abbreviation. **Examples** ***Wind:*** *from the Southeast at 8 miles per hour.* ***Wind:*** *from the Northwest at 12 kilometers/hour.*
wdir_cardinal	Daytime average wind direction in cardinal notation.	string	4	N , NNE , NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, NNW	N	SE	required	none	Display the Wind Speed with its Wind Direction. Use the value as it appears in the data feed (numeric value) and always display its unit of measure, either the fully spelled version or its abbreviation. **Examples** ***Wind:*** *from the Southeast at 8 miles per hour.* ***Wind:*** *from the Northwest at 12 kilometers/hour.*
wind_phrase	The phrase that describes the wind direction and speed for a 12 hour daypart. This is is a mapping of a phrase that coincides with the calculated wspd. It is designed as a range rather than an absolute value for a better understanding that the wind speed can change.	string			N	Winds SSE at 5 to 10 mph.	required	None. Units of measure are dependent on the parameter provided in the request.	display as provided.
clds	Daytime average cloud cover expressed as a percentage.	integer	3		N	82	required	none	You must display the percent sign “%” after the value.
shortcast	An abbreviated sensible weather portion of narrative forecast.	string	64		N	Cloudy	required	none	display as provided
narrative	The narrative forecast for the daytime period.	string	256		N	A few thunderstorms possible. Lows overnight in the low 60s.	required	none	display as provided
qpf	The forecasted measurable precipitation (liquid or liquid equivalent) during the 12 hour forecast period.	decimal	5,2		N	0.04	optional	none	Display as provided with the correct unit of measure (inches or millimeters).
accumulation_phrase	An accumulation phrase of any precipitation type in the 12 hour forecast period.	string	75		N	Additional rainfall over 2 inches expected.	optional	None. Units of measure are dependent on the parameter provided in the request.	display as provided
snow_qpf	The forecasted measurable precipitation as snow during the 12 hour forecast period.	decimal	5,1		N	5.3	optional	none	Display as provided with the correct unit of measure (inches or centimeters).
snow_range	Snow accumulation amount for the 12 hour forecast period.	string	Up to 7		N	4 - 6	optional	none	Display as provided with the correct unit of measure (inches or centimeters).

snow_phrase	Snow accumulation phrase for the 12 hour forecast period.	string	75		N	Additional snow and ice accumulating 4 to 6 inches	optional	none	display as provided
snow_code	Residual snow accumulation code for the 12 hour forecast period.	string	5		N	A9015	optional	none	do not display
vocal_key	An encoded narrative forecast used for creating computer-generated audio narratives of the forecast period. TWC use only.	string	128		N	D1:DA01:X2600260011:S260011:TH81:W07R02	optional	none	do not display
qualifier	A forecast qualifier that is applicable to the 12 hour forecast period.	string	100		N	Winds could occasionally gust over 70 mph.	required	none	display as provided
qualifier_code	A code for the forecast qualifier applicable to the 12 hour forecast period.	string	5		N	Q9015	required	none	do not display
uv_index_raw	The non-truncated UV Index which is the intensity of the solar radiation based on a number of factors.	decimal	4,2		N	2.22	optional	none	do not display
uv_index	Maximum UV index for the 12 hour forecast period.	integer	3		N	2	optional	none	Display as provided. If the data value is greater than or equal to 11, convert the value to "10+"
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.	string	20	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	N	Low	optional	none	display as provided
uv_warning	TWC-created UV warning based on UV index of 11 or greater.	integer	1		N	0	optional	If the data value is 1, then a UV warning is in effect. If the data value is 0, then no UV warning is in effect.	do not display
golf_index	The Golf Index expresses on a scale of 0 to 10 the weather conditions for playing golf. Not applicable at night.	integer	2		Y	8	optional	none	display as provided
golf_category	The Golf Index Category expressed as a phrase for the weather conditions for playing golf.	string	20		Y	Very Good	optional	none	display as provided
Daily - Nighttime									
class	Data identifier	string			N	fod_long_range_daily	required	none	do not display
expire_time_gmt	Expiration time in UNIX seconds	epoch	11		N	1373914800	required	none	do not display
fcst_valid	Time forecast is valid in UNIX seconds	epoch	10		N	1369306800	required	none	do not display
fcst_valid_local	Time forecast is valid in local apparent time.	ISO			N	2013-08-06T07:00:00-0400	required	none	do not display
day_ind	Day or night indicator	string	1		N	N	required	none	do not display
thunder_enum	The enumeration of thunderstorm probability within an area for the 12 hour daypart.	integer	2	0 - 5	N	3	optional	none	display as provided
thunder_enum_phrase	The description of probability thunderstorm activity in an area for the 12 hour daypart.	string	34	0 = "No thunder"; 1 = "Thunder possible"; 2 = "Thunder	N	Severe thunderstorms possible	optional	none	display as provided

				expected"; 3 = "Severe thunderstorms possible"; 4 = "Severe thunderstorms likely"; 5 = "High risk of severe thunderstorms"					
daypart_name	The name of a 12 hour daypart not including day names in the first 48 hours.	String	20	Today, Tonight	N	Today	required	none	display as provided
long_daypart_name	The named time frame for the valid weather forecast in an expanded format. The named time frame can be either for 12-hour periods or 24-hour periods.	string	20	Monday, Monday Night, Tuesday, Tuesday Night, Wednesday, Wednesday Night, Thursday, Thursday Night, Friday, Friday Night, Saturday, Saturday Night, Sunday, Sunday Night	N	Tuesday Night	optional	none	display as provided
alt_ daypart_name	A specialized version of the Daypart Name field. Certain holidays or historic events may replace the usual daypart name.	string	64		N	Christmas Day	optional	none	display as provided
num	The sequential number that identifies each of the forecasted days in your feed. 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	2		N	1	optional	day 1 is the first day in the series	do not display
temp	The maximum temperature between 7am and 7pm for daytime temperature and the minimum temperature between 7pm and 7am for nighttime temperature. Minimum temperature also incorporates hourly forecasts up to and including 8am the next morning, to better capture morning lows.	integer	4		N	81	required	none	Display as provided in degrees Fahrenheit or degrees Celsius based on the Unit of Measure in the API request. Always display the unit of temperature (°F or °C) with the value.
temp_phrase	The short phrase containing the forecasted high or low temperature for 12 hour forecast period.	string	75		N	High 81F	optional	none	display as provided
hi	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. Below 65°F, it is set = to the temperature. Units - Expressed in fahrenheit when	integer	4		N	84	optional	Display Heat Index only when the Heat Index value in your data feed is greater than 65°F (or equivalent).	Use either Celsius degrees **or** Fahrenheit degrees **or** both. Always display the unit of temperature (°F or °C) with the value.

	units=e, expressed in celsius when units=m, s, or h.								
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. Above 65°F, it is set = to the temperature. Units - Expressed in fahrenheit when units=e, expressed in celsius when units=m, s, or h.	integer	4		N	68		Display Wind Chill only when the Wind Chill value in your data feed is 65°F (or equivalent) or lower.	Use either Celsius degrees **or** Fahrenheit degrees **or** both. Always display the unit of temperature (°F or °C) with the value.
pop	Nighttime maximum probability of precipitation.	integer	3		N	20	required	none	Display the percent **%** sign after the value.
pop_phrase	Nighttime probability of precipitation phrase.	string	25		N	Chance of snow 90%	optional	none	display as provided
icon_extd	Code representing explicit full set sensible weather. Please refer to the Forecast Icon Code, Weather Phrases and Images document.	integer	4		N	2600	required	none	do not display
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	2		N	26	required	none	do not display
wxman	The code to enable the Weather Man animation for forecast period. TWC use only.	string	6		N	wx4400	optional	none	do not display
phrase_32char	Nighttime sensible weather phrase	string	32		N	Heavy Rain/Wind	required	none	display as provided
phrase_22char	Nighttime sensible weather phrase	string	22		N	Cloudy	required	none	display as provided
phrase_12char	Nighttime sensible weather phrase	string	12		N	Windy	required	none	display as provided
subphrase_pt1	Part 1 of 3-part nighttime sensible weather phrase	string	9		N	Cloudy	optional	none	The three parts are to be displayed one after another in numerical order. display as provided
subphrase_pt2	Part 2 of 3-part nighttime sensible weather phrase	string	9		N	windy	optional	none	The three parts are to be displayed one after another in numerical order. display as provided
subphrase_pt3	Part 3 of 3-part nighttime sensible weather phrase	string	9		N	Thunder	optional	none	The three parts are to be displayed one after another in numerical order. Display as provided
precip_type	Type of precipitation to display with the probability of precipitation (pop) data element.	string	6	rain, snow	N	rain	required	none	display as provided
rh	The nighttime 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	3	0 to 100	N	83	required	none	You must display the percent sign “%” after the value.

wspd	The maximum forecasted nighttime 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 and the North wind is at your back.	integer	3		N	7	required	none	Display the Wind Speed with its Wind Direction. Use the value as it appears in the data feed (numeric value) and always display its unit of measure, either the fully spelled version or its abbreviation. **Examples** ***Wind:*** *from the Southeast at 8 miles per hour.* ***Wind:*** *from the Northwest at 12 kilometers/hour.*
wdir	Nighttime average wind direction in magnetic notation.	integer	4	0 to 359	N	148	required	none	Display the Wind Speed with its Wind Direction. Use the value as it appears in the data feed (numeric value) and always display its unit of measure, either the fully spelled version or its abbreviation. **Examples** ***Wind:*** *from the Southeast at 8 miles per hour.* ***Wind:*** *from the Northwest at 12 kilometers/hour.*
wdir_cardinal	Nighttime average wind direction in cardinal notation.	string	4	N , NNE , NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, NNW, CALM, VAR	N	SE	required	none	Display the Wind Speed with its Wind Direction. Use the value as it appears in the data feed (numeric value) and always display its unit of measure, either the fully spelled version or its abbreviation. **Examples** ***Wind:*** *from the Southeast at 8 miles per hour.* ***Wind:*** *from the Northwest at 12 kilometers/hour.*
wind_phrase	The phrase that describes the wind direction and speed for a 12 hour daypart. This is is a mapping of a phrase that coincides with the calculated wspd. It is designed as a range rather than an absolute value for a better understanding that the wind speed can	string			N	Winds SSE at 5 to 10 mph.	required	None. Units of measure are dependent on the parameter provided in the request.	display as provided.

	change.								
clds	Nighttime average cloud cover expressed as a percentage.	integer	3		N	82	required	none	You must display the percent sign “%” after the value.
shortcast	An abbreviated sensible weather portion of narrative forecast.	string	64		N	Cloudy	required	none	display as provided
narrative	The narrative forecast for the nighttime period.	string	256		N	A few thunderstorms possible. Lows overnight in the low 60s.	required	none	display as provided
qpf	The forecasted measurable precipitation (liquid or liquid equivalent) during the 12 hour forecast period.	decimal	5,2		N	0.04	optional	none	Display as provided with the correct unit of measure (inches or millimeters).
accumulation_phrase	An accumulation phrase of any precipitation type in the 12 hour forecast period.	string	75		N	Additional rainfall over 2 inches expected.	optional	None. Units of measure are dependent on the parameter provided in the request.	display as provided
snow_qpf	The forecasted measurable precipitation as snow during the 12 hour forecast period.	decimal	5,1		N	5.3	optional	none	Display as provided with the correct unit of measure (inches or centimeters).
snow_range	Snow accumulation amount for the 12 hour forecast period.	string	Up to 7		N	4 - 6	optional	none	Display as provided with the correct unit of measure (inches or centimeters).
snow_phrase	Snow accumulation phrase for the 12 hour forecast period.	string	75		N	Additional snow and ice accumulating 4 to 6 inches	optional	none	display as provided
snow_code	Residual snow accumulation code for the 12 hour forecast period.	string	5		N	A9015	optional	none	do not display
vocal_key	An encoded narrative forecast used for creating computer-generated audio narratives of the forecast period. TWC use only.	string	128		N	D1:DA01:X2600260011:S260011:TH81:W07R02	optional	none	do not display
qualifier	A forecast qualifier that is applicable to the 12 hour forecast period.	string	100		N	Winds could occasionally gust over 70 mph.	required	none	display as provided
qualifier_code	A code for the forecast qualifier applicable to the 12 hour forecast period.	string	5		N	Q9015	required	none	do not display
uv_index_raw	The non-truncated UV Index which is the intensity of the solar radiation based on a number of factors.	decimal	4,2		N	2.22	optional	none	do not display
uv_index	Maximum UV index for the 12 hour forecast period.	integer	3		N	2	optional	none	Display as provided. If the data value is greater than or equal to 11, convert the value to "10+"
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.	string	20	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	N	Low	optional	none	display as provided
uv_warning	TWC-created UV warning based on UV	integer	1		N	0	optional	If the data value is 1,	do not display

	index of 11 or greater.							then a UV warning is in effect. If the data value is 0, then no UV warning is in effect.	
golf_index	The Golf Index expresses on a scale of 0 to 10 the weather conditions for playing golf. Not applicable at night.	integer	2		Y	8	optional	none	display as provided
golf_category	The Golf Index Category expressed as a phrase for the weather conditions for playing golf.	string	20		Y	Very Good	optional	none	display as provided

Response Field Maintenance

TWC strives to minimize the impact of changes in our weather content to your applications. TWC will not remove, rename or change the data type (int, string) of any data fields in the API response. However, TWC may add new data fields without notice.

Note: Outbound File Format: If data is null, then the data element tag will be displayed with the value “null” If the data value is an empty string, the element tag will return the tag and the value will have no value displayed (XML) or display double quotes with no data (JSON).

Formatted Response Sample

XML Example

```
<dailyForecastResponse xmlns="">
   <metadata>
      <language>en-US</language>
      <transaction_id>1427213176615:-63875823</transaction_id>
      <version>1</version>
      <latitude>34.06</latitude>
      <longitude>-84.21</longitude>
      <units>e</units>
      <expire_time_gmt>1427213527</expire_time_gmt>
   </metadata>
   <forecasts>
      <forecast>
         <class>fod_long_range_daily</class>
         <expire_time_gmt>1427213527</expire_time_gmt>
         <fcst_valid>1427194800</fcst_valid>
         <fcst_valid_local>2015-03-24T07:00:00-0400</fcst_valid_local>
         <num>1</num>
         <max_temp>72</max_temp>
         <min_temp>56</min_temp>
         <torcon/>
         <stormcon/>
         <blurb/>
```

JSON Example

```
{
"metadata": {
"language": "en-US",
"transaction_id": "1427212946977:243470602",
"version": "1",
"latitude": 34.06,
"longitude": -84.21,
"units": "e",
"expire_time_gmt": 1427213199
},
"forecasts": [
{
"class": "fod_long_range_daily",
"expire_time_gmt": 1427213199,
"fcst_valid": 1427194800,
"fcst_valid_local": "2015-03-24T07:00:00-0400",
"num": 1,
"max_temp": 72,
"min_temp": 55,
"torcon": null,
"stormcon": null,
"blurb": null,
```

```
<blurb_author/>
<lunar_phase_day>5</lunar_phase_day>
<dow>Tuesday</dow>
<lunar_phase>Waxing Crescent</lunar_phase>
<lunar_phase_code>WXC</lunar_phase_code>
<sunrise>2015-03-24T07:35:39-0400</sunrise>
<sunset>2015-03-24T19:51:33-0400</sunset>
<moonrise>2015-03-24T10:42:44-0400</moonrise>
<moonset/>
<qualifier_code/>
<qualifier/>
<narrative>
   Mix of sun and clouds. Highs in the low 70s and lows in the mid 50s.
</narrative>
<qpf>0.01</qpf>
<snow_qpf>0.0</snow_qpf>
<snow_range/>
<snow_phrase/>
<snow_code/>
<night>
   <fcst_valid>1427238000</fcst_valid>
   <fcst_valid_local>2015-03-24T19:00:00-0400</fcst_valid_local>
   <day_ind>N</day_ind>
   <thunder_enum>0</thunder_enum>
   <daypart_name>Tonight</daypart_name>
   <long_daypart_name>Tuesday night</long_daypart_name>
   <alt_daypart_name>Tonight</alt_daypart_name>
   <thunder_enum_phrase>No thunder</thunder_enum_phrase>
   <num>2</num>
   <temp>56</temp>
   <hi>68</hi>
   <wc>57</wc>
   <pop>40</pop>
   <icon_extd>7301</icon_extd>
   <icon_code>11</icon_code>
   <wxman>wx2500</wxman>
   <phrase_12char>Rain Late</phrase_12char>
   <phrase_22char>Light Rain Late</phrase_22char>
   <phrase_32char>Light Rain Late</phrase_32char>
   <subphrase_pt1>Light</subphrase_pt1>
   <subphrase_pt2>Rain</subphrase_pt2>
   <subphrase_pt3>Late</subphrase_pt3>
   <precip_type>rain</precip_type>
```

```
"blurb_author": null,
"lunar_phase_day": 5,
"dow": "Tuesday",
"lunar_phase": "Waxing Crescent",
"lunar_phase_code": "WXC",
"sunrise": "2015-03-24T07:35:41-0400",
"sunset": "2015-03-24T19:51:35-0400",
"moonrise": "2015-03-24T10:42:44-0400",
"moonset": null,
"qualifier_code": null,
"qualifier": null,
"narrative": "Times of sun and clouds. Highs in the low 70s and lows in the mid 50s.",
"qpf": 0.01,
"snow_qpf": 0,
"snow_range": "",
"snow_phrase": "",
"snow_code": "",
"night": {
"fcst_valid": 1427238000,
"fcst_valid_local": "2015-03-24T19:00:00-0400",
"day_ind": "N",
"thunder_enum": 0,
"daypart_name": "Tonight",
"long_daypart_name": "Tuesday night",
"alt_daypart_name": "Tonight",
"thunder_enum_phrase": "No thunder",
"num": 2,
"temp": 55,
"hi": 67,
"wc": 56,
"pop": 40,
"icon_extd": 7301,
"icon_code": 11,
"wxman": "wx2500",
"phrase_12char": "Rain Late",
"phrase_22char": "Light Rain Late",
"phrase_32char": "Light Rain Late",
"subphrase_pt1": "Light",
"subphrase_pt2": "Rain",
"subphrase_pt3": "Late",
"precip_type": "rain",
"rh": 80,
"wspd": 4,
```

```
    <rh>78</rh>
    <wspd>4</wspd>
    <wdir>132</wdir>
    <wdir_cardinal>SE</wdir_cardinal>
    <clds>65</clds>
    <pop_phrase>Chance of rain 40%.</pop_phrase>
    <temp_phrase>Low 56F.</temp_phrase>
    <accumulation_phrase/>
    <wind_phrase>Winds light and variable.</wind_phrase>
    <shortcast>Light rain late</shortcast>
    <narrative>
      Partly cloudy skies during the evening will give way to cloudy skies and light rain after
      midnight. Low 56F. Winds light and variable. Chance of rain 40%.
    </narrative>
    <qpf>0.01</qpf>
    <snow_qpf>0.0</snow_qpf>
    <snow_range/>
    <snow_phrase/>
    <snow_code/>
    <vocal_key>D2:DA02:X3000120122:S730124:TL56:W9902:P9041</vocal_key>
    <qualifier_code/>
    <qualifier/>
    <uv_index_raw>0</uv_index_raw>
    <uv_index>0</uv_index>
    <uv_warning>0</uv_warning>
    <uv_desc>Low</uv_desc>
    <golf_index/>
    <golf_category/>
</night>
<day>
    <fcst_valid>1427194800</fcst_valid>
    <fcst_valid_local>2015-03-24T07:00:00-0400</fcst_valid_local>
    <day_ind>D</day_ind>
    <thunder_enum>0</thunder_enum>
    <daypart_name>Today</daypart_name>
    <long_daypart_name>Tuesday</long_daypart_name>
    <alt_daypart_name>Today</alt_daypart_name>
    <thunder_enum_phrase>No thunder</thunder_enum_phrase>
    <num>1</num>
    <temp>72</temp>
    <hi>71</hi>
    <wc>67</wc>
    <pop>0</pop>
```

```
"wdir": 133,
"wdir_cardinal": "SE",
"clds": 64,
"pop_phrase": "Chance of rain 40%.",
"temp_phrase": "Low around 55F.",
"accumulation_phrase": "",
"wind_phrase": "Winds light and variable.",
"shortcast": "Light rain developing late",
"narrative": "Partly cloudy this evening then becoming cloudy with periods of light rain after midnight.
Low around 55F. Winds light and variable. Chance of rain 40%.",
"qpf": 0.01,
"snow_qpf": 0,
"snow_range": "",
"snow_phrase": "",
"snow_code": "",
"vocal_key": "D2:DA02:X3000120121:S730121:TL55:W9902:P9041",
"qualifier_code": null,
"qualifier": null,
"uv_index_raw": 0,
"uv_index": 0,
"uv_warning": 0,
"uv_desc": "Low",
"golf_index": null,
"golf_category": ""
},
"day": {
"fcst_valid": 1427194800,
"fcst_valid_local": "2015-03-24T07:00:00-0400",
"day_ind": "D",
"thunder_enum": 0,
"daypart_name": "Today",
"long_daypart_name": "Tuesday",
"alt_daypart_name": "Today",
"thunder_enum_phrase": "No thunder",
"num": 1,
"temp": 72,
"hi": 71,
"wc": 66,
"pop": 0,
"icon_extd": 3000,
"icon_code": 30,
"wxman": "wx1100",
"phrase_12char": "P Cloudy",
```

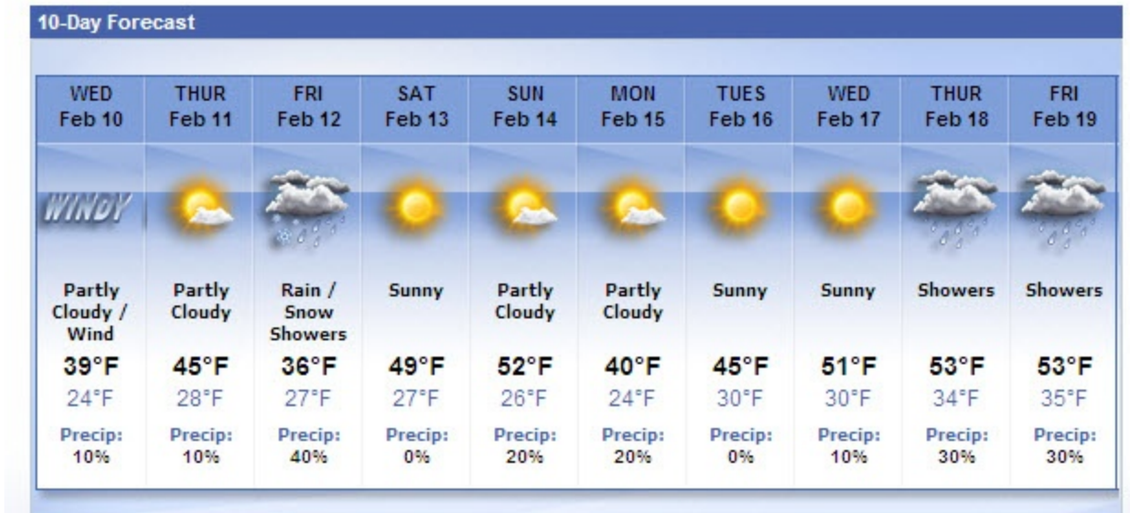
```
        <icon_extd>3000</icon_extd>
        <icon_code>30</icon_code>
        <wxman>wx1100</wxman>
        <phrase_12char>P Cloudy</phrase_12char>
        <phrase_22char>Partly Cloudy</phrase_22char>
        <phrase_32char>Partly Cloudy</phrase_32char>
        <subphrase_pt1>Partly</subphrase_pt1>
        <subphrase_pt2>Cloudy</subphrase_pt2>
        <subphrase_pt3/>
        <precip_type>rain</precip_type>
        <rh>49</rh>
        <wspd>5</wspd>
        <wdir>144</wdir>
        <wdir_cardinal>SE</wdir_cardinal>
        <clds>40</clds>
        <pop_phrase/>
        <temp_phrase>High 72F.</temp_phrase>
        <accumulation_phrase/>
        <wind_phrase>Winds light and variable.</wind_phrase>
        <shortcast>Times of sun and clouds</shortcast>
        <narrative>Partly cloudy. High 72F. Winds light and variable.</narrative>
        <qpf>0.0</qpf>
        <snow_qpf>0.0</snow_qpf>
        <snow_range/>
        <snow_phrase/>
        <snow_code/>
        <vocal_key>D1:DA01:X3000300014:S300013:TH72:W9902</vocal_key>
        <qualifier_code/>
        <qualifier/>
        <uv_index_raw>7.21</uv_index_raw>
        <uv_index>7</uv_index>
        <uv_warning>0</uv_warning>
        <uv_desc>High</uv_desc>
        <golf_index>10</golf_index>
        <golf_category>Excellent</golf_category>
      </day>
    </forecast>
// Response Collapsed for Presentation Purposes
    <forecast>...</forecast> // - Response Repeats for Day 1
    <forecast>...</forecast> // - Response Repeats for Day 2
    <forecast>...</forecast> // - Response Repeats for Day 3…
    <forecast>...</forecast> // - Response Repeats for Day 10
  </forecasts>
```

```
"phrase_22char": "Partly Cloudy",
"phrase_32char": "Partly Cloudy",
"subphrase_pt1": "Partly",
"subphrase_pt2": "Cloudy",
"subphrase_pt3": "",
"precip_type": "rain",
"rh": 49,
"wspd": 5,
"wdir": 146,
"wdir_cardinal": "SE",
"clds": 39,
"pop_phrase": "",
"temp_phrase": "High 72F.",
"accumulation_phrase": "",
"wind_phrase": "Winds light and variable.",
"shortcast": "Partly cloudy",
"narrative": "A mix of clouds and sun. High 72F. Winds light and variable.",
"qpf": 0,
"snow_qpf": 0,
"snow_range": "",
"snow_phrase": "",
"snow_code": "",
"vocal_key": "D1:DA01:X3000300011:S300011:TH72:W9902",
"qualifier_code": null,
"qualifier": null,
"uv_index_raw": 7.2,
"uv_index": 7,
"uv_warning": 0,
"uv_desc": "High",
"golf_index": 10,
"golf_category": "Excellent"
}
},
 // Response Collapsed for Presentation Purposes
{}, // - Response Repeats for Day 1
{}, // - Response Repeats for Day 2
{}, // - Response Repeats for Day 3…
{} // - Response Repeats for Day 10
]
}
```

</dailyForecastResponse>	

Display Examples

Example 1



Example 2