



Weather Company Data - Severe Weather | Tropical Cyclone Probability Forecast 15 Day - v2

Domain Portfolio: Weather Imagery | Domain: Tropical | API Name: Tropical Cyclone Probability Forecast - 15 Day - v2

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”.

Geography: West Pacific & Atlantic Basin

Attribution Required: NO

Attribution Requirements: N/A

Overview

West Pacific Aggregate 15 Day Tropical Cyclone Probability - Tropical_WNP_ECM_15day

West Pacific Aggregate 15 Day Tropical Cyclone Probability: Maximum probability that the wind speed will exceed a particular threshold, for the north Indian Ocean and the northwestern Pacific Ocean, expressed as a percentage, 0 to 100; aggregated across a forecast of 15 days: 80-km resolution, with a new set of forecasts generated every 12 hours.

Atlantic Basin Aggregate 15 Day Tropical Cyclone Probability - Tropical_ATL_ECM_15day

Atlantic Basin Aggregate 15 Day Tropical Cyclone Probability: Maximum probability that the wind speed will exceed a particular threshold, for the north Atlantic Ocean, expressed as a percentage, 0 to 100; aggregated across a forecast of 15 days: 80-km resolution, with a new set of forecasts generated every 12 hours.

Includes Tropical Types:

Probability that wind speed will exceed the threshold for a tropical depression, tropical storm, tropical cyclone, hurricane or major hurricane.

The ‘Tiler’, and ‘Featurizer’ products support data visualization and analytics.

- Tiler provides gridded raster data, typically in tiles of 256x256 pixels at various levels of detail; a client-side SDK can use this data to create weather image tiles
- Featurizer provides geometric vector data, either a line or a polygon, indicating where meteorological values cross a particular threshold; this data can facilitate statistical analysis
- For additional details about Tiler and Featurizer please see the [Weather Company Data | Common Usage Guide - Data Visualization - Weather Imagery](#)

Using the Tiler and Featurizer products require a multi-step workflow to retrieve the necessary data for the specific product data request. Steps 2a, and 2b are dependent on which type you are requesting (i.e. Tiler Data or Featurizer Tile. Both step 2a, and step 2b require the ‘t’ parameter values as input into the ‘t’ parameter for the subsequent request (v2/tiler/data, and v2/featurizer/tile).

- **Step 1:** Get Tiler Info - Provides current dimensions ‘t’ and ‘rt’ parameter values on one or more products.
- **Step 2a:** Get Tiler Data - Provides tiles of meteorological data from one or more products.
- **Step 2b:** Get Featurizer Tile - Provides a polygon or line indicating when a product’s data has crossed a given threshold, in web-mercator projection.

URL Construction

Step 1: Get Tiler Info
Tiler Info: Required Parameters: products, apiKey=yourApiKey Optional Parameters: meta=true https://api.weather.com/v2/tiler/info?products=<productNumber>:<variableID>&apiKey=yourApiKey
The v2/tiler/info? request response provides the ‘t’ parameter value required as input for the subsequent v2/tiler/data? request as well as a subsequent v2/featurizer/tile? request. If the product is an ‘Observation/Current Condition’ type then it will return a ‘t’ parameter value; if the product is a ‘Forecast’ type then it will return both a ‘t’ parameter value and ‘rt’ parameter value. <ul style="list-style-type: none">• Note: some exceptions may apply to the use of the ‘t’ parameter value and ‘rt’ parameter values; please see product specific details for all product specific required and optional parameters.

https://api.weather.com/v2/tiler/info?products=304:hrprob&meta=true&apiKey=yourApiKey
Step 2a: Get Tiler Data
Tiler Data - Observations: Required Parameters: products, t, lod, x, y, apiKey=yourApiKey https://api.weather.com/v2/tiler/data?products=<productNumber>:<variableID>&t=<t>&lod=<lod>&x=<x>&y=<y>&apiKey=yourApiKey
https://api.weather.com/v2/tiler/data?products=304:hrprob&t=1474300200000&lod=-1&x=0&y=0&apiKey=yourApiKey
Step 2b: Get Featurizer Tile
Featurizer Tile - Observations: Required Parameters: product, t, lod, x, y, apiKey=yourApiKey Optional Parameters: threshold https://api.weather.com/v2/featurizer/tile?product=<productNumber>:<variableID>&t=<t>&lod=<lod>&x=<x>&y=<y>&apiKey=yourApiKey
https://api.weather.com/v2/featurizer/tile?product=304:hrprob&t=1474300200000&lod=2&x=2&y=1&threshold=0.3&apiKey=yourApiKey
Featurizer Feature (Native Resolution) - Observations: Required Parameters: product, t, apiKey=yourApiKey Optional Parameters: threshold https://api.weather.com/v2/featurizer/feature?product=<productNumber>:<variableID>&t=<t>&apiKey=yourApiKey
https://api.weather.com/v2/featurizer/feature?product=304:hrprob&t=1474300200000&threshold=0.3&apiKey=yourApiKey

Product Elements & Definitions

West Pacific 15-Day Aggregate Tropical Cyclone Probability <i>Probability that the maximum sustained wind speed will fall within a particular range, for the north Indian Ocean and the northwestern Pacific Ocean; the probability is expressed as a percentage (0.0 to 1.0, where 1.0 means 100 percent), the wind speed must be sustained for at least 1 minute, and the range is determined by the variable ID; maximum probability aggregated across a forecast of 15 days: 30-km resolution, with a new forecast generated every 12 hours</i>			
Variable Summary	Product Number	Variable ID	Reasonable Threshold
Hurricane	304	hrprob	0.3
Maximum sustained wind speed of 74-110 mph (64-96 knots).			
Major Hurricane	304	mhrprob	0.3
Maximum sustained wind speed of 111+ mph (96+ knots).			
Tropical Cyclone	304	tcprob	0.3
Maximum sustained wind speed of 22+ mph (20+ knots).			

Tropical Depression	304	tdprob	0.3
Maximum sustained wind speed of 22-38 mph (20-34 knots).			
Tropical Storm	304	tsprob	0.3
Maximum sustained wind speed of 39-73 mph (35-63 knots).			
Atlantic Basin 15-Day Aggregate Tropical Cyclone Probability <i>Probability that the maximum sustained wind speed will fall within a particular range, for the north Atlantic Ocean; the probability is expressed as a percentage (0.0 to 1.0, where 1.0 means 100 percent), the wind speed must be sustained for at least 1 minute, and the range is determined by the variable ID; maximum probability aggregated across a forecast of 15 days: 30-km resolution, with a new forecast generated every 12 hours</i>			
Variable Summary	Product Number	Variable ID	Reasonable Threshold
Hurricane	306	hrprob	0.3
Maximum sustained wind speed of 74-110 mph (64-96 knots).			
Major Hurricane	306	mhrprob	0.3
Maximum sustained wind speed of 111+ mph (96+ knots).			
Tropical Cyclone	306	tcprob	0.3
Maximum sustained wind speed of 22+ mph (20+ knots).			
Tropical Depression	306	tdprob	0.3
Maximum sustained wind speed of 22-38 mph (20-34 knots).			
Tropical Storm	306	tsprob	0.3
Maximum sustained wind speed of 39-73 mph (35-63 knots).			