Weather Company Data | HD Analysis Snow Depth, CONUS - v2

Domain Portfolio: Weather Imagery | Domain: Current Conditions | API Name: HD Analysis Snow Depth, CONUS - 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: CONUS **Attribution Required:** NO **Attribution Requirements:** N/A

Overview

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
- Tiler also provides the ability to get point data, for applicable layer, from the gridded raster data, represented as a geojson feature collection. This point data is a calculated value from grid values
- For additional details about Tiler and Featurizer please see the Weather Company Data | Common Usage Guide - Data Visualization - Weather Imagery:
  - https://ibm.co/DVWCUG

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. Steps 2a, 2b, and step 3 require the **‘rt** parameter values as input into the **‘t’** parameter for the subsequent request (v2/tiler/data, v2/featurizer/tile, and v2/tiler/point).

- **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.
- **Step 3:** Get Point Data from a grid - Retrieves a geoJson Feature Collection which is a calculated value of meteorological data for one or more specific locations

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. • 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=750:hdanalysisCONUS2kmSnowDepthSfc&meta=true&apiKey=yourApiKey
Step 2a: Get Tiler Data
Tiler Data - Forecast: Required Parameters: products, rt, t, lod, x, y, apiKey**=yourApiKey** https://api.weather.com/v2/tiler/data?products=**<productNumber>:<variableID>**&rt=**<rt>**&t=**<t>**&lod=**<lod>**&x=**<x>**&y=**<y>**&**apiKey=yourApiKey**
https://api.weather.com/v2/tiler/data?products=750:hdanalysisCONUS2kmSnowDepthSfc&t=**1474400700000**&lod=2&x=0&y=0&apiKey=yourApiKey

Step 2b: Get Featurizer Tile
Featurizer Tile - Forecast: Required Parameters: product, rt, t, lod, x, y, apiKey**=yourApiKey || Optional Parameters:** threshold https://api.weather.com/v2/featurizer/tile?product=**<productNumber>:<variableID>**&rt=**<rt>**&t=**<t>**&lod=**<lod>**&x=**<x>**&y=**<y>**&**apiKey=yourApiKey**
https://api.weather.com/v2/featurizer/tile?product=750:hdanalysisCONUS2kmSnowDepthSfc&t=**1474400700000**&lod=2&x=0&y=0&threshold=0&apiKey=yourApiKey
Featurizer Feature (Native Resolution) - Forecast: Required Parameters: product, rt, t, apiKey**=yourApiKey || Optional Parameters:** threshold https://api.weather.com/v2featurizer/feature?product=**<productNumber>:<variableID>**&rt=**<rt>**&t=**<t>**&**apiKey=yourApiKey**
https://api.weather.com/v2/featurizer/feature?product=750:hdanalysisCONUS2kmSnowDepthSfc&t=**1474400700000**&threshold=0&apiKey=yourApiKey
Step 3: Get Point Data
Point Data - Forecast: Required Parameters: product, <dimensions>,lon,lat,method,format, apiKey**=yourApiKey** https://api.weather.com/v2/tiler/point?products=**<productNumber>:<variableID>**&rt=**<rt>**&t=**<t>**&lon=**<lon>**&lat=**<lat>**&method=nearest&format=geojson&**apiKey=yourApiKey**
https://api.weather.com/v2/tiler/point?products=750:hdanalysisCONUS2kmSnowDepthSfc&t=**1451606400000**&lon=-74.0&lat=40.7&method=nearest&format=geojson&**apiKey=yourApiKey**

Product Elements & Definitions

Product Name	**Product Number**	**Variable ID**	**Reasonable Threshold**
HD Analysis Snow Depth, CONUS	750	hdanalysisCONUS2kmSnowDepthSfc	N/A
High-definition index of current snow depth for the contiguous United States, where 0 is no snow / no data, 1 is less than 1 inch of snow, 2 is 1 to 3 inches of snow, 3 is 3 to 6 inches, 4 is 6 to 12 inches, 5 is 12 to 18 inches, 6 is 18 to 24 inches, 7 is 24 to 36 inches, 8 is 36 to 48 inches, 9 is 48 to 60 inches, and 10 is 60 inches or more: 2-km resolution, refreshed every hour			