OSPO HMS Smoke - v2

Domain Portfolio: Weather Imagery | Domain: Natural Disasters | API Name: OSPO HMS Smoke - 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: Global **Attribution Required:** NO **Attribution Requirements:** N/A

Overview

The Feature Data Service (FDS) API provides geographic features for a number of products. The client can use these features to render a visual representation of data.

- FDS provides geometric vector data where each feature can be a set of points, a polygon or set of polygons, a linestring or set of linestrings, or any other valid GeoJSON type
- Each feature is described by a set of geographic coordinates and a set of properties.
- Each feature is uniquely identified by the *combination* of its product key, feature key and valid time; the valid time is used to assign the feature to a unique feature set.
- For additional details about FDS, please see the Weather Company Data | Data Visualization - Weather Imagery | Common Usage Guide

Using FDS products requires a multi-step workflow to retrieve the necessary data for the specific product data request. Step 2 requires the **‘time’** value parameter, found in the response from Step 1.

- **Step 1:** Get Product Info - Provides time-based labels for the feature sets that are currently available.
- **Step 2:** Get Features for a Single Tile - Provides all geographic features for a single tile, taken from a single feature set within a specific product.

URL Construction

Step 1: Get Product Info
Required Parameters: **productKey,** apiKey=**yourApiKey** || **Optional Parameters:** meta, max-times https://api.weather.com/v2/vector-api/products/**<productKey>**/info?**apiKey=yourApiKey**
The [**/products/{productKey}/info**] request provides the labels for the feature sets that are currently available. These labels are required as input for the subsequent [**/products/{productKey}/features**] request, and they are invoked in that request’s **‘time’** parameter.
https://api.weather.com/v2/vector-api/products/634/info?meta=true&max-times=12&apiKey=yourApiKey
Step 2: Get Features for a Single Tile
Required Parameters: **productKey, time, lod, x, y,** apiKey=**yourApiKey** || **Optional Parameters:** declutter, tile-size https://api.weather.com/v2/vector-api/products/**<productKey>**/features?time=**<time>**&lod=**<lod>**&x=**<x>**&y=**<y>**&**apiKey=yourApiKey**
The [**/products/{productKey}/features**] request provides a set of features for a single tile, from a particular feature set within a particular product. Each feature contains a small set of key metadata properties, including its ID and valid time, which are required as input for any subsequent [**/products/{productKey}/feature-details**] request, as the **‘feature-id’** and **‘valid-time’** parameters.
https://api.weather.com/v2/vector-api/products/634/features?time=1492016701805&lod=10&x=175&y=409&tile-size=256&apiKey=yourApiKey

Product Data Dictionary: 634 - OSPO HMS Smoke

The source of the data is the Hazard Mapping System (HMS) from NOAA's Office of Satellite and Product Operations (OSPO).

The JSON data includes the following fields:

Field *Found in the GeoJSON response, in each feature's **properties** field*	**Description**
start-time	Date and time, in UTC, marking the beginning of the satellite image animation The date and time is in the format yyyyddd hhmm; note the space between date and time. In this format, ddd is the current day number, hhmm is in 24-hour format, and leading zeroes are included as needed. Example: 2017211 1915 is 7:15 PM, July 30, 2017; July 30 is Day 211/365
end-time	Date and time, in UTC, marking the end of the satellite image animation, in the same format as above
density	Smoke density in micrograms per cubic meter This integer value is approximated through manual analysis: 0-10 is light, 10-21 is medium, and 21-32 is thick.
satellite	Source satellite, such as GOES-EAST or GOES-WEST