

Global [Forecast] 120 hours ahead (hourly) API

It returns hourly forecast values up to 120 hours ahead.

Specify the latitude and longitude in a request, and the data for the grid that includes the specified point will be retrieved.

Data

Coverage (area)	Land areas except Greenland, between northern latitude of 72 degrees and south latitude 57degrees
Coverage (time)	From the initial date of the forecast to 23:00 5 days ahead
Grid size	lat 0.25 degree and lon 0.25 degree
Update time	2 times/day (7:30 and 19:30 JST)

URL

/v1/ovsmesh/forecasts/pp/hourly/point/{point}.json

Method

GET

Parameters

Name	Parameters	Required	Type	Notes
lat, lon	point	Required	Path Parameters	Latitude and longitude comma delimited. World geodetic system decimal, e.g., 35.68944,139.691670.
Language	lang	Option	Query Parameters	When "jp" is specified, wind direction and weather items are written in Japanese. When not specified, it will be "en" and written in English.

Example of API call

Point(lat, lon)

<endpoint>/v1/ovsmesh/forecasts/pp/hourly/point/35.68944,139.691670.json

Response

Returns hourly forecast data in the result area.

Item	Type	Notes
mesh_code	character	7-digit number, e.g., 2170559. Proprietary code of WeatherDataAPI, commonly available in each API.
reference_time	character	UTC
initial_time	character	UTC
local_time	character	Time difference from UTC, e.g., utc+09:00
elevation	character	Elevation of the grid to be used for forecasting. Unit: m
data	time	Local time, e.g., 2022-05-23T18:00:00+09:00
	temperature	actual number Unit: 0.1°C
	wind_speed	actual number Unit: 1m/s
	wind_direction_code	integer number Integer value from 0 to 16
	wind_direction	character wind_direction
	precipitation	actual number Unit: 0.1mm
	snowfall	actual number Unit: 0.1cm
	humidity	integer number Unit: 1%
	weather_code	character Weather code, e.g., 1
	weather	character Weather in English or Japanese, e.g., clear
probability_precipitation	integer number Unit: 10%	

When it is invalid value for no data or uncalculable data, it returns blank.

Response Example

```
{
  "metadata": {
    "author": "Japan Weather Association",
    "title": "global_mesh_hourly_forecasts",
    "detail": "Success",
    "parameter": {
      "point": "35.68944,139.691670",
      "lang": "en",
      "format": "json"
    }
  },
  "resultset": {
    "count": 120
  },
  "results": [
    {
      "mesh_code": "2170559",
      "reference_time": "2022-05-19T22:00:00Z",
      "initial_time": "2022-05-19T13:00:00Z",
      "local_time": "utc+09:00",
      "elevation": "-6",
      "data": [
        {
          "time": "2022-05-19T22:00:00+09:00",
          "temperature": 23,
          "wind_speed": 4.9,
          "wind_direction_code": 8,
          "wind_direction": "S",
          "precipitation": 0,
          "snowfall": 0,
          "humidity": 61.4,
          "weather_code": 1,
          "weather": "clear",
          "probability_precipitation": 20
        }
      ]
    }
  ]
}
```

Error

API errors will be indicated in the status of the response header, code in the response (code), title (title) and detail (detail).

Response header	Response body		
status	code	title	detail
400	40001	Bad Request	longitude and latitude value is invalid. Review the API documentation to determine which parameters are valid for your request.
400	40003	Bad Request	meshcode value is invalid. Review the API documentation to determine which parameters are valid for your request.
400	40004	Bad Request	it contained an invalid parameter or parameter value. Review the API documentation to determine which parameters are valid for your request.
400	40005	Bad Request	time value is invalid. Review the API documentation to determine which parameters are valid for your request.
400	40006	Bad Request	one of the request inputs is out of range.
404	40401	Not Found	The requested operation failed because a resource associated with the request could not be found.
500	50001	Internal Server Error	The request failed due to an internal error.

Example of Error Response

```
{
  "error": {
    "code": "40004",
    "title": "Bad Request",
    "detail": "it contained an invalid parameter or parameter value. Review the API documentation to determine which parameters are valid for your request."
  }
}
```