Global [Forecast] 72 hours ahead (hourly) API

It returns hourly forecast values up to 72 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 three days later
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/bp/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/bp/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	character	Local time, e.g., 2022-05-23T18:00:00+09:00
	temperature	actual number	Unit: 0.1℃
	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": 72
      }
   },
   "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."
    }
}
```