

API Name : Weather3Hour

```
In [3]: import requests
import json
```

URL address

```
In [4]: url = 'http://data.tmd.go.th/api/Weather3Hours/V1/?type=json&Province='
```

```
In [5]: province = 'ราชบุรี'
response = requests.get(url + province)
data = response.json()
```

Example output data obtained from this API

```
In [6]: data
```

```
Out[6]: {'Header': {'Title': 'Weather3Hours',
  'Description': 'Weather Observation for every 3 hour (1:00, 4:00, 7:00, 10:00, 13:00, 16:00, 19:00, 22:00)',
  'Uri': 'https://data.tmd.go.th/api/Weather3Hours/V1',
  'LastBuiltDate': '31/1/2023 17:37:30',
  'CopyRight': 'Thai Meteorology Department 2015',
  'Generator': 'TMDData_API services'},
  'Stations': [{'WmoNumber': '48464',
    'StationNameTh': 'ราชบุรี',
    'StationNameEng': 'RATCHA BURI',
    'Province': 'ราชบุรี',
    'Latitude': {'Value': '13.489306', 'Unit': 'decimal degree'},
    'Longitude': {'Value': '99.792389', 'Unit': 'decimal degree'},
    'Observe': {'Time': '31/1/2023 16:00:00',
      'Temperature': {'Value': 31.0, 'Unit': 'celcius'},
      'StationPressure': {'Value': 1008.8, 'Unit': 'hPa'},
      'MeanSeaLevelPressure': {'Value': 1010.1, 'Unit': 'hPa'},
      'DewPoint': {'Value': 9.9, 'Unit': 'celcius'},
      'RelativeHumidity': {'Value': 27.0, 'Unit': '%'},
      'VaporPressure': {'Value': 12.2, 'Unit': 'hPa'},
      'LandVisibility': {'Value': 6.0, 'Unit': 'km'},
      'WindDirection': {'Value': '040', 'Unit': 'degree'},
      'WindSpeed': {'Value': 11.1, 'Unit': 'km/h'},
      'Rainfall': {'Value': 0.0, 'Unit': 'mm'},
      'TotolCloud': 'ท้องฟ้าแจ่มใส'}}]}
```

Temperature measurements at this stations

```
In [7]: data['Stations'][0]['Observe']['Temperature']['Value']
```

```
Out[7]: 31.0
```

Relative Humidity measurements at this stations

```
In [8]: data['Stations'][0]['Observe']['RelativeHumidity']['Value']
```

```
Out[8]: 27.0
```

This API gives the results of 3-hour air quality measurements at all stations, which are measured by the staff. Examination time includes 01.00, 04.00, 07.00, 10.00, 13.00, 16.00, 19.00, 22.00 hrs. Display information of all stations (122-125 stations). This API also has optional parameters like Province. We can change the province name to get information of interested province. In above code I use Province = 'ราชบุรี' as an example and use temperature, relative humidity as example output data.

URL linking to the REST API reference document

<https://data.tmd.go.th/api/doc/reference/Weather3Hours.pdf>

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