## **User Manual**

#### **Supported Fields**

- datetime
- air\_temperature
- report\_type
- wban
- weather\_station
- sea\_level\_pressure
- dew\_point\_temperature
- elevation
- visibility\_distance
- precipitation\_hour
- precipitation\_depth\_in\_mm
- latitude
- longitud

# **Usage**

location's value should be separated by common You can give a city name or longitude, latitude

```
location=Boston, MA, USA location=-71.05,42.35
```

## **Example**

Select data with fields temperature, sea\_level\_pressure and nearby "Boston, MA, USA"

```
http://<SERVER>/?
location=Boston,MA,USA&fields=air_temperature,weather_station
```

Select data with some fields temperature, sea\_level\_pressure and nearby longitude=-71.05, latitude=42.35

```
http://<SERVER>/?location=-71.05,42.35
```

Select data with all avaliable fields and nearby "Boston, MA, USA"

http://<SERVER>/?location=Boston,MA,USA

Select data with all avaliable fields and nearby "Boston, MA, USA" with start\_time= 2014-03-03 and end\_time= 2014-03-26

http://<SERVER>/?location=Boston,MA,USA&start\_time=2014-03-03&end\_time=201403-26

#### Avaliable cities in database

- latitude:-34.15 longitude:19.9 city\_name:["N2", "Overberg District Municipality", "Western Cape", "South Africa"]
- latitude:-33.5 longitude:21.283 city\_name:["Bell Street", "Ladismith", "Ladismith", "South Cape DC", "Western Cape", "South Africa", "6655"]
- latitude:-33.3 longitude:23.483 city\_name:["Suid Street", "Willowmore", "Willowmore", "Western District", "Eastern Cape", "South Africa", "6445"]
- latitude:-33.283 longitude:23.5 city\_name:["8th Avenue", "Willowmore", "Willowmore", "Western District", "Eastern Cape", "South Africa", "6445"]
- latitude:-33.2 longitude:20.867 city\_name:["8th Street", "Laingsburg", "Laingsburg", "Central Karoo DC", "Western Cape", "South Africa", "6900"]
- latitude:-33.05 longitude:25.717 city\_name:["R400", "Western District", "Eastern Cape", "South Africa"]
- latitude:-32.2 longitude:24.55 city\_name:["R61", "Graaff-Reinet", "Western District", "Eastern Cape", "South Africa"]
- latitude:-31.548 longitude:28.674 city\_name:["R61", "Hairfield", "Transkei District", "Eastern Cape", "South Africa"]
- latitude:-31.533 longitude:28.667 city\_name:["Unnamed Road", "Transkei District", "Eastern Cape", "South Africa"]
- latitude:-30.85 longitude:26.883 city\_name:["N6", "Drakensberg District", "Eastern Cape", "South Africa"]
- latitude:-30.8 longitude:26.883 city\_name:["N6", "Drakensberg District", "Eastern Cape", "South Africa"]
- latitude:-30.4 longitude:30.667 city\_name:["Baker Street", "Sezela", "Ugu District Municipality", "KwaZulu-Natal", "South Africa", "4215"]
- latitude:-30.15 longitude:30.067 city\_name:["R56", "Ixopo", "Ixopo", "East Griqualand", "KwaZulu-Natal", "South Africa", "3276"]
- latitude:-29.7 longitude:31.05 city\_name:["Sugar Cane Road", "Flanders", "Blackburn", "Durban Metro", "KwaZulu-Natal", "South Africa", "4339"]
- latitude:-29.217 longitude:30.0 city\_name:["R103", "Mooi River", "Mooi River", "Indlovu DC", "KwaZulu-Natal", "South Africa", "3300"]
- latitude:-26.2 longitude:28.45 city\_name:["Lily Road", "Springs NU", "Springs", "East Rand", "Gauteng", "South Africa", "1559"]

- latitude:-25.983 longitude:28.133 city\_name:["Old Pretoria Main Road", "Grand Central", "Midrand", "City of Johannesburg Metropolitan Municipality", "Gauteng", "South Africa", "1685"]
- latitude:-24.583 longitude:27.417 city\_name:["14", "Sekelbos Street", "Thabazimbi", "Thabazimbi", "Bosveld", "Limpopo", "South Africa", "0387"]
- latitude:-23.867 longitude:29.45 city\_name:["12", "Tin Street", "Polokwane Ext 8", "Polokwane", "Central", "Limpopo", "South Africa", "0700"]
- latitude:-23.845 longitude:29.459 city\_name:["Veldspaat Street", "Central", "Limpopo", "South Africa"]
- latitude:-23.824 longitude:30.329 city\_name:["R71", "Mopani", "Limpopo", "South Africa"]
- latitude:-23.6 longitude:28.383 city\_name:["R518", "Bosveld", "Limpopo", "South Africa"]
- latitude:-22.55 longitude:45.4 city\_name:["7", "Ranohira", "Ihosy", "Fianarantsoa", "Madagascar"]
- latitude:-22.058 longitude:27.829 city\_name:["A15", "Selebi Phikwe", "Selebi-Phikwe", "Central", "Botswana"]
- latitude:-17.822 longitude:25.823 city\_name:["Libala Drive", "Hillcrest", "Livingstone", "Livingstone", "Zambia"]
- latitude:-17.817 longitude:25.817 city\_name:["Libala Drive", "Hillcrest", "Livingstone", "Livingstone", "Zambia"]
- latitude:-17.8 longitude:25.817 city\_name:["Libala Drive", "Hillcrest", "Livingstone", "Livingstone", "Zambia"]
- latitude:-17.633 longitude:48.5 city\_name:["44", "Andreba", "Ambatondrazaka", "Toamasina", "Madagascar"]
- latitude:-15.683 longitude:34.967 city\_name:["Unnamed Road", "Blantyre", "Southern Region", "Malawi"]
- latitude:-15.679 longitude:34.974 city\_name:["Chileka Road", "Blantyre", "Blantyre", "Southern Region", "Malawi"]
- latitude:-15.317 longitude:28.45 city\_name:["Great East", "Lusaka", "Lusaka", "Lusaka", "Zambia"]
- latitude:-12.917 longitude:34.267 city\_name:["M18", "Nkhotakota", "Nkhotakota", "Central Region", "Malawi"]
- latitude:-11.9 longitude:31.433 city\_name:["Unnamed Road", "Mpika", "Northern", "Zambia"]
- latitude:-10.339 longitude:40.182 city\_name:["A 19", "Mtwara", "Mtwara", "Mtwara", "Tanzania"]
- latitude:-1.3 longitude:36.917 city\_name:["Eldoret Drive", "Nyayo Estate", "Embakasi", "Nairobi", "Nairobi", "Kenya"]
- latitude:0.404 longitude:35.239 city\_name:["Airport Path", "Eldoret International Airport", "Uasin Gishu", "Kenya"]
- latitude:1.543 longitude:11.581 city\_name:["Oyem Airport", "Woleu", "Woleu-Ntem", "Gabon"]
- latitude:1.583 longitude:11.567 city\_name:["N2", "Oyem", "Woleu", "Woleu-Ntem", "Gabon"]

- latitude:1.733 longitude:40.1 city\_name:["Wajir Airport Runway", "Wajir Airport", "Wajir", "Wajir", "Kenya"]
- latitude:2.076 longitude:11.493 city\_name:["N2", "Bitam", "Ntem", "Woleu-Ntem", "Gabon"]
- latitude:2.083 longitude:11.483 city\_name:["Unnamed Road", "Bitam", "Ntem", "Woleu-Ntem", "Gabon"]
- latitude:2.25 longitude:32.9 city\_name:["Lira-Kitgum Road", "Lira", "Lira", "Northern Region", "Uganda"]
- latitude:2.283 longitude:32.933 city\_name:["Apala Road", "Lira", "Northern Region", "Uganda"]
- latitude:3.117 longitude:35.617 city\_name:["Kapenguria Lodwar Road", "Lodwar", "Turkana County", "Kenya"]
- latitude:6.517 longitude:101.283 city\_name:["Unnamed Road", "Sateng Nok", "Mueang Yala District", "Yala", "Thailand", "95000"]
- latitude:6.933 longitude:122.067 city\_name:["Gov. Ramos Ave.", "Zamboanga",
   "Zamboanga Sibugay", "Zamboanga Peninsula", "Philippines"]
- latitude:7.167 longitude:3.333 city\_name:["Adedotun", "Abeokuta", "Ogun State", "Nigeria"]
- latitude:7.362 longitude:3.978 city\_name:["Airport Road", "Ibadan", "Oyo", "Nigeria"]
- latitude:7.75 longitude:-2.1 city\_name:["Unnamed Road", "Wenchi", "Wenchi", "Brong Ahafo", "Ghana"]
- latitude:7.817 longitude:-0.033 city\_name:["Port lotniczy Kete-Krachi", "Krachi", "Volta", "Ghana"]
- latitude:8.667 longitude:3.383 city\_name:["Sheik Tijani Street", "Shaki", "Oyo", "Nigeria"]
- latitude:9.15 longitude:92.817 city\_name:["Unnamed Road", "Malacca", "Nicobar", "Andaman and Nicobar Islands", "India", "744301"]
- latitude:9.183 longitude:105.15 city\_name:["54", "Lý Bôn", "Lâm Thành Mậu", "4", "Cà Mau", "Ca Mau", "Vietnam"]

### Avaliable longitude, latitude in Database

		longitude	
	-34.15	+   19.9	-+ 
1 1	-33.5	21.283	1
1 1	-33.3	1 23.483	I
1 1	-33.283	1 23.5	1
1 1	-33.2	1 20.867	I
1 1	-33.05	25.717	I
1 1	-32.2	1 24.55	I
	-31.548		I
1 1	-31.533	1 28.667	-
	-30.85		I
1 1	-30.8	1 26.883	ı
	-30.4	1 30.667	

```
I -30.15
            1 30.067
                        1
1 - 29.7
            I 31.05
| -29.217 | 30.0
                        -
1 - 29.0
           1 29.883
                        -
1 -28.95
            | 31.7
                        -
I -28.933 | 31.7
                        1
1 -28.6
            1 20.35
                        1 -28.567
           16.533
                        1
1 - 27.417
           | 31.6
I -26.817
           1 26.017
                        -
1 - 26.722
           | 30.912
                        -
1 -26.2
           1 28.45
                        -
I -25.983 | 28.133
                        1
1 -24.583
           | 27.417
                        -
1 -23.867
           1 29.45
                        1
1 -23.845
           1 29.459
1 -23.824
           1 30.329
                        -
1 - 23.6
           1 28.383
                        -
1 -22.55
           1 45.4
                        -
1 - 22.333
           1 40.333
           1 27.829
1 -22.058
                        -
| -22.018 | 35.313
                        1
1 -22.0
           I 35.317
I -19.883 | 32.883
                        1
I -19.75
           1 63.37
I -18.533
           1 25.633
                        -
I -18.217
          1 28.933
| -18.183
           | 31.467
                        -
l -17.932
           | 31.093
                        -
I -17.917
          | 31.133
1 -17.822
           1 25.823
                        I -17.817
           | 25.817
                        -
1 -17.8
           | 25.817
                        -
I -17.633
           1 48.5
I -15.683
           1 34.967
                        -
I -15.679
           1 34.974
                        1
I -15.317
           1 28.45
I -12.917
           1 34.267
I -11.9
            | 31.433
                        -
I -10.339
           | 40.182
                        -
1 -10.267
           | 40.183
1 -9.55
            16.367
                        -
1 -8.933
            1 33.467
                        1
1 -7.669
            1 35.752
1 -7.667
            1 35.75
                        -1
I -6.17
            1 35.753
I -6.167
            1 35.767
                        1
1 - 5.597
            1 12.188
1 -5.55
            1 12.183
                        -
1 -5.083
            1 32.833
                        -
1 -1.3
            I 36.917
```

	4.747   4.75   5.333   6.33   6.467   6.467   6.516   6.517   6.933   7.167   7.362   7.75   7.817   8.017   8.667   9.15   9.183   9.267   9.652   9.767   9.767   9.778   9.983	35.239   11.581   11.567   40.1   11.493   11.483   32.9   32.933   35.617   35.609   -6.661   -6.65   39.567   99.729   7.55   7.562   101.283   101.283   101.283   122.067   3.333   3.978   -2.1   -0.033   110.617   3.383   92.817   105.15   79.3   6.533   6.462   1.091   1.1   98.585   98.617   -2.5	
   	10.05	-2.5   114.37	Ì