## Open Weather One Call

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Thank you for your interest in the Open Weather One call library. This library streamlines the ability to gather information from the OpenWeatherMap website. There are two items you will need to get started:

## **OPENWEATHERMAP API KEY**

(optional for geolocation via WiFi)

## **GOOGLE DEVELOPER API KEY**

You can get those at <a href="www.openweathermap.org">www.openweathermap.org</a> and Google's developer website. Once you have those using the library is as simple as providing the calling function with the following items:

OpenWeather Key, Google Key, Latitude, Longitude, Unit type, City ID

Calling the weather forecast you only need call parseWeather(OpenWeather Key, Google Key, Latitude, longitude, Unit type, Clty ID) where unit type is a boolean (true/false) with true being METRIC, false being Imperial, and sending neither true nor false returns Kelvin. **ALWAYS SEND NULL FOR CITY ID** it is for a future release.

If you are using a GPS simply use those coordinates for Latitude and Longitude. If an invalid coordinate is sent (out of range of worldwide measurements) geolocation will take over and gather your current location based on WiFi triangulation. Forcing an out of bounds Latitude or Longitude ensures geolocation will be used. Sending an invalid Google Key (NULL) will ensure coordinates are used. If none of those are valid a return error code of -1 will take place.

As an example of what type of call to make:

parseWeather(OpenWeatherKey,NULL,Latitude,Longitude,true,NULL) will use YOUR gps or other manually controlled coordinates to gather weather for THAT location and returns info in METRIC units. So if you are in St. Louis, Missouri and you know the coordinates for Los Angeles, California, use those coordinates to get the weather in LA.

parseWeather(OpenWeatherKey,GoogleKey,NULL,NULL,false,NULL) will use your current location based on WiFi triangulation and returns information in IMPERIAL units.

Including a Google Key in ANY call will return your current location weather regardless if you have sent latitude and longitude of another location, so be sure you are only using one or the other based on your needs.

Many items are returned once a correct call is made and you will have access to the following items for CURRENT conditions: (current.variable)

- 1. temperature
- 2. apparentTemperature
- 3. pressure
- 4. humidity
- 5. dewPoint
- 6. uvlndex (midday number)
- 7. cloudCover
- 8. visibility
- 9. windSpeed
- 10. windBearing
- 11. windGust
- 12. Icon

For FUTURE forecasts you will have access to a 7 day forecast of the following items:

- 1. sunriseTime
- 2. sunsetTime
- 3. temperatureHigh
- 4. temperatureMin
- 5. temperatureMax
- 6. temperatureLow
- 7. apparentTemperatureHigh
- 8. apparentTemperatureLow
- 9. pressure
- 10. humidity
- 11. dewPoint
- 12. windSpeed
- 13. windBearing
- 14. precipType
- 15. icon
- 16. cloudCover
- 17. precipIntensity
- 18. uvlndex

Each day is accessible by using forecast[x].variable where x is 0-6 (Starting with TODAY).

As you can see, it couldn't be easier to get weather information for any day, any location up to 7 days into the future.

Please examine the examples available to see just how to send the required pieces of information to the library. As always, if you have any questions, the creator is available on GitHub.

Thanks for your interest in the library!