

4. 7 inch Epaper Doc

1.Default mode



2.Contact customer service to get the code



3.Unzip



ArduinoJson-6.x.zip



LilyGo-EPD47.zip

4. Install arduino ESP32 environment

link:<https://github.com/espressif/arduino-esp32>

Arduino core for the ESP32

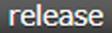
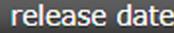
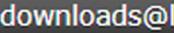
build passing  ESP32 Arduino CI passing

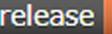
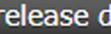
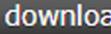
Need help or have a question? Join the chat at [chat on gitter](#)

Contents

- [Development Status](#)
- [Installation Instructions](#)
- [Decoding Exceptions](#)
- [Issue/Bug report template](#)
- [ESP32Dev Board PINMAP](#)

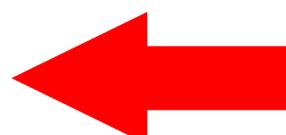
Development Status

Latest Stable Release  v1.0.4  october 2019  downloads@latest 809k

Latest Development Release  v1.0.5-rc6  january  downloads@latest 1.2k

Installation Instructions

- Using Arduino IDE Boards Manager (preferred)
 - [Instructions for Boards Manager](#)
- Using Arduino IDE with the development repository
 - [Instructions for Windows](#)
 - [Instructions for Mac](#)
 - [Instructions for Debian/Ubuntu Linux](#)
 - [Instructions for Fedora](#)



5. Open the code with IDE

Unzip LilyGo-EPD47, Click [example->weather->weather.ino](#)

.git	2021/1/11 14:10
examples	2021/1/11 14:10
scripts	2021/1/11 14:10
src	2021/1/11 14:10
0-sjk_asm(1).stp	2020/12/24 8:53
library.properties	2020/12/4 10:05
LICENSE	2020/12/24 8:53
README.MD	2020/12/4 10:05
README_CN.MD	2020/12/4 10:05

Click example



名称	修改日期
demo	2021/1/11 14:10
drawImages	2021/1/11 14:10
grayscale_test	2020/12/4 10:05
touchtest	2021/1/11 14:10
weather	2021/1/11 14:10

Click weather



forecast_record.h	2020/12/4 10:05
lang.h	2020/12/4 10:05
opensans6.h	2020/12/4 10:05
opensans8.h	2020/12/4 10:05
opensans8b.h	2020/12/4 10:05
opensans10.h	2020/12/4 10:05
opensans12.h	2020/12/4 10:05
opensans12b.h	2020/12/4 10:05
opensans16.h	2020/12/4 10:05
opensans16b.h	2020/12/4 10:05
opensans24.h	2020/12/4 10:05
opensans24b.h	2020/12/4 10:05
owm_credentials.h	2020/12/4 10:05
weather.ino	2020/12/4 10:05

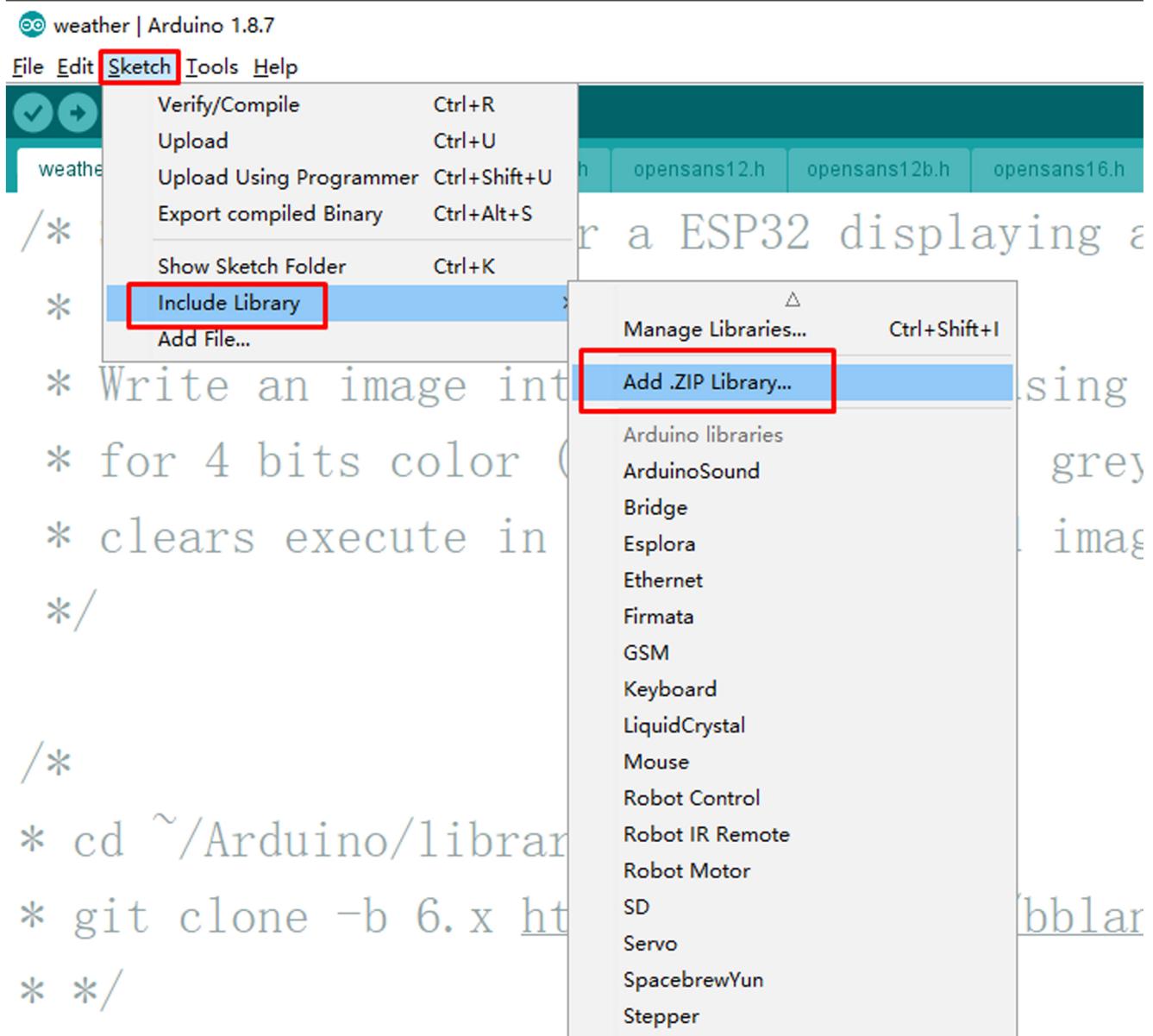
double-click weather.ino



```
weather | Arduino 1.8.7
文件 编辑 项目 工具 帮助
weather | Examples | 库 | 定制化 | openweathermap | grayscale | opensans6 | opensans8 | opensans10 | opensans12 | opensans16 | opensans24 | opensans24b | owm_credentials | weather.ino
/*
 * Simple firmware for a ESP32 displaying a static image on an EPaper Screen.
 *
 * Write an image into a header file using a 3...2...1...0 format per pixel,
 * for 4 bits color (16 colors - well, greys.) MSB first. At 80 MHz, screen
 * clears execute in 1.075 seconds and images are drawn in 1.531 seconds.
 */

/*
 * cd ~/Arduino/libraries
 * git clone -b 6.x https://github.com/bblanchon/ArduinoJson.git
 */
#include <Arduino.h>
#define ARDUINOJSON_ENABLE_ARDUINO_STRING 1
#include <ArduinoJson.h> // https://github.com/bblanchon/ArduinoJson.git
```

6.Add Lib



ArduinoJson-6.x (1).zip



LilyGo-EPD47.zip

Adding method as shown above

Find the compressed package downloaded in the **first step** and add it to arduino

7.Modify Wifi SSID

Click the last file of the code to configure,
the following interface will be displayed

```
weather forecast_record.h lang.h opensans10.h opensans12.h opensans12b.h opensans16.h opensans16b.h opensans24.h opensans24b.h opensans6.h opensans8.h opensans8b.h owm_credentials.h

const bool DebugDisplayUpdate = false;

// Change to your WiFi credentials
const char* ssid      = "";
const char* password = "";

// Use your own API key by signing up for a free developer account at https://openweathermap.org/
String apikey        = ""; // See: https://openweathermap.org/
const char server[] = "api.openweathermap.org";
//http://api.openweathermap.org/data/2.5/forecast?q=Melksham,UK&APPID=your\_OWM\_API\_key&mode=json&units=metric&cnt=40
//http://api.openweathermap.org/data/2.5/weather?q=Melksham,UK&APPID=your\_OWM\_API\_key&mode=json&units=metric&cnt=1
//Set your location according to OWM locations
String City           = "KIEV"; // Your home city See: http://bulk.openweathermap.org/sample
String Country        = "UA"; // Your _ISO-3166-1_two-letter_country_code country code, on OWM
```

// Change to your WiFi credentials
const char* ssid = ""; WiFi SSID
const char* password = ""; WiFi PASSWORD



const char* ssid = "zhangsan123";
const char* password = "zhang123456";

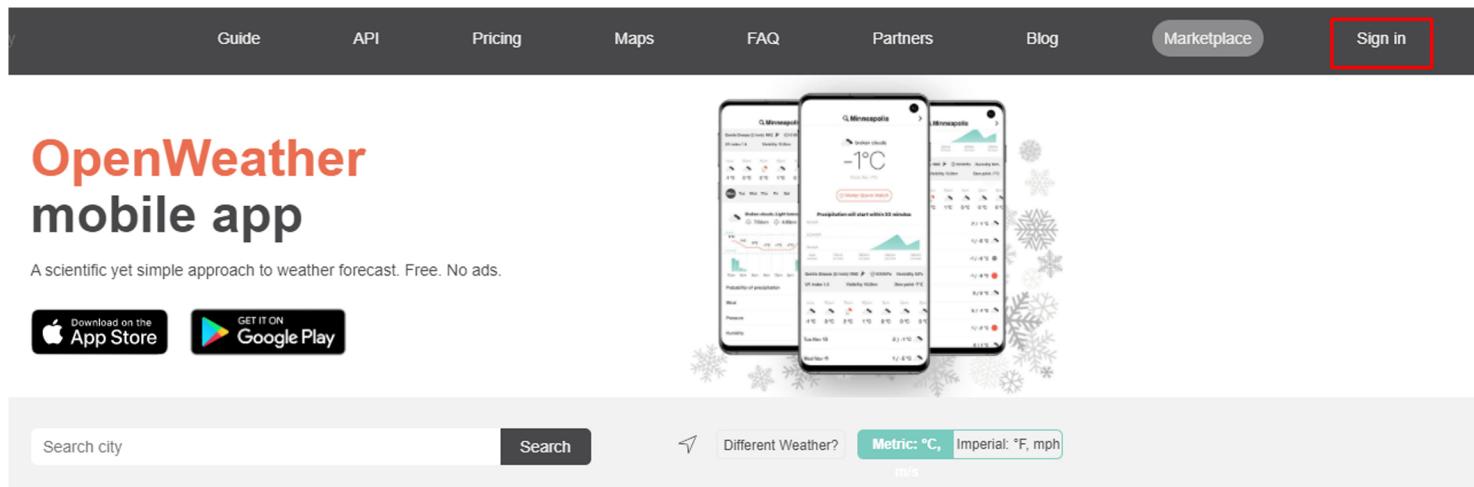
Note: To add WiFi that you can use, the above
picture is just a demonstration

8.register openweather

```
String apikey      = "";
const char server[] = "api.openweathermap.org";
```

login <https://openweathermap.org/>, get apikey

(1)First click on the upper right corner



9:49am, Jan 11
London, GB

6°C

Feels like 1°C. Overcast clouds. Gentle Breeze

5.1m/s WSW 1019hPa Humidity: 81%
UV: 0 Dew point: 3°C Visibility: 10.0km

Sign In To Your Account

Not registered? [Create an Account](#).

Lost your password? [Click here to recover](#).

(2)Register: Click [Create an Account](#)

8. Registered account

Create New Account

Username

Input Username

Enter email

Input Email

Password

Repeat Password

Input password

We will use information you provided for management and administration purposes, and for keeping you informed by mail, telephone, email and SMS of other products and services from us and our partners. You can proactively manage your preferences or opt-out of communications with us at any time using Privacy Centre. You have the right to access your data held by us or to request your data to be deleted. For full details please see the OpenWeather [Privacy Policy](#).



I am 16 years old and over

I agree with [Privacy Policy](#), [Terms and conditions of sale](#) and [Websites terms and conditions of use](#)

Tick here to agree to the agreement

I consent to receive communications from OpenWeather Group of Companies and their partners:

- System news (API usage alert, system update, temporary system shutdown, etc)
- Product news (change to price, new product features, etc)
- Corporate news (our life, the launch of a new service, etc)

The three suggestions here **do not choose**

Create Account

Finally Create Account

9.Login openweather

Sign In To Your Account

Enter email **Input email**

Password **Input password**

Remember me

Submit **Click Submit**

Not registered? [Create an Account.](#)
Lost your password? [Click here to recover.](#)

After successful login, it will display **Signed in successfully**

Get Started API Pricing Maps FAQ Partners

Notice X

Signed in successfully.

New Products Services **API keys** Billing plans Payments Block logs My orders My profile



Click API keys

10.Copy the key to the code

New Products Services API keys Billing plans Payments Block logs My orders My profile

You can generate as many API keys as needed for your subscription. We accumulate the total load from all of them.

Key	Name	Create key
9fa347b74b167c2e25234fb6c415ee9	Default <input checked="" type="checkbox"/>	<input type="text" value="API key name"/> <button>Generate</button>

```
// Use your own API key by signing up for a free developer
String apikey      = "9fa347b74b167c2e25234fb6c415ee9";
const char server[] = "api.openweathermap.org";
```

11.Modify time zone and city

```
String City          = "KIEV" ; // 
String Country       = "UA" ; 

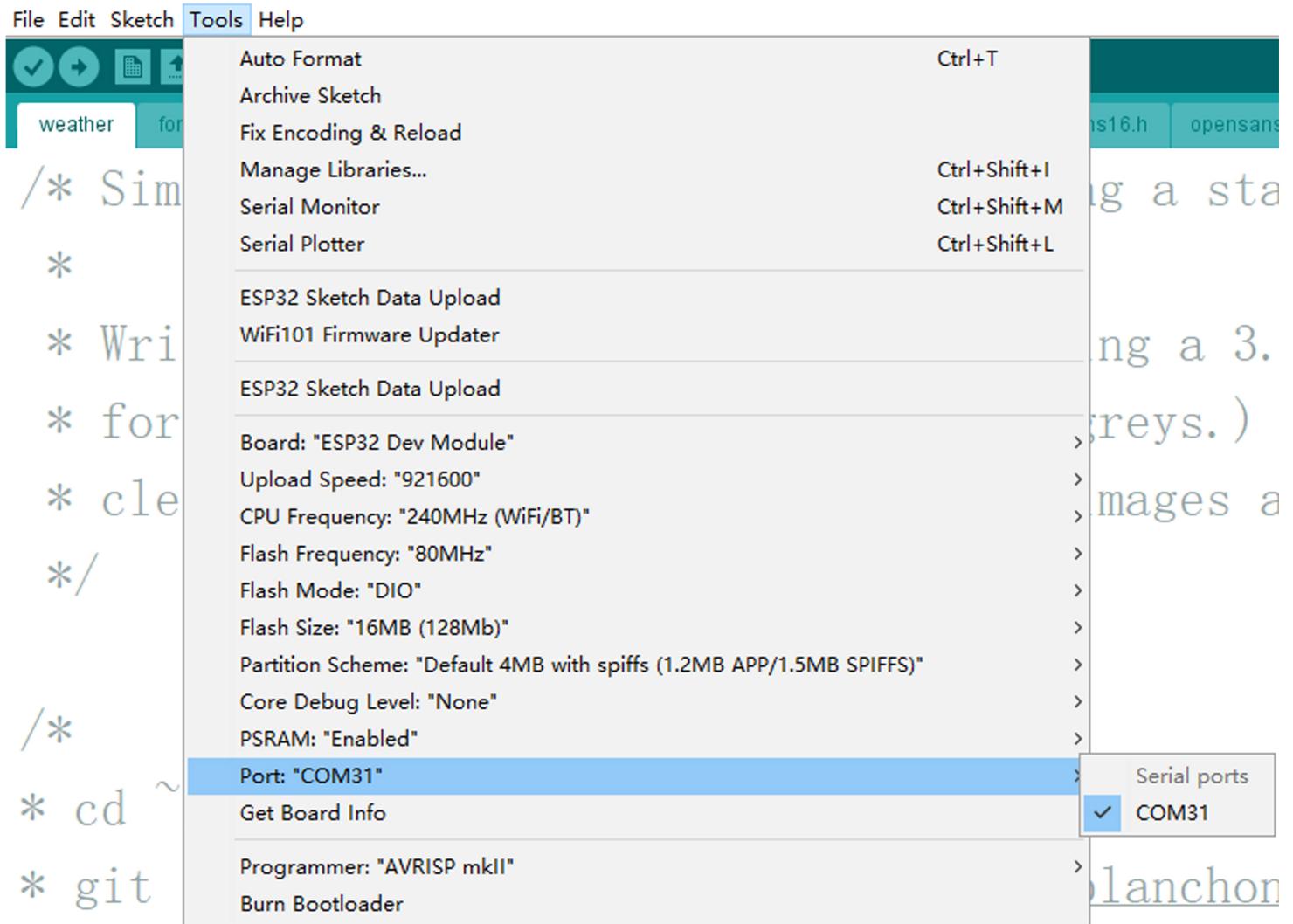
String Language      = "EN" ; 

String Hemisphere    = "north" ;
String Units         = "M" ;
const char* Timezone = "EET-2EEST, M3. 5. 0/3, M10. 5. 0/4" ;
```

The code modification is complete.

Continue **environment configuration**

12. Board config



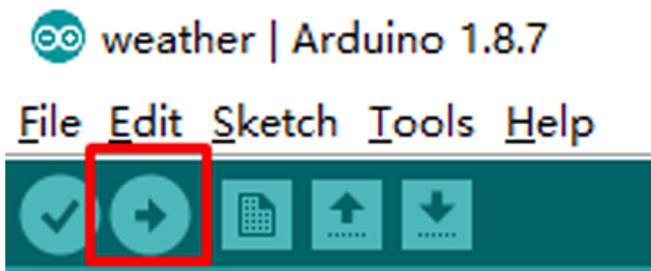
Borad: **ESP32 Dev Moldule**

Port: **COMXXX**

PARAM: **Enabled**

XXX Randomly generated numbers

13. Upload



Finish!

