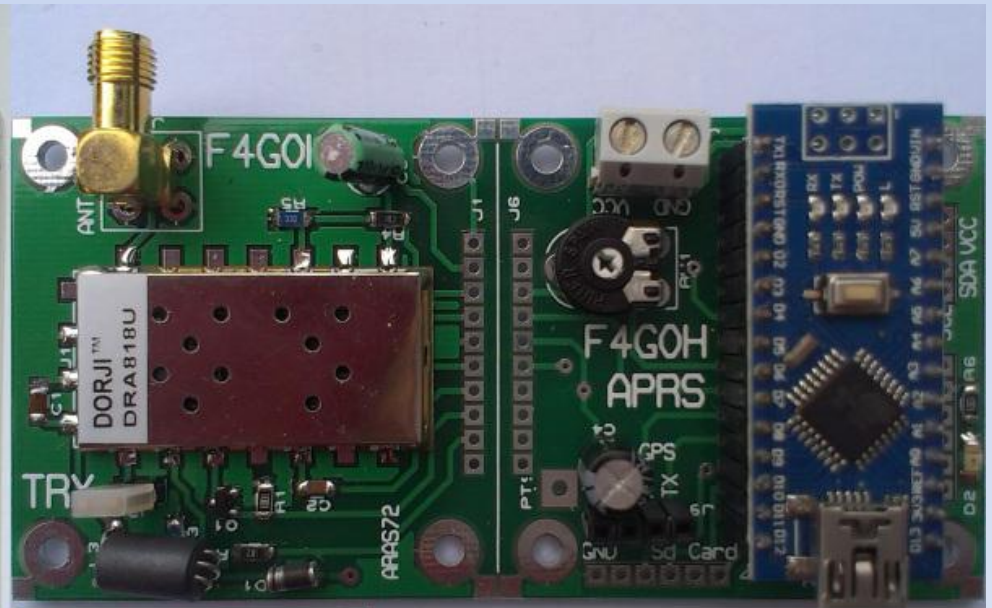


APRS à l'ouest 2018

- Introduction
- Les trames APRS
- Simulateur de trames
 - Position
 - Météo
 - Télémessures
- Ballon 2019
- Squirrel C

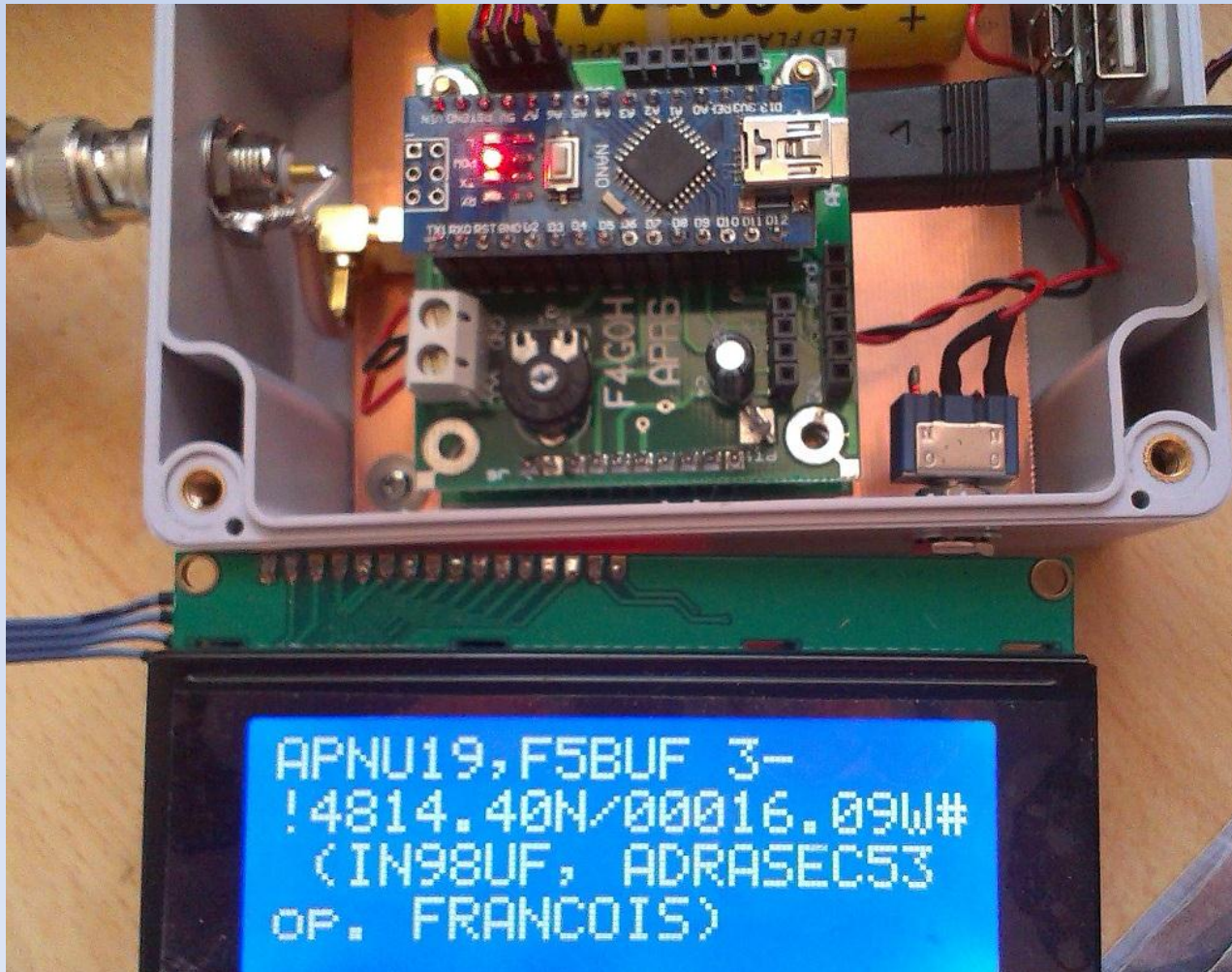


Tracker VHF (DRA 818)

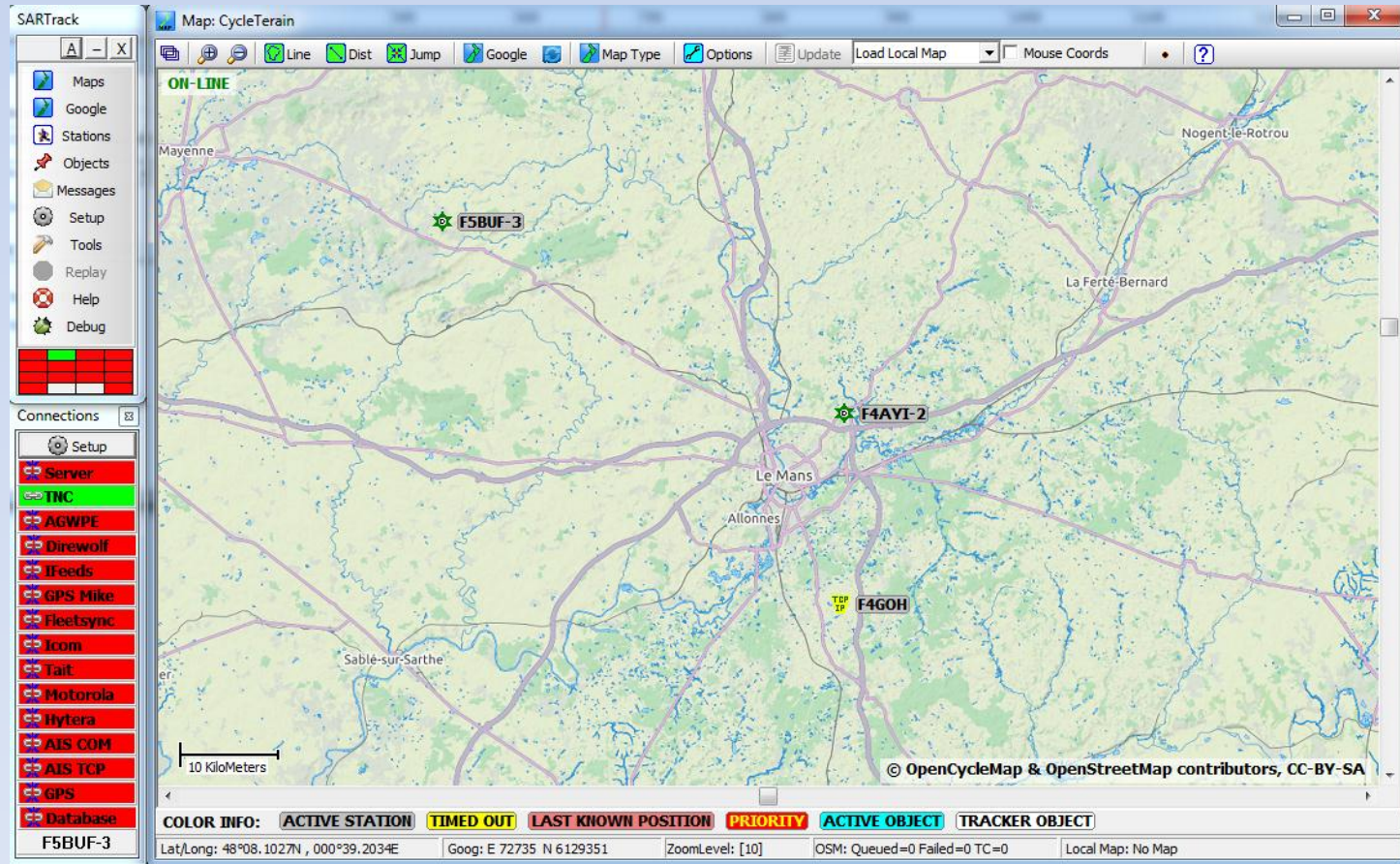


APRS

Décodage

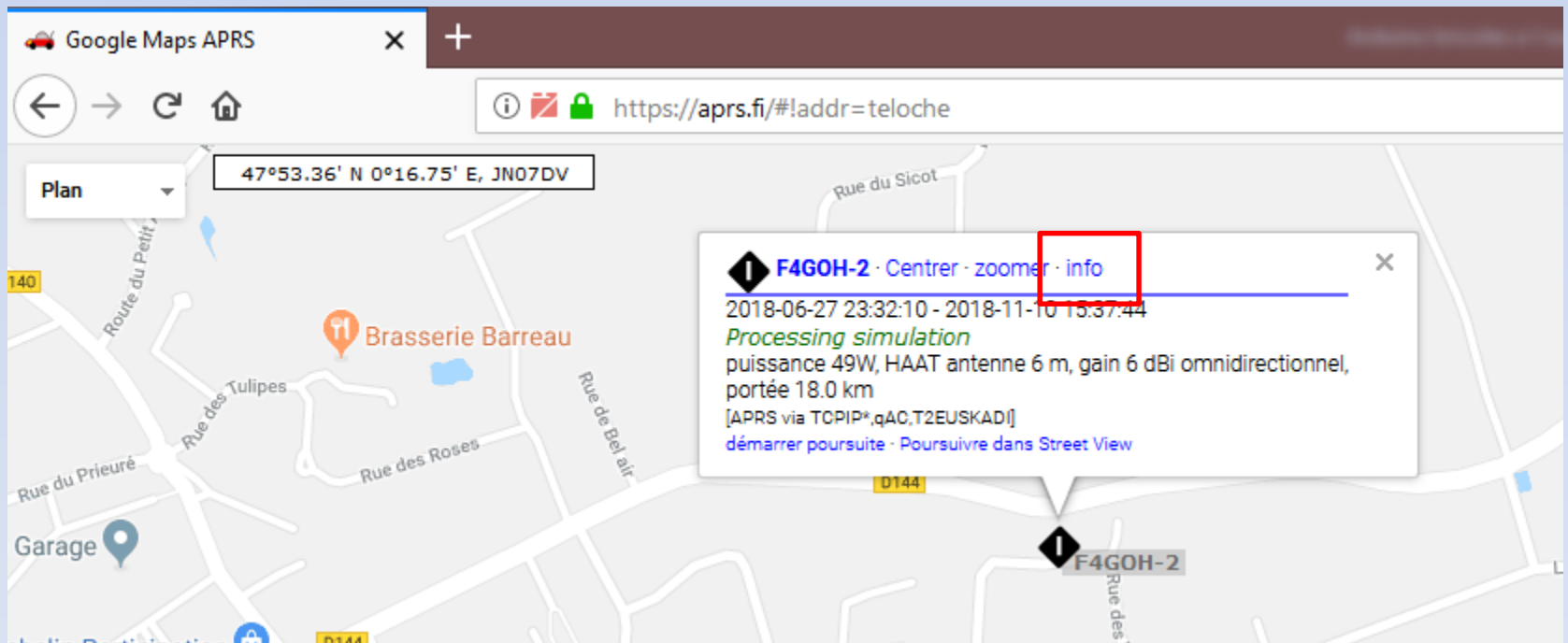


Igate et cartographie



- <http://www.sartrack.co.nz/>

APRS.FI



Trame

Informations de la station F4GO X

+

https://aprs.fi/info/a/F4GOH-2

Information station · vue carte · info · télémétrie · météo · **trame** · statuts · balises · messages · bulletins · naviguer · bouger · Mon compte

Indicatif, nom du navire ou locator: **Création des statistiques complètes (prendra 0.037 s).**

Il est possible de faire une recherche en utilisant des jokers (* ?) après le préfixe. Exemple : OH*

Station APRS **F4GOH-2** - [Graphiques d'activité](#)


Commentaire:
Position:




Dernière position

Appareil:
Dernier chemin:
Positions enregistrées
Débit de paquets:
Autres SSID :

Processing simulation
47°53.41' N 0°16.61' E - locator JN07DV33FP - [Carte](#) - [Carte statique](#)
496.3 m Nord-est Cap 64° de [Teloché, Département de la Sarthe, Pays de la Loire, France](#) [?]
3.1 km Sud-est Cap 139° de [Mulsanne, Département de la Sarthe, Pays de la Loire, France](#)
13.5 km Sud-est Cap 155° de [Le Mans, Département de la Sarthe, Pays de la Loire, France](#)
77.7 km Nord-est Cap 52° de [Angers, Département de Maine-et-Loire, Pays de la Loire, France](#)
2018-11-10 15:37:44 CET (49m34s Il y a)
2018-11-10 15:37:44 CET Heure locale Teloché, France [?]
Unknown: Unknown
F4GOH-2>APRS via TCP/IP*,qAC,T2EUSKADI
6
230 secondes entre paquets sur une moyenne de 4133 secondes.
[F4GOH](#) [F4GOH-1](#) **[F4GOH-10](#)** [F4GOH-11](#) [F4GOH-12](#) **[F4GOH-9](#)** [F4GOH-B](#)

Liste des trames

 +

   <https://aprs.fi/?c=raw&call=F4GOH-2>

Trames packet de F4GOH-2 - [vue carte](#) · [info](#) · [télémétrie](#) · [météo](#) · [trame](#) · [statuts](#) · [balises](#) · [messages](#) · [bulletins](#) · [naviguer](#) · [bouger](#) · [Mon compte](#)

Indicatif générateur : Affiche:

Trouvé 19 paquets. 230 secondes entre paquets sur une moyenne de 4133 secondes. La recherche a pris 0.041 secondes.

Les paquets bruts APRS-IS sont sauvegardés pendant 2 jours. Les paquets non supportés ou non reconnus sont affichés en rouge. Les données AIS ne sont pas affichées ici. Il est possible de faire une recherche en utilisant un indicatif.

2018-11-10 15:23:19 CET: [F4GOH-2](#)>APRS,TCPIP*,qAC,T2UKRAINE:!4753.41NI00016.61E&PHG7160/Processing simulation
2018-11-10 15:25:47 CET: [F4GOH-2](#)>APRS,TCPIP*,qAC,T2EUSKADI:!4753.41NI00016.61E&PHG7160/Processing simulation
2018-11-10 15:26:31 CET: [F4GOH-2](#)>APRS,TCPIP*,qAC,T2UKRAINE:!4753.41NI00016.61E&PHG7160/Processing simulation
2018-11-10 15:28:12 CET: [F4GOH-2](#)>APRS,TCPIP*,qAC,T2EUSKADI:!4753.41NI00016.61E&PHG7160/Processing simulation
2018-11-10 15:37:08 CET: [F4GOH-2](#)>APRS,TCPIP*,qAC,T2ROMANIA:!4753.41NI00016.61E&PHG7160/Processing simulation
2018-11-10 15:37:44 CET: [F4GOH-2](#)>APRS,TCPIP*,qAC,T2EUSKADI:!4753.41NI00016.61E&PHG7160/Processing simulation

Processing.org

Download \ Processing.org

https://processing.org/download/

Processing p5.js Processing.py Processing for Android Processing for Pi Processing Foundation

Processing

Cover
Download
Donate
Exhibition
Reference
Libraries
Tools
Environment
Tutorials

Download Processing. Processing is available for Linux, Mac OS X, and Windows. Select your choice to download the software below.



3.4 (26 July 2018)

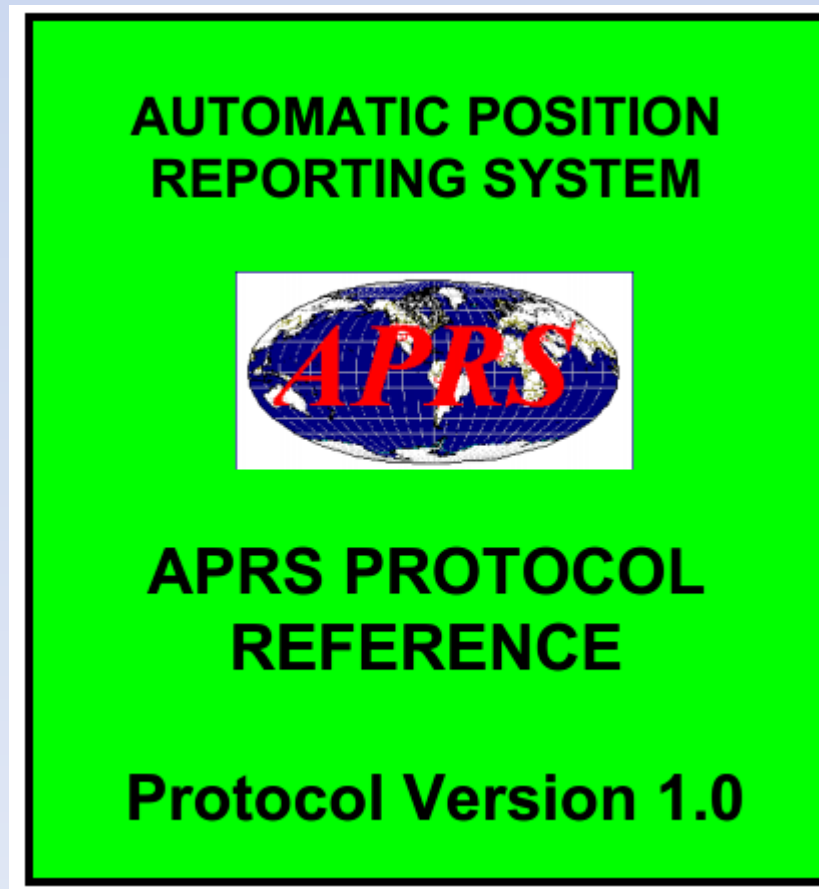
Windows 64-bit
Windows 32-bit

Linux 64-bit
Linux 32-bit
Linux ARM
(running on Pi?)

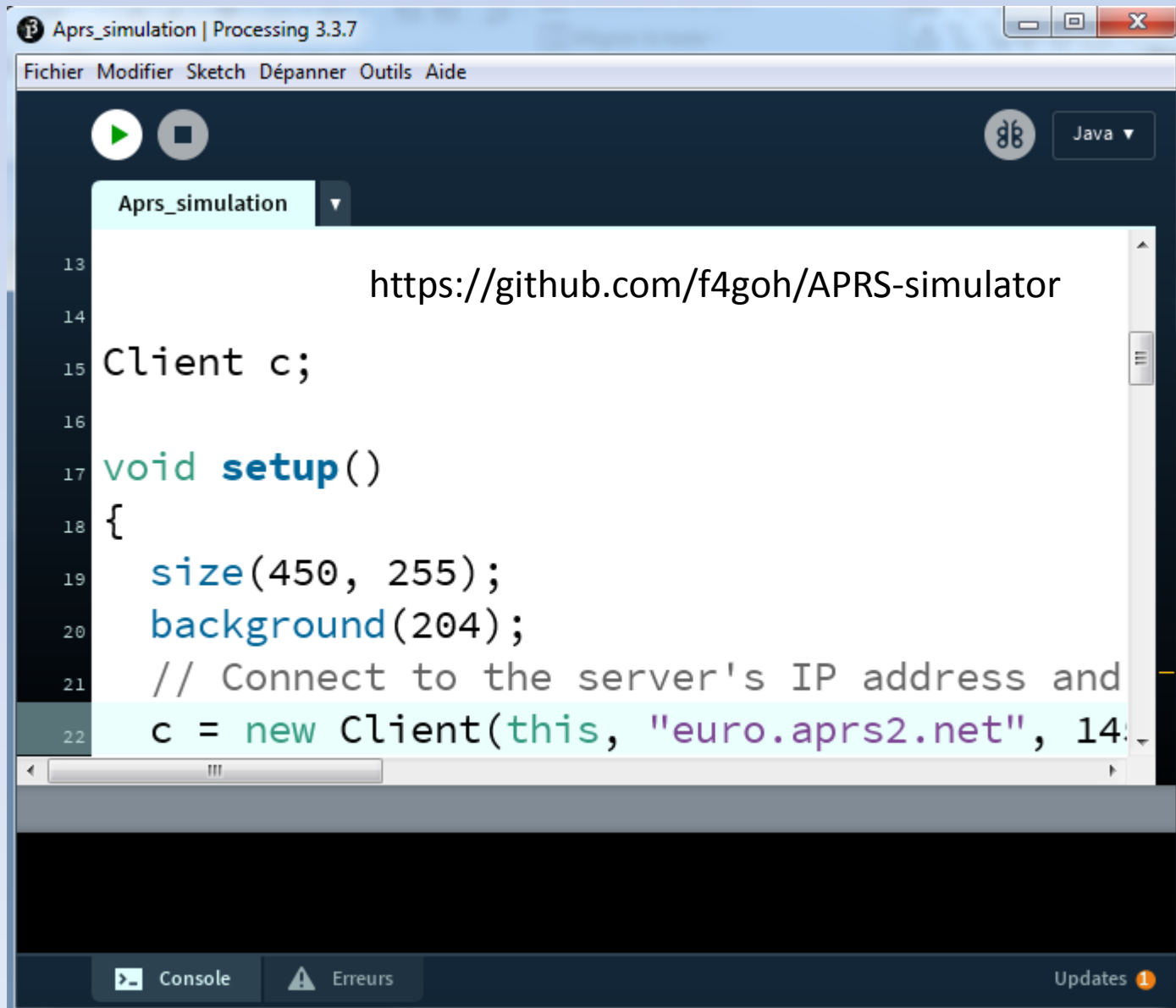
Mac OS X

Documentation

- <http://www.aprs.org/doc/APRS101.PDF>



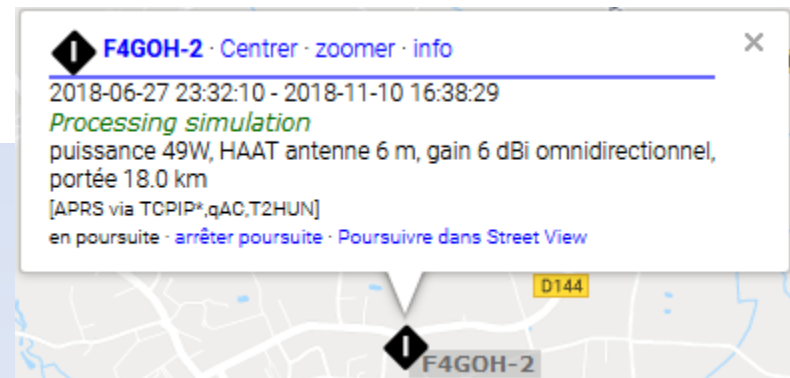
Simulateur de trames



Connexion au serveur

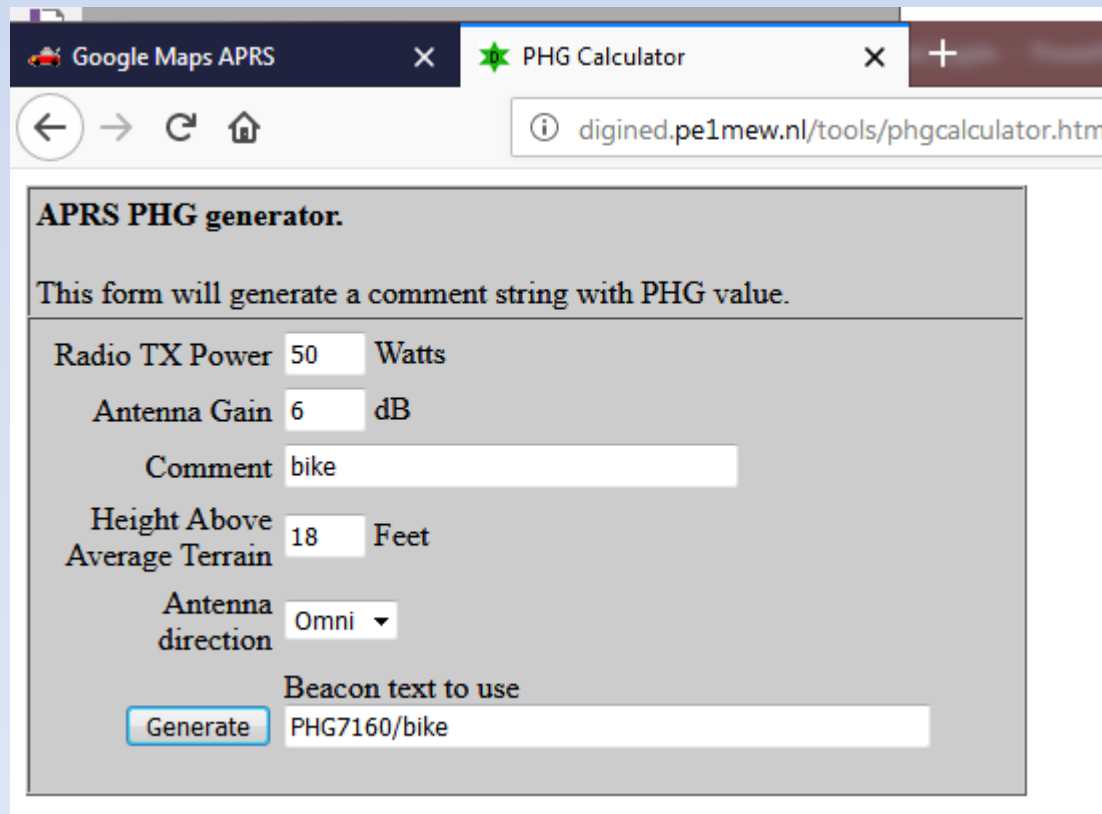
Client c;

```
void setup()
{
  size(450, 255);
  background(204);
  // Connect to the server's IP address and port
  c = new Client(this, "euro.aprs2.net", 14580);
  if (c.active() == true) {
    println("connecte au serveur");
    c.write("user F4GOH-2 pass xxxxx|vers Processing simulation filter b/F4GOH-11\n");
    c.write("F4GOH-2>APRS:!4753.41NI00016.61E&PHG7160/Processing simulation\n");
  } else {
    println("non connecte au serveur");
  }
}
```



PHG : Power Height Gain

<http://digined.pe1mew.nl/tools/phgcalculator.htm>



The screenshot shows a web browser window with two tabs: "Google Maps APRS" and "PHG Calculator". The address bar shows the URL "digined.pe1mew.nl/tools/phgcalculator.htm". The main content area is titled "APRS PHG generator." and contains the instruction "This form will generate a comment string with PHG value." Below this, there are several input fields: "Radio TX Power" with a value of 50 and unit "Watts"; "Antenna Gain" with a value of 6 and unit "dB"; "Comment" with the text "bike"; "Height Above Average Terrain" with a value of 18 and unit "Feet"; "Antenna direction" with a dropdown menu set to "Omni"; and "Beacon text to use" with the text "PHG7160/bike". A "Generate" button is located to the left of the "Beacon text to use" field.

APRS PHG generator.

This form will generate a comment string with PHG value.

Radio TX Power Watts

Antenna Gain dB

Comment

Height Above Average Terrain Feet

Antenna direction

Beacon text to use

Position

Lat/Long Position Report Format — with Timestamp						
/ or @	Time DHM / HMS	Lat	Sym Table ID	Long	Symbol Code	Comment (max 43 chars)
1	7	8	1	9	1	0-43
<p><u>Examples</u></p> <p>/092345z4903.50N/07201.75W>Test1234 with timestamp, no APRS messaging, zulu time, with comment.</p> <p>@092345/4903.50N/07201.75W>Test1234 with timestamp, with APRS messaging, local time, with comment.</p>						

```
String heure=horaire();
if (key=='p') {
    c.write("F4GOH-10>APRS,WIDE1-1,WIDE2-1,qAR,F4GOH-2:/" +heure+"4753.42N/00016.62Eb/bike\n");
    println("position...");
}
```

Météo

```
if (key=='w') {  
  c.write("F4GOH-9>APRS,WIDE1-1,WIDE2-1,qAR,F4GOH-2:/" +heure+"4753.43N/00016.60E_.../...g...t0020r...p...P...h60b10130\n");  
  println("Weather...");  
}
```

Positionless Weather Data

Wind Direction c ccc	Wind Speed s sss	Gust g ggg	Temp t ttt	Rain Last Hr r rrr	Rain Last 24 Hrs p ppp	Rain Since Midnight P PPP	Humidity h hh	Barometric Pressure b bbbbbb
4	4	4	4	4	4	4	3	5

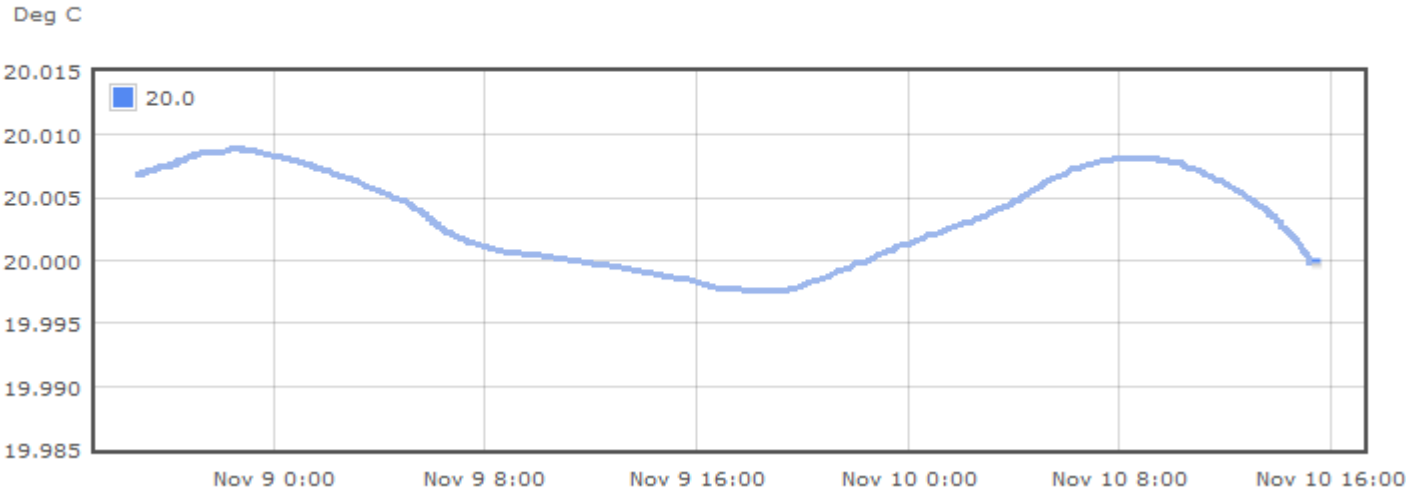
where:

- c** = wind direction (in degrees).
- s** = sustained one-minute wind speed (in mph).
- g** = gust (peak wind speed in mph in the last 5 minutes).
- t** = temperature (in degrees Fahrenheit). Temperatures below zero are expressed as -01 to -99.
- r** = rainfall (in hundredths of an inch) in the last hour.
- p** = rainfall (in hundredths of an inch) in the last 24 hours.
- P** = rainfall (in hundredths of an inch) since midnight.
- h** = humidity (in %. 00 = 100%).
- b** = barometric pressure (in tenths of millibars/tenths of hPascal).

Télémesures

[24 heures · 48 heures · semaine · mois · année]

F4GOH-10 Temp sea 2018-11-10 15:15:03 -> 2018-11-10 15:37:08 CET



```
if (key=='u') {
  c.write("F4GOH-10>APRS,WIDE1-1,WIDE2-1,qAR,F4GOH-2::F4GOH-10 :PARM.Temp sea,Temp ext,Vbat,Ocean waves\n");
  c.write("F4GOH-10>APRS,WIDE1-1,WIDE2-1,qAR,F4GOH-2::F4GOH-10 :UNIT.Deg C,Deg C,Volts,Meters\n");
  c.write("F4GOH-10>APRS,WIDE1-1,WIDE2-1,qAR,F4GOH-2::F4GOH-10 :EQNS.0,1,-100,0,1,-100,0,0.1,0,0,0.1,0\n");
  c.write("F4GOH-10>APRS,WIDE1-1,WIDE2-1,qAR,F4GOH-2::F4GOH-10 :BITS.00000000,Telemetry\n");
  println("telemetry Units...");
}
if (key=='t') {
  c.write("F4GOH-10>APRS,WIDE1-1,WIDE2-1,qAR,F4GOH-2:T#002,120,115,135,5,000,00000000\n"); //page 74
  println("telemetry Data...");
}
```

```
,F4GOH-2:T#002,120,115,135,5,000,00000000
,F4GOH-2:T#003,120,115,135,5,000,00000000
```

Diagram illustrating the LM35 precision centigrade centibarometer circuit and its physical component.

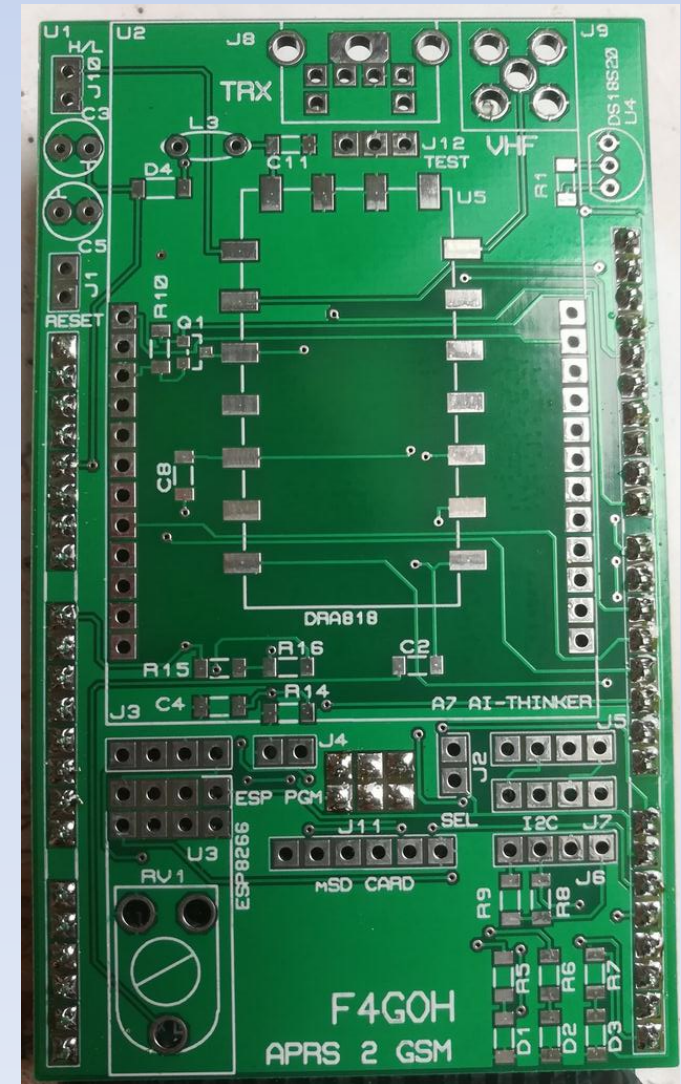
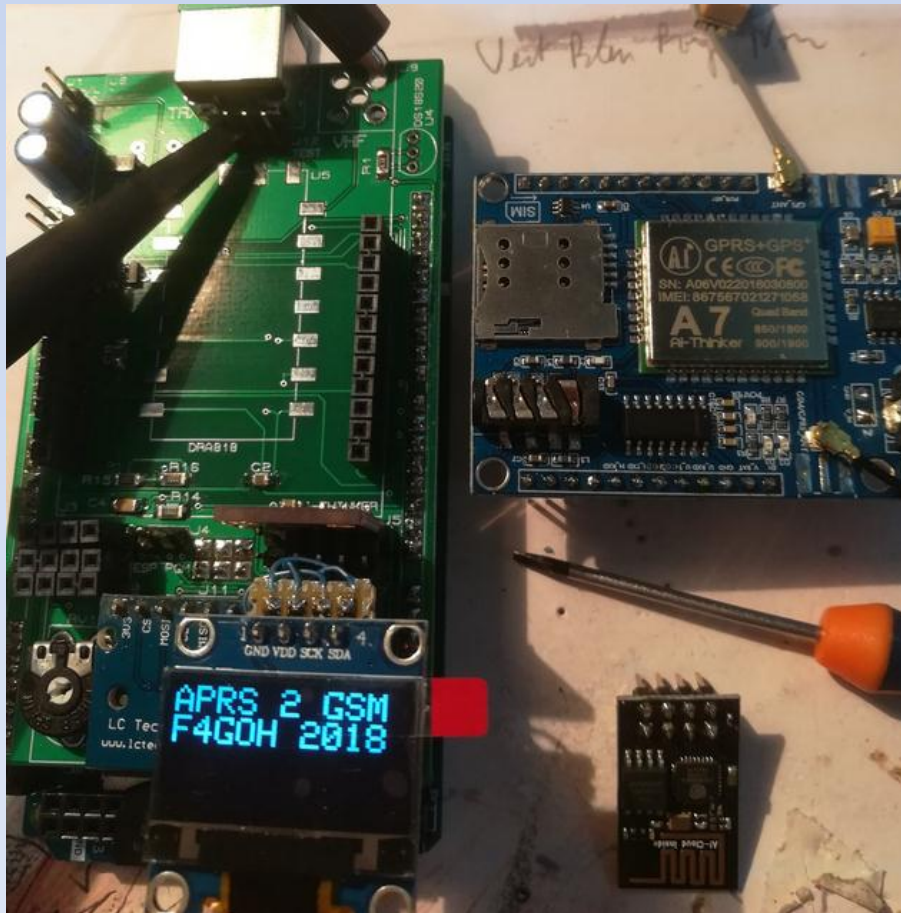
The circuit shows the LM35 connected to a positive supply voltage $+V_s$ and ground. The output is labeled "OUTPUT 0 mV + 10.0 mV/°C".

The physical component is a small black square package with three pins labeled 1 (4-20V), 2 (OUT), and 3 (GND).

a=0
b=2
c=0



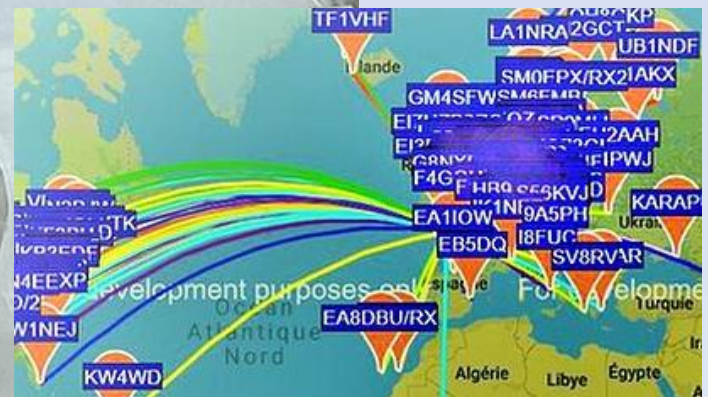
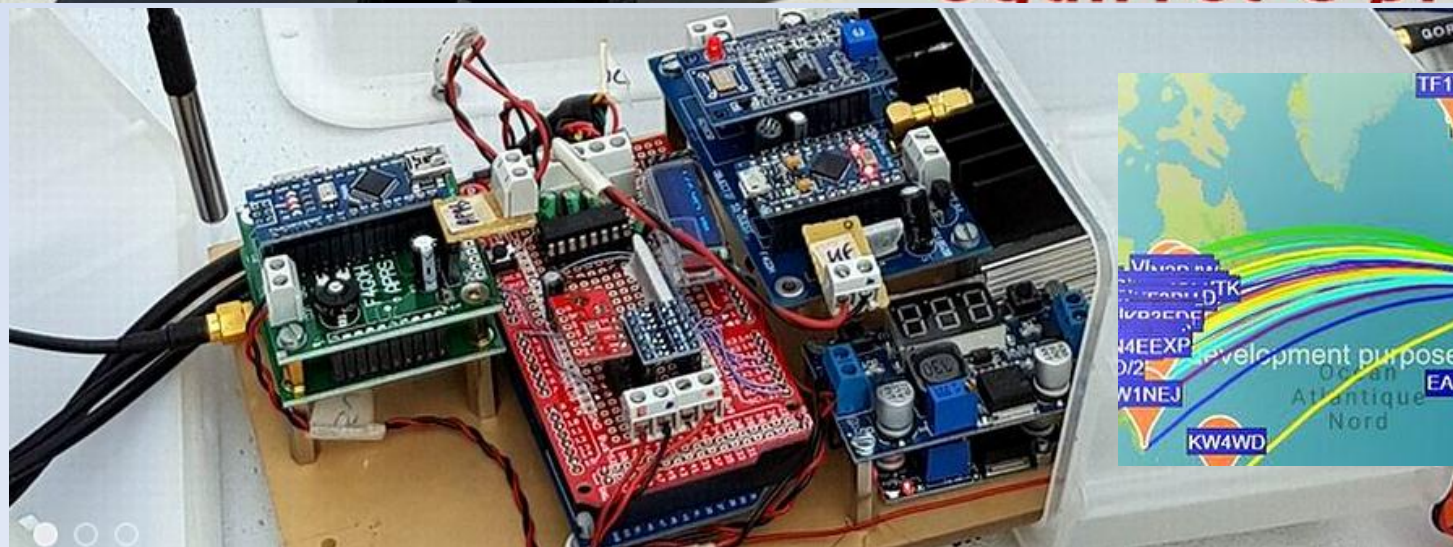
Ballon 2019



<http://squirrelc.fr/>



Squirrel C project



73 et à bientôt

