

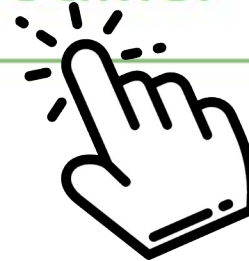
# RTKBASE

Stéphane Péneau (Carto'Cité)

# 2011



OpenStreetMap



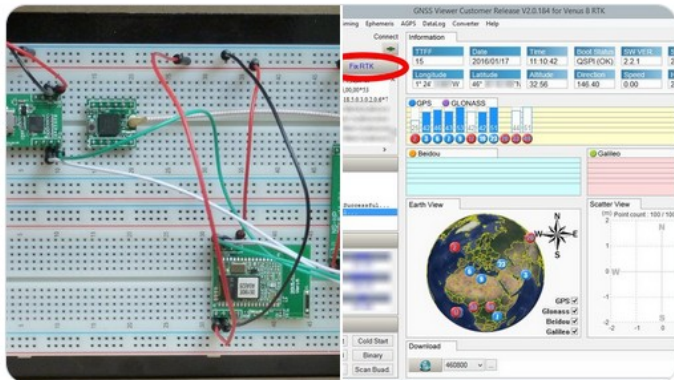
# 2016

- Découverte du RTK à bas coût. RTKLib, Ublox M8T, ...
- Découverte des possibilités, des limites.



Stéphane Péneau @stfmani · 17 janv. 2016

Youhou !! Premier Fix [#GNSS](#) en [#RTK](#) avec [@NavSpark](#) NS-HP-5 & base station EUREF VFCHO



NavSpark



Stéphane Péneau @stfmani · 12 août 2016

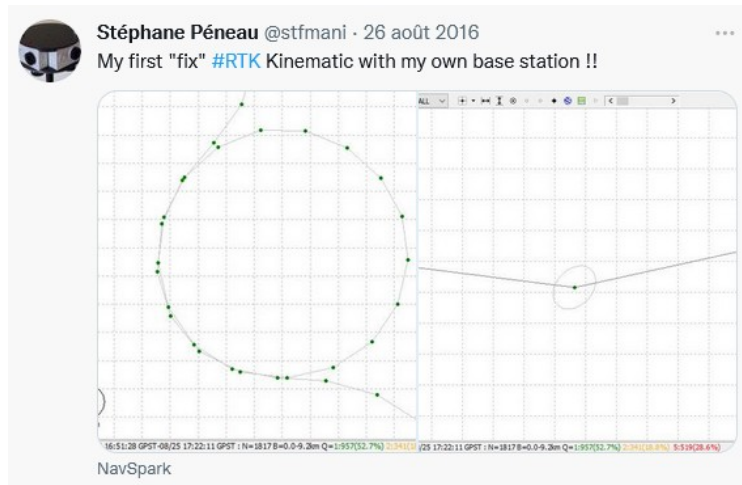
Aujourd'hui, sauts de puces [#RTK](#) de 10km depuis base rgp vers nouvelle base. Avec l'aide de [@CartoCharles](#)



- Bases du RGP non utilisables en temps réel.
- Limitées au GPS + GLONASS
- Trop éloignée



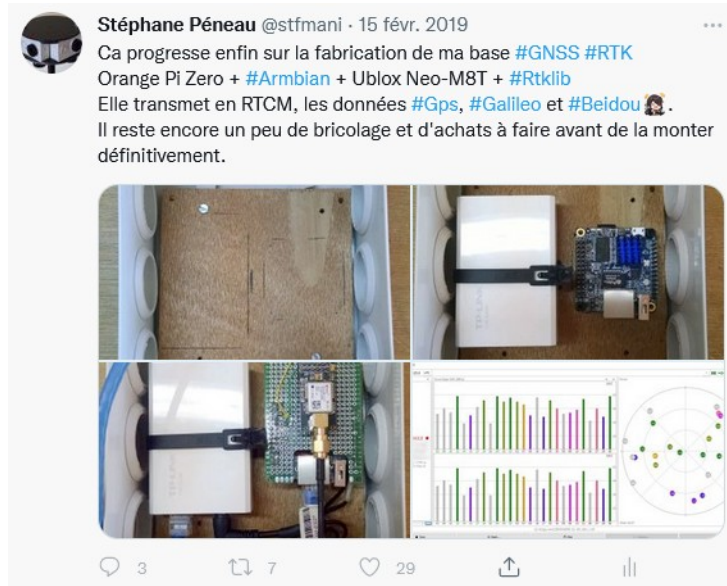
**Il me faut ma propre base !**



Base temporaire alimentée sur batterie

# 2019

- Démarrage du caster Centipède RTK avec des bases Emlid
- Nouvelle base « maison »



- Début de RTKBASE

```
basegnss@basegnss:~$ sudo systemctl status str2str_tcp.service
[sudo] Mot de passe de basegnss :
● str2str_tcp.service - RTKBase Tcp
   Loaded: loaded (/etc/systemd/system/str2str_tcp.service; disabled; vendor preset: enabled)
   Active: active (running) since Sun 2021-07-04 08:17:12 CEST; 3 months 9 days ago
     Main PID: 589 (str2str)
       Tasks: 2 (limit: 905)
      Memory: 576.0K
      CGroup: /system.slice/str2str_tcp.service
              └─589 /usr/local/bin/str2str -in serial://ttyACM0:115200:8:n:1#ubx -out tcpvsvr://:5015 -t 0 -fl /home/basegnss/rtkbase/logs/st

oct. 13 15:15:12 basegnss systemd-journal[498]: Suppressed 11 messages from str2str_tcp.service
oct. 13 15:15:12 basegnss run_cast.sh[560]: 2021/10/13 13:15:31 [CC--] 39153540 B 42682 bps (0) /dev/ttyACM0 (1) 4 clients
oct. 13 15:16:12 basegnss systemd-journal[498]: Suppressed 11 messages from str2str_tcp.service
oct. 13 15:16:12 basegnss run_cast.sh[560]: 2021/10/13 13:16:31 [CC--] 39466892 B 42160 bps (0) /dev/ttyACM0 (1) 4 clients
oct. 13 15:17:12 basegnss systemd-journal[498]: Suppressed 11 messages from str2str_tcp.service
oct. 13 15:17:12 basegnss run_cast.sh[560]: 2021/10/13 13:17:31 [CC--] 39780076 B 39464 bps (0) /dev/ttyACM0 (1) 4 clients
oct. 13 15:18:12 basegnss systemd-journal[498]: Suppressed 11 messages from str2str_tcp.service
oct. 13 15:18:12 basegnss run_cast.sh[560]: 2021/10/13 13:18:31 [CC--] 40004092 B 40080 bps (0) /dev/ttyACM0 (1) 4 clients
oct. 13 15:19:12 basegnss systemd-journal[498]: Suppressed 11 messages from str2str_tcp.service
oct. 13 15:19:12 basegnss run_cast.sh[560]: 2021/10/13 13:19:31 [CC--] 40408592 B 39476 bps (0) /dev/ttyACM0 (1) 4 clients
basegnss@basegnss:~$
```

- Arrivée des récepteurs GNSS L1/L2 à bas coût (Ublox F9P)...mais pas chez Emlid



# Fin 2019

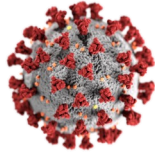
- Création d'une « image » RTKBase pour Raspberry Pi par Julien Ancelin.
- L'INRAE finance 12 bases RTKBase L1/L2





# 2020

- Confinement



- Apprentissage et développement d'une interface Web pour le V4MPack



V4MPACK	Home	Cams	Session	Login
---------	------	------	---------	-------

All Cams	
Power:	Wifi link:
Capture mode: Photo	Time Sync: PPS
Capture size: 16M	metering: center
Send preset: V4MPACK	Clock: Set clock

Cam_avant	
Power:	Wifi link:
Capture mode: Photo	Clock: 2020-03-28 16:20:57
Battery: 100%	ext pwr:
SD free space: 58.69GB (98%)	total space: 59.59GB
Capture size: 16M	metering: center

Cam_droite	
Power:	Wifi link:
Capture mode: Photo	Clock: 2020-03-28 16:20:57
Battery: 0%	ext pwr:
SD free space: 58.73GB (98%)	total space: 59.59GB
Capture size: 16M	metering: center

Cam_arriere	
Power:	Wifi link:
Capture mode: Photo	Clock: 2020-03-28 16:20:58
Battery: 0%	ext pwr:
SD free space: 58.75GB (98%)	total space: 59.59GB
Capture size: 16M	metering: center

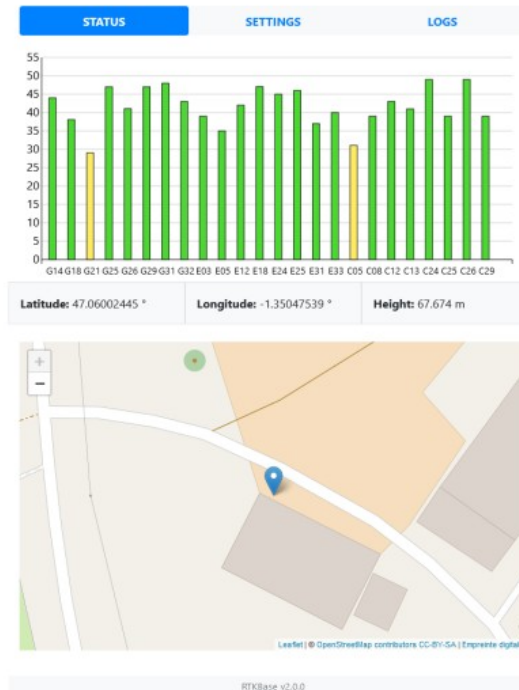
Cam_gauche	
Power:	Wifi link:
Capture mode: Photo	Clock: 2020-03-28 16:20:59

# 2020

- Et si ?
- Banco !
- Go !

# Juin 2020

- RTKBase v2 ! (licence AGPL-3.0)



RTKBase v2.0.0

Services:

- Main service: ☒ On Options
- Ntrip service: ☐ Off Options
- Rtcm server service: ☒ On Options
- File service: ☒ On Options

System Settings:

Rtkbase 2.0.0:

Change Password:

New:

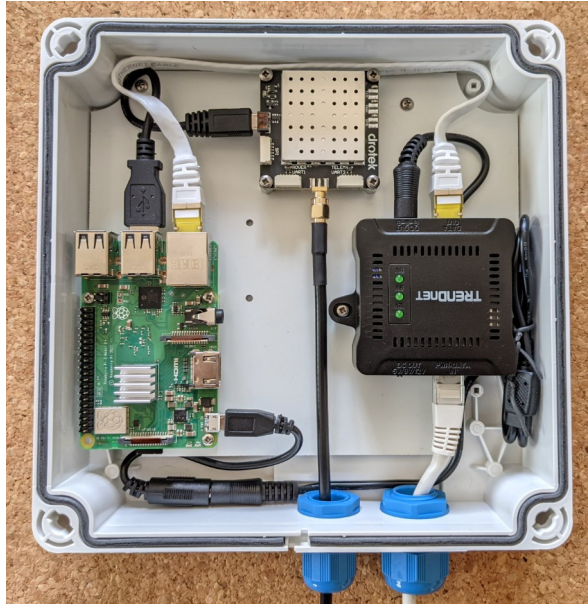
Confirm:

Power:

STATUS		SETTINGS		LOGS
File name	type	size (MB)	actions	
2020-05-18-09:36:26-GNSS-1.ubx.tag	TAG	2.06	  	
2020-05-18-09:36:26-GNSS-1.ubx	UBX	32.05	  	
2020-05-15-08:04:45-GNSS-1.ubx.tag	TAG	4.15	  	
2020-05-15-08:04:45-GNSS-1.ubx	UBX	66.74	  	
2020-05-14-04:44:41-GNSS-1.ubx.tag	TAG	2.61	  	
2020-05-14-04:44:41-GNSS-1.ubx	UBX	38.00	  	
2020-05-13-05:00:21-GNSS-1.ubx	UBX	101.84	  	
2020-05-12-05:13:58-GNSS-1.ubx.tag	TAG	3.81	  	
2020-05-12-05:13:58-GNSS-1.ubx	UBX	58.45	  	
2020-05-11-16:50:03-GNSS-1.ubx.tag	TAG	1.13	  	
2020-05-11-16:50:03-GNSS-1.ubx	UBX	17.39	  	
2020-05-11-14:51:22-GNSS-1.ubx.tag	TAG	0.98	  	
2020-05-11-14:51:22-GNSS-1.ubx	UBX	14.54	  	
2020-05-11-14:49:09-GNSS-1.ubx.tag	TAG	0.00	  	
2020-05-11-14:49:09-GNSS-1.ubx	UBX	0.00	  	
2020-05-10-00:00:00-GNSS-1.ubx.tag	TAG	2.49	  	

# 2020

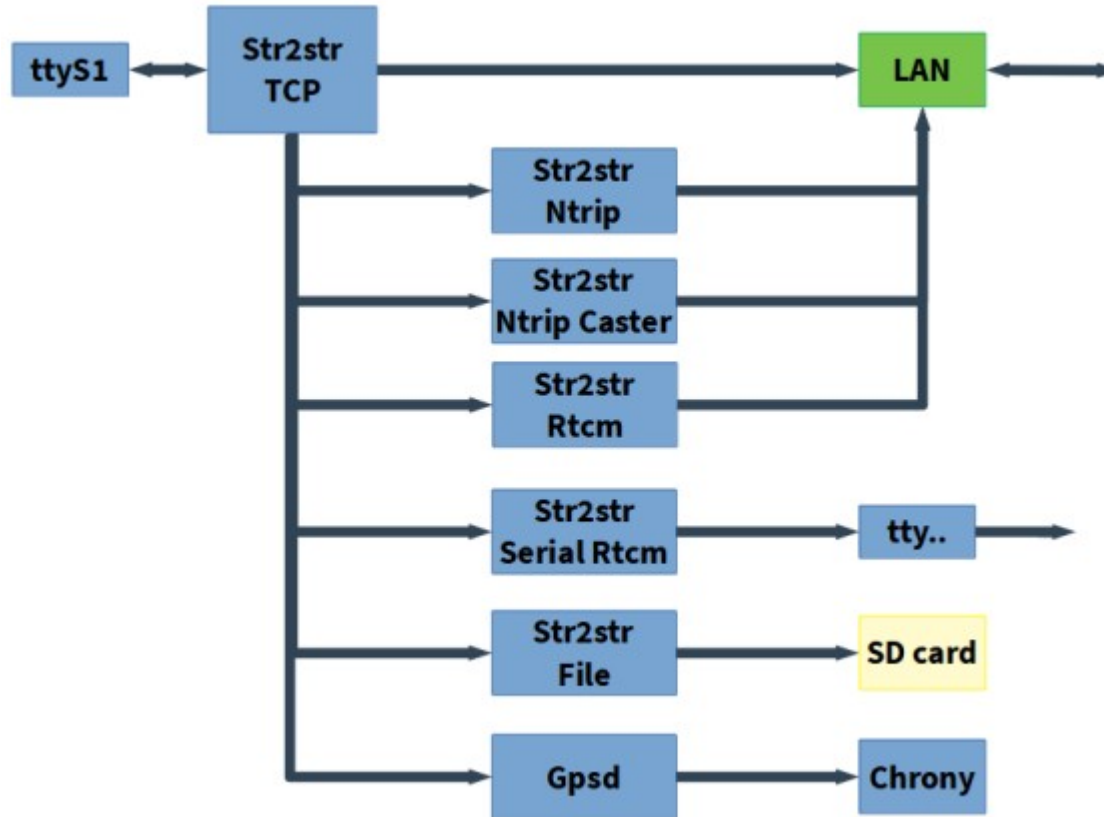
- Création et vente de kits de montage
- Vente en ligne sur <http://rtkbase.eu> (bientôt)



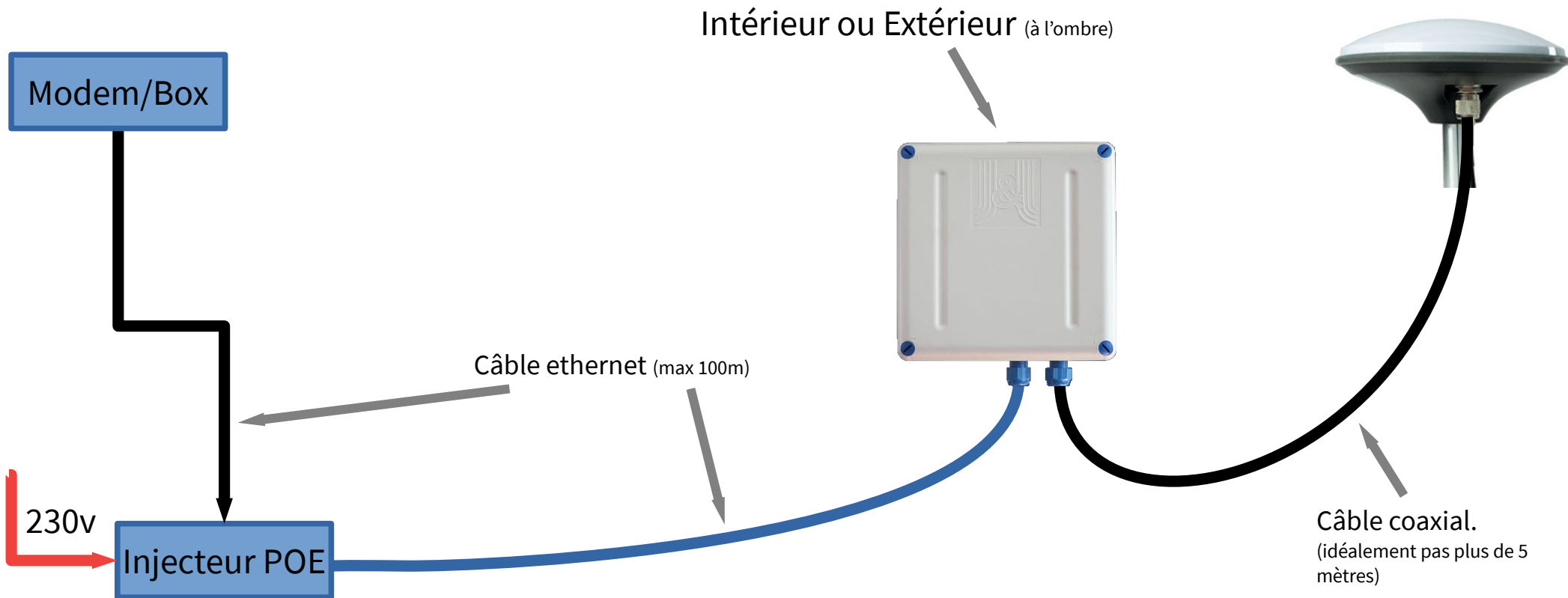
# 2020 → 2021

- 3 nouvelles version majeures
- 2 version intermédiaires
- Utilisation de RTKBase sur environ 200 bases, en France et au delà.

# Comment ça marche ?



# Installation





# Fin

Merci pour votre écoute !



@stfmani



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<http://rtkbase.eu>



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