HOW CAN THEY BE USED?

1

Navigate to 'Register to CatNet'
at https://catnet-ip.icgc.cat/spgic/en

2

Fill in the
registration form

4

An email is received with
details of the registration made

3

Activate the subscription by clicking
the received mail link

5

Set up the device with the username and password
of the registration made, and the parameters of the connection.

WHAT ARE THE CONNECTION PARAMETERS?

Caster URL / IP	catnet-ip.icgc.cat (recommended) or 84.88.72.26 (alternative)
Port	2101
Service[*1]	VRS3M

[*1]: Service recommended for its characteristics, being the one considered to have the most benefits and in the newest format. See alternatives on the next page for any problems with specific equipment capabilities.

IN WHAT FORMATS ARE BROADCASTED?

CatNet network positioning services are broadcasted in different formats, so to favour compatibility with most of the receivers in the market:

- **Available formats:** RTCM 3.2 MSM5 / RTCM 3.1 / RTCM 2.3 / CMR+

WHAT ACCURACY[*1] CAN BE ACHIEVED?

- **Centimetric accuracy (RTK):** 2-4 cm (planimetry) / 6 cm (altimetry)

Service[*2]	Type	Constellations	Format
VRS3M[*3]	Network	GPS + GLO + GAL + BDS	RTCM 3.2 MSM5
VRS3	Network	GPS + GLO	RTCM 3.1
VRS2	Network	GPS + GLO	RTCM 2.3
VRS+	Network	GPS + GLO	CMR+
PROPERA3M	Station	GPS + GLO + GAL + BDS	RTCM 3.2 MSM5

- **Metrica and decametric** accuracy:

Service[*2]	Type	Constellations	Format
VRS2_DGNSS	Network	GPS + GLO	RTCM 2.3
XXXX2_DGNSS	Station	GPS + GLO	RTCM 2.3

where XXXX is a CatNet station identifier: ARES, AVEL, BELL, BEUD, CASE, CREU, EBRE, ESCO, GARR, LLEI, LLIV, MARE, PLAN, REUS, SBAR, SONA, SORG.
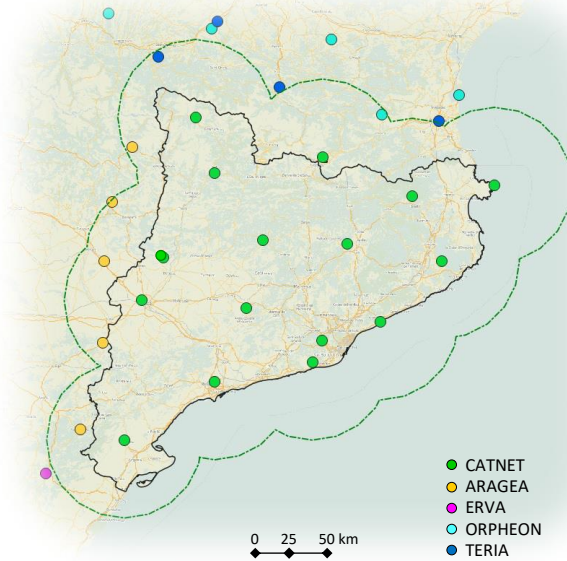
[*1]: The values shown do not consider factors such as the performance of the equipment, its configuration, the geometry of the GNSS constellation or the environment, which may adversely affect the accuracy of the final solution obtained.

[*2]: Some receivers may identify the service using other nomenclatures, such as: "Mount point", "Mountpoint", "Data stream", "Stream", "Punto de montaje", "Punto de anclaje", "Servicio".

[*3]: It is a service identical to the still valid 'VRS3_GAL'. It has been included following the recommendation of the "Consejo Superior Geográfico Specialized Commission of the Geodetic System Working Group" for the standardization of names.
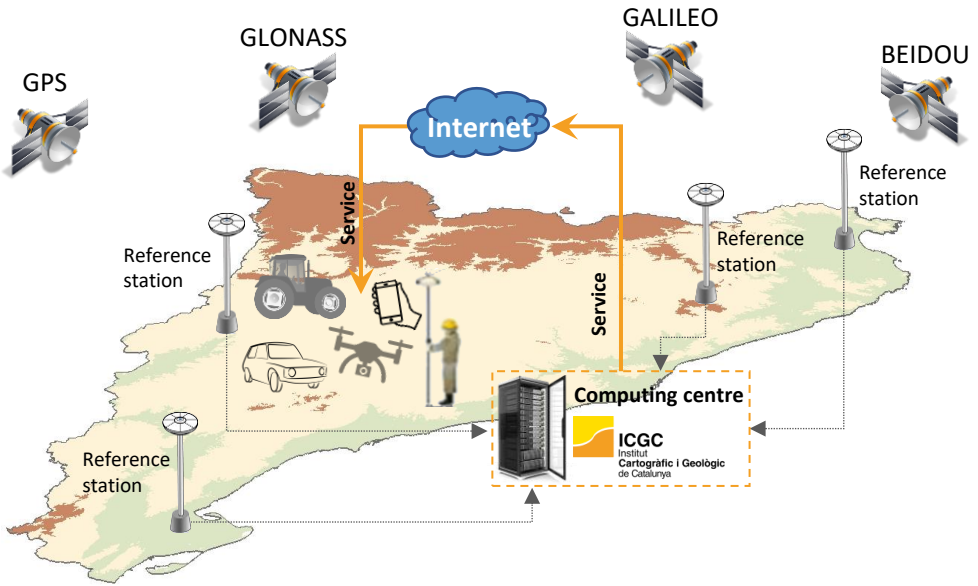
HOW DO THEY WORK?

GPS

GLONASS

GALILEO

BEIDOU

Reference station

Reference station

Reference station

Internet

Service

Service

Reference station

Computing centre

![ICGC Institut Cartogràfic i Geològic de Catalunya]

WHAT IS THE COVERAGE?

17	CatNet stations
15	partner stations

+30	years operating stations
+15	years providing service

+1300	active annual users
+290K	hours/year of service

24/7	service availability

● CATNET
● ARAGEA
● ERVA
● ORPHEON
● TERIA

0   25   50 km

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