

Galileo HAS Assessment Within GNSS Contested Environment

Steve Hancock – Lead Scientist PNT



Ordnance Survey and GNSS

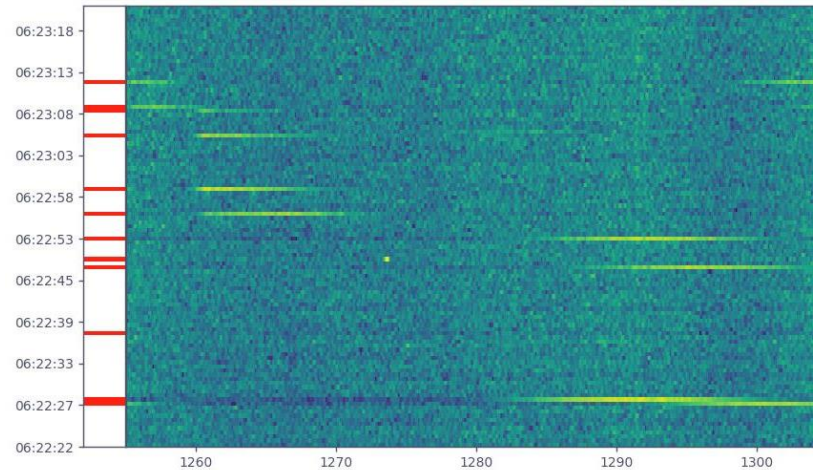
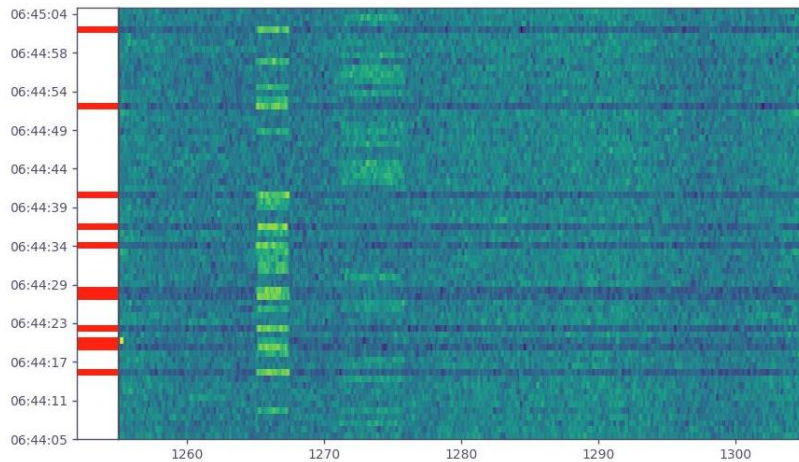
OS has been involved with PNT for over 230 years.

Today **Ordnance Survey is today critically reliant upon GNSS.**

OS Net is a network of 114 (+ 4) continuously operating GNSS receivers about 60km apart, but varies considerably depending upon geography

GNSS faces a wide variety of threats and vulnerabilities.

OS Net, our surveyors and your own devices **detect** multiple natural, non-intentional and intentional **interference events every day.**



Ordnance Survey – Position, Navigation and Timing (PNT)

Due to the presence of interference within the E6 bands, performance of Galileo HAS services maybe impacted – this must be quantified.

The aim is to subject HAS enabled receiver(s) with real world GNSS jamming and spoofing scenarios.

Behaviour of HAS enabled outputs will be evaluated and reported.

Sennybridge Training Area (SENTA), located upon Mynydd Epynt, is the principal one of three military training areas in Wales.

The land was requisitioned for military use in 1939 and covers approximately 31,000 acres (12,000 ha) of Ministry of Defence freehold land and 6,000 acres (2,500 ha) of forested land.

Annual testing of GNSS contested environments (jamming and spoofing) has been completed for about 20 years.



Thank you

