

Report from NESC meeting on Thursday 24th March 2022

The NESC held a meeting on Thursday 24th March on Microsoft Teams with **46** participants online.

New station IZN-1, Tenerife

Andrea Di Mira gave a presentation introducing this new addition to the ILRS network (7701). It was designed and built by DiGOS for ESA and can operate at 532nm or 1064nm wavelengths. It is remotely operated and is undergoing the validation process and co-ordinate estimation. It is remarkable how quickly this station went from nothing in 2018 to validation in 2022. As well as ILRS tracking, it will be a test bed for European industry and will include future projects in space debris and optical communications.

ILRS response to the war in Ukraine

Participants of the NESC meeting were invited to share their views on the IAG/ILRS statement of concern sent by email on 4th March. The statement described the ILRS as a “*non-political cooperative international scientific organization*” and also suggested that “*each member institution should examine the relevant sanctions, governing institutional policies, and their own consciences to guide their actions.*”

Some colleagues asked for the ILRS GB to remove the GLONASS satellites from the ILRS tracking list because it is a military satellite system. Some stations in the network have stopped tracking GLONASS or stopped releasing the data. EDC also announced by email on the 4th that it will cease to make GLONASS SLR data available.

Tracking IRNSS

Mike Pearlman presented the planning around the upcoming IRNSS tracking campaign. The campaign will last 10 days and at least 65 normal points on 1 IRNSS satellite are required in this time period. The SC discussed which satellites this should be and since only certain satellites can be seen by some stations, it was decided that IRNSS-C, IRNSS-D and IRNSS-I would be chosen as targets for the campaign. It was also reported that the predictions are not always high quality and should be improved for the campaign.

These targets are very difficult to get strong return signals from. **Matt Wilkinson** presented a comparison between IRNSS-1I and COMPASS-I5, which showed that COMPASS-I5 gives a far better signal. However, some of the COMPASS-I5 information taken from the ILRS website was incorrect and this will be updated.

ILRS Site Log

As well as reviewing CRDv2 data, **Van Husson** has been looking at Site Logs and wanted to clear up any confusion over the correct way to fill in ‘Section 6: Receiver System’. There are 3 subsections available to stations that use multiple laser wavelengths or detectors. Further subsections (eg. 6.01.02) can then be used for hardware updates and Van showed some examples.

Meteorological Measurements / Travelling Barometer

Nils Raymond updated the NESC on the progress of the travelling barometer. A Vaisala PTU303 has been made available by the Grasse team to visit SLR stations and take meteorological readings.

The enclosure did not arrive and so an alternative design is being developed. Nils has produced a 3D printed prototype box containing all of the hardware with an exterior housing for the sensors. There are issues with the cabling connections and making sure they are properly sealed. The initial trip to Wettzell has been postponed.

The presentation slides from the meeting will be available here

https://ilrs.gsfc.nasa.gov/network/newg/newg_activities.html

The date for the next NESC meeting was set as **Thursday 19th May at 1300 UTC**

If you missed the meeting and would like to catch up, please send me an email (matwi@nerc.ac.uk) and I can provide the recording.