

Subject: [ilrs-a] [EXTERNAL] FW: NESC Meeting Thursday 26th August at 1300UTC
Date: Monday, August 23, 2021 at 5:56:37 AM Eastern Daylight Time
From: Matthew Wilkinson - BGS via ilrs-a
To: ilrs-a@lists.nasa.gov

Dear Colleagues

The next ILRS Networks and Engineering Standing Committee will be held on **Thursday 26th August at 1300UTC**.

You can join using this link:

Microsoft Teams meeting

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As an ILRS associate you are welcome to attend this meeting. If there is something that you would like to include on the agenda then please email me to discuss. See below for the report from the previous NESC meeting.

With regards
Matt Wilkinson
Chair, ILRS Networks and Engineering SC

From: Matthew Wilkinson - BGS
Sent: 23 August 2021 10:53
To: ILRS NESC <ilrs-newg@lists.nasa.gov>
Subject: NESC Meeting Thursday 26th August at 1300UTC

NESC colleagues

The next online Networks and Engineering SC meeting will be on **Thursday 26th August at 1300UTC**.

You can join using this link:

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

This is a holiday season for many of us and so we will see how things go. There is time available on the agenda and so I would welcome any presentation offers.

The ILRS Virtual Tour is scheduled for later this year. Some time is being made available during the week for a NESC session and we have been asked to identify some 'hot topics' to present. So, please send me your suggestions and there will be time at the meeting to discuss what we should do.

Draft Meeting Agenda

1. Chair report from previous meeting
2. Update on CPF & CRD v2 Implementation - **Randy Ricklefs**
3. Update on meteorological devices and calibration at SLR sites and the travelling met device campaign.
4. Discussion on NESC session for the Virtual Tour
5. Any other NESC business
 - o Offers for future items
 - o NESC requests for presentations
6. DATE FOR NEXT MEETING

So please send me your agenda contributions. This can be short if need be. Any updates on your station, any developments or any problems would be of interest to the NESC.

Thanks

Matt Wilkinson

Chair, NESC

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SGF, Herstmonceux
<http://sgf.rgo.ac.uk>

Report from NESC meeting on Thursday 24th June 2021

The NESC held a meeting on Thursday 24th June on Microsoft Teams with **32** participants online.

Eventech

We were fortunate to be joined by **Pavels Razmajev** and his Eventech colleagues to discuss the development of event timers at the company. **Imants Pulksten** gave a presentation on the history of Eventech timers and the company's other activities, including working with ESA on space applications and lidar. He described the plans for the next event timer model, which is designed with modern components and will use USB-3 to achieve a much greater data output speeds. The AO33-ET timer was developed 10 years ago and some components are becoming unavailable. The team are developing the timer to work in Windows but will also look into supporting Linux. They answered questions on the internal delays, temperature compensation, supporting MHz SLR and best practice operation. The NESC thanked Eventech for joining us.

CPF and CRD v2

Randy Ricklefs supplied slides on the status of 'CPF & CRD v2 Implementation'. CPFv2 predictions are now available for all satellites and 15 stations have been confirmed to be using these. On 1st October prediction providers will be allowed to cease producing CPFv1 files.

CRDv2 is being produced by 9 stations. These have been validated at the Operational Centers and Data Centers, although some stations have not produced enough Lageos, Lares and Etalon data to meet the ASC testing criteria. To help stations develop and test their CRD v2 files, a tool is available on the EDC website and

Van Husson and others are checking the contents of the files for more subtle compliance issues. The goal is to complete the conversion effort by the end of 2021.

Meteorological Measurements

The NESC discussed how to improve and check the meteorological data recorded at stations, particularly the barometric data. This data must be accurate over time as they are used for a range correction and therefore directly impact our SLR measurements. Clément proposed that a Vaisala device from Grasse could be sent to other stations to collect data alongside the station instruments. It was thought that a week of data would be adequate, after which the station would send the unit to the next destination. Ulrich Schreiber thought this would be a good idea and it could uncover relative differences between stations. Mike Pearlman said that stations should also consider having a second unit for comparison and as a back-up. Matt Wilkinson showed the list of pressure units currently in use in the ILRS network and asked for recommendations for which devices performed well at a good price. Toshi Otsubo said he recently bought a Vaisala device that has 3 pressure sensors.

orbitNP update

Matt Wilkinson gave a presentation on the forthcoming update to the orbitNP.py software, [available](#) on the ILRS website, that can flatten range residuals and produce normal points. The new version includes a 1st iteration quick-pass option, takes station coordinates and velocities from an ILRS SINEX solution file, calculates peak-mean using a tangent fit to a smoothed profile and filters at two levels (to form normal points and to include in the full-rate output).

The date for the next meeting was agreed as **Thursday 26th August at 1300UT**.

The presentation slides from the meeting will be available here
https://ilrs.gsfc.nasa.gov/network/newg/newg_activities.html

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.

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