



吞却三分明月

Networks & Engineering Standing Committee

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NESC

- What do you want to talk about?
- What have you been talking about at the Workshop?
- Do you have a question to ask NESC?
- Is there something you would like to bring to the attention of NESC?
- What would you like to see from NESC over the next year?



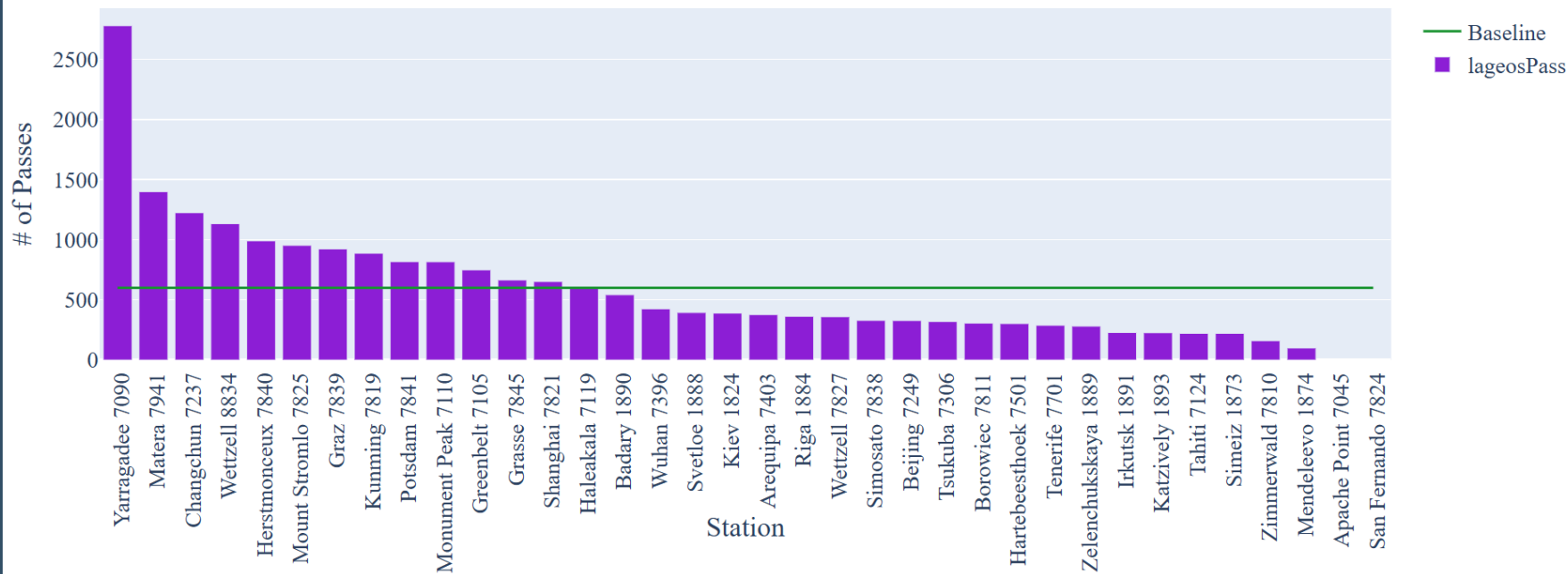
NESC - Suggestions

- Direction of NESC
- Station performance strategy
- Impact of GENESIS. What is the network response? Observation campaign organisation.
- Galileo 4 Science
- Quarantine process
- Why is there less data for LARES-2?



NESC - Stations

Total Number of LAGEOS and LARES Passes
(2023-10-01 to 2024-09-30)



NESC - Stations

NESC discussed how there are stations in the network that are not reaching the required minimum productivity levels and are therefore not contributing very much to the products from the ILRS.

A **Station Survey & Plan** document was drafted and designed to find out more about the status of these station and the limitations to greater SLR tracking and ask them to produce a plan of action.

This was passed to the ILRS CB and has been sent to a select group of stations and the responses will be reviewed by a panel.

ILRS Survey and Station Plan



The ILRS relies upon the accurate measurements taken by the global SLR network in order to form its products. ILRS Stations must repeatedly observe the primary geodetic targets over many passes. Those stations that do not meet the minimum tracking requirement risk not contributing significantly to the scientific output of the ILRS.

Productivity can be improved with the right hardware or software developments or better funding support. ILRS stations not meeting the minimum tracking requirement are requested to identify the main factors limiting their performance and to make a development plan to meet the required productivity level in the near future.

Please answer the following questions with as much detail as possible. Completed forms will be kept by the ILRS Central Bureau and made available within the ILRS on request.

SLR Station

Email

Contact Name

Date dd/mm/yyyy

1. Is your SLR station operating at its full potential?

- a) Can your station track the full ILRS target list? ☐ Yes ☐ No
- b) Does your station track during the day and night? ☐ Yes ☐ No
- c) How many days a week does your station operate?
- d) How many hours per day does your station operate?
- e) Are there additional tracking priorities beyond SLR? ☐ Yes ☐ No

Please provide further information:

NESC - Stations

Do we have the right strategy when approaching under performing stations?

Do stations understand the requirements from the ILRS?

NESC - Forum

The NESC continues to operate an online forum. However, this is not very active.

- <http://sgf.rgo.ac.uk/forumNESC>



NESC - GENESIS



What will be the impact of GENESIS?

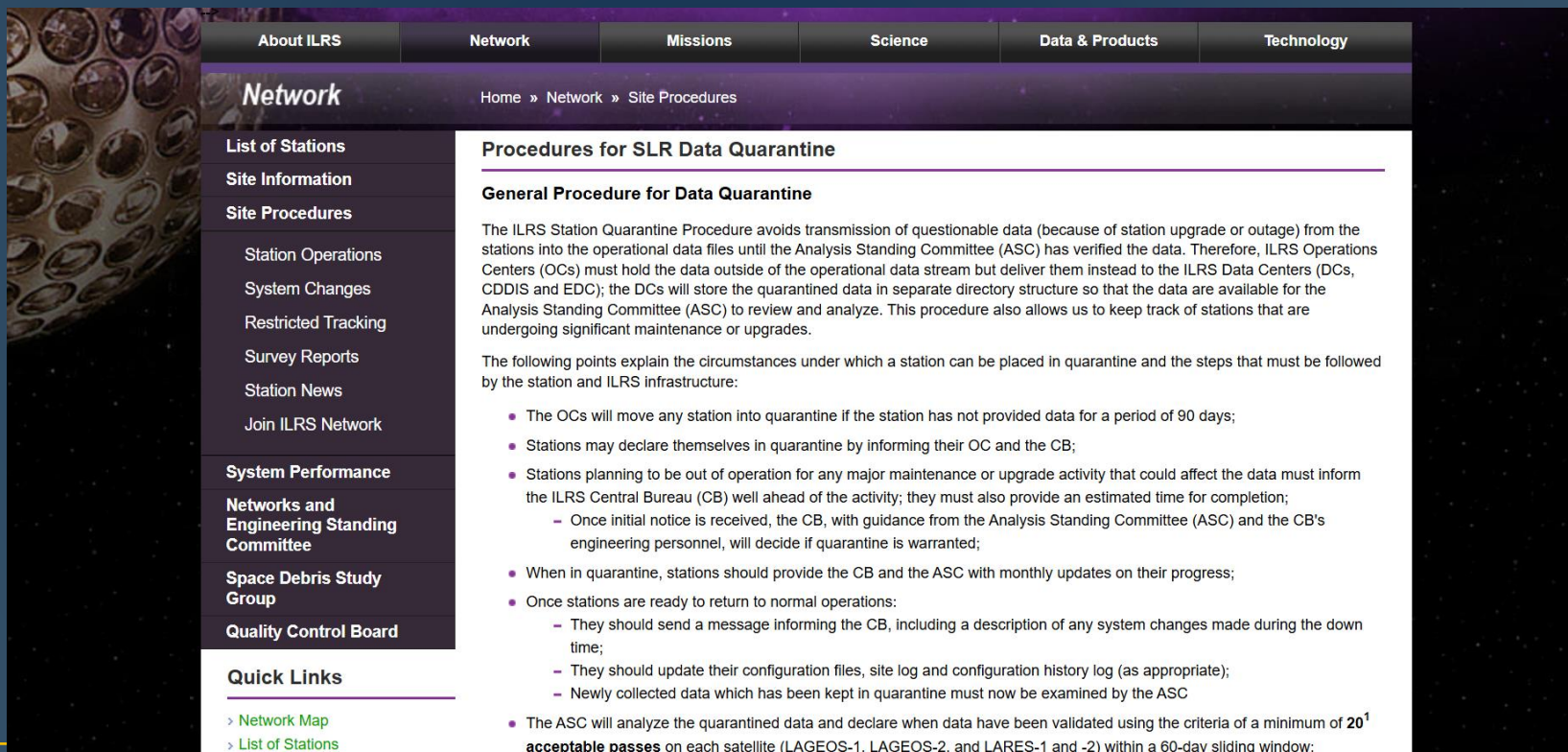
What is the network response?

Responsibility for organising the Observation Campaign.

What would help the ILRS network to provide the best tracking support?

NESC – Quarantine

https://ilrs.gsfc.nasa.gov/network/site_procedures/quarantine_procedure.htm



The screenshot shows the ILRS Network website. The top navigation bar includes links for About ILRS, Network, Missions, Science, Data & Products, and Technology. The main content area is titled "Network" and shows a breadcrumb trail: Home » Network » Site Procedures. A left sidebar contains a list of links: List of Stations, Site Information, Site Procedures (selected), Station Operations, System Changes, Restricted Tracking, Survey Reports, Station News, Join ILRS Network, System Performance, Networks and Engineering Standing Committee, Space Debris Study Group, and Quality Control Board. Below the sidebar is a "Quick Links" section with links to the Network Map and List of Stations. The main content area is titled "Procedures for SLR Data Quarantine" and contains a "General Procedure for Data Quarantine" section. This section explains that the ILRS Station Quarantine Procedure avoids transmission of questionable data until the Analysis Standing Committee (ASC) has verified the data. It also lists the circumstances under which a station can be placed in quarantine and the steps that must be followed.

Procedures for SLR Data Quarantine

General Procedure for Data Quarantine

The ILRS Station Quarantine Procedure avoids transmission of questionable data (because of station upgrade or outage) from the stations into the operational data files until the Analysis Standing Committee (ASC) has verified the data. Therefore, ILRS Operations Centers (OCs) must hold the data outside of the operational data stream but deliver them instead to the ILRS Data Centers (DCs, CDDIS and EDC); the DCs will store the quarantined data in separate directory structure so that the data are available for the Analysis Standing Committee (ASC) to review and analyze. This procedure also allows us to keep track of stations that are undergoing significant maintenance or upgrades.

The following points explain the circumstances under which a station can be placed in quarantine and the steps that must be followed by the station and ILRS infrastructure:

- The OCs will move any station into quarantine if the station has not provided data for a period of 90 days;
- Stations may declare themselves in quarantine by informing their OC and the CB;
- Stations planning to be out of operation for any major maintenance or upgrade activity that could affect the data must inform the ILRS Central Bureau (CB) well ahead of the activity; they must also provide an estimated time for completion;
 - Once initial notice is received, the CB, with guidance from the Analysis Standing Committee (ASC) and the CB's engineering personnel, will decide if quarantine is warranted;
- When in quarantine, stations should provide the CB and the ASC with monthly updates on their progress;
- Once stations are ready to return to normal operations:
 - They should send a message informing the CB, including a description of any system changes made during the down time;
 - They should update their configuration files, site log and configuration history log (as appropriate);
 - Newly collected data which has been kept in quarantine must now be examined by the ASC
- The ASC will analyze the quarantined data and declare when data have been validated using the criteria of **20¹ acceptable passes** on each satellite (LAGEOS-1, LAGEOS-2, and LARES-1 and -2) within a 60-day sliding window;

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- Thanks
- Sign up to the NESC email list