NEOS Operation Center

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Abstract This report covers the activities of the NEOS Operation Center at USNO for 2021 and 2022. The Operation Center schedules the IVS-R4 rapid-turnaround and the IVS-INT-1 Intensive sessions.

1 VLBI Operation

Each week NEOS operations consisted of one 24-hour duration IVS-R4 observing session and five one-hour duration IVS-INT-1 ("Intensive") sessions. IVS-R4 sessions were observed on Thursday-Friday and were used to measure all five Earth Orientation Parameters, while IVS-INT-1 sessions were observed daily Monday-Friday and were used to measure UT1-UTC. In 2021–2022, the operational IVS-R4 network consisted of eight to 12 stations. The regular stations for the weekday IVS Intensives were Kokee Park and Wettzell. Table 1 shows the number of sessions scheduled during the 2021–2022 period.

 Table 1 Sessions scheduled in 2021–2022.

Туре	Mode	Number scheduled
IVS-INT-1	S/X	483
IVS-R4	S/X	102

The Operation Center updated the version of SKED [1] as updates became available. All sessions are cor-

U. S. Naval Observatory

NEOS Operation Center

IVS 2021+2022 Biennial Report

related at the Washington Correlator, which is located at USNO and is run by NEOS.

Additional sessions with the Mauna Kea VLBA antenna were scheduled as needed when Kokee Park experienced downtime.

2 Staff

D. Hall and M. S. Carter are the main staff members of the NEOS Operation Center. Mr. Hall is responsible for the overall management, and Carter makes the schedules. M. S. Carter is located at the USNO Flagstaff Station (NOFS).

Personnel from the Washington Correlator provide support for updates and as backup. Andrew Sargent was the backup scheduler for most of 2021–2022. Sara Hardin transitioned to that role when Andrew Sargent left the VLBI group.

References

 Vandenberg N (1999) Sked: interactive/automatic scheduling program. NASA/Goddard Space Flight Center NVI, Inc, Greenbelt