



# HEROIC: A Realtime Observatory Coordination System



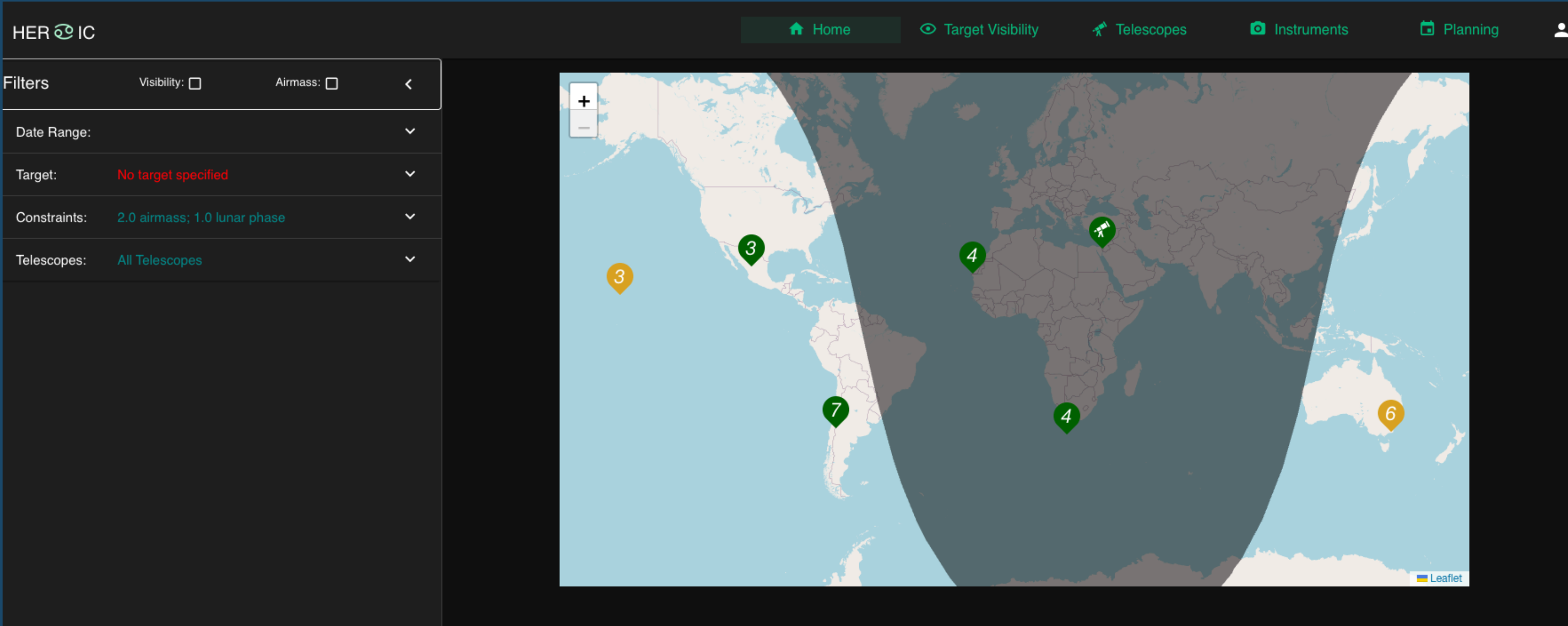
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## SCIMMA: The Scalable CyberInfrastructure for Multi-Messenger Astronomy

- The goal of SCIMMA is to enable time domain and multi-messenger astrophysics.
- Our team is building the cyberinfrastructure to support real-time-alerts and analysis from heterogenous data streams by global teams.



- The splash page shows what facilities are currently in the dark

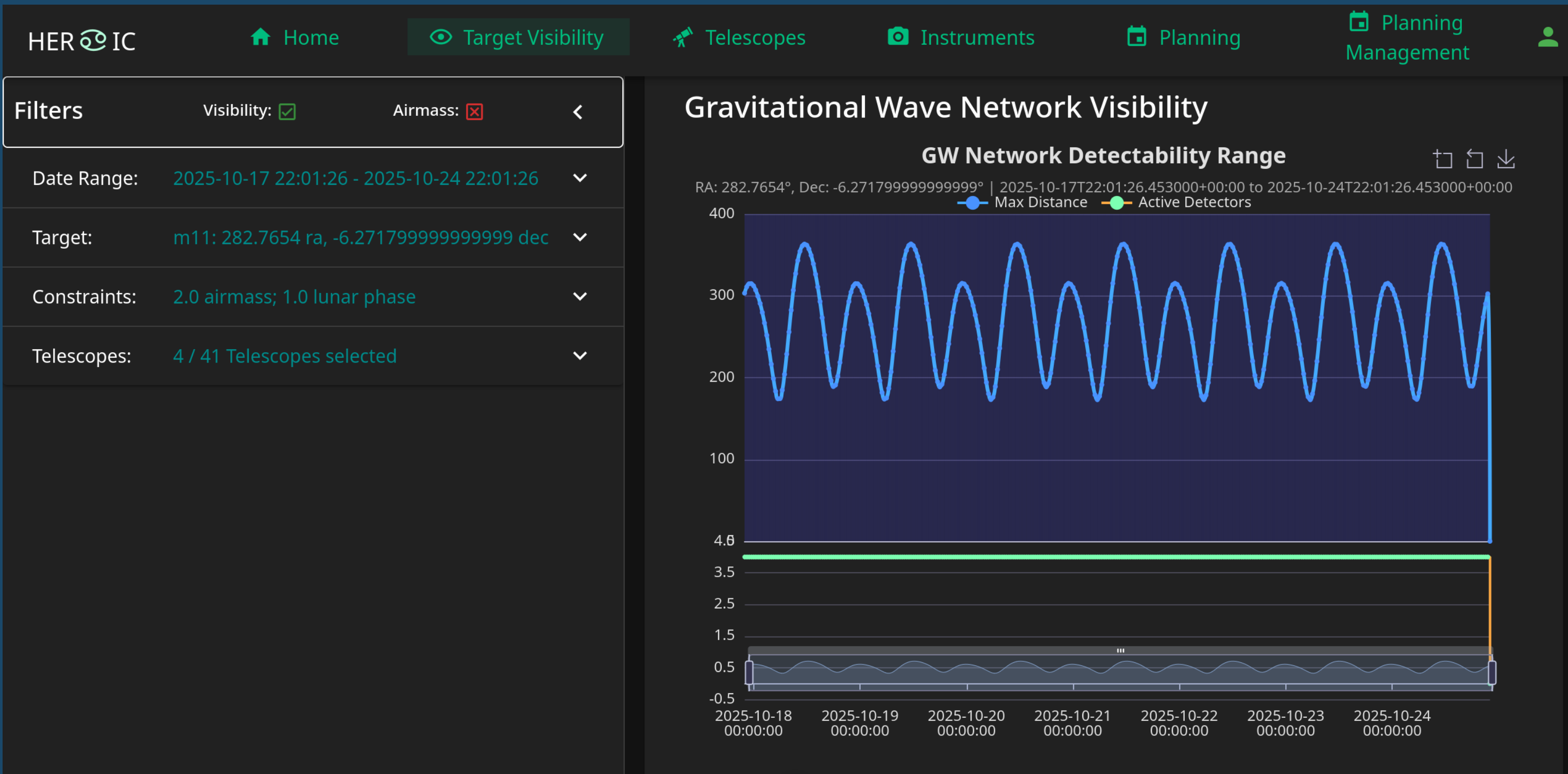
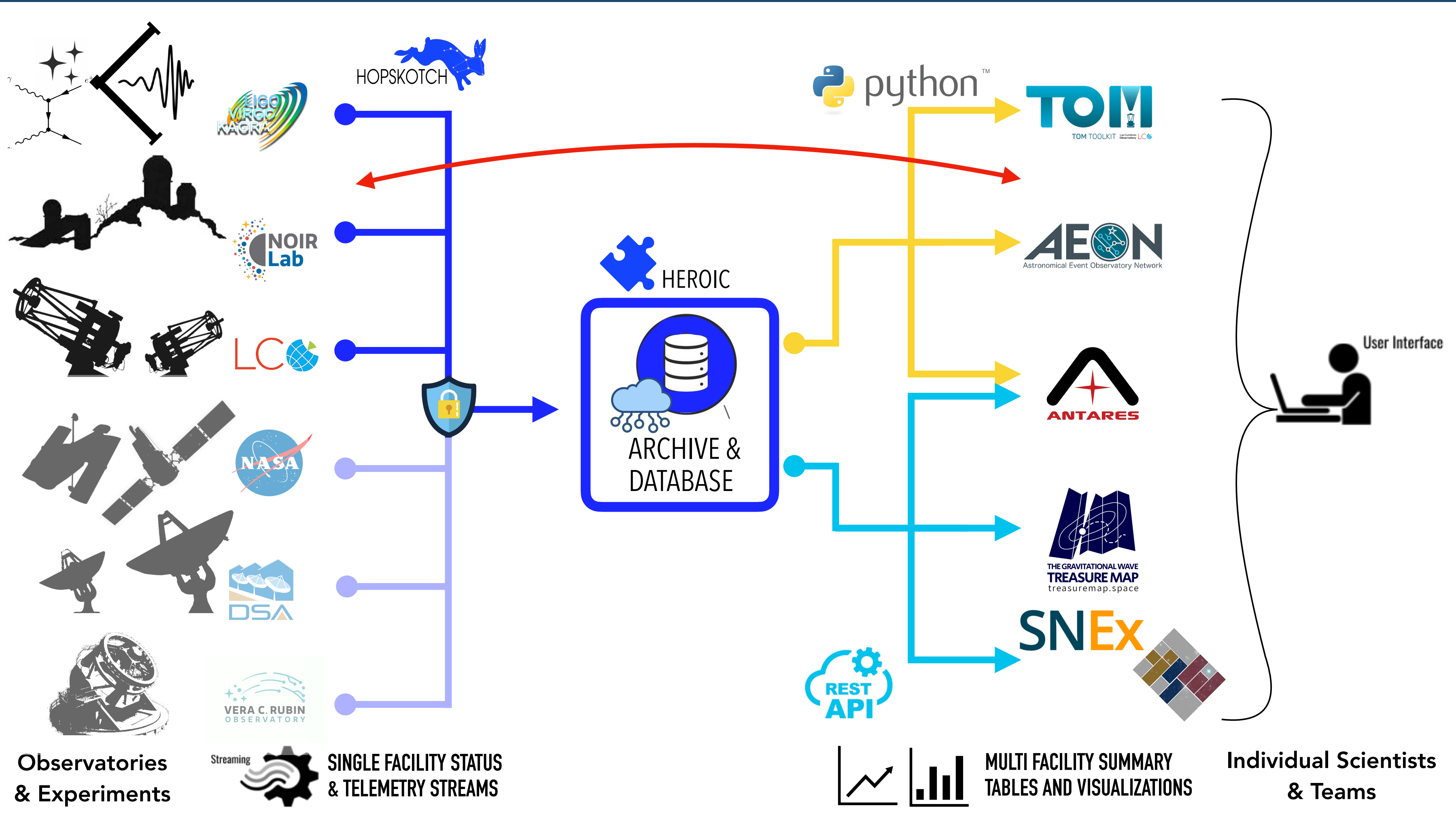
## HOPSKOTCH

- HOPSKOTCH is the SCIMMA Kafka-based publish-subscribe system that allows experiments to share arbitrary public and private alerts to the community in machine and human-readable form.
- HOPSKOTCH provides high-uptime, low-latency, and scaling for high-throughput via the AWS cloud.
- HOPSKOTCH consumes and can post to other existing streams, like GCN and TNS.
- LIGO-Virgo-Kagra (LVK) observatories have adopted HOPSKOTCH for igwn-alert.

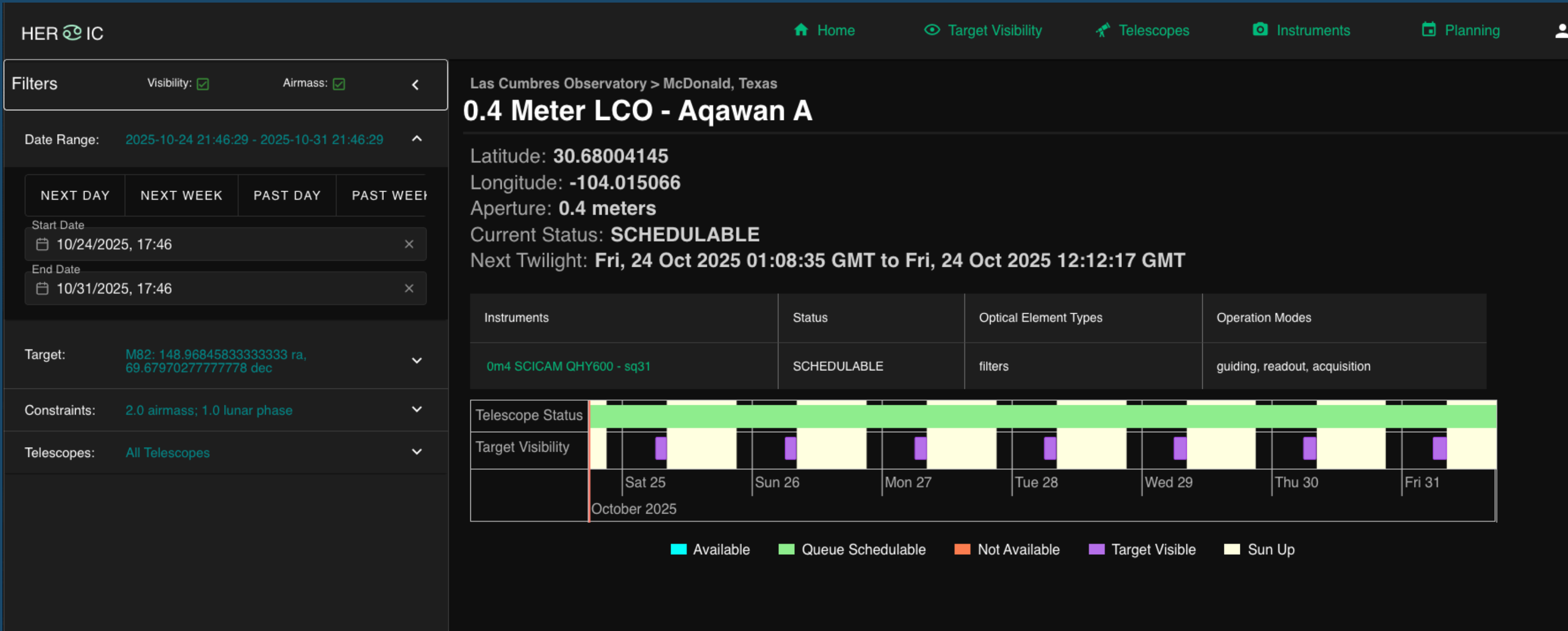


- Entering a target gives you the visibility for all the facilities

## HEROIC: HOP-Enabled Real-time Observatory Information and Coordination



- We have sensitivity limits from LIGO and other experiments.



- You can check on currently available instruments and planned outages



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