

Over-the-Horizon Detection for Low-Latitude Space Environment



Admission:
FREE

12/17 (WED), 2025 12:30-13:20

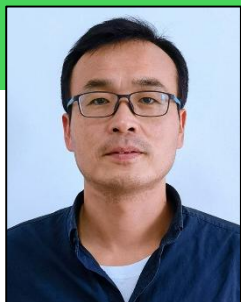
Associated
Mission

• Mission1

Environmental Diagnosis and Regulation
of Circulatory Function

• Mission3

Sustainable Space Environments for
Humankind



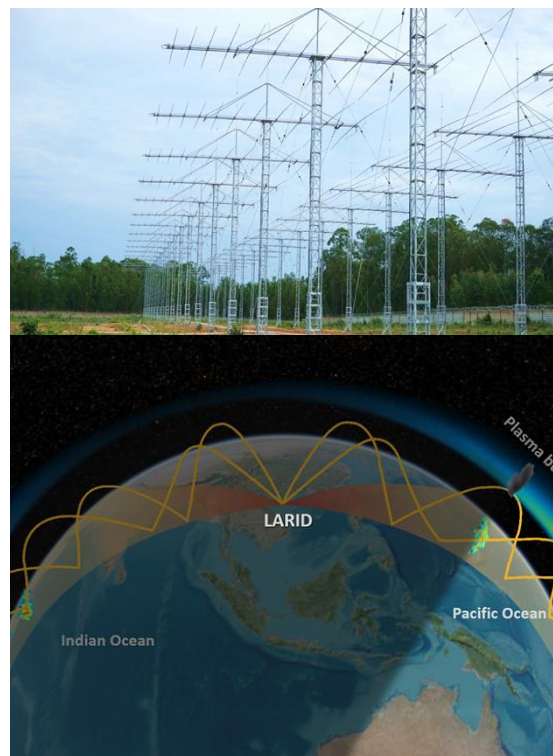
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Keyword

- ✧ space environment
- ✧ radar
- ✧ irregularities
- ✧ disturbance

The space environment critically impacts human space activities and ground-based hi-tech systems. Disturbances and irregularities in this environment, such as those affecting satellite navigation, necessitate large-scale, continuous monitoring—a significant challenge over vast oceanic regions. Supported by the Meridian Project II, we have developed the Low-latitude long range Ionospheric Radar (LARID). LARID enables the over-the-horizon detection of space environment over the Indian Ocean-West Pacific, providing a powerful means to monitor disturbances. This report will introduce LARID's technical features and present its key findings in detecting equatorial plasma bubbles and traveling ionospheric disturbances.



The “open seminar” is a casual research meeting during lunch time on Wednesdays, with the aim of sharing research results, and enhancing collaborations.

https://www.rish.kyoto-u.ac.jp/open_seminar_2022/

