

Potential New Contributions to ILWS from China

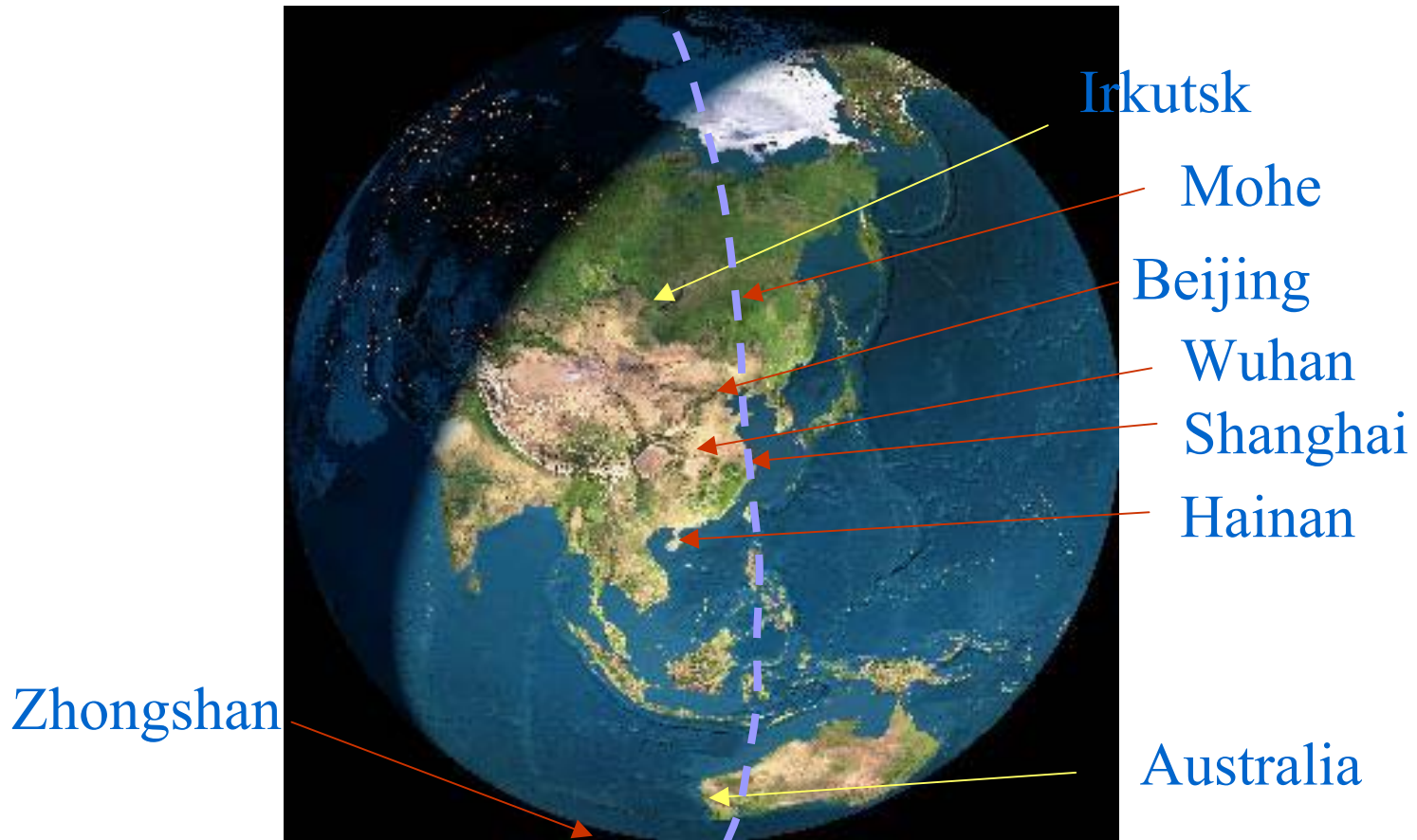
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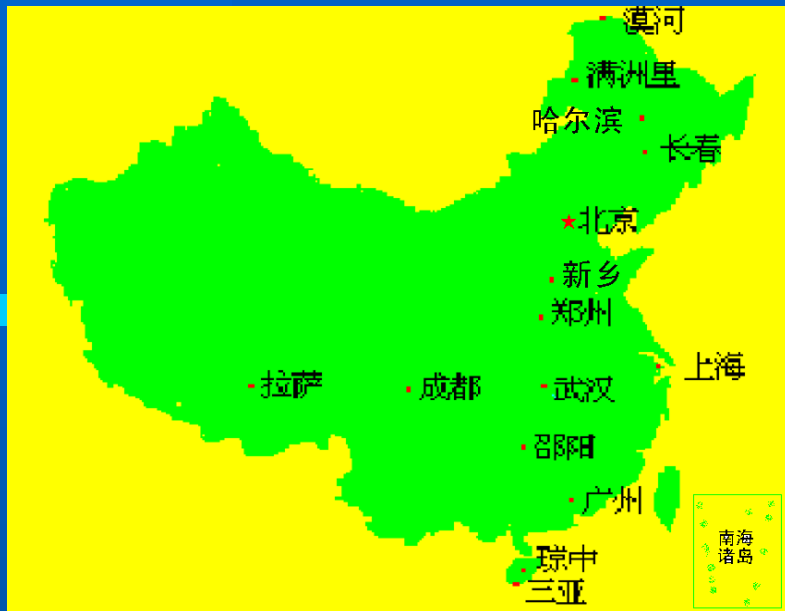
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Meridian Chain of Comprehensive Ground-Based Space Environment Monitors in the Eastern Semi-hemisphere

“Meridian Project”

It is a Chinese multi-station chain along 120°E to monitor space environment, starting from Mohe, the most northern station in China, through Beijing, Wuhan, Guangzhou and extended to Chinese Zhongshan station in the Antarctic.





120E meridian chains



Zhongshan Station in Antarctica →

Meridian Project Framework

The frame of the Meridian project consists of three systems as follows:

(1) Space environment monitor system

- Radio monitor subsystem
- Geomagnetic (Goelectronic)-monitor subsystem
- Optical-atmospheric monitor subsystem
- Rocket Sounding monitor subsystem

(2) Data and communication system

- Collect, transfer, process, store and distribute data
- International data exchange
- Coordinate stations, instruments and operating personnel

(3) Research & Modeling and forecast system

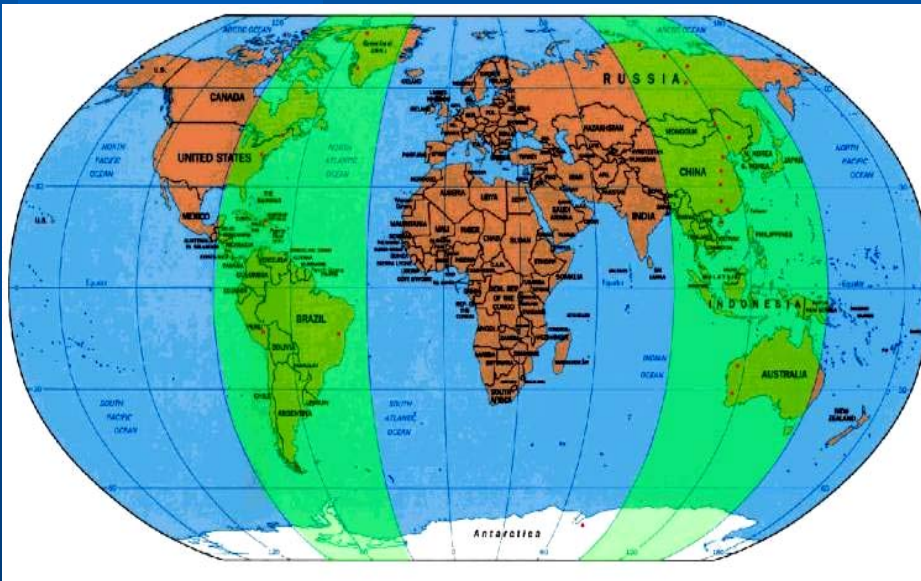
- Coordinating observations, research and management
- Carrying out research
- Jointly forecasting space weather
- Promoting international cooperation

Instrument and Facilities



- Magnetometers
- Ionosondes and digisondes
- Photometers
- Neutron monitor
- HF back-scattering radar
- VLF receiver
- LIDARS
- Fabry-Perot interferometer
- Coherent VHF radar
- ...

International Collaboration



The concept of the International Space Weather Meridian Circle Program (ISWMCP), which will connect 120°E and 60°W meridian chains and enhance the ability of monitoring space environment worldwide, is currently under study and open for suggestions.

Meridian Project is in the final
stage of approval.

(2005-2010)



**THANK
YOU**