

INTRODUCTION OF INTERNATIONAL MERIDIAN CIRCLE PROGRAM AND THE PROGRESS OF ITS TYPICAL DEMONSTRATIONS IN BRAZIL

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Based on the Chinese Meridian Project (CMP), the International Meridian Circle Program (IMCP) aims to coordinate the deployment of a comprehensive ground-based monitoring network along the 120°E–60°W Great Meridian Circle to track the propagation and evolution of space weather events from the Sun to the Earth, as well as the imprints of other major natural and anthropic hazards on the ionosphere, the middle and upper atmosphere. Currently, we have completed the IMCP headquarters building in Beijing and established the China-Brazil Joint Laboratory for Space Weather in cooperation with Brazil. Meanwhile, the Chinese Meridian Project Phase II and different components of the IMCP observation system are under construction.

As a precursor to the IMCP, we have jointly established the China-Brazilian Joint Laboratory for Space Weather with INPE, and the second phase of construction will be completed this year. By deploying 16 sets of space environment monitoring equipment in Brazil, including all-sky airglow imagers, GNSS-TEC, and lidar, we have initially obtained monitoring data of the space environment in the South American region, setting an example for the IMCP.

REFERENCES

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