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THE CURRENT STATUS OF THE CHINA-BRAZIL JOINT LABORATORY FOR SPACE WEATHER IN ITS SOUTHERN CAMPUS, IN SANTA MARIA, RS, BRAZIL

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ABSTRACT

This paper describes the Chinese Academy of Sciences (CAS) and the National Institute for Space Research of Brazil (INPE) scientific cooperation partnership to jointly established the China-Brazil Joint Laboratory for Space Weather and expand the International Space Weather Meridian Circle Program (IMCP), in its Southern campus, in Santa Maria, RS, with instruments from the National Space Science Center (NSSC), already installed and in operation, such as: Digisonde, GPS-TEC receiver, and magnetometer. The paper also describes the support regarding the application for additional budget for the installation, in the new future, of new instruments by the Institute of Atmospheric Physics (IAP) - Chinese Academy of Sciences (CAS), and by the School of Earth and Space Sciences from the University of Science and Technology of China (USTC), including: Na/K LIDAR, Aerosol-cloud-water vapor LIDAR; Tropospheric Ozone LIDAR; Cloud Radar (millimeter); Sun/Star Radiometer (for Aerosol). The IMCP is a very important Chinese Program since it aims to take full advantage of diverse instrumentation to study the space weather and associated system science along an approximate meridian circle along 120E/60W longitude passing through a variety of countries and regions, including China, Russia, Canada, South America, Antarctica, Australia and many others.

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