Project Details

ROSES ID: NRA-02-OSS-01
Selection Year: 2003
Program Element: Independent Investigation: LWS

Project Title:
Characterizing Solar Farside Images for Space Weather Applications with Near-Real-Time GONG+ Data

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Summary:
We propose to 1) develop near-real-time compression and transmission of the images needed for farside imaging from the six GONG instruments around the world; merge the data to a uniform time series; and produce and distribute in a timely manner farside proxy images on a regular basis. In order to enhance the space weather predictive capabilities of the farside images, we propose to 2) compare full-disk photospheric and chromospheric magnetograms with holographic images of the nearside and farside of the Sun derived from helioseismic data to quantitatively determine the characteristics (distribution, strength, complexity) of active region magnetic fields associated with seismic signatures, and the relationship between changes in the seismic signatures and the evolution of the magnetic field.

Publication References:

Summary: "

Reference: Leibacher, John NSO - Characterizing Solar Farside Images for Space Weather Applications with Near-Real-Time GONG+ Data