

Title: SuperDARN In Latin America

Presenting author: W.A. Bristow

Co-authors S.G. Shepherd, J.M. Ruohoniemi, A. Chartier.

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Abstract:

SuperDARN is a network of high frequency (HF) radars used for space weather research observations. The network is operated by an international collaboration that involves scientists from around the world. The original development of SuperDARN began in the 1990's as part of the International Solar Terrestrial Physics program (ISTP). Since that original development, SuperDARN has grown and flourished, and continues to make significant contributions to the science goals of ISTP. The network has evolved in several ways since the original conception as a northern hemisphere auroral zone array of radars for mapping convection. It has expanded poleward to cover the polar cap, and equatorward to cover mid latitudes. Today's network comprises radars observing over regions from the mid-latitudes to the central polar cap to differing degrees in both the northern hemisphere and the southern hemisphere. New radars continue to be developed, including the newest radars in the network, a pair of radars in Iceland that came on line earlier this year.

Development of the network in Latin America has been limited to a single radar in the Islas Malvinas operated by the British Antarctic Society. Looking to the future, we hope to expand the network by building radars in Patagonia to provide observations over the Southern Ocean to complement the coverage of radars on the Antarctic continent. This presentation will give an overview of the present network status and science, and discuss some of the plans for future development.