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Poster
The Super Dual Auroral Radar Network (SuperDARN) operates on High Frequency (HF) to benefit from refraction in the ionosphere to illuminate plasma irregularities in the F-layer. A by-product of regular operations is information on HF propagation conditions which are useful for establishing communications links. As part of a previous project, we analyzed the impact of solar flares on the dayside ionosphere as seen by SuperDARN radars in Short Wave Fadeout (SWF) events. We have developed a prototype of a system to alert HF users to the occurrence of SWF in the North American sector in near real-time. There are technical challenges with maintaining links to radars in remote locations, but reliability could be improved with more resources. In this presentation we review the capabilities of the near real-time monitoring of HF propagation and the detection of SWFs in a beneficial way to space weather operations and how it relates to the security domain.



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