SuperDARN: Some recent results and future perspectives

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The Super Dual Auroral Rader Network (SuperDARN) has been providing multi-point observations of ionospheric flows for over a decade. The network now consists of 17 operational radars, 10 in the northern hemisphere and 7 in the southern hemisphere, with further radars being deployed in both hemispheres. This paper will consider some of the recent studies with SuperDARN data which also include data from spacecraft such as Cluster, IMAGE, Geotail, DMSP and ACE, as well as ground based instrumentation. These studies investigate solar wind-magnetosphere-ionosphere coupling, ionospheric flows during northward IMF, and magnetospheric substorms. Some discussion of the future of the network will also be given.