SuperDARN Hokkaido Pair of (HOP) radars and mid-latitude SuperDARN

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The Super Dual Auroral Radar Network (SuperDARN) is a network of HF radars deployed in the high- and mid-latitude regions in both hemispheres. As of Jan 01, 2018 there are 35 radars in operation in both hemispheres. The Hokkaido Pair of (HOP) radars belong to the mid-latitude SuperDARN, and are located at the lowest geomagnetic latitude, less than 40 degrees. The SuperDARN Hokkaido East and West radars began their operation in 2006 and 2014 respectively, and have been playing important roles in the study of the coupling between solar wind, magnetosphere, ionosphere and upper atmosphere. The accomplishments of the radars and their future perspectives will be presented.

Keywords: mid-latitude SuperDARN, Hokkaido Pair of (HOP) radars, coupling between solar wind, magnetosphere, ionosphere and neutral atmosphere

