



## **General configuration and site specific surveys for the EISCAT\_3D incoherent radar system**

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EISCAT\_3D is the next-generation incoherent scatter radar for the study of the atmosphere and geospace environment. It will be a distributed phased-array facility built in modular fashion from a few tens of thousands up to a hundred thousand individual antenna elements. The system will be located in northern Scandinavia and has a planned start of operations in 2015.

Since EISCAT\_3D is planned to be a multistatic system, the basic geometric configuration of the locations of the sites will have a certain impact on the quality of the measurements. Here we have studied the merit of different constellations of the transmitting and receiver stations of the radar system.

We have also performed surveys of potential sites for the antenna arrays. We discuss the criteria for choosing specific locations of the sites, and show the results of the surveys in terms of factors such as the local geography, radio environment and access to infrastructure.