

Ionospheric heating

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Ionospheric heating is one of the sources of ion upflow/outflow. Sources of heating include solar EUV radiation, particle precipitation, Joule heating and field-aligned current fluctuations. In this talk, we review some results related specifically to Joule heating rates and auroral precipitation power in the terrestrial ionosphere. We will show measurements by the EISCAT incoherent scatter radars and discuss shortly the possibilities provided by the EISCAT_3D radar facility, which is expected to make its first measurements in 2022.