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Solar radio bursts in the Radio Neutrino Observatory in Greenland RNO-G

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Neutrino radio detectors are designed to target the first measurement of neutrinos beyond energies of ~10 PeV. Several such radio detectors operate in Antarctica. They are scanning the ice sheet in search of Askaryan radio emission from neutrino induced showers. The Radio Neutrino Observatory in Greenland (RNO-G), designed to monitor ultra-high-energy neutrinos in the northern hemisphere, is under construction. It currently has 7 of 35 stations with antennas inside the ice and on the surface. Antennas on the surface should also measure radio emissions from down-coming cosmic rays. The radio observatory may also be sensitive to solar radio bursts, which will be a background for cosmic rays. On the other hand, solar flares also present a unique opportunity for detector calibration. This contribution presents the results of a search for solar bursts in RNO-G data and demonstrates what calibration possibilities can be derived from solar flare data.

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