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Search for oblique Whistler waves using solar orbiter data

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Whistler waves are thought to play an important role on the evolution of the electron distribution function as a function of distance. In particular, oblique whistler waves may diffuse the Strahl electrons into the halo population. Using AC magnetic field from the RPW/SCM (search coil magnetometer) of Solar Orbiter, we search for the presence of oblique Whistler waves in the frequency range between 3 Hz and 128 Hz. We perform a minimum variance analysis of the SCM data in combination with the MAG (magnetometer) data to determine the inclination of the waves with respect to the ambient magnetic field. As the emphasis is placed on the search for oblique whistler, we also analyze the RPW electric field data and the evolution of the electron distribution function during these Whistler events.