



Pc1-2 activity and energetic electron precipitation in the polar cap

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A possible driver of the precipitation of magnetospheric energetic electron is represented by EMIC or Pc1-2 magnetospheric waves, which can induce the electron precipitation process through pitch angle scattering by gyroresonant interaction. We present a study on the correlation between the occurrence of Pc1-2 waves and the precipitation of energetic electrons in the high latitude ionosphere. We used ULF geomagnetic measurements at Mario Zucchelli Station (Terra Nova Bay, Antarctica) to identify Pc1-2 events. In correspondence to such events, analyses are done to look for possible signatures of the precipitating particles in the ionospheric parameters provided by the ionosonde and GPS receiver at Mario Zucchelli Station.