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# The impact of radiation belts region on top side ionosphere condition during last solar minimum.

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The wave particle interactions in radiation belts region are one of the key parameters in understanding the global physical processes which govern the near Earth environment. The populations of outer radiation belts electrons increasing in response to changes in the solar wind and the interplanetary magnetic field, and decreasing as a result of scattering into the loss cone and subsequent absorption by the atmosphere. The most important question in relation to understanding the physical processes in radiation belts region relates to estimate the ratio between acceleration and loss processes. This can be also very useful for construct adequate models adopted in Space Weather program. Moreover the wave particle interaction in inner radiation zone and in outer radiation zone have significant influence on the space plasma property at ionospheric altitude.
The aim of this presentation is to show the manifestation of radiation belts region at the top side ionosphere during the last long solar minimum. The presentation of longitude and seasonal changes of plasma parameters affected by process occurred in radiation belts region has been performed on the base of the DEMETER and COSMIC 3 satellite registration.
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