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Disturbances in communication and radar work on the air traffic control tower of the military airport in Deblin.

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We study the impact of electromagnetic conditions in the Sun, in interplanetary space and the Earth's magnetosphere (that is the so-called space weather) on possible disturbances with radar work and loss of communication with aircraft on the air traffic control tower (ATC) of the military airport in Dęblin.
At the beginning, the period of maximum solar activity in 2014 was examined
An analysis was performed using solar parameters such as: sunspot numbers(SSN), sunspot areas SSA,the solar flare index (SFI), the 10.7-cm solar radio flux, coronal mass ejection (CME), interplanetary parameters i.e. heliospheric magnetic field (HMF), proton temperature, proton density, solar wind (SW) speed,SW pressure, and geomagnetic parameters i.e.: geomagnetic field, DST index, Ap index, Kp index ,local K index from Belsk and their possible impact on radar disorders and loss of communication.
The preliminary results obtained indicate the possible impact of an increase in solar activity and associated disturbances in interplanetary space and the Earth's magnetosphere on the work of radars and communication between the ATC tower and the aircraft Our research are continued and are important from the point of view of flight safety for both manned and unmanned aircraft.

Keywords

space weather ,loss of communication with aircraft

Collaboration

other Collaboration

Subcategory

Experimental Results

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