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Saturation of the polar cap flux JASON SEILER, KELLY HALLMAN, SALVADOR HERNANDEZ, JORGE LANDIVAR, RAMON LOPEZ, Florida Institute of Technology, Department of Physics and Space Sciences — We are using Interplanetary Magnetic Field (IMF) data to investigate the correlation exists between the magnitude of the Y component of the solar wind electric field and the latitude of the Earth's polar cap boundary. The location of that boundary is an indicator of how much magnetic flux is connected to the IMF. It is well known that there is a correlation between the polar cap boundary and the solar wind Ey for moderate values of Ey. We are investigating if that correlation disappears during very large Ey, that is to say, we are investigating if the polar cap flux saturates for a given value of Ey.

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