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Asymmetric aurora in the conjugate hemispheres during the magnetic storm on August 17, 2001

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On August 17, 2001 a strong magnetic storm caused significant compression and reconfiguration of the Earth's magnetosphere as well as highly asymmetric aurora in the conjugate hemispheres. During this event, the Polar VIS Earth camera and the IMAGE FUV system provided about 2 hours of imaging data from the conjugate hemispheres. During this time interval the entire auroral ovals were imaged in both hemispheres. By analyzing all three imaging channels from IMAGE, the WIC, SI12 and SI13, as well as the one VIS Earth channel, we identify what are symmetric and what are asymmetric features. Combined with supporting data from other satellites, such as DMSP and NOAA, as well as ground based networks as SuperDARN and SuperMAG, we try to understand the dynamical behavior of the interaction between solar wind, magnetosphere and the two polar regions of the ionosphere.