

Ionospheric Connection Explorer

*Exploring the region where
Earth Weather meets
Space Weather*

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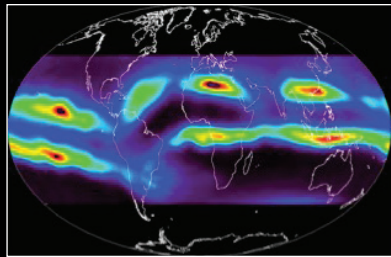
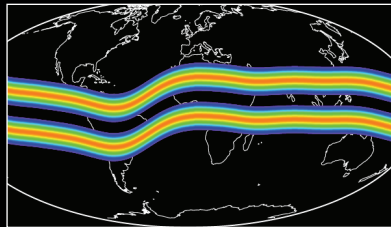
Image, courtesy of NASA, is a derivative of photograph taken by D. Pettit from the ISS, used under Creative Commons licence <https://creativecommons.org/licenses/by-nc/2.0>



The Ionospheric Connection Explorer (ICON) will be the newest addition to NASA's fleet of Heliophysics satellites. Led by UC Berkeley, scientists and engineers from around the world are coming together to make ICON a reality.

The goal of the ICON mission is to understand the tug-of-war between Earth's atmosphere and the space environment. ICON will investigate the forces at play in the near-space environment, leading the way in understanding disturbances that can lead to severe interference with communications and GPS signals.

The colored bands in these images show the density of plasma in the upper atmosphere, with mathematical predictions in the top picture, and real observations in the bottom. Scientists cannot yet explain why there is uneven structure in the bands, though they suspect it might be Earth weather systems affecting the edge of space. ICON will investigate the cause of these unexpected variations.



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