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C/NOFS Thermospheric Research and Reentry Experiment (T-RREX)

Abstract: The Air Force Research Laboratory is leveraging an extraordinary opportunity with the Communication/Navigation Outage Forecasting System (C/NOFS) satellite to collect a comprehensive set of low-altitude measurements as the orbit decays prior to reentry in October-November 2015. C/NOFS is in a 13-degree elliptical orbit, with apogee currently below 510 km and perigee below 350 km. The primary goals for this last phase of the C/NOFS mission are to advance our understanding of topside/bottomside dynamics and to improve models currently used for trajectory propagation, orbital drag and uncontrolled reentry predictions.