

Airborne Doppler wind lidar to evaluate cloud and water vapor motion vectors from GIFTS

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Abstract

Planning is in progress to launch a much improved temperature and moisture sounder called GIFTS-Geosynchronous Imaging Fourier Transform Spectrometer. The IPO of the NPOESS had developed an Airborne Sounder Test bed, NAST, to simulate GIFTS data products. The IPO has also developed an airborne Doppler wind lidar (Twin Otter Doppler Wind Lidar - TODWL) to provide accurate wind profiles over the oceans to enable evaluation of the GIFTS and other space-based wind observing systems. This presentation reports on the first in a series of TODWL under flights of the NAST flown on NASA's ER-2.