

## SPARCLE: A Mission Overview

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**Abstract:**      The SPace Readiness Coherent Lidar Experiment (SPARCLE) is a NASA mission to demonstrate for the first time the measurement of tropospheric winds from a space platform using coherent Doppler Wind Lidar (DWL). SPARCLE is scheduled for launch in early 2001 on board one of the shuttle orbiters. While primarily a demonstration of the technology's performance at ranges of 300-350 km, the mission will also address sampling issues critical to the design and operation of follow-on missions. In this paper we provide a brief overview of the SPARCLE instrument and the experiments being planned.

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