

Neutral Wind Monitor (NWM)

part of
Coupled Ionosphere-Neutral Dynamics Investigation (CINDI)

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The Neutral Wind Meter (NWM) comprises two sensors, a cross track wind sensor (CTS) and a ram wind sensor (RWS) that will directly measure the neutral wind vector with a spatial resolution of ~8 km along the satellite track. Measurements will be made over a restricted altitude range between perigee and the exobase, which is dependent on solar activity levels during the mission.

Measurement Output	Units	Estimated Accuracy	Frequency (Cadence)	Estimated Range of Output Values
Crosstrack Local Vertical Neutral Wind Speed	m/s	+/- 10 m/s	8 Hz	-500 to +500
Crosstrack Local Horizontal Neutral Wind Speed	m/s	+/- 10 m/s	8 Hz	-500 to +500
Intrack Local Horizontal Neutral Wind Speed	m/s	+/- 10 m/s	2 Hz	-500 to +500

The Coupled Ion Neutral Dynamics Investigation (CINDI) is sponsored by NASA. This collaborative endeavor between the Air Force and NASA is designed to maximize the science and operational capabilities of the instrumentation.