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**Title:** University of North Dakota Facilities for Studying Convective Storms

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**Abstract:** The University of North Dakota (UND) owns and operates a Cessna Citation II aircraft for the purpose of atmospheric research. The Citation Research Aircraft has twin-engine fanjets with an operating ceiling of 43,000 ft (13.1 km), a cruise speed up to 340 knots (175 m/s) and a climb rate of 3300 ft/min (16.8 m/s). The basic Citation II airplane has undergone a series of structural modifications that include adding pylons under the wing tips to allow a variety of probes to sample in relatively undisturbed airflow and the addition of a nose boom to enables gust probe measurements ahead of the aircraft, which provides accurate wind measurements. Hard points on the fuselage enable the mounting of various probes and inlet ports allow for air sampling inside the pressurized cabin. UND has a Calibration Lab that enables calibration of research instruments deployed on airborne platforms and at surface monitoring sites. The Penthouse Lab on the top of Clifford Hall supports atmospheric aerosols sampling and the Northpol C-band radar. UND unique facilities enable performance of cutting-edge research on the development and prediction of convective storms.