

University of North Dakota Cessna Citation Research Aircraft

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The University of North Dakota owns and operates a Cessna Citation II twin-engine fanjet aircraft for the purpose of atmospheric research. This aircraft type has a number of design and performance characteristics that make it an ideal platform for a wide range of atmospheric studies, including both high performance and the ability to be flown at the slower speeds necessary for many types of measurements. A series of structural modifications have been made to the basic airplane, including: pylons under the wing tips for a variety of probes in the undisturbed air flow away from the fuselage; a gust probe for wind measurement; and air inlet ports for air sampling inside the pressurized cabin. Fuselage mounting locations are available for a 6-angle electric field mill configuration and other instruments. A dropsonde capability is also included.

A variety of instruments are available in-house for observing atmospheric conditions. The installation of instruments provided by other investigators can be accommodated, subject to space, weight and electrical requirements. Also, a variety of 19-inch racks are available to accommodate instruments and support systems.