

Aircraft: TOI DHC-6 N821AR

Flight number: 2

Payload Configuration: WISM

New Data Collected: yes

Total Flight Time: 0.8 hours

Submitted By: Paul Racette

From: GJT **To:** GJT

Start: 2/05/17 15:25 MST **Finish:** 2/05/17 16:15 MST

Flight Time: 0.8 hours

Log Number:

PI: Tim Durham

Funding Source: Parminder Ghuman - NASA - SMD - ESD ESTO - IIP Program Manager

Purpose of Flight: Science

Comments: Tri-band radar test flight around the airport. Two radar channels didn't work during the first flight. Repairs were made to the radar and this flight aimed to verify all six radar channels work. Problem with the radar computer prevented data from being collected. Radiometer collected data but was not connected to the antenna to minimize potential impact on radar data collects.

Accomplishments

- Flew multiple loops around airport passing over the radar calibration target

| Instrument | Operated | Data Volume | Instrument Issues/Comments |
|-----------------|----------|-------------|---|
| WISM-Radar | yes | 14 MByte | One of the radar computers failed to boot preventing radar data from being collected. |
| WISM-Radiometer | yes | 4.3 GByte | Was not connected to antenna. Otherwise, instrument operated normally. |

Flight Report: Second flight for the WISM instrument of this campaign. Flight was conducted around the Grand Junction airport. Tim Durham, Kerry Speed and Batu Osmanoglu flew. Pilots were Thomas Sommerville and Ross Rice. Sky was mostly clear with scattered clouds. The aircraft flew 4 loops around the airport at an altitude of 5000 ft on a track that placed the projected antenna pattern directly over four, in-line calibration targets located in a field adjacent to the aircraft hanger.