

DCOTSS - ER-2 - AFRC #809 07/20/21 Science Report

Aircraft: [ER-2 - AFRC #809](#) ([See full schedule](#))

Date: Tuesday, July 20, 2021

Mission: DCOTSS

Mission Location: Salina, KS

Mission Summary:

Science flight RF02

Submitted by: Kenneth Bowman on 07/22/21

File:

 [DCOTSS Science Flight Summary Report RF02 2021-07-20.pdf](#)

Related Flight Report:

ER-2 - AFRC #809 07/20/21

NOTE: All flight reports will be archived as NASA public data in the DAAC.

Flight Number: 21-9058

Payload Configuration: AWAS, DPOPS, HAL, HWV, HUPCRS, ROZE, CAFÉ, CANOE, WI-ICOS, MMS, PALMS, UCATS, AVS Cam

Nav Data Collected: Yes

Total Flight Time: 7.2 hours

Comments: This was the second science flight from SLN for the DCOTSS campaign. Take off occurred 0901 local. Ground ops went very well. Climb out went well. No N4 FL, power cycle requested by instrument team twice, green for remainder of flight. Flew via flight plan through P2. Started westbound for dips, no issue for first descent, ascent takes longer and affect subsequent dips. At P3 still needed additional 10k ft in turn towards eastbound leg. First dip on eastbound leg, cumulus was above aircraft at FL450, no turbulence. Max altitude was reached close to Salina, then began descent for MMS maneuver. Did very gradual descent for moisture. Landed 1615 local. Gary Toroni was the pilot.

Submitted by: Fran Becker on 07/20/21

Flight Segments:

From:	SLN	To:	SLN
Start:	07/20/21 14:01 Z	Finish:	07/20/21 21:15 Z
Flight Time:	7.2 hours		
Log Number:	212002	PI:	Kenneth Bowman
Funding Source:	Barry Lefer - NASA - SMD - ESD Earth Venture Suborbital-3 Program		
Purpose of Flight:	Science		
Miles Flown:	2400 miles		

Flight Hour Summary:

	212002
Flight Hours Approved in SOFRS	166
Total Used	97.5
Total Remaining	68.5

212002 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
06/09/21	21-9046	Check	4.1	4.1	161.9	1268
06/14/21	21-9047	Check	3.8	7.9	158.1	0
06/17/21	21-9048	Science	6.2	14.1	151.9	0
07/12/21	21-9056	Transit	3.2	17.3	148.7	0
07/16/21	21-9057	Science	8	25.3	140.7	2883

07/20/21	21-9058	Science	7.2	32.5	133.5	2400
07/23/21	21-9059	Science	6.7	39.2	126.8	2294
07/26/21	21-9060	Science	6.3	45.5	120.5	1952
07/29/21	21-9061	Science	7.6	53.1	112.9	2628
08/02/21	21-9062	Science	6.7	59.8	106.2	2670
08/06/21	21-9065	Science	5.7	65.5	100.5	2271
08/10/21	21-9066	Science	7.7	73.2	92.8	2542
08/14/21	21-9067	Science	7	80.2	85.8	2564
08/17/21	21-9068	Science	6.8	87	79	2275
08/19/21	21-9069	Science	7.1	94.1	71.9	2373
08/23/21	21-9070	Transit	3.4	97.5	68.5	0

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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NASA Official: Bruce A. Tagg

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