

## DCOTSS - ER-2 - AFRC #809 07/16/21 Science Report

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

**Date:** Friday, July 16, 2021

**Mission:** DCOTSS

**Mission Location:** Salina, KS

**Mission Summary:**

Science flight RF01

**Submitted by:** Kenneth Bowman on 07/22/21

**File:**

 [DCOTSS Science Flight Summary Report RF01 2021-07-16.pdf](#)

**Related Flight Report:**

### ER-2 - AFRC #809 07/16/21

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

**Flight Number:** 21-9057

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

**Nav Data Collected:** No

**Total Flight Time:** 8 hours

**Comments:** This was the first science flight from SLN for the DCOTSS campaign. Take off occurred 0913 local. Ground ops went well. Climb to FL560 for MMS maneuvers; added 10 minutes to FL560; climbed to FL580 to point 1. Stair steps on next line; ground called for early climb to max altitude prior to point 2. AWAS was turned on around FL630 just after max altitude was reached. Turned slightly in of the Northern point (point 2). Performed various altitude changes on the Southern leg through Minnesota into Iowa, was able to see plume at FL460. L2 FL and N3 FL on entire flight, as expected. A lot of haze through most of the flight, clear over Hudson bay. Landed 1710L. Greg Nelson was the pilot.

**Submitted by:** Fran Becker on 07/16/21

**Flight Segments:**

<b>From:</b>	SLN	<b>To:</b>	SLN
<b>Start:</b>	07/16/21 14:13 Z	<b>Finish:</b>	07/16/21 22:15 Z
<b>Flight Time:</b>	8 hours		
<b>Log Number:</b>	<a href="#">212002</a>	<b>PI:</b>	Kenneth Bowman
<b>Funding Source:</b>	Barry Lefer - NASA - SMD - ESD Earth Venture Suborbital-3 Program		
<b>Purpose of Flight:</b>	Science		
<b>Miles Flown:</b>	2883 miles		

**Flight Hour Summary:**

	<b>212002</b>
<b>Flight Hours Approved in SOFRS</b>	166
<b>Total Used</b>	97.5
<b>Total Remaining</b>	68.5

#### 212002 Flight Reports

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

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