

## ER-2 #809 11/18/15

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

**Flight Number:** 16-9018

**Payload Configuration:** AMPR, CPL, CRS, eMAS, HIWRAP, AirMSPI-1

**Nav Data Collected:** Yes

**Total Flight Time:** 6.6 hours

**Comments:** Purpose: RADEX-15 Science Mission #1 – Sample post frontal shallow clouds. Comments: Flight 16-9018 was the first science mission from KTCM with AMPR, CPL, eMAS, HIWRAP and AirMSPI-1. The flight was delayed 1-hour to better align with post-frontal activity. Flight 16-9018 took off from KTCM at 0959 local and landed in KTCM at 1633 local (6.6 hours). Tim Williams was the pilot. A calibration run was accomplished and an east-west racetrack 12 nm wide and 100 nm long with one end on NPOL was established with the DC8. Excellent coordination was achieved between the two aircraft during 4 orbits around this racetrack. Scattered showers persisted throughout this period below a cirrus layer. Showers were noted to have reflectivities in excess of 40 dBZ and they were capped by a strong inversion near 3 km. Aerosol predictions for this region conducted by GMAO were for very clean conditions since the air mass had long overwater trajectories. After 4 orbits, the racetrack was reoriented SW-NE to observe maritime showers that were persisting under an advancing and thickening altostratus layer that seemed to be raining on the far SW end. The UND Citation joined the ER2 and DC8 on this racetrack. 3-4 orbits were accomplished by the ER2 and DC8. The eMAS instrument indicated two failures in flight (R3/R4) which was successfully reset. It was determined that this was a software issue and the instrument was operating normally. HIWRAP conducted a reboot from the ground to address a hard drive logging issue which resulted in the loss of data between about 2126Z to 2219Z. AirMSPI-1 had a indicated a failure (L4) after the 5th or 6th data run. The issue was resolved from the ground.

**Submitted by:** Brian Hobbs on 11/19/15

### Flight Segments:

<b>From:</b>	T CM	<b>To:</b>	TCM
<b>Date:</b>	11/18/15		
<b>Flight Time:</b>	6.6 hours		
<b>Log Number:</b>	<a href="#">162003</a>	<b>PI:</b>	David Starr
<b>Funding Source:</b>	Hal Maring - NASA - SMD - ESD Radiation Science Program		
<b>Purpose of Flight:</b>	Science		

### Flight Hour Summary:

	<b>162003</b>
<b>Flight Hours Approved in SOFRS</b>	70
<b>Total Used</b>	70
<b>Total Remaining</b>	0

### 162003 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
<a href="#">11/10/15</a>	16-9016	Check	2.3	2.3	67.7	
<a href="#">11/16/15</a>	16-9017	Transit	2.7	5	65	
<a href="#">11/18/15</a>	16-9018	Science	6.6	11.6	58.4	
<a href="#">11/23/15</a>	16-9019	Science	8.2	19.8	50.2	
<a href="#">11/24/15</a>	16-9020	Science	7.1	26.9	43.1	
<a href="#">12/01/15 - 12/02/15</a>	16-9021	Science	5.1	32	38	
<a href="#">12/03/15</a>	16-9022	Science	3.4	35.4	34.6	
<a href="#">12/04/15</a>	16-9023	Science	7	42.4	27.6	
<a href="#">12/05/15</a>	16-9024	Science	4	46.4	23.6	
<a href="#">12/08/15 - 12/09/15</a>	16-9025	Science	3	49.4	20.6	
<a href="#">12/10/15</a>	16-9026	Science	5.8	55.2	14.8	
<a href="#">12/12/15</a>	16-9027	Science	4.1	59.3	10.7	
<a href="#">12/13/15 - 12/14/15</a>	16-9028	Science	8	67.3	2.7	

[12/15/15](#)

16-9029 Ferry

2.7

70

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.*

Page Last Updated: April 22, 2017

Page Editor: Brad Bulger

NASA Official: Bruce A. Tagg

---

**Source URL:** [https://airbornescience.nasa.gov/flight\\_reports/ER-2\\_809\\_11\\_18\\_15#comment-0](https://airbornescience.nasa.gov/flight_reports/ER-2_809_11_18_15#comment-0)