TC4 ER-2 Check-out Flight: July 7, 2007 Flight Summary S. Platnick

Sortie: TBD

Pilot: Dave Wright

Takeoff (DFRC): ~0910 PDT **Landing (DFRC)**: ~1130 PDT

Duration: ~2:20

Objectives:

- 1. Short check-out of all instruments over a variety of scenes.
- 2. Test of REVEAL/RTMM system for ER-2 location and CPL.

Satellite Coordination:

None.

Flight Track Summary (see REVEAL/RTMM map):

Fly northward over the Sierras to Lake Tahoe, SW towards Pt. Reyes, southward off CA coast to Pismo State Beach, back to DFRC.

Pilot Comments:

- Clear over Tahoe, no haze.
- EDOP failure light(s) after turn towards coast. Fixed itself after a minute or so.
- Happened about 3 times during the flight.

Stratocumulus over the ocean with about 20 miles of open ocean off Big Sur.

 Static heard on UHF Guard Channel, thought to be related to instrument interference Monday update: found related to grounding problem in right hand pod (without instruments running).

REVEAL:

A CPL signal was "seen" but didn't look like the data stream from aircraft tests.

REVEAL/RTMM map w/GOES-W overlay:



MODIS Terra True Color (Rapid Response subset):



ER-2 Science Instrument Payload and Status:

Instrument	Status	Notes
CPL	G	
Cloud Physics Lidar		
CRS	G	
Cloud Radar System		
EDOP ER-2 Doppler Radar	Р	Intermittent (but self-correcting) data sys problem. Also, one channel not functioning. If need to pull, unlikely to fly on Monday test.
AMPR Advanced Microwave Precipitation Radiometer	G	Will come out of hatch to install REVEAL cable
CoSSIR Compact Scanning Sub-mm wave Imaging Radiometer	Р	One channel (640 GHz?) saturated. Working the problem.
MAS MODIS Airborne Simulator	G	
S-HIS Scanning High Resolution Interferometer	G	
IR Radiometer Broadband flux radiometer (nadir & zenith)	G	
SSFR Solar Spectral Flux Radiometer (nadir & zenith)	G	
MVIS video camera	G	Will adjust focus
MTP Microwave Temperature Profiler	_	Not integrated for flight

G = good; P = partial data collected; F = failure, no data