

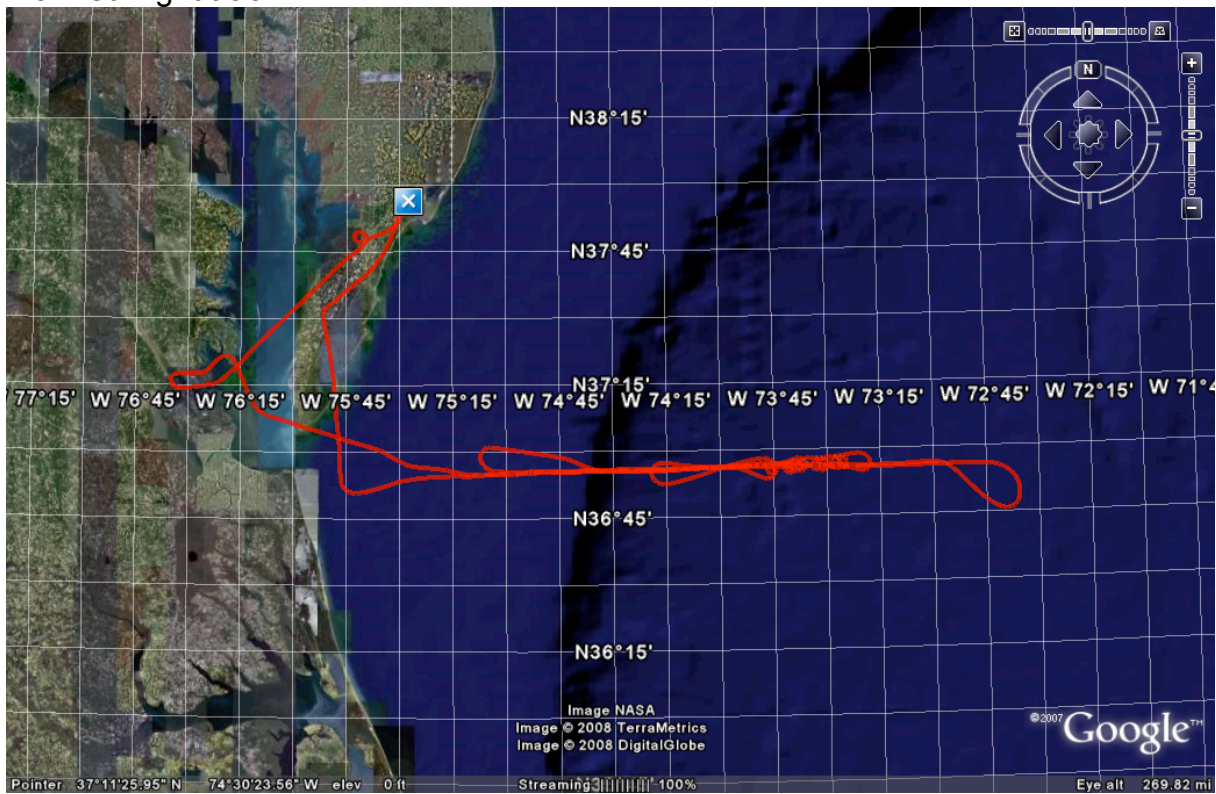
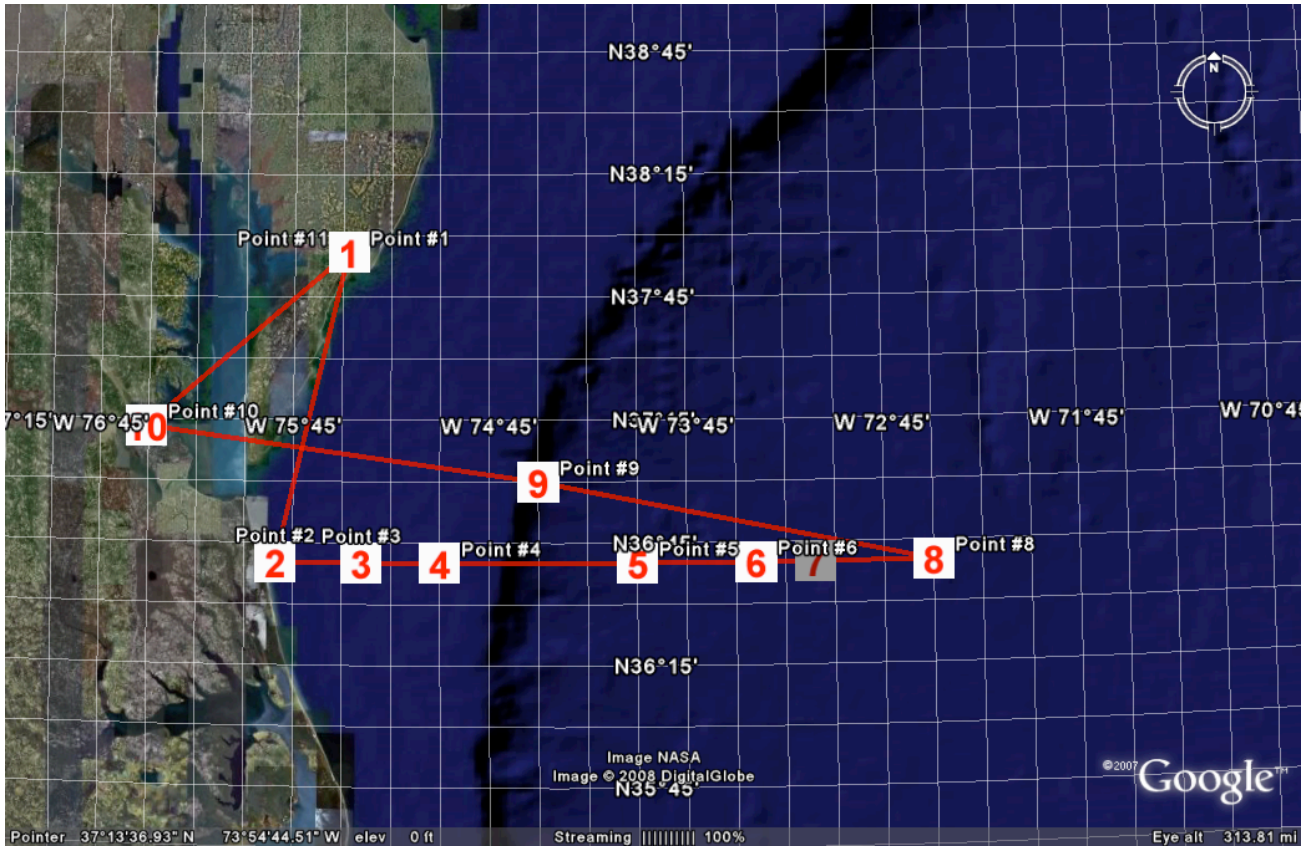
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Flight Report

Aircraft :	NASA P-3B
Operating Site(s) From / To :	KWAL/KWAL
Flight Date :	March 27, 2008
Flight Number :	PCF#2 538
Time out:	1151 (L)
Time in:	1514 (L)
Flight Time :	3.4
Flt Request # / PI:	8P301/ Phil Russell
Purpose of Flight :	Data [] Ferry [] Functional Check [] Other [X]
Sensor Payload :	ARCTAS
Comments :	Project check flight #2. Another excellent weather day with pollution found – which was a good thing for the science team. Still some issues ATTS-14, all the other instruments were up and the flight was considered highly successful. Next flight will be the transit from Wallops to Yellowknife Canada scheduled for takeoff at 0800 Monday March 31 st .

SUBMITTED BY: Cate Fairchild 27 March, 2008



Instrument Reports

AATS: Gets good data and retains sun tracking after initial sun acquisition. But startup to acquire sun still has intermittent failures. Operating with ground power supply in flight (on A/C 120 VAC) improves it, but not a perfect fix. Team looking at possible software patch. No A/C access needed before transit flights.

AERO3X: Extinction signals OK. Scattering not. Want A/C access Friday. In hangar or out OK.

BBR: AOK.

CCN: AOK til near end of flight. Then signals look strange. Operator checked with PI's team. Possible plumbing issue affecting flows at near ambient pressure.

COBALT: Worked OK, but absolute pressure relief valve stuck. Will pull valve & pump dewar Friday. Would like possibility of A/C access Saturday if not all work gets done Friday.

HiGEAR

Front: Really good flight. Speed trials at 4500 ft were isokinetic over full A/C speed range. At 24,000 ft, isokinetic at minimum speed and up to ~230 kt. Ozone worked OK.

Rear (AMS): Operated fine; still learning operation.

PDS: OK. Need ~2 hrs A/C access today.

REVEAL: Very good flight sending data to ground. Networks up. New computers worked fine. HiGEAR got no interference from Iridium.

SSFR: AOK.

Transit Flight Planning

All above instruments expect to be ready to depart on Monday's Wallops-Yellowknife transit flight and be ready to acquire science data on Tuesday's Yellowknife-Fairbanks flight. Most plan to operate on Monday's flight. ARCTAS forecast team has offered to provide a curtain forecast (clouds & composition) along Monday's Wallops-Yellowknife path. Pilots say P-3 fuel & endurance limits should permit some in-progress profiling or a spiral at Yellowknife if cloud & pollution conditions warrant. But we need to be mindful of the need to preserve flight hours for the best science flight opportunities.

Plan is still to re-install CAR nose before Monday's transit flight and transit with CAR installed but not operating (except maybe for heaters).