

March 27, 2011 – Test Flight

Takeoff: 2100 UT, Landing: 2300 UT

This was a partial-payload test flight. Several instruments were not flown, including the particle probes that will be mounted on the superpod adaptor ring. The aircraft headed southwest over the Gulf and ascended to maximum altitude (≈ 59 Kft). The aircraft then turned back, descended, and headed east toward high clouds apparent on the horizon. On descent into EFD, altocumulus clouds were penetrated at about 22 Kft. The flight included more than 40 minutes in the stratosphere.

Table 1: Instrument performance

SID3	Worked well
VIPS	Worked well
2DS	Not flown
CDP	Not flown
HVPS	Not flown
CIN	Not flown
NMASS	Worked well
FCAS	Worked well
PALMS	Worked well
MMS	Worked OK; one probe iced up
ALIAS	Data not recorded
CLH	Problem with exhaust flow
JLH	Laser alignment problem
ULH	Worked well
DLH	Need to improve signal strength
Harvard Water Vapor	Had problems
HHH	Had problems
Harvard Total Water	Not flown
Harvard Halogens	Not flown
FISH	Overheated in middle of flight
CIMS	Engineering data only
O3	Worked well
O3Lite	Worked well
