

Flight Report: DISCOVER-AQ Science Flight #3

From: KPMD To: KPMD

Start: 01/20/13 15:48 Z Finish: 01/18/13 23:13 Z

Flight Time: 7.4 hours

Log Number: 13P201 PI: James Crawford

Funding Source: Hal Maring - NASA - SMD Radiation Science Program

Official report logged at:

[http://airbornescience.nasa.gov/flight_reports/P-3 Orion 01 20 13](http://airbornescience.nasa.gov/flight_reports/P-3_Orion_01_20_13)

Flight	Date	Duration	Cumulative Hours	DISCOVER-AQ Hours remaining	PODEX Hours remaining
<i>Total Allocated</i>				100	21
ECF	1/10/13	1.1	1.1	98.9	21
ECF -2	1/10/13	0.6	1.7	98.3	21
PCF	1/10/13	2.1	3.8	96.2	21
Transit	1/14/13	8.3	12.1	87.9	21
Science Flight – 1	1/16/13	8.4	20.5	79.5	21
Science Flight – 2	1/18/13	7.6	28.1	71.9	21
Science Flight – 3	1/20/13	7.4	35.5	64.5	21

Comments: This was the third science flight for DISCOVER-AQ with forecasted code Orange conditions for PM2.5 in the southern San Joaquin Valley. This was the first flight for which fog did not fully dissipate before the flight. Fog depth remained below 1000 feet, only interfering with missed approaches at Bakersfield, Hanford, and Visalia Airport. PM2.5 continued to increase reaching code Red levels in Bakersfield. Pollution continues to be contained close to the surface below 2000 feet, but more layering is being observed, particularly in the morning circuit with conditions looking more well mixed later in the day.