

U.S. Dep't. of Commerce / OMAO / NOAA / Aircraft Operations Center

FLT ID: 2013062941	From: KMQV	To: KMQV
FLT #:	Blk In: Z	Lnd Time: 2237 Z
ETD: 1500 Z	Blk Out: 1513 Z	T/O Time: 1526 Z
ETE: 7430	Total Blk:	Total Flt: 7.2
Sponsoring Org: OAR	Program: SENEX	Purpose: BHAM

AOC Flight Crew

Aircraft Commander: SWEENEY	SSA: BOSKO
Co-Pilot: PRICE / DIDIER	AVAPS: /
Navigator: SLOAN /	Scientists:
Flight Eng: KLIPPEL /	Scientists:
Flt Director: SEARS /	Scientists:
SEB: DEWAM /	Scientists:

Crew Chief: POLLACK KAWA Visitors: WAGNER, DICK / BELT, ANDRE / GRAS, MARTIN, De GOUW, FOST

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure				

AS REQUIRED BY ORM	YES / NO	REMARKS
VOLCANIC ASH		
SCIENCE MISSION WITHIN BOUNDARY LAYER		
LACK OF PRECIPITATION		
RELATIVE HUMIDITY AT OR ABOVE 80%		
LARGE AIR-SEA TEMPERATURE GRADIENT		
HIGH SURFACE WINDS		
LONG FETCH AND/OR DURATION OF SFC WIND		
SEA SALT ACCRETION FORECAST		
SEA SALT ACCRETION OBSERVED		

Dropsondes	Good:	Bad:	Sent:
AXBT	Good:	Bad:	Sent:

List other data sources in Remarks section

Remarks (Storm VDM Identifier, Mission ID, Fix Times)	Fix #	VDM Ob Num	Fix Time / SLP
Storm Number Identifier (VDM): (ie: AL072012)			
TCPOD/WSPOD Mission ID: SENEX 12 (ie: NOAA2 2418A SANDY)			

Remarks:



N42RF ERROR SUMMARY

SENEX 2013 KMQY

29 June 2013



Flight ID: 20130629H1

<u>Sensor or system</u>	<u>Number or Name</u>
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.2
Vertical Accelerometer	AccZI.1
Altimeter	AltIGPS.1
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/MET/2013/20130629H1

Local Met Data:	<u>Takeoff</u> (1526Z)	<u>Landing</u> (2237Z)
Aircraft Static Pressure	988.8mb	986.9mb
Tower Pressure (corrected)	986.6mb	985.2mb

Notes:

All AOC instruments worked properly

After the aircraft returned to MacDill AFB, a few instruments that were installed on N42RF were removed and calibrated in the AOC calibration laboratory. The final Quality Control data sets use the post project calibration coefficients for determining the output of the instruments.

The following parameters that have been updated from the original data set follow.

PDALPHA.2 - Radome Attack Differential Pressure Measured
PDBETA.2 - Radome Sideslip Differential Pressure Measured
PDALPHA.1 - Fuselage Attack Differential Pressure Measured
PQALPHA.1 - Fuselage Attack Dynamic Pressure Measured
PDBETA.1 - Fuselage Sideslip Differential Pressure Measured
PQBETA.1 - Fuselage Attack Dynamic Pressure Measured
PQM.3 - Measured Fuselage Dynamic Pressure, Two Sources --co-pilot
PQM.4 - Radome Dynamic Pressure Measured
TTM.1 - Measured Total Temperature Degree
TTM.2 - Measured Total Temperature Degree

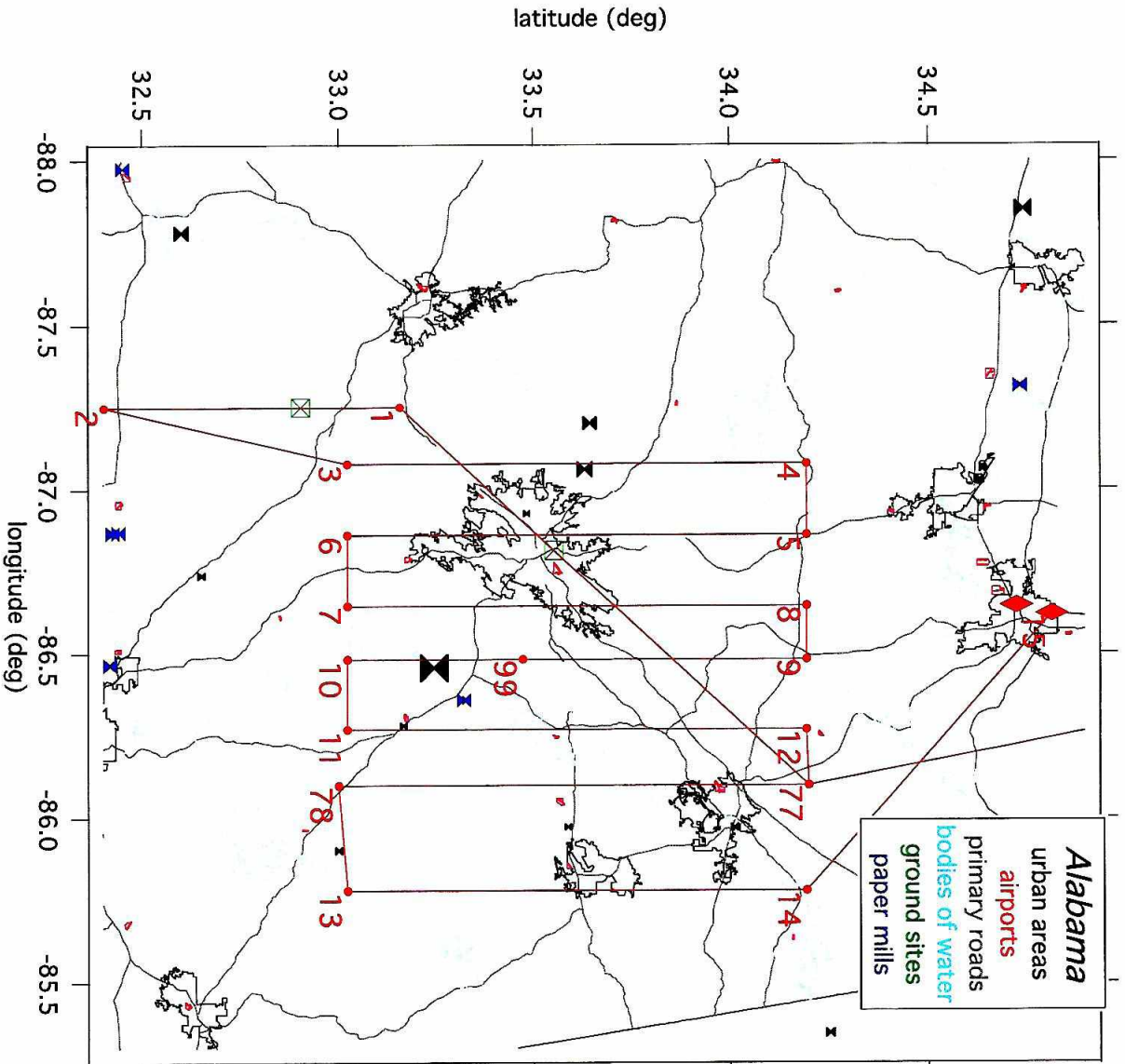
Any derived value using the outputs from the measured parameters listed above have changed slightly from the values measured in real-time.

See SENEX_READ_ME.txt for file information.

Flight Director:
Phone #:

Ian Sears
(813) 828-3310 ext. 3039

Birmingham_PP_WtoE_Intercompare_d



320 07 CLR

280 10 616 -

Durham V.S. SC7050

130 SHOWERS

155820

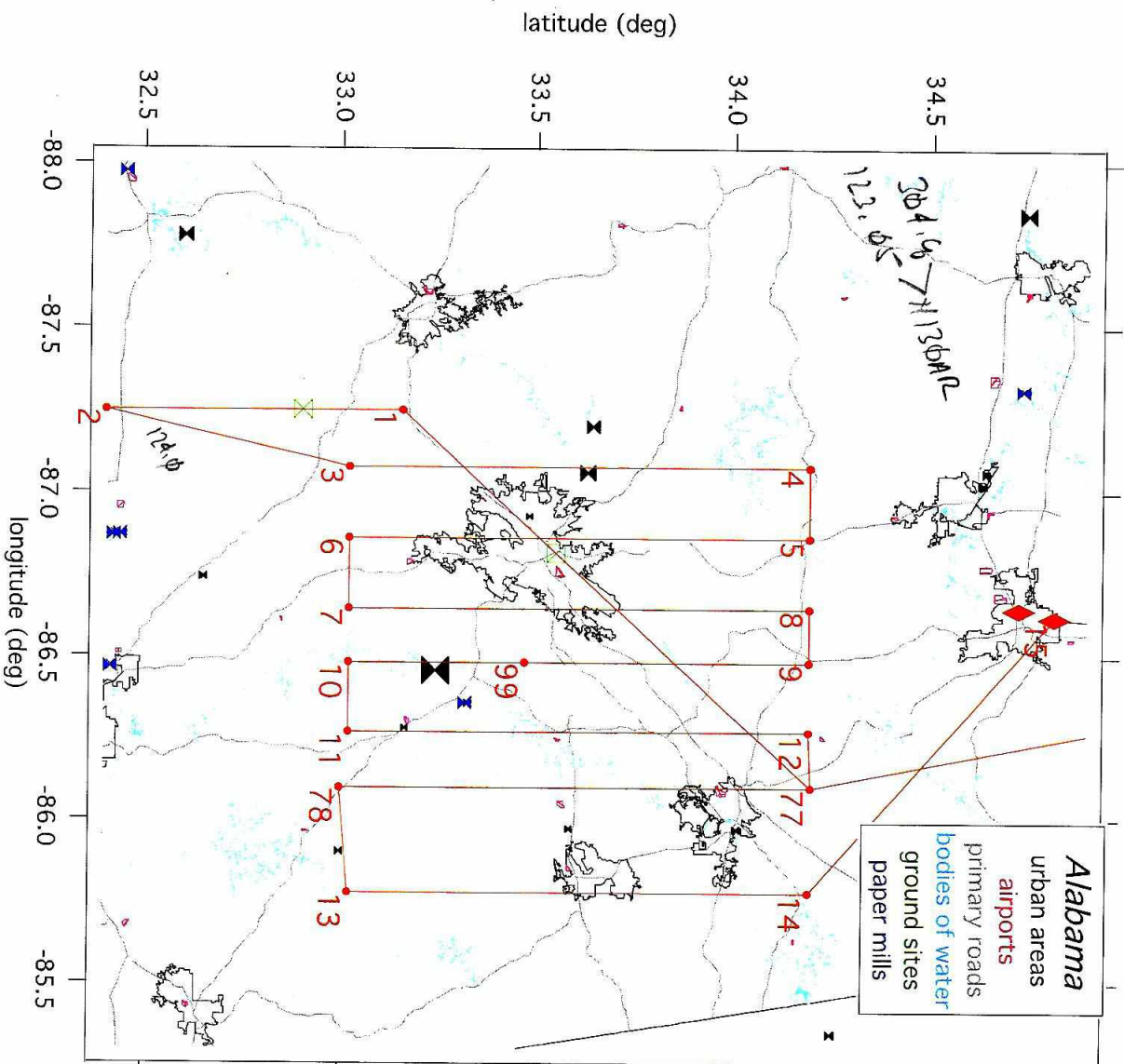
Birmingham_PP_Wro_E_Intercomarison

est_time	altit_ft	Comments	lat_deg	lat_min	lng_deg	lng_min	lat	lng	point	AGL_MSL
0:00:00	543 KMQY Smyrna		36	0.54	-86	31.2	36.009	-86.5201	0 MSL	
0:12:00	12000									
0:30:00	12000									
0:32:45	10000	Intercomparison	34	12	-86	6	34.2	-86.1	77 MSL	
0:54:06	10000	Intercomparison	33	0	-86	6	33	-86.1	78 MSL	
1:01:06	3000	spiral down at Pt 78	33	0	-86	6	33	-86.1	78 MSL	
1:22:26	3000	Intercomparison	34	12	-86	6	34.2	-86.1	77 MSL	
1:27:26	8000	enroute up								
1:40:36	8000	enroute down, note cloud top & PBL	33	9.48	-87	14.98	33.158	-87.2497	1 AGL	
1:47:36	1000	CTR transects	32	24.18	-87	14.98	32.403	-87.2497	2 AGL	
2:01:02	1500									
2:02:02	1500									
2:14:28	1500		33	9.48	-87	14.98	33.158	-87.2497	1 AGL	
2:15:28	2000									
2:27:54	2000		32	24.18	-87	14.98	32.403	-87.2497	2 AGL	
2:29:54	4000									
2:41:19	4000		33	9.48	-87	14.98	33.158	-87.2497	1 AGL	
2:44:19	7000									
2:45:19	6000	skimming cloud tops								
2:54:45	6000	CTR transects	32	24.18	-87	14.98	32.403	-87.2497	2 AGL	
2:59:45	1500	enroute down	33	1.4	-87	4.6	33.0233	-87.0767	3 AGL	
3:06:05	1500	Birmingham plume	34	11.67	-86	4.6	34.1945	-87.0767	4 AGL	
3:26:55	1500		34	11.67	-86	51.63	34.1945	-86.8604	5 AGL	
3:30:06	1500		33	1.4	-86	51.63	33.0233	-86.8604	6 AGL	
3:50:56	1500		33	1.4	-86	38.65	33.0233	-86.6442	7 AGL	
3:54:10	1500		34	11.67	-86	38.65	34.1945	-86.6442	8 AGL	
4:15:00	1500		34	11.67	-86	28.92	34.1945	-86.482	9 AGL	
4:17:23	1500	mark max plume location	33	1.4	-86	28.92	33.0233	-86.482	10 AGL	
4:38:13	1500		33	28.43	-86	28.92	33.4738	-86.482	99 AGL	
4:46:14	1500	return to max plume location	33	28.43	-86	28.92	33.0233	-86.482	99 AGL	
4:52:14	8000	spiral up at plume max	33	1.4	-86	28.92	33.0233	-86.482	10 AGL	
5:00:14	8000		33	1.4	-86	28.92	33.0233	-86.482	10 AGL	
5:06:14	1500	spiral down	33	1.4	-86	28.92	33.0233	-86.482	10 AGL	
5:09:24	1500		33	1.4	-86	16.19	33.0233	-86.2698	11 AGL	
5:30:14	1500		34	11.67	-86	16.19	34.1945	-86.2698	12 AGL	
5:32:44	1500		34	12	-86	6	34.2	-86.1	77 AGL	
5:54:05	1500		33	0	-86	6	33	-86.1	78 AGL	
5:58:53	8000	enroute up	33	1.4	-85	46.76	33.0233	-85.7793	13 AGL	
6:04:53	1500	spiral down								
6:25:43	1500	Birmingham Plume	34	11.67	-85	46.76	34.1945	-85.7793	14 AGL	
6:42:16	15000	UAH lidar profile	34	48.9	-86	37.2	34.815	-86.62	15	
6:55:16	2000	spiral down, UAH lidar profile	34	48.9	-86	37.2	34.815	-86.62	15	
7:06:33	12000	enroute up, down								
7:16:33	543 KMQY Smyrna		36	0.54	-86	31.2	36.009	-86.5201	0 MSL	

6/29
CNC - (HCR) 090 74

H 3015

Birmingham_PP_WtoE_Intercompare_d



REQ
118.4 126.15
125.6 132.25 (M2)
126.8 127.67 (GTHM APP)
133.4 123.8
126.25 132.15
124.6
123.66 (GTHM APP)

STAT-1452/1456
TAXI - 1514
I - 1514
T/O - CE T/O 090 & 2.5N 1525/1526
IV - 1529
III - 1532
LAID - 2239
171 -

59
16.25
16.34
5122
5143