

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

FLT ID: 20130710H1	From: KM6Y	To: KMCK
FLT #:	Blk In: 1958 Z	Lnd Time: 1947 Z
ETD: 1400 Z	Blk Out: 1347 Z	T/O Time: 1354 Z
ETE: 6+30	Total Blk: 6.2	Total Flt: 5.9
Sponsoring Org: DAR	Program: SENEX	Purpose: NC

AOC Flight Crew

Aircraft Commander: SWEENEY	SSA: BOSKO
Co-Pilot: PRICE, DIDIER	AVAPS: NEWNAM
Navigator: SLOAN,	Scientists: IYERSON, TOM
Flight Eng: KLIPPER,	Scientists: WARNEKE, CARSTEN
Flt Director: SEARS,	Scientists: WELT, ANDRE
SEB: /	Scientists: WAGNER, NICK
Crew Chief:	Visitors: HOLLAWAY, JOHN

	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: (ie: NOAA2 2418A SANDY)			

Remarks:



N42RF ERROR SUMMARY

SENEX 2013 KMQY KMCF

10 July 2013



Flight ID: 20130710H1

<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/2013/20130710H1

Local Met Data:	<u>Takeoff</u> (1354Z)	<u>Landing</u> (1947Z)
Aircraft Static Pressure	999.9mb	1015.7mb
Tower Pressure (corrected)	998.2mb	1016.0mb

Notes:

TTM.2 was occasionally oscillating compared to TTM.1: TTM.1 was used for deriving higher level parameters.
TDM.3 trended well with TDM.1, however, the average output was about 4.0 C too high.

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

7/10/2013 CLNC - R157E 34 74 +10 RT 0700 J 34
 118.4 1077 CLR T/O
 32 'F'

6540
 2115
 2627

START - 1339/1344

TAXI - 1346

V - 1349

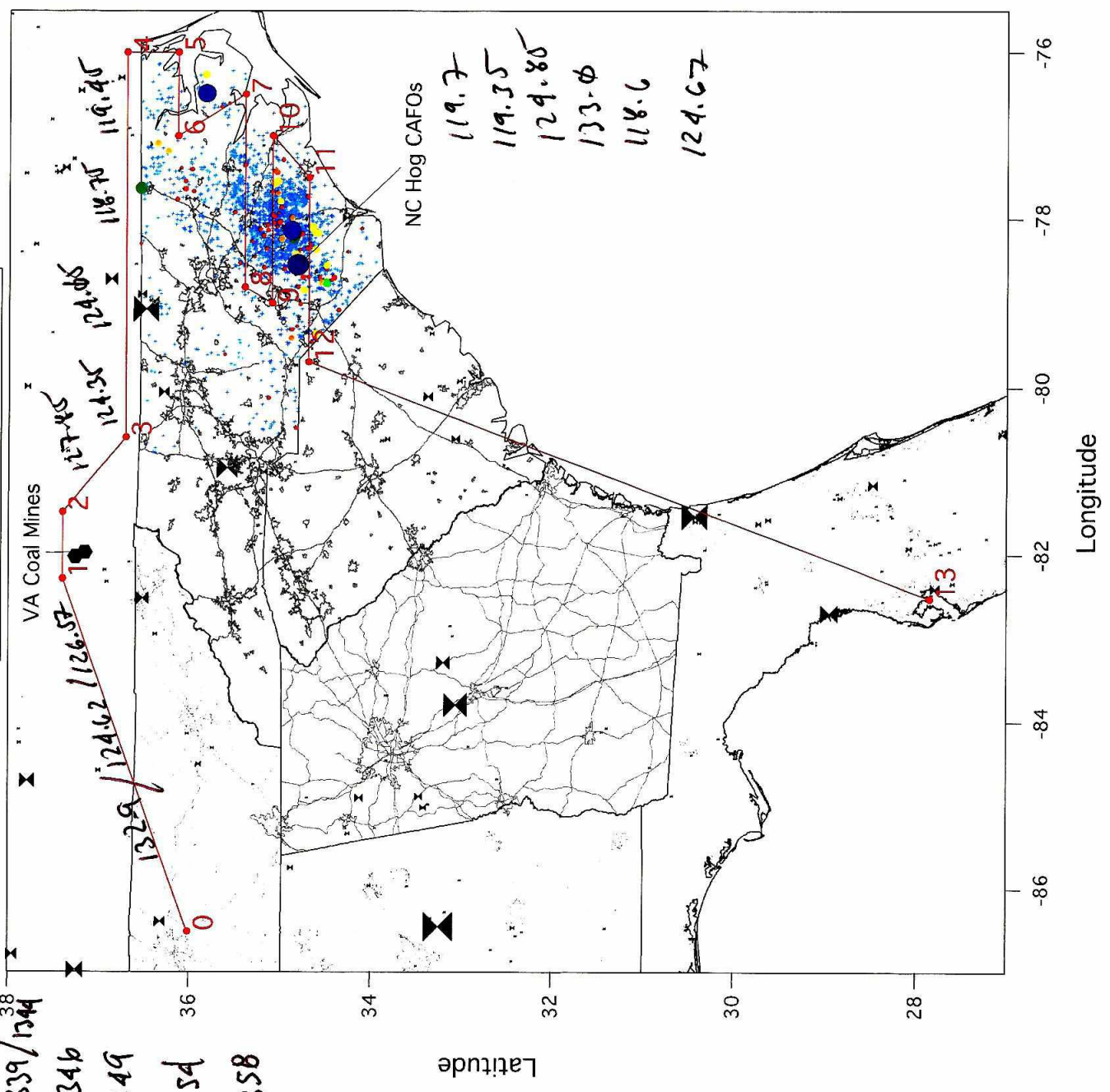
T/O - 1354

III - 1358

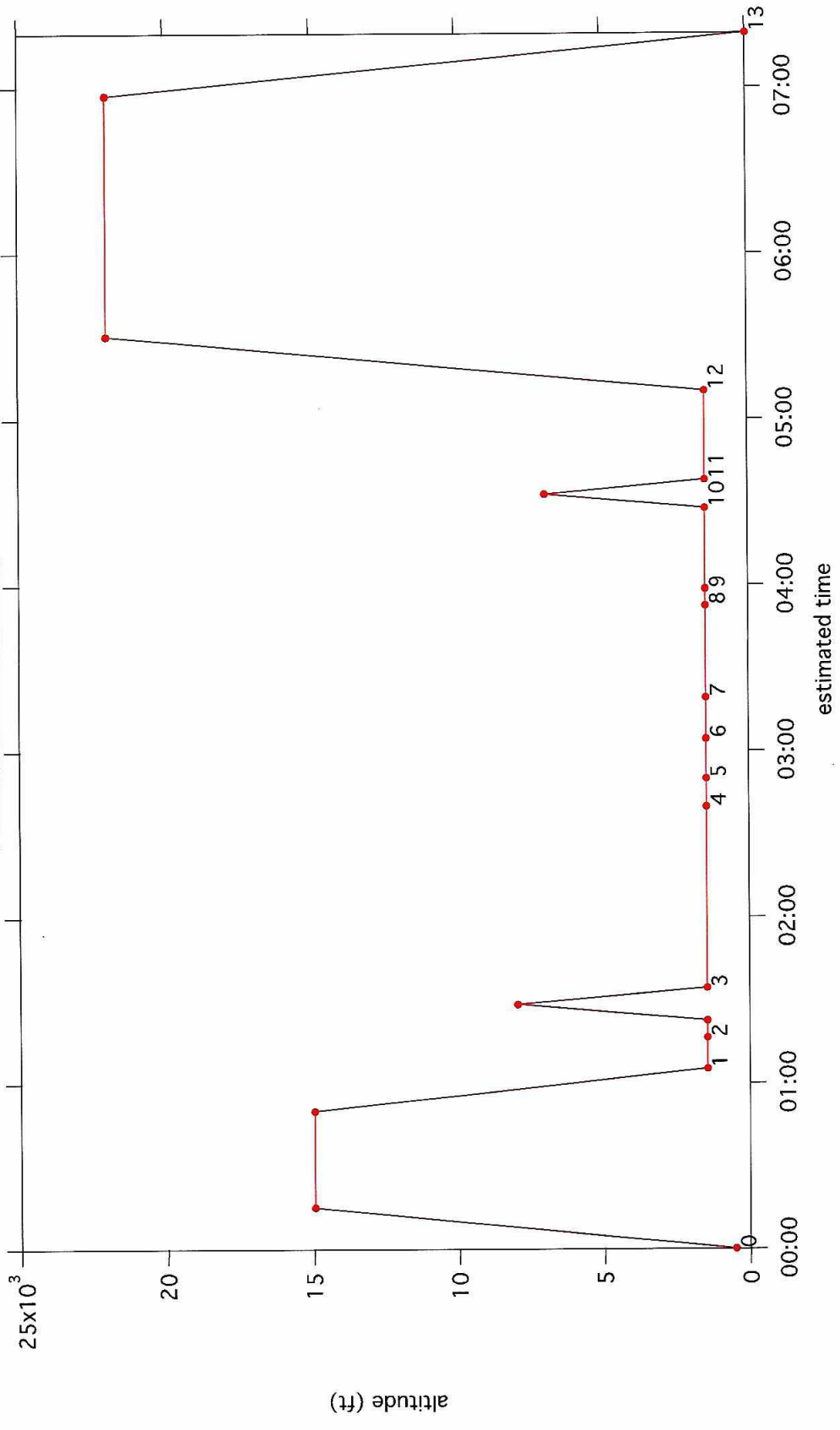
LAND -

IN -

TN_NC_FL_transit_hogs_b

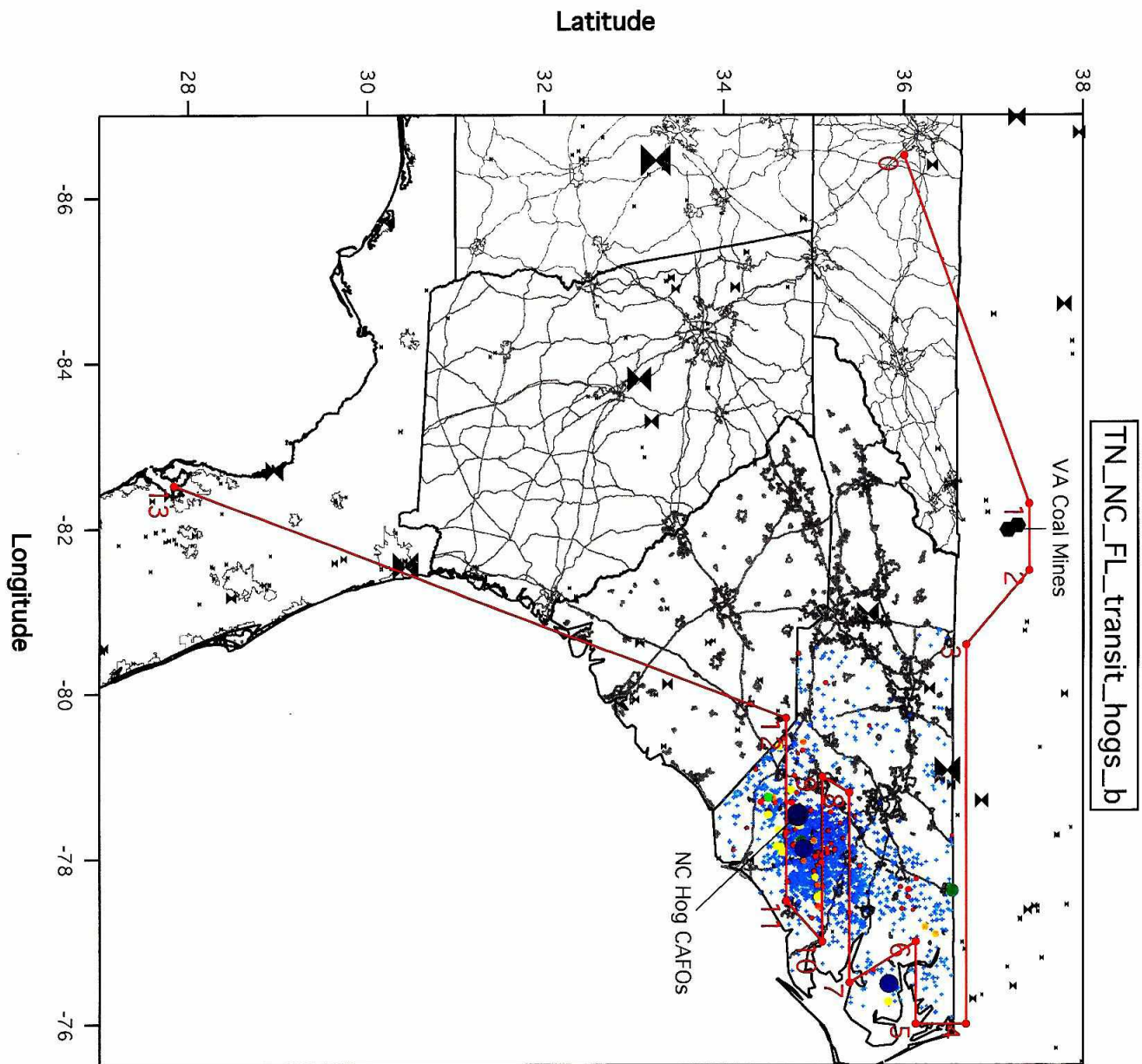


TN_NC_FL_transit_hogs_b



TN_NC_FL_transit_hogs_b

est_time	altit_ft	Comments	lat_deg	deg_lat_min	deg_lat_min	deg_lat_min	lat	ing	point	AGL_MSL
0:00:00	543	KMQY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0	AGL
0:15:00	1500	enroute up								
0:50:00	1500	enroute down								
1:05:03	1500	dwnd VA coal mines	37	24	-82	18	37.4	-82.3	1	AGL
1:16:22	1500	dwnd VA coal mines	37	24	-81	30	37.4	-81.5	2	AGL
1:22:22	1500									
1:28:22	8000	enroute up & down								
1:34:12	1500		36	42	-80	36	36.7	-80.6	3	AGL
2:39:48	1500		36	42	-76	0	36.7	-76	4	AGL
2:49:53	1500	NC hog CAFOs	36	8	-76	0	36.1333	-76	5	AGL
3:04:15	1500		36	8	-76	60	36.1333	-77	6	AGL
3:19:09	1500		35	24	-76	30	35.4	-76.5	7	AGL
3:52:30	1500		35	24	-78	48	35.4	-78.8	8	AGL
3:58:35	1500		35	6	-79	0	35.1	-79	9	AGL
4:27:41	1500		35	6	-76	60	35.1	-77	10	AGL
4:32:41	7000	enroute up & down								
4:37:53	1500		34	42	-77	30	34.7	-77.5	11	AGL
5:10:03	1500	NC hog CAFOs	34	42	-79	42	34.7	-79.7	12	AGL
5:30:03	22000	enroute up								
6:57:00	22000	enroute down								
7:19:13	14	KMCF MacDill	27	50.96	-82	31.27	27.8493	-82.521	13	AGL



107
54
53

TN_NC_FL_transit_hogs_b

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	-86.52	0	AGL	
0:15:00	15000	enroute up									
0:50:00	15000	enroute down									
1:05:03	1500	dwnd VA coal mines	37	24	-82	18	37.4	-82.3	1	AGL	
1:16:22	1500	dwnd VA coal mines	37	24	-81	30	37.4	-81.5	2	AGL	
1:22:22	1500										
1:28:22	8000	enroute up & down									
1:34:12	1500		36	42	-80	36	36.7	-80.6	3	AGL	
2:39:48	1500		36	42	-76	0	36.7	-76	4	AGL	
2:49:53	1500	NC hog CAFOs	36	8	-76	0	36.1333	-76	5	AGL	
3:04:15	1500		36	8	-76	60	36.1333	-77	6	AGL	
3:19:09	1500		35	24	-76	30	35.4	-76.5	7	AGL	
3:52:30	1500		35	24	-78	48	35.4	-78.8	8	AGL	
3:58:35	1500		35	6	-79	0	35.1	-79	9	AGL	
4:27:41	1500		35	6	-76	60	35.1	-77	10	AGL	
4:32:41	7000	enroute up & down									
4:37:53	1500		34	42	-77	30	34.7	-77.5	11	AGL	
5:10:03	1500	NC hog CAFOs	34	42	-79	42	34.7	-79.7	12	AGL	
5:30:03	22000	enroute up									
6:57:00	22000	enroute down									
7:19:13	14	KMCF MacDill	27	50.96	-82	31.27	27.8493	-82.521	13	AGL	

KMQY 190 03 175m CLR

KCLT

KMCF 140 09 SLO 35
KTPA TEMPO VRB 10 15 3mi VIS -TSRA SLO 20 30 35