

MEAPRS

Flight #03 H980525 IOP #03 (Thunderstorms near Alva, OK)

DATA TYPE

SENSOR or OPTION

INE	1
Accelerometer	1
Temperature Probe	2
Altitude (for vertical wind)	Pressure Altitude
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2
Constants file:	CO2986.con

Notes:

There were no data/time gaps.

The RA232 radar altimeter was used in extrapolating surface pressure from flight level.

Downward spikes in radar altimeter data are a result of overflying land.

Sensors operated optimally with the exception of total temperature 2 and the King liquid water probe.

Because of the wet-bulbing of total temperature probe 2, the values of total temperature 2 were replaced with the values of total temperature 1 during the following time periods:

055700Z - 060400Z
061229Z - 070835Z
091150Z - 094740Z

Dewpoint temperature was warmer than ambient temperature during the following time periods:

033500Z - 040100Z
041050Z - 041130Z
042850Z - 043030Z
055740Z - 060220Z
061230Z - 064150Z
064930Z - 065220Z
065700Z - 070200Z

The King liquid water probe stopped working at 0408Z.

Aircraft inertial positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	961.6mb	965.6mb
Corrected tower pressure	961.0mb	965.2mb

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073

FLT ID: 14980525	FM: KOKC	TO: KOKC
FLT NO: 98-056	BLK IN: 11/02	ATA: 1102Z
ETD: 0300Z	BLK OUT: 0248Z	ATD: 0259Z
ETE:	BLK TIME: 8:22	FLT TIME: 8:03
SPONSOR ORG: NSSC/NCF	PROGRAM: MEAPRS	PURPOSE: MCS at OR-KS BORDER

DAO PERSONNEL

AC KENNEDY ✓	SYS ENG
CP TAGGART/PHILLIPS BORN ✓	DATA SYS BARR ✓
NAV RATHBUN ✓	RADAR DELGADO ✓
FE BAST	BT/ODW CARPENTER ✓
RADIO ROGERS ✓	CLD PHYS
FD DAMIANO ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
ZIEGLER ✓	PI	NSSC
SHEPHERD ✓	ASST. PI	Texas A&M
SCHUUR ✓	PMS	
MCCARTHY ✓	OBS	
BIGGERSTAFF ✓	PMS	
SANTARPIA ✓	OBS	
BLACK ✓	PMS	NRD

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

Both radar not working properly @ 0309Z.
 Reflectivity ranges have changed. Radar up @ 0317Z
 T/O delayed waiting for weather 9K +5°C
 DW1 acting up 14K -5
 TT2 icing up @ 0629Z 16.5K -10
 DW3 → 0747Z King broke at 0408Z
 JW offset = 8

1630-1000
U.S. DEPT. COMM./NOAA/ORA - DATA SECTION WORK FORM NO. 2 DROWF2 FILE

FLT ID: H980525 TIME OFF: 0259Z TIME ON: 1102Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	961.6	29.76	965.6	29.88

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

2

FAST FLT LVL TAPES

RADAR TAPES

3

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

PMS

3

AXBT

AXCP

ODW

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

14980525

260 080

240/015

205 000 080 250

235

045

240/060

235/065

TIME	LAT	LONG	TRK	HD	WD	WS	TA	TD	PA	GA	SP	PS	PC
032400	3622	9808	297	291	228	36	15.2	2.1	2497	2171	958.4	747.1	79.0
033900	start leg												
034100	3629	9854	70	87	214	54	12.9	9.0	2651	2286	955.6	732.9	leg 77.5
035600	end leg (turn)												
040040	end leg @ 9K PA												
040230	start leg @ 11K PA												
040800	end leg												
041020	start leg @ 11K PA												
041450	end leg @ 11K PA												
041600	start leg @ 11K PA												
042000	3619	9735	285	232	210	40	6.9	-9.0	3412	3225	972.4	665.0	R 72.7
042130	end leg												
042440	start leg @ 11K PA												
042100	3626	9713	65	71	200	43	5.5		5142	33		665.0	TURB 62.1
043340	end leg @ 11K PA												
043500	start leg @ 11K PA												
043700	3624	9658	240	238	219	39	6.4	-16.8	3414	3257	975.2	665.0	leg 73.0
044430	end leg @ 11K PA												
044700	3613	9746	280	273	210	35	6.9	-12.6	3400	3215	972.1	666.1	73.0
045530	end leg @ 11K PA												
050000	start leg @ 11K PA												
050700	3625	9740	139	42	206	40	6.6	-13.0	3394	3175	969.3	666.6	69.5
051120	start leg @ 11K PA												
051300	3632	9735	208	209	203	38	6.4	-4.6	3398	3223	973.8	666.2	line 75.8
051820	end leg @ 11K PA												
052220	start leg @ 11K PA												
052400	3623	9735	45	48	213	43	5.7	-2.6	3396	3202	970.8	666.5	line 75.6
053900	3710	9744	277	277	103	2	2.4	3.0	2102	2838	970.9	691.5	RW 68.9
055920	at -50C at 14K PA												
060100	3720	9732	91	93	257	22	-5.4	-3.4	4266	4048	972.0	595.2	RW- 75.6
061900	3720	9541	92	93	266	28	-5.0	-3.4	4266	4186	988.3	595.2	RW- 72.8
063100	3731	9548	270	269	238	24	-4.8	-3.1	4270	4183	987.4	595.1	RW- 71.0
064700	3732	9707	270	269	240	22	-8.5	-7.6	4881	4674	970.3	548.9	RW- 72.0
071600	3730	9905	78	80	252	58	-7.7	-16.7	4886	4471	946.5	548.5	73.7
073355	pull left turn (SW)												
074247	turn N												
074500	3720	9639	1	354	272	32	6.9	1.9	2767	2494	969.2	721.4	TURB 74.6
075300	pull left (NE)												
075900	3752	9652	267	268	270	37	7.8	1.2	2769	2460	963.3	721.2	leg 71.7
082200	3718	9715	175	170	248	28	-3.8	-3.3	4279	4090	973.5	594.2	RW 72.2
083700	3727	9638	357	350	242	40	-3.7	-3.9	4302	3992	959.2	592.8	leg 72.4
084800	3754	9644	262	264	269	35	-3.8	-5.3	4297	4041	966.3	592.9	leg 72.5
085529	pull												
090500	pull												
093600	3750	9719	180	191	276	52	-10.7	-25.6	5370	5156	965.2	514.4	74.3
101100	3602	9840	229	232	240	20	11.3	9.7	2441	1954	943.6	752.1	66.2
105500	3513	9746	123	119	4	10	18.8	17.2	950	5716	961.0	905.3	39.5

