

9870202 I1- FDIR

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 870202I	FM: Darwin, AU	TO: Darwin, AU
FLT NO: 87-29	BLK IN: 0329	ATA: 0322
ETD: 182	BLK OUT: 1819	ATD: 1826
ETE: 9	BLK TIME: 9:10	FLT TIME: 8:56
SPONSOR ORG: FIZL	PROGRAM: EMEK	PURPOSE: Research Flight #9

OAO PERSONNEL

AC Genzlinger ✓	SYS ENG Goldstein ✓
CP Gunnoe ✓	DATA SYS Lynch ✓
NAV Secretan ✓	RADAR
FE Ricci ✓	BT/ODW Gonzales ✓
RADIO Nunn	CLD PHYS
FD Parrish ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
31 Holland, Greg	Visitor	Bureau of Met
Burpee	P.I.	HRD
Marks	P.I.	"
Camacho	Doppler	"
B. Duff	Observer	Penn State
Mayer	Radar	U of Wash
Churchill	C.P.	"
Webster McBride	Visitor	Bureau of Met
41 Houze	P.I.	Bureau of Met

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

Fly to 11.5, 135 → then 11.5, 139. Try dop patterns w/ ship.
 Delayed due to doppler problem. Data system died on T.O. roll.
 Several data system problems after T.O. Precip probe out.
 11.5, 136.7 11.5 13.8 11.5, 139.5 9.5, 139.5 → Drop points.
 Flew survey around 10.5, 138. FLEW CORRECTIVE PATTERNS AROUND 9.5, 138.5E
 Flew strat pattern around the same area.
 Flew radiation profile along 9S between 138°40' & 139°15'
 20215 - Apparent large latitude error on approaching Aus coast.

FLT ID: 87020.2I TIME OFF: 1826Z TIME ON: 0322Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	AS 1005 SP 1007	ALT 1007	AS 1007 SP 1004.6	ALT 1008.5

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	1	
FAST FLT LVL TAPES		
RADAR TAPES	13	
DOPPLER TAPES	15	
ODW CASSETTES	2	
HARD COPIES	2	
C.P.	44	
AXBT		
AXCP		
ODW	6	

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON	✓	✓	✓	
OFF				
RATE	1/5	1/5	1/5	

REMARKS

check Doppler tapes 3-6 Fully - sporadic tape drive
 Noted large latitude error in IDEs when approaching
 Aus coast
 VS, ~~NA~~ WZ drifted steadily negative through whole flight

NAV TERMINAL ERRORS

IDE	LAT	LONG	GS
1	-24.5	-1.1	5
2	-26.1	+2.4	5

115 137
9.5 162.5

870202I EMEX #9

Surwind 230/15-20 kt

Time	LAT	LOD	TK	WD	WS	PA	GA	TA	TD	SP	PS			
1830	12 23	130 59	92	308	24	1435	1465	19.2	14.3	1008.4	847	↑		
183630	12 18	132 32	83	275	26	3610	3776	7.0	2.0	1006.4	648	↑	System crash	
1851	12 13	132 32	80	260	24	4634	4862	0.5	-6.2	1005.8	567.3	-	at 15K	
1907	11 53	133 54	70	260	27	4569	4808	1.7	-4.5	1005.8	572			
193630	11 30	136 20	91	253	28	4566	4797	0.9	-1.0	1000	572			
194028	11 31	136 43	91	244	25	4565	4803	0.3	-1.0	1008	572	Drop 1 ✓		
195534	11 31	138 01	88	210	18	4563	4799	6.7	-0.6	1007	573	Drop 2 ✓		
200830	11 31	139 03	89	221	21	4560	4798	0.5	0.0	1007.5	573.6			
201316	11 27	139 35	11	209	22	4559	4796	0.6	-0.6	1007.7	573.7	Drop 2 ✓		
2029	10 12	139 32	1	240	20	4563	4797	0.8	0.6	1007.0	573			
204018	9 32	139 37	211	262	26	4556	4794	0.4	-0.5	1008	573	Drop 4 ✓		
CONVECTIVE TENDS TO DOWN PATTERN														
204405	9 45	139 29	210	262	24	4556	4790	0.4	-0.8	1007.5	573	Log 1	205305	
205540	0 18	139 13	230	244	20	4555	4795	0.4	-0.2	1009	573	Log 2	210640	
210920	9 35	138 53	210	270	21	4550	4791	0.2	-1.3	1010	573	Log 3	211735	
212015	10 04	138 39	230	235	22	4549	4790	-0.1	-1.0	1009.7	573.7	Log 4	212925	
213200	9 28	138 23	210	263	27	4546	4796	0.6	-0.6	1008.6	573.9	Log 5	2139	
214200	9 49	138 10	330	260	22	4545	4788	0.7	0.2	1008.8	573.9	Log 6	215200	
215445	9 11	137 59	210	270	27	4542	4787	-	-	1013	575	Log 7	220345	
220415	9 31	137 39	630	247	29	4541	4790	0.1	-0.4	1011.5	574	Log 8	221430	
221655	8 51	138 04	148	262	36	4541	4790	-0.1	-2.1	1011.8	574	Log 9	222800	
223050	9 32	138 33	040	240	32	4538	4790	0.4	0.3	1010	574.4	Log 10	223940	
224230	9 00	139 02	150	260	39	4538	4790	0.3	-0.8	1010.4	574.4	Log 11	225115	
225325	9 32	139 26	330	255	28	4536	4785	0.6	-0.1	1010.3	574.6	Log 12	230200	
STRATIFORM PATTERN														
230445	9 00	139 11	211	262	33	4534	4784	0.9	-0.5	1009	574.6	Log 1	231850	
2313	↑	1715	1715											
231830	9 40	138 51	330	235	23	5178	5471	-2.6	-3.5	1007.2	528	Log 2	232730	
232955	9 01	138 36	210	264	27	5177	5469	-2.7	-3.5	1007.6	527.7	Log 3	233830	
234055	9 31	138 20	330	240	27	5174	5472	-2.7	-3.5	1008.2	527.8	Log 4	234955	
235155	8 58	137 57	150	250	34	5172	5471	-2.6	-4.5	1008.4	527.9	Log 5	000055	
000345	9 33	138 16	030	241	32	5173	5477	-2.7	-3.7	1008	527	Log 6	001245	↑ to 18K
001525	8 52	138 38	150	253	32	5506	5819	-4.5	-5.9	1006	504.5	Log 7	002475	
RADIATION PRO FILE														
002640	9 03	139 06	270	233	36	6407	6766	-9.5	-11.0	1002	446	21K	003140	
003535	9 02	138 42	090	247	28	5500	5810	-4.4	-5.6	1006.3	505	18K	004035	
004435	9 02	139 10	270	258	33	4574	4827	0.7	-0.4	1008.7	571.8	15K	004935	
005425	8 00	138 55	090	240	29	3670	3877	4.9	2.5	1013.7	643.4	12K	005925	
010310	8 59	139 23	270	240	35	2432	2560	12.9	7.3	1012.1	753.2	8K	010810	
011200	8 58	139 08	090	220	32	1223	1279	19.8	14.6	1012.2	874.8	4K	011700	
0130	9 22	138 49	244	233	20	5874	6195	-6.3	-8.8	1002.6	476	↑ to Ferry	Darwin	
015150	10 09	137 12	239	218	21	6122	6465	-7.8	-10.9	1003.6	464	Drop 5 ✓		
022144	11 17	134 54	245	172	12	6119	6469	-7.5	-10.6	1003.5	464.2	Drop 6		
0241	11 40	133 24	272	170	12	6116	6401	-8.1	-9.0	995	464.3			
0256	11 39	132 10	262	204	12	6119	6467	-8.2	-9.4	1005	464			
030630	11 52	131 23	208	278	30	2611	2700	13	4	1008	752	↓		

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