AVHRR/2 S/N 203

IR CHANNEL CALIBRATION

TARGET TEMPERATURE*		CH 3 10.8 MICRON			CH 4 3.7 MICRON			CH 5 12.0 MICRON			MAGNETIC TAPE RECORD	
		OUTPUT		NOISE	OUTPUT		NOISE	OUTPUT		NOISE		
NOMINAL	ACTUAL	MILLIVOLTS	COUNTS	mV	MILLIVOLTS	COUNTS	mV	MILLIVOLTS	COUNTS	MV	NUMBER	FILE
175K	174.14	6036.62	966	2.16	6190.16	990	8.23	5959.43	954	3.14	2032	1
185K	184.72	5937.23	950	1.50	6186.23	990	7.50	5833.91	933	3.11	2032	2
195K	194.68	5814.50	930	2.79	6188.48	990	8.00	5684.03	909	3.11	2032	3
205K	204.68	5658.17	905	2.74	6180.61	989	7.21	5494.18	879	2.15	2032	4
215K	214.73	5461.03	874	2.54	6168.38	987	7.62	5266.59	843	2.99	2032	5
225K	224.74	5224.99	836	0.87	6153.71	985	8.49	4997.69	800	3.25	2032	6
235K	234.76	4949.94	792	0.66	6111.52	978	7.59	4684.92	750	3.12	2032	7
245K	244.71	4628.45	741	2.85	6037.05	966	7.33	4332.35	693	2.74	2032	8
255K	254.75	4268.47	683	1.26	5908.41	945	7.74	3931.34	629	2.40	2032	9
265K	264.77	3862.86	618	1.41	5704.65	913	8.29	3489.77	558	3.06	2033	1
275K	274.83	3418.75	547	0.39	5372.98	860	7.55	2995.83	479	3.09	2033	2
285K	284.83	2931.14	469	0.82	4848.44	776	8.07	2462.90	394	2.21	2033	3
295K	294.82	2415.66	387	2.62	4089.08	654	8.37	1891.92	303	2.82	2033	4
305K	304.83	1865.51	298	2.81	2962.53	474	7.86	1279.08	205	2.97	2033	5
310K	309.92	1573.72	252	2.41	2232.53	357	8.15	953.01	152	3.12	2033	6
315K	314.92	1280.69	205	1.75	1372.05	220	8.04	618.98	99	2.42	2033	7
320K	319.96	980.95	157	1.32	369.05	59	8.69	279.96	45	2.54	2033	8
CLAMP	≅25K	6206.42	993	1.66	6194.08	991	8.78	6226.45	996	2.95	NA	NA

BASEPLATE TEMP. 15°C

DATE 05-02-88

NOAA-11 ~~[illegible]~~ re-calibration

AVHRR/2 S/N 203

IR CHANNEL CALIBRATION BLACKBODY TARGET TEMPERATURES

TARGET NOMINAL TEMP	TARGET TEMPERATURE DEGREES KELVIN								TARGET BASE CALCULATION	
	BASE PRT'S						WALLS PRT'S			
	0	1	2	3	4	5	6	7	AVERAGE	DIFF P-P
175	174.45	174.25	174.15	173.90	174.10	174.00	174.55	174.60	174.14	.55
185	185.00	184.75	184.80	184.45	184.65	184.65	184.70	185.60	184.72	.55
195	194.95	194.75	194.75	194.45	194.65	194.55	195.05	195.65	194.68	.50
205	204.95	294.75	204.75	204.45	204.65	204.55	205.30	205.85	204.68	.50
215	214.95	214.80	214.80	214.50	214.70	214.60	215.50	215.95	214.73	.45
225	225.00	224.80	224.85	224.50	224.70	224.60	225.70	226.10	224.74	.50
235	235.00	234.85	234.85	234.50	234.75	234.60	236.00	236.40	234.76	.50
245	244.95	244.80	244.80	244.45	244.65	244.60	245.95	246.30	244.71	.50
255	254.95	254.85	254.90	254.50	254.70	254.60	255.85	256.25	254.75	.45
265	264.95	264.90	264.90	264.50	264.70	264.65	265.90	266.30	264.77	.45
275	275.00	274.95	274.95	274.55	274.80	274.70	276.10	276.50	274.83	.45
285	285.00	284.95	285.00	284.55	284.80	284.70	286.20	286.55	284.83	.45
295	294.95	294.95	295.00	294.55	294.75	294.70	296.40	296.70	294.82	.45
305	304.95	304.95	304.95	304.65	304.75	304.75	306.50	306.80	304.83	.30
310	310.00	310.05	310.05	309.70	309.85	309.85	311.70	311.85	309.92	.35
315	314.95	314.95	315.05	314.75	314.90	314.90	316.45	316.80	314.92	.30
320	319.95	320.05	320.05	319.80	319.95	319.95	321.80	321.90	319.96	.25

BASEPLATE TEMP. 15°C

DATE 05-02-88

Table 4.3-4. In-Flight Black Body TM S/N 203 Calibration

	IN-FLIGHT CAL. TGT. MEAN						B.B. TM #1		B.B. TM #2		B.B. TM #3		B.B. TM #4		AVG. B.B.
	CH #3		CH #4		CH #5		OUT		OUT		OUT		OUT		TEMP
	mV	CNT	mV	CNT	mV	CNT	V	°C*	V	°C*	V	°C*	V	°C*	°K
0 °C	2679.69	429	5002.84	800	2539.48	406	.669	8.94	.681	9.04	.719	9.35	.756	9.66	282.40
5°C	2481.84	397	4702.70	752	2295.95	367	1.231	13.59	1.250	13.75	1.269	13.90	1.306	14.21	287.01
10°C	2250.81	360	4291.82	687	2011.38	322	1.862	18.84	1.887	19.05	1.881	18.99	1.931	19.41	292.22

RE-CALIBRATION 5-2-88

15 °C	2816.83	451	4688.20	750	2331.29	373	1.269	13.90	1.287	14.06	1.325	14.37	1.356	14.62	287.39

Telemetry Calibration Table for Equation.

AVHRR/2 S/N 203

I.R. CHANNEL CALIBRATION

TARGET TEMPERATURE *		CH. 3 10.8 MICRON			CH. 4 3.7 MICRON			CH. 5 12.0 MICRON			MAGNETIC TAPE REC.	
		OUTPUT		NOISE	OUTPUT		NOISE	OUTPUT		NOISE		
NOMINAL	ACTUAL	MILLI VOLTS	COUNTS	MV.	MILLI VOLTS	COUNTS	MV.	MILLI VOLTS	COUNTS	MV.	NUMBER	FILE
175K	174.14	6036.62	966	2.16	6190.16	990	8.23	5859.43	954	3.14	2032	1
185K	184.72	5937.23	950	1.50	6186.23	990	7.50	5833.91	933	3.11	2032	2
195K	194.68	5814.50	930	2.79	6188.48	990	8.00	5684.03	909	3.11	2032	3
205K	204.68	5658.17	905	2.74	6180.61	989	7.21	5494.16	879	2.15	2032	4
215K	214.73	5461.03	874	2.54	6168.38	987	7.62	5266.59	843	2.99	2032	5
225K	224.74	5224.99	836	0.87	6153.71	985	8.49	4997.69	800	3.25	2032	6
235K	234.76	4949.94	792	0.66	6111.52	978	7.59	4684.92	750	3.12	2032	7
245K	244.71	4628.45	741	2.85	6037.05	966	7.33	4332.35	693	2.74	2032	8
255K	254.75	4268.47	683	1.26	5908.41	945	7.74	3931.34	629	2.40	2032	9
265K	264.77	3862.86	618	1.41	5704.65	913	8.29	3489.77	558	3.06	2033	1
275K	274.83	3418.75	547	0.39	5372.98	860	7.55	2985.83	479	3.09	2033	2
285K	284.83	2931.14	469	0.82	4848.94	776	8.07	2462.90	394	2.21	2033	3
295K	294.82	2415.66	387	2.62	4089.08	654	8.37	1891.82	303	2.82	2033	4
305K	304.83	1865.51	298	2.81	2962.53	474	7.86	1279.08	205	2.97	2033	5
310K	309.92	1573.72	252	2.41	2232.53	357	8.15	953.01	152	3.12	2033	6
315K	314.92	1280.69	205	1.75	1372.05	220	8.04	618.98	99	2.92	2033	7
320K	319.96	980.95	157	1.32	369.05	59	8.69	279.96	45	2.54	2033	8
CLAMP	≅25K	6206.42	993.	1.66	6194.08	991	8.78	6226.45	996	2.95	N/A	N/A
			.027						.232			

BASEPLATE TEMP. 15°C

DATE 05-02-88

AVHRR/2 S/N 203

VISIBLE CHANNEL CALIBRATION

NUMBER OF LAMPS	MV. CHAN 1 SIGNAL	CHAN. 1 COUNTS	MV. CHAN 1 STD. DEV.	MV. CHAN 1 SPACE SIGNAL	MV. CHAN 1 SPACE STD. DEV.	MV. CHAN 2 SIGNAL	CHAN 2 COUNTS	MV. CHAN 2 STD. DEV.	MV. CHAN 2 SPACE SIGNAL	MV. CHAN 2 SPACE STD. DEV.	MAGNETIC TAPE RECORD NUMBER	FR
12	5219.99	835	2.45 MV	256.25	0.96	–	–	–	–	–	2030	1
11	4803.09	768	3.14	256.21	1.00	–	–	–	–	–	2030	2
10	4370.99	699	2.83	256.13	1.18	–	–	–	–	–	2030	3
9	3955.00	633	2.46	256.19	0.69	–	–	–	–	–	2030	4
8	3543.27	567	3.05	256.18	0.85	–	–	–	–	–	2030	5
7	3098.99	496	2.17	256.12	1.02	–	–	–	–	–	2030	6
6	2699.99	432	2.05	256.14	0.92	6249.13	1000	2.61	255.36	2.16	2030	7
5	2303.89	369	1.95	256.08	1.05	5276.60	844	2.67	255.46	2.05	2030	8
4	1886.29	302	2.44	256.11	1.00	4257.63	680	2.65	255.44	2.05	2030	9
3	1462.00	234	2.46	256.08	1.07	3218.15	515	2.45	255.30	2.19	2031	1
2	1022.51	164	2.89	256.05	1.22	2137.83	342	1.52	255.27	2.21	2031	2
1	639.43	102	2.77	256.12	0.97	1197.94	192	2.69	255.29	2.23	2032	3
0	256.33	41	0.79	256.11	0.98	254.27	41	2.87	255.28	2.24	2032	4

SPHERE CALIBRATION DATE 11-20-87 DATE 4-11-88

AVHRR/2 S/N 203

IR CHANNEL CALIBRATION

BLACKBODY TARGET TEMPERATURES

TARGET NOMINAL TEMP	TARGET TEMPERATURE DEGREES KELVIN								TARGET BASE CALCULATION	
	BASE PRT'S						WALLS PRT'S			
	0	1	2	3	4	5	6	7	AVERAGE 0-5	DIFF. P-P
175	174.45	174.25	174.15	173.90	174.10	174.00	174.55	174.60	174.14	.55
185	185.00	184.75	184.80	184.45	184.65	184.65	184.70	185.60	184.72	.55
195	194.95	194.75	194.75	194.45	194.65	194.55	195.05	195.65	194.68	.50
205	204.95	204.75	204.75	204.45	204.65	204.55	205.30	205.85	204.68	.50
215	214.95	214.80	214.80	214.50	214.70	214.60	215.50	215.95	214.73	.45
225	225.00	224.80	224.85	224.50	224.70	224.60	225.70	226.10	224.74	.50
235	235.00	234.85	234.85	234.50	234.75	234.60	236.00	236.40	234.76	.50
245	244.95	244.80	244.80	244.45	244.65	244.60	245.85	246.30	244.71	.50
255	254.95	254.85	254.90	254.50	254.70	254.60	255.85	256.25	254.75	.45
265	264.95	264.90	264.90	264.50	264.70	264.65	265.90	266.30	264.77	.45
275	275.00	274.95	274.95	274.55	274.80	274.70	276.10	276.50	274.83	.45
285	285.00	284.95	285.00	284.55	284.80	284.70	286.20	286.55	284.83	.45
295	294.95	294.95	295.00	294.55	294.75	294.70	296.40	296.70	294.82	.45
305	304.95	304.95	304.95	304.65	304.75	304.75	306.50	306.80	304.83	.30
310	310.00	310.05	310.05	309.70	309.85	309.85	311.70	311.85	309.92	.35
315	314.95	314.95	315.05	314.75	314.90	314.90	316.95	316.80	314.92	.30
320	319.95	320.05	320.05	319.80	319.95	319.85	321.80	321.90	319.96	.25

BASE PLATE TEMP. 15°C

DATE 05-02-88

06/15/1988 15:07 ITT AOD TAC-1 FT WAYNE IN 2194876033 P.10

AVHRR/2 S/N203

MODULATION TRANSFER FUNCTION

TARGET SPATIAL FREQUENCY	CHAN. 1	CHAN 2	CHAN 3	CHAN 4	CHAN 5
1.0 I.F.O.V.	.49	.49	.35	.73	.93
1.5	.86	.88	.72	1.00	.87
2.0	1.00	1.00	.92	1.00	1.00
4.0	1.00	1.00	1.00	1.00	1.00

DATE 04-27-88

AVHRR/2 S/N203

~~[illegible]~~ I.F.O.V.

~~DATE 4-27-88~~

IFOV WIDTH SCAN	1.27 mr.	1.29 mr.	1.49 mr.	1.20 mr.	1.23 mr.
IFOV WIDTH X-SCAN	1.24 mr.	1.27 mr.	1.48 mr.	1.21 mr.	1.38 mr.

DATE 04-27-88

T/M 205 – Recal @ 15°

	CU3		ch4		ch5		BB#1 V	°C	#2 V	°C	#3	
15°C	2816.83	451	4638.20	750	2331.29	373	1.269	13.9	1.287	14.06	1.325	14.37
		450.693				.006						

#4		AVG
1.356	14.62	287.39