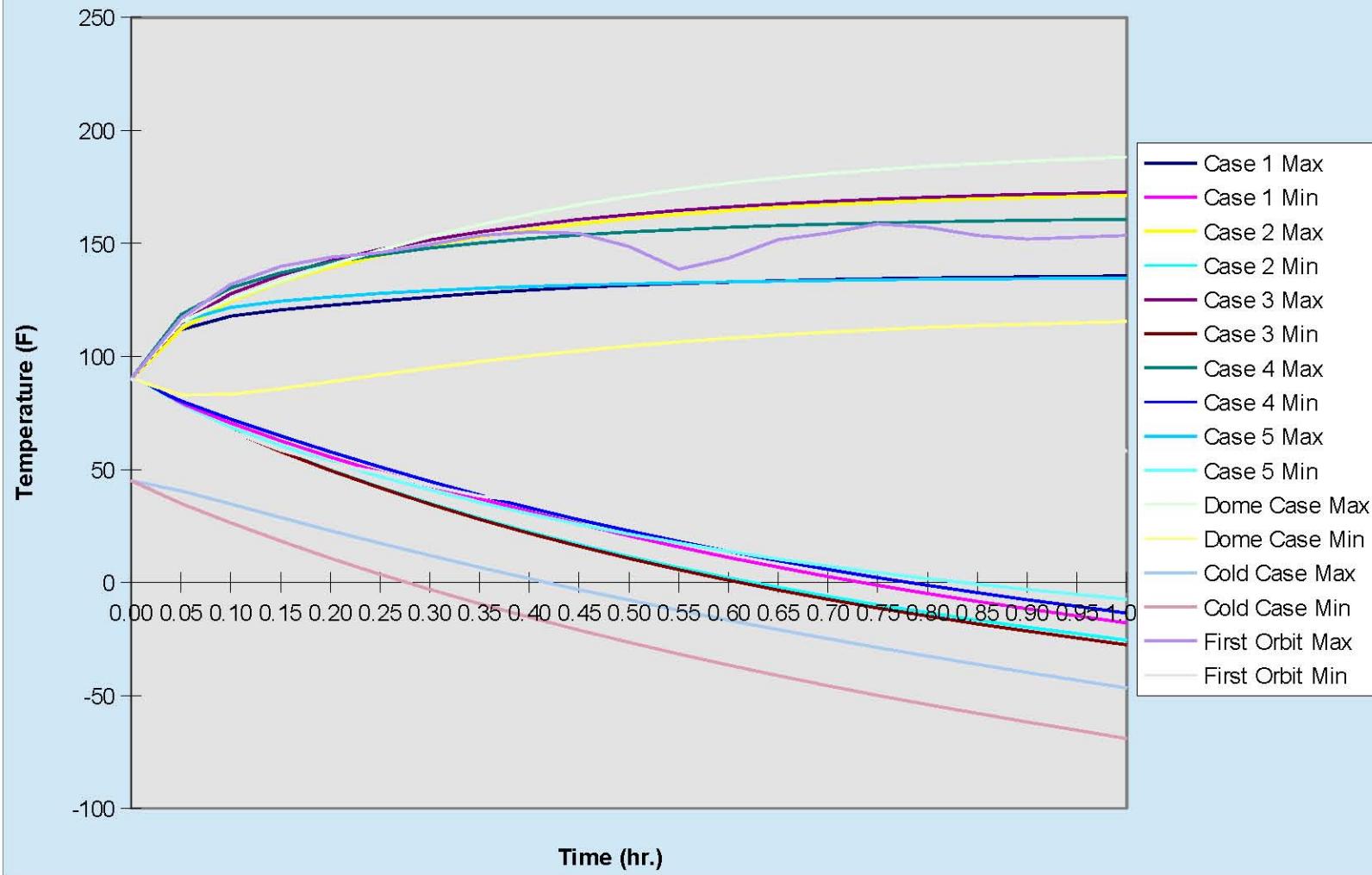


### Summary\_Table\_1

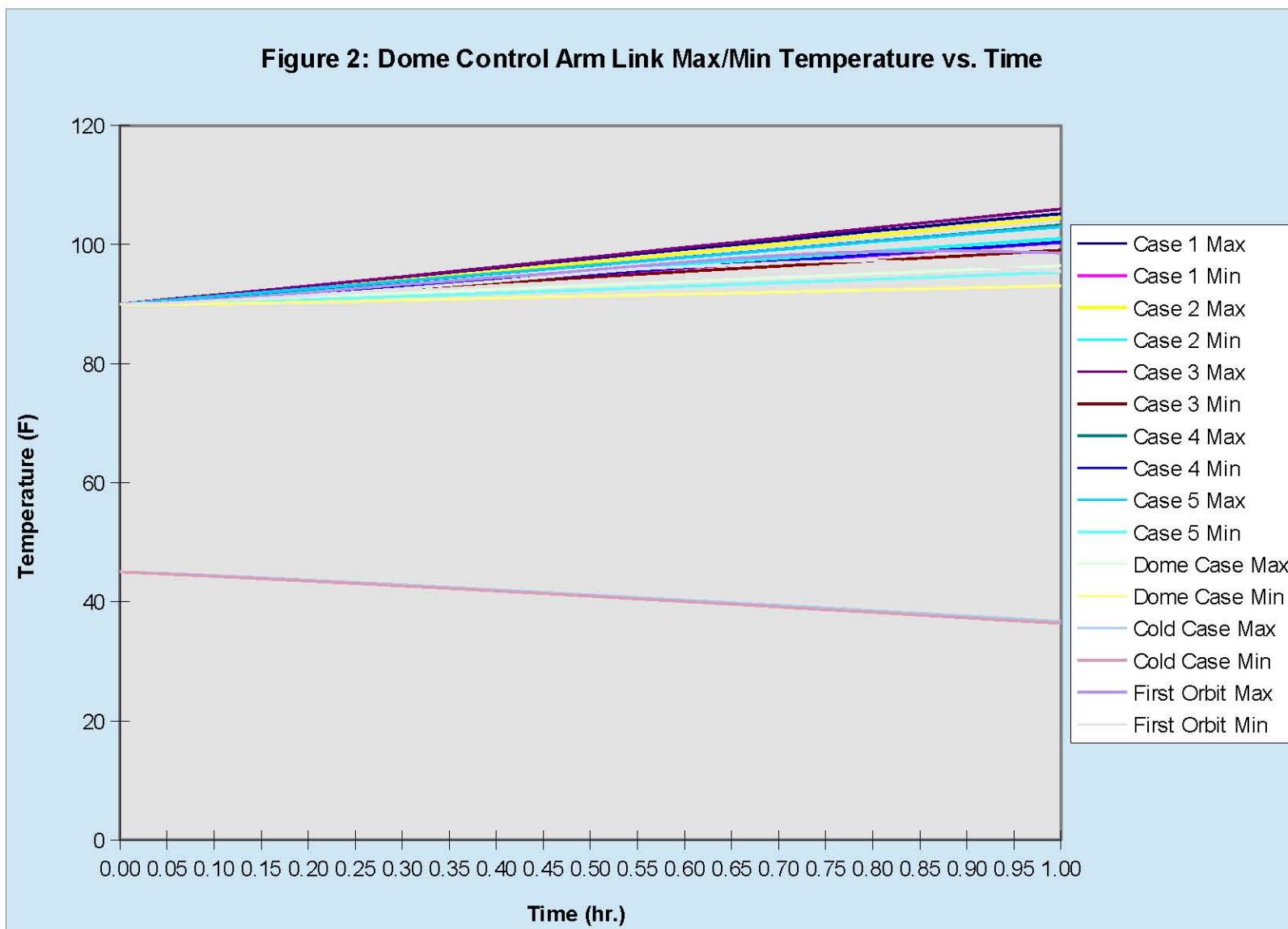
Table 1: PRELIMINARY Simplified Payload Bay Thermal Analysis Results																																													
Item	#	Allow Op temp				Allow Non Op				case 1 hot				case 2 hot				case 3 hot				case 4 hot				case 5 hot				case 6 dome				case cold		first orbit hot		Composite Results				Mat'l	Group	P/N	Nomenclature
		(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	(F)	(F)	(F)	(F)																
		(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)																	
1	Dome_Control_Arm:	-60	150	-100	250	135	-15	171	-23	172	-25	160	-11	135	-5	187	115	-43	-65	159	30	187	-65	cable	MECH	PSK10-37902	CABLE																		
2	Dome_Control_Arm_Link:	-160	250	-160	250	105	100	104	101	105	99	103	100	102	95	96	93	37	37	99	95	105	37	al	MECH	K10-37162	HINGE FITTING																		
3	Dome_Control_Cable_Shield:	-160	250	-160	250	45	45	50	45	49	45	45	49	45	49	48	109	90	11	11	83	63	109	11	al	MECH	K10-37191	GUARD, PIN BRKT																	
4	Dome_Control_Hinge:	-65	392	-65	392	89	70	89	71	89	71	89	70	89	73	150	85	44	31	89	75	150	31	wire	ELECT	K10-37854	WIRE HARNESS																		
5	Dome_Control_Wheel:	-160	250	-160	250	90	60	90	61	90	61	90	60	90	63	102	87	45	23	95	72	102	23	al	MECH	K10-37170	DRUM ASSY																		
6	Dome_Frame_Blanket:	-125	450	-125	450	-26	-75	3	-67	3	-67	-28	-78	4	-33	324	90	-79	-118	289	-25	324	-118	blknt	STRUCT	K10-37140	DOME ACOUSTIC BL																		
7	Dome_Frame_Closeout:	-160	350	-160	350	-48	-68	-3	-86	0	-66	-50	-71	26	-43	284	169	-90	-99	84	-16	284	-99	BMI	STRUCT	K10-37112	DOME FRAME																		
8	Dome_Frame_Skin_Inner:	-160	350	-160	350	5	-31	24	-29	23	-28	5	-32	23	1	282	103	-58	-69	159	0	282	-69	BMI	STRUCT	K10-37112	DOME FRAME																		
9	Dome_Frame_Skin_Outer:	-160	350	-160	350	159	6	163	-16	167	-10	163	-2	128	58	148	43	-47	-52	148	2	167	-52	BMI	STRUCT	K10-37112	DOME FRAME																		
10	Dome_Frame_Top:	-160	350	-160	350	-19	-26	6	-25	3	-26	-23	-30	7	-4	301	81	-56	-65	112	-1	301	-65	BMI	STRUCT	K10-37112	DOME FRAME																		
11	Dome_Hinge_Mount:	-160	350	N/A	350	75	75	77	75	77	75	75	77	121	118	34	34	86	79	121	34	121	34	BMI	MECH	K10-37171	HINGE SUPPORT																		
12	Dome_Lock_Act:	-65	160	-85	300	89	77	89	77	89	77	89	79	133	90	44	36	90	80	133	36	act	MECH	PSK10-37900	ACTUATOR, DOME LOCK																				
13	Dome_Skin_Blanket:	-125	450	-125	450	-3	-87	9	-72	7	-73	-22	-93	14	-40	314	55	-74	-133	237	-28	314	-133		STRUCT	K10-37140	DOME ACOUSTIC BL																		
14	Dome_Skin_Inner_Inner:	-160	350	-160	350	23	-12	31	-13	30	-13	5	-32	37	13	282	66	-54	-78	99	3	282	-78	BMI	STRUCT	K10-37116	DOME BOND ASSY																		
15	Dome_Skin_Inner_Outer:	-160	350	-160	350	170	52	173	15	170	18	150	11	185	139	103	45	-41	-65	151	4	185	-65	BMI	STRUCT	K10-37116	DOME BOND ASSY																		
16	Dome_TPS_Outer:	N/A	N/A	N/A	N/A	279	-125	260	-138	275	-124	269	-130	301	-82	308	-143	-153	-220	277	-189	308	-220	N/A	N/A	N/A	N/A	N/A	N/A	N/A															
17	Dome_TPS_Inner:	N/A	N/A	N/A	N/A	223	1	225	-57	221	-40	215	-23	243	67	167	202	-123	243	-123	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A														
18	Fwd_Aft_Frame:	-160	350	-160	350	96	91	93	87	93	87	93	88	91	84	86	79	38	36	93	88	96	36	BMI	STRUCT	K10-37313	FWD FAIR AFT CLOSE FRM																		
19	Fwd_Aft_Frame_Skirt_Inner:	-160	350	-160	350	97	89	92	82	91	82	91	85	88	78	85	73	34	31	95	87	97	31	BMI	STRUCT	K10-37313	FWD FAIR AFTB CLOSE FRM																		
20	Fwd_Aft_Frame_Skirt_Outer:	-160	350	-160	350	87	59	98	56	98	56	98	88	88	56	90	59	40	16	96	68	98	16	BMI	STRUCT	K10-37313	FWD FAIR AFTB CLOSE FRM																		
21	Fwd_Aft_Seal:	-65	350	-65	550	102	97	98	88	97	88	96	89	98	85	85	81	40	38	93	89	102	38	seal	ECS	K10-37958	FAIRING SEAL																		
22	Fwd_Dome_Actuator:	-65	160	-85	300	118	117	128	111	125	115	121	86	114	105	77	77	36	112	99	128	36	act	MECH	PSK10-37901	ACTUATOR, DOME ART																			
23	Fwd_Dome_Seal:	-65	350	-65	550	155	96	187	81	195	66	176	77	193	66	17	-24	-39	-46	168	60	195	-46	seal	ECS	K10-37955	DOME SEAL																		
24	Fwd_Fwd_Frame_Attach_Inner:	-160	350	-160	350	201	181	192	133	203	132	197	142	197	137	-13	-28	-44	-55	272	51	272	-55	BMI	STRUCT	K10-37313	FWD FAIR FWD CL FRA																		
25	Fwd_Fwd_Frame_Attach_Outer:	-160	350	-160	350	134	96	129	92	135	74	133	104	121	76	59	26	15	-11	124	89	135	-11	BMI	STRUCT	K10-37313	FWD FAIR FWD CL FRA																		
26	Fwd_Fwd_Frame_Cap:	-160	350	-160	350	252	227	241	154	250	152	246	163	243	157	-27	-41	-55	-66	230	38	252	-66	BMI	STRUCT	K10-37313	FWD FAIR FWD CL FRA																		
27	Fwd_Skin_Inner:	-160	350	N/A	350	122	94	126	93	132	92	129	93	125	90	84	66	40	27	114	90	132	27	BMI	STRUCT	K10-37316	FWD FAIR SKIN BOND																		
28	Fwd_Skin_Outer:	-160	350	N/A	350	95	80	102	60	100	60	101	71	94	59	90	54	41	14	96	69	102	14	BMI	STRUCT	K10-37316	FWD FAIR SKIN BOND																		
29	Fwd_TPS:	N/A	N/A	N/A	N/A	393	-183	341	-183	359	-183	342	-183	342	-183	166	-185	-53	-194	401	-125	401	-194	N/A	N/A	N/A	N/A	N/A	N/A	N/A															
30	Aft_Aft_Frame_Inner:	-160	350	-160	350	120	100	107	81	106	81	103	82	92	69	75	62	21	20	97	86	120	20	BMI	STRUCT	K10-37613	AFT FAIR AFT CL FRAM																		
31	Aft_Aft_Frame_Outer:	-160	350	-160	350	98	89	93	83	92	83	92	84	87	79	84	77	34	34	91	86	98	34	BMI	STRUCT	K10-37613	AFT FAIR AFT CL FRAM																		
32	Aft_Blanket_Lower:	-125	450	-125	450	225	147	217	92	224	91	220	93	204	91	38	24	3	-12	212	77	225	-12	blknt	STRUCT	K10-37641	AFT FAIR ACOUSTIC BL																		
33	Aft_Blanket_Upper:	-125	450	-125	450	142	114	205	104	204	105	214	104	208	103	9	-2	-14	-35	200	58	214	-35	blknt	STRUCT	K10-37641	AFT FAIR ACOUSTIC BL																		
34	Aft_Center_Panel:	-160	350	-160	350	77	75	300	85	295	85	292	86	291	85	44	41	10	8	145	98	300	8	BMI	STRUCT	K10-37616	AFT FAIR CLOSE PAN																		
35	Aft_Closeout_Panels:	-160	350	-160	350	348	239	28																																					

Figure\_1\_dome\_control\_arm

**Figure 1: Dome Control Arm Max/Min Temperature vs. Time**

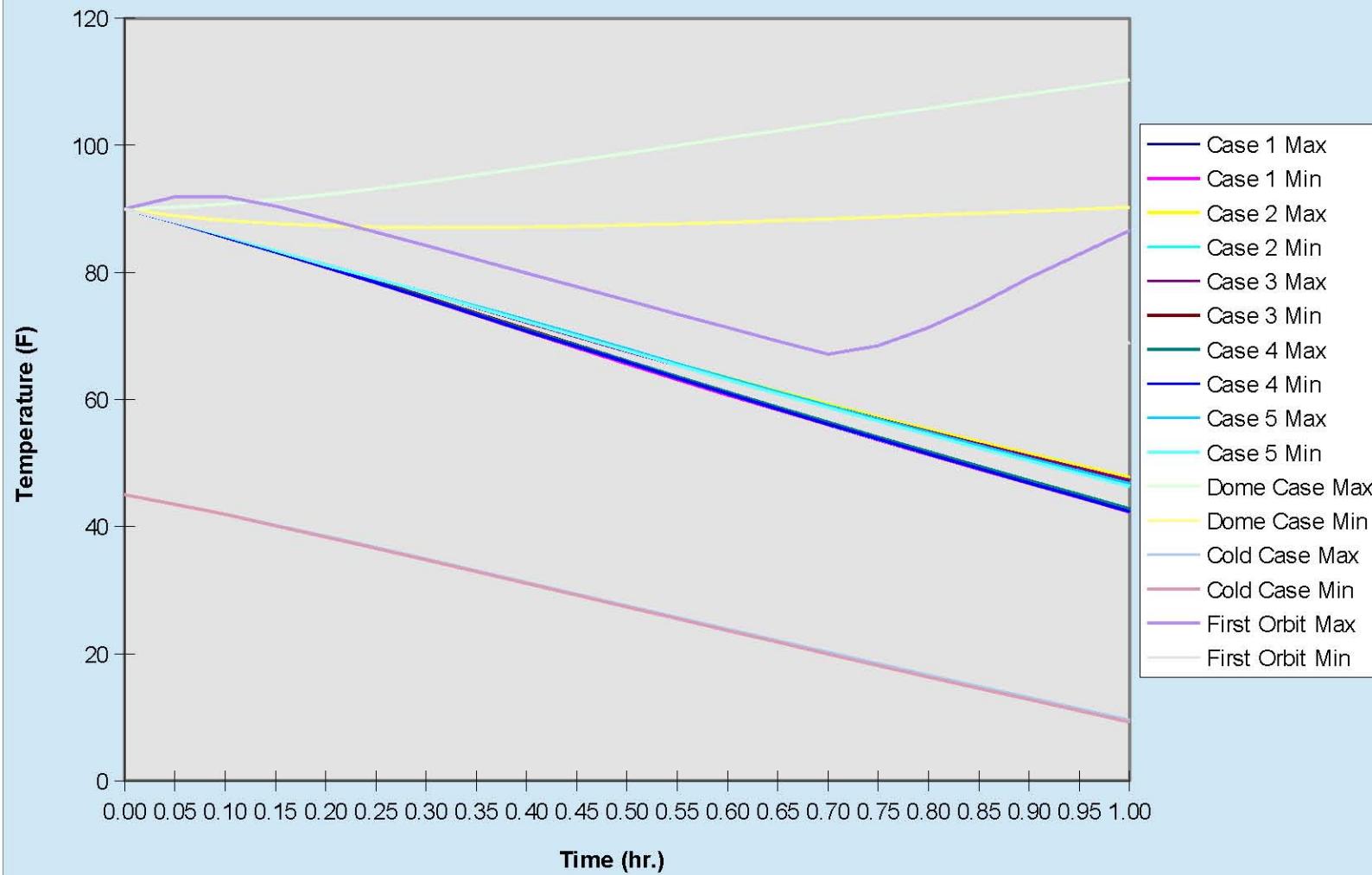


**Figure 2: Dome Control Arm Link Max/Min Temperature vs. Time**



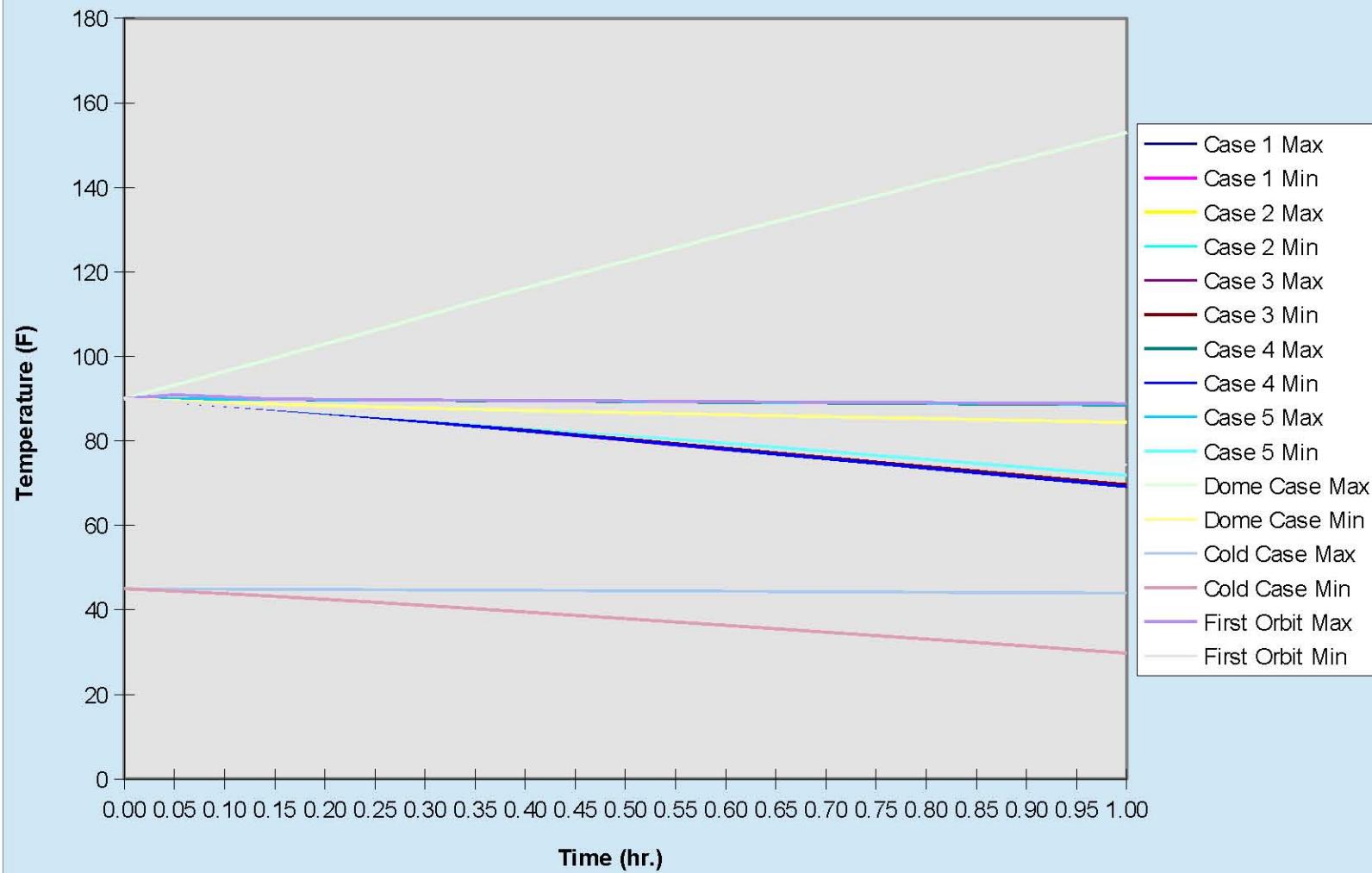
Figure\_3\_dome\_control\_cable\_shd

**Figure 3: Dome Control Cable Shield Max/Min Temperature vs. Time**



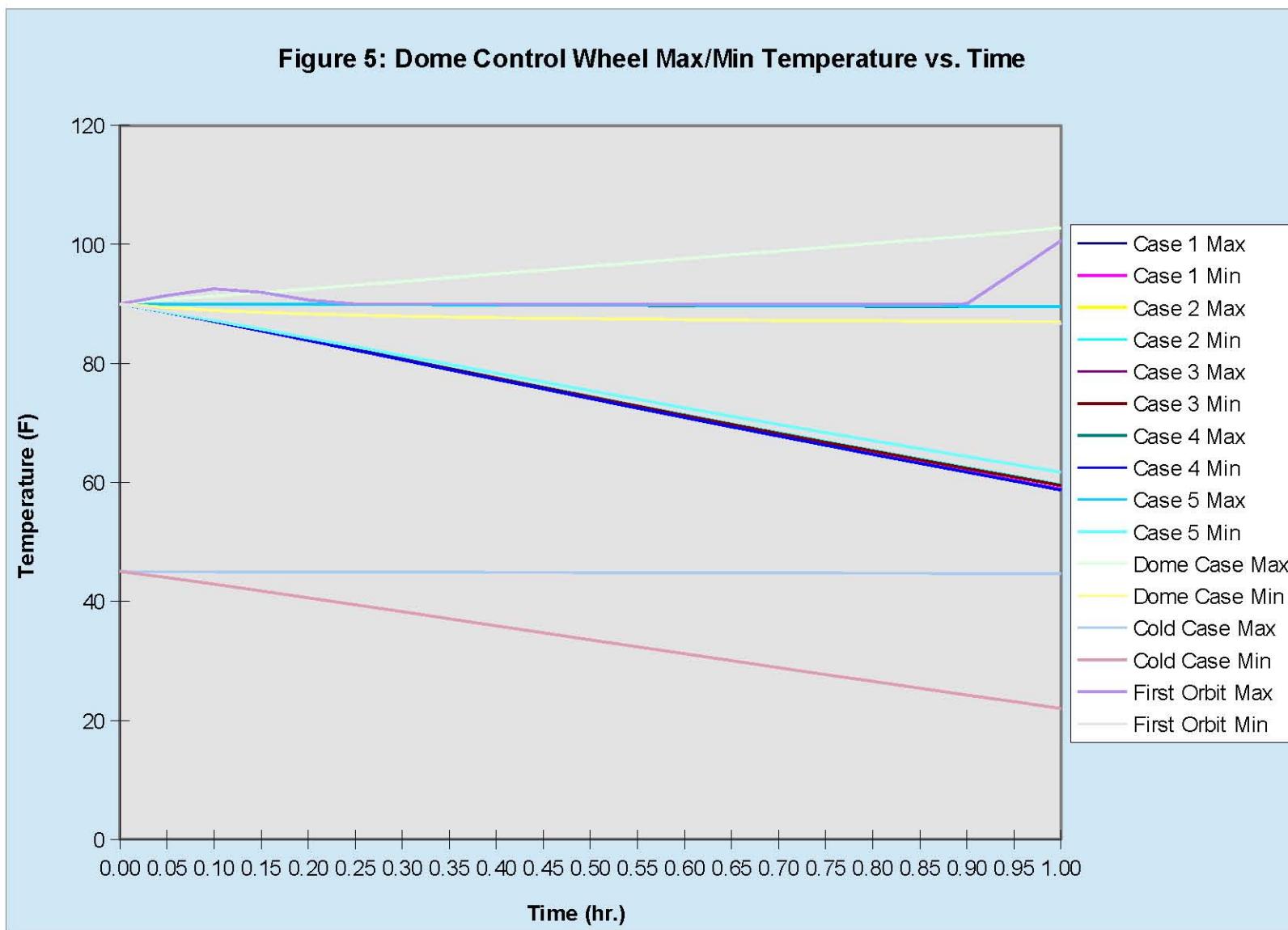
Figure\_4\_dome\_control\_hinge

**Figure 4: Dome Control Hinge Max/Min Temperature vs. Time**



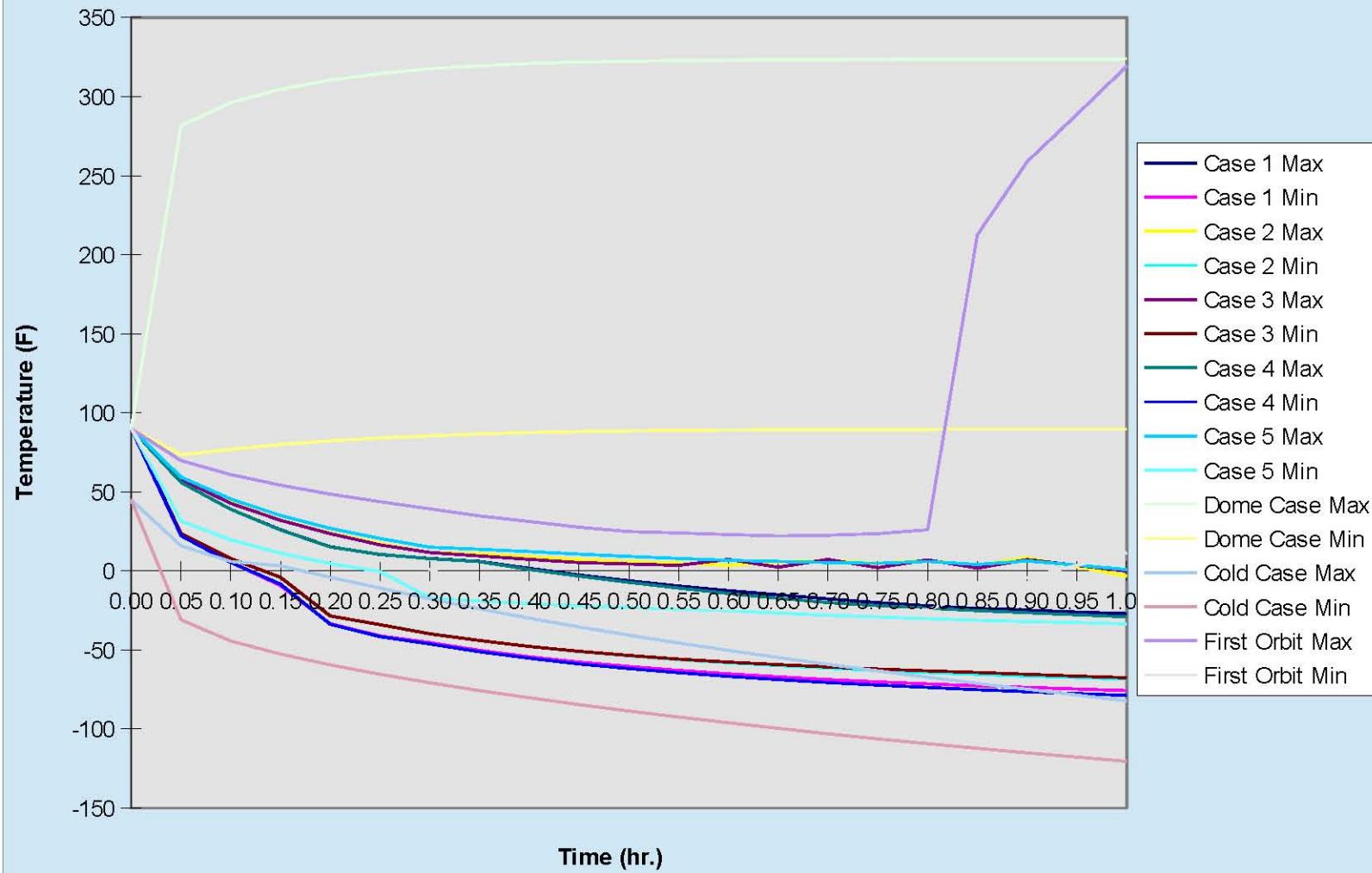
Figure\_5\_dome\_control\_wheel

**Figure 5: Dome Control Wheel Max/Min Temperature vs. Time**



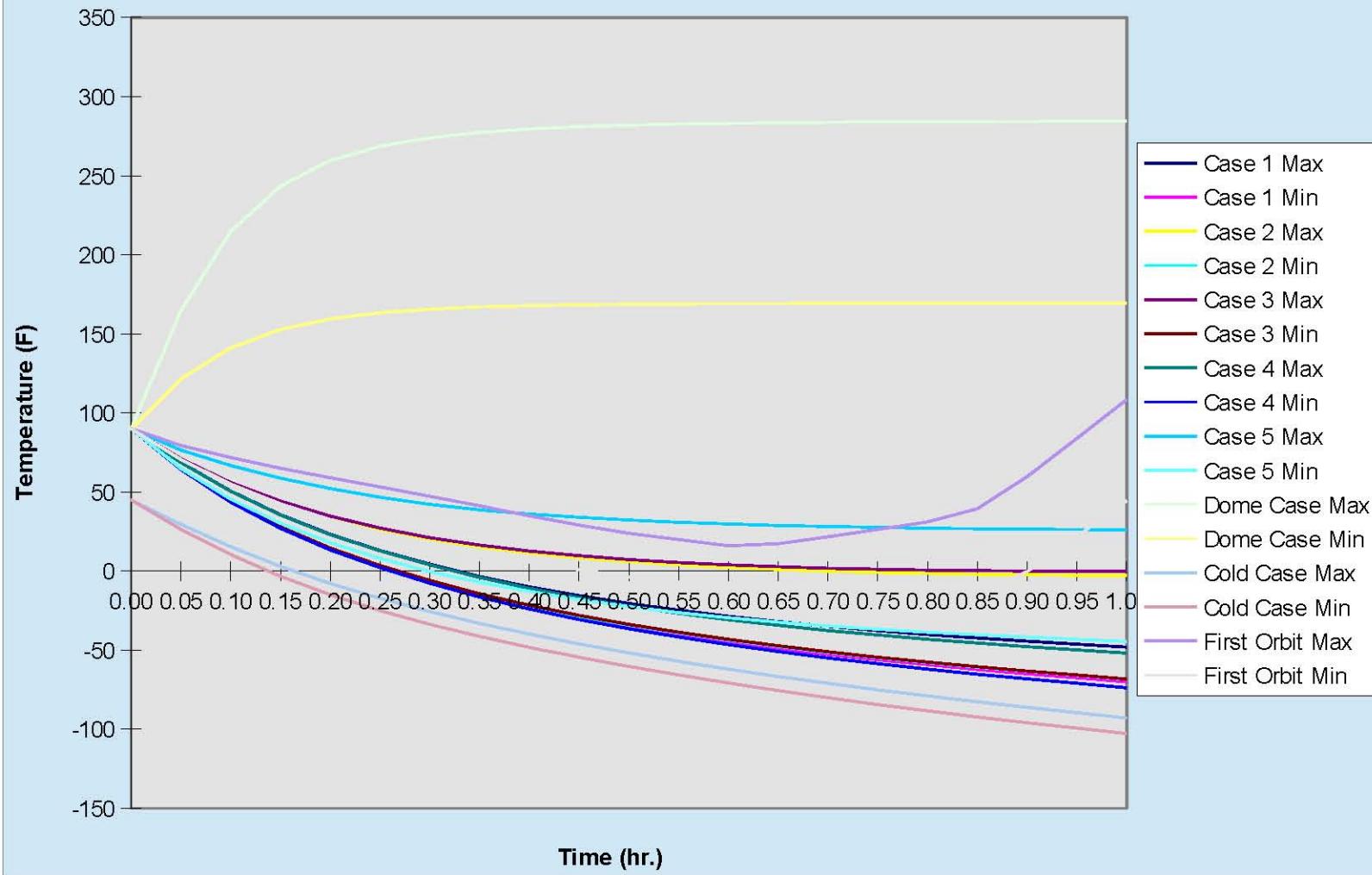
Figure\_6\_dome\_frame\_blanket

**Figure 6: Dome Frame Blanket Max/Min Temperature vs. Time**



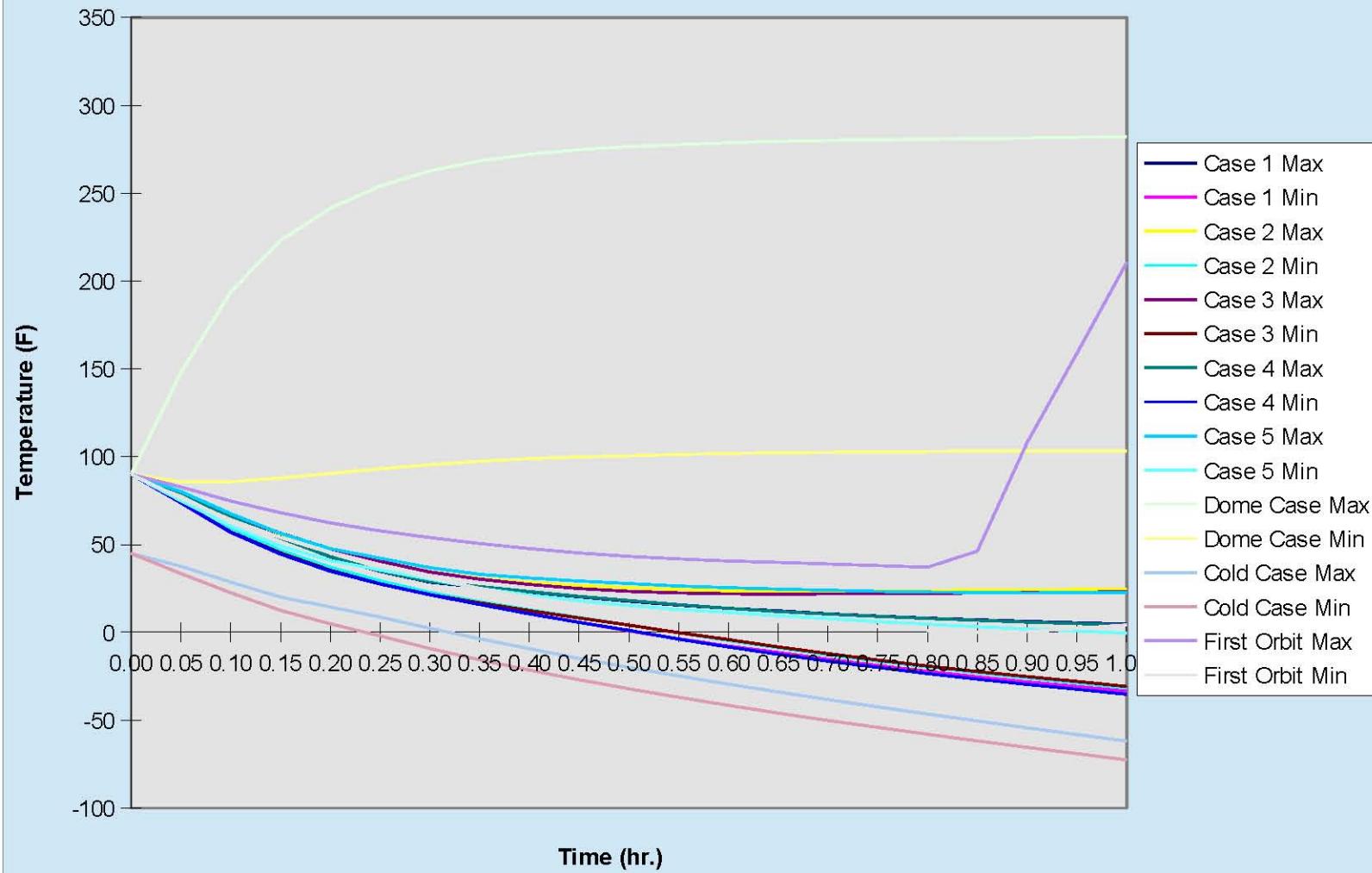
Figure\_7\_dome\_frame\_closeout

**Figure 7: Dome Frame Closeout Max/Min Temperature vs. Time**



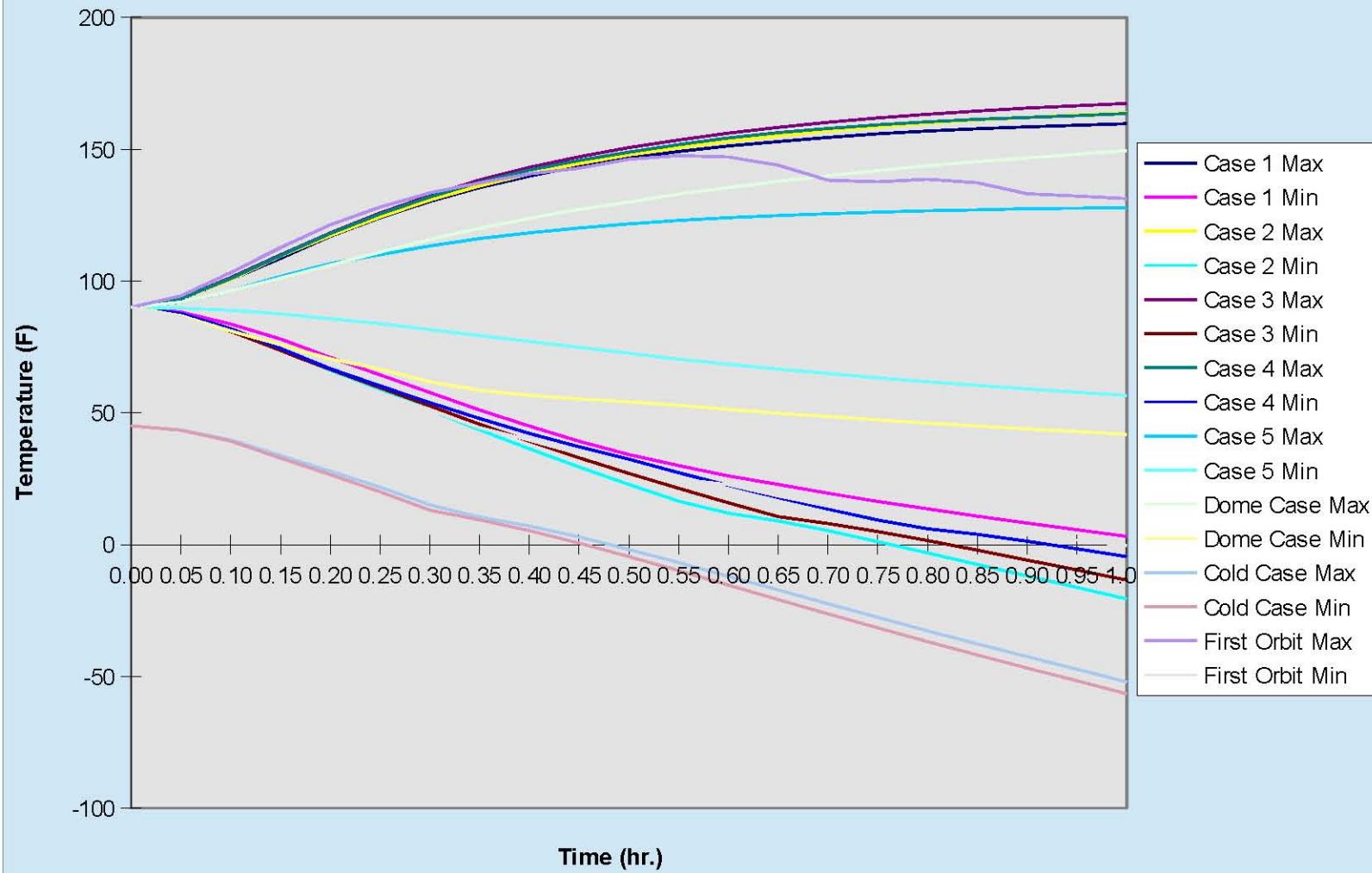
Figure\_8\_dome\_frame\_skin\_inner

**Figure 8: Dome Frame Skin Inner Max/Min Temperature vs. Time**

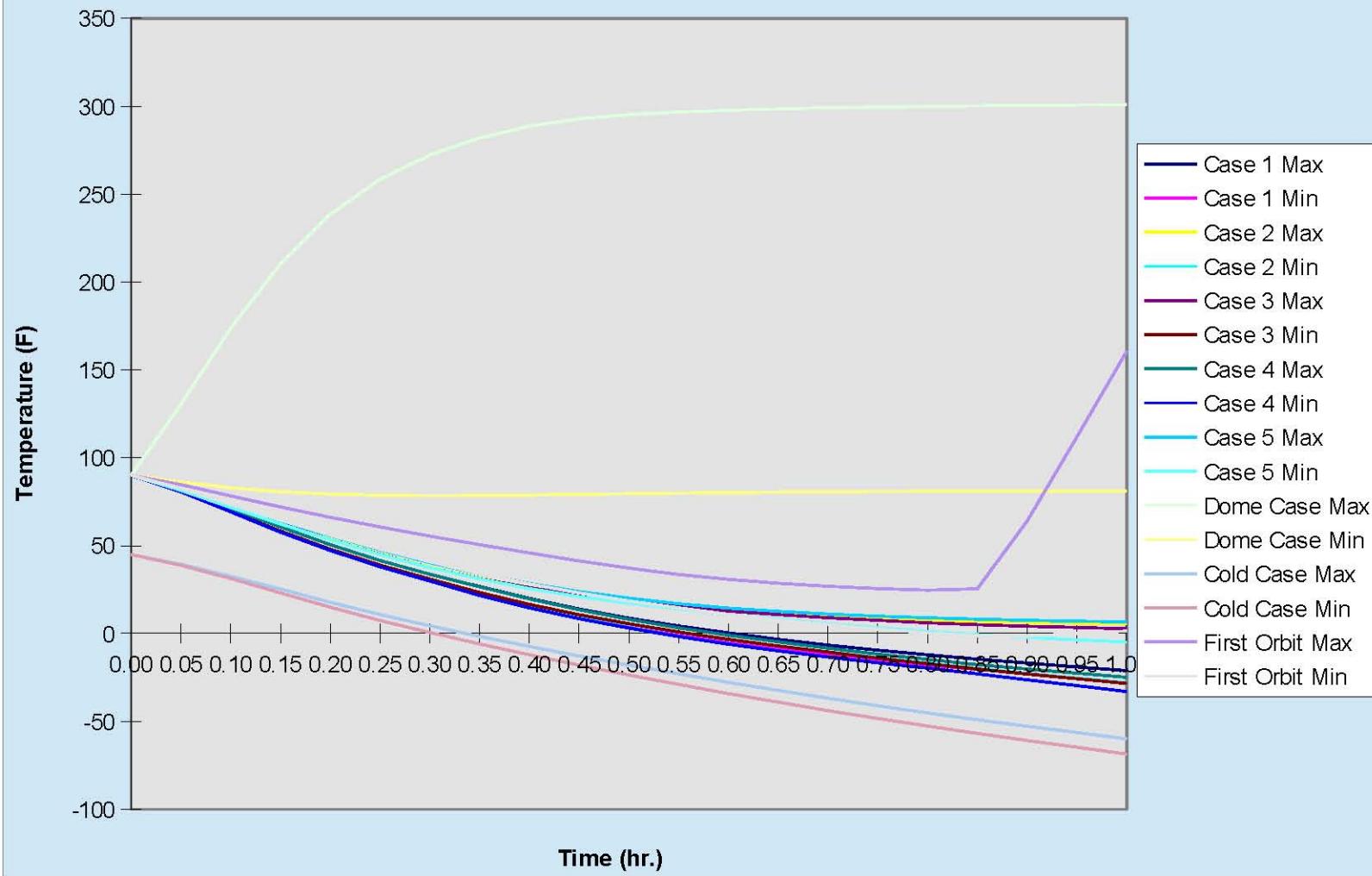


Figure\_9\_dome\_frame\_skin\_outer

**Figure 9: Dome Frame Skin Outer Max/Min Temperature vs. Time**

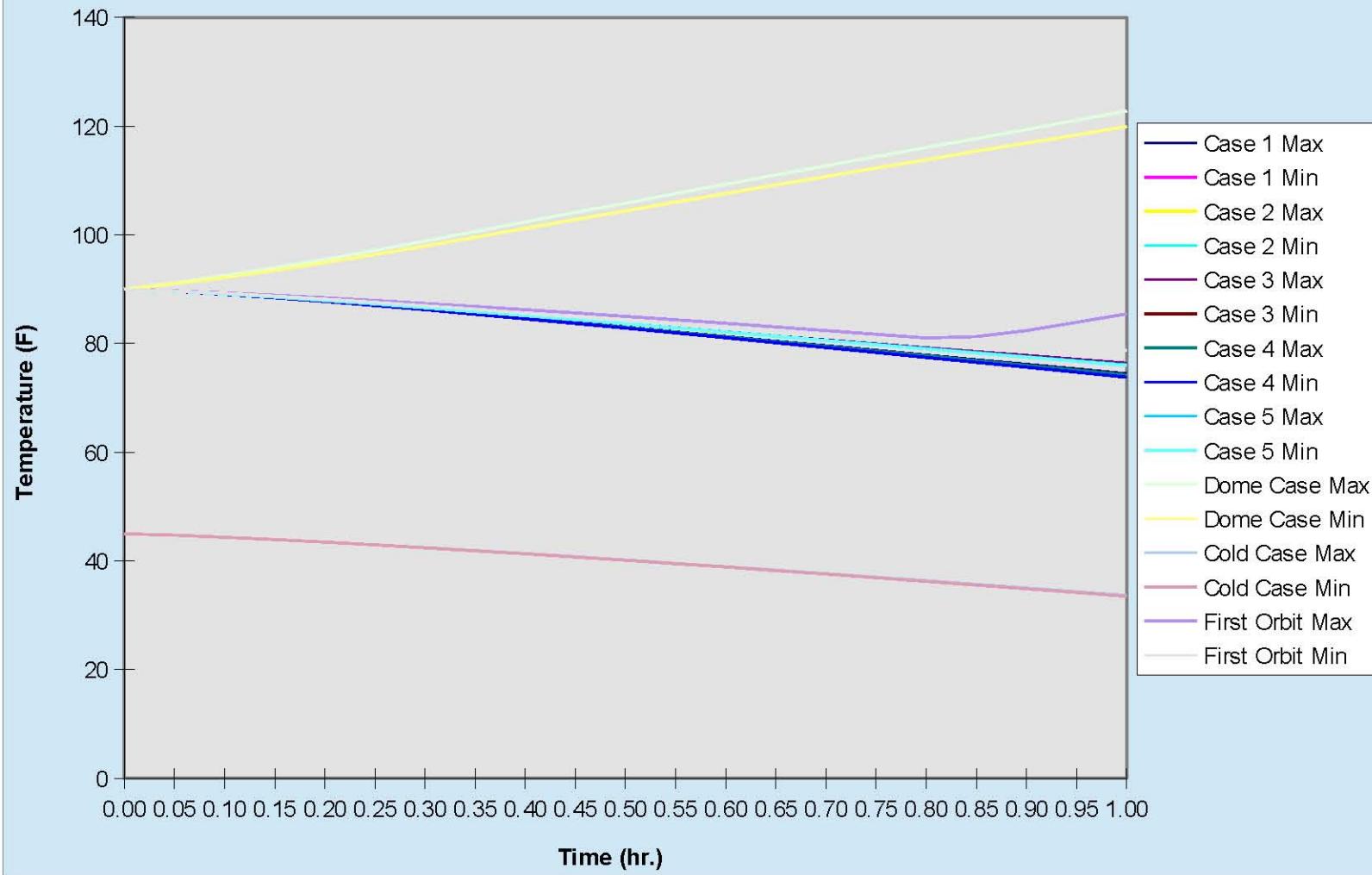


**Figure 10: Dome Frame Top Max/Min Temperature vs. Time**



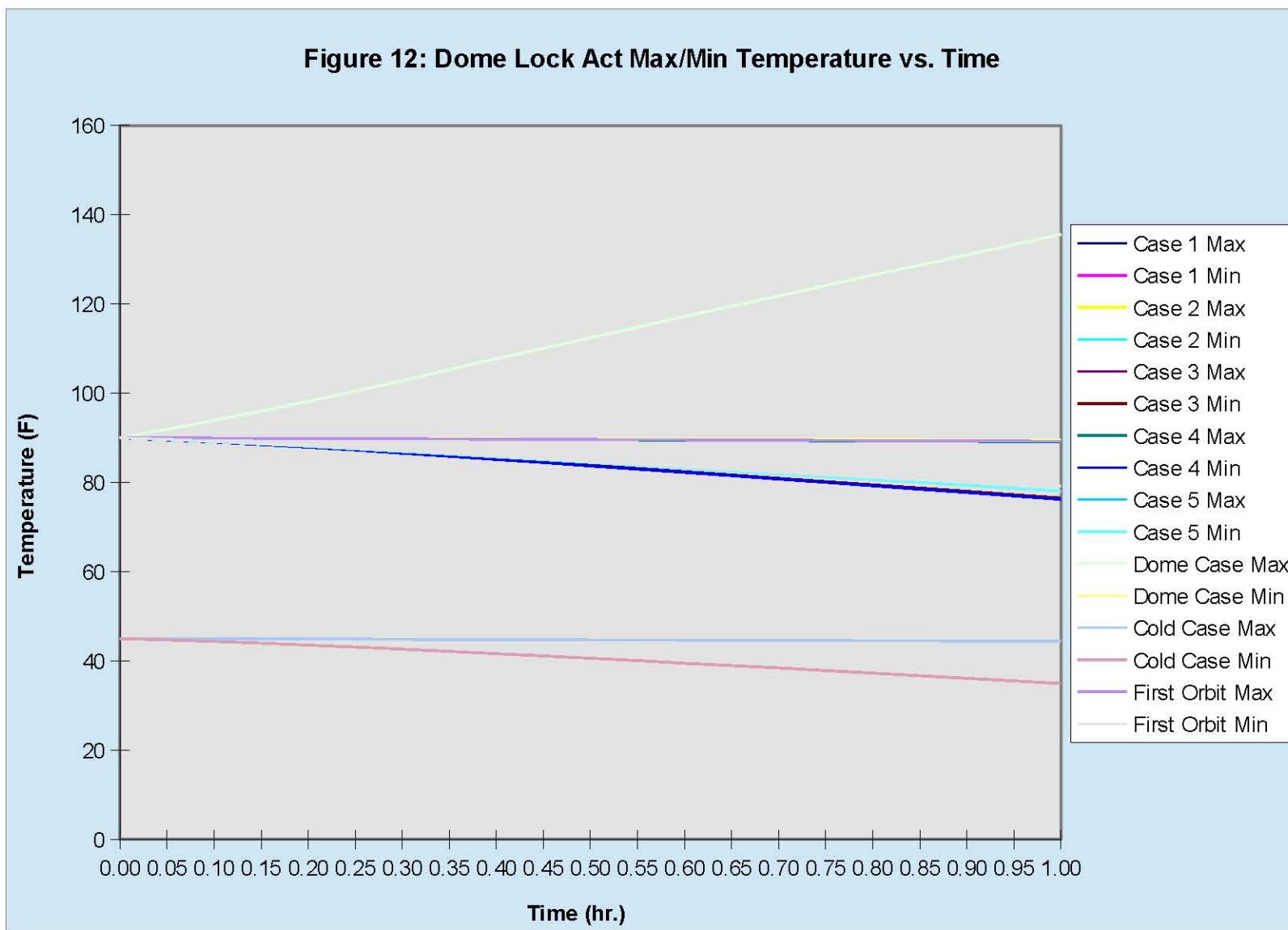
Figure\_11\_dome\_hinge\_mount

**Figure 11: Dome Hinge Mount Max/Min Temperature vs. Time**



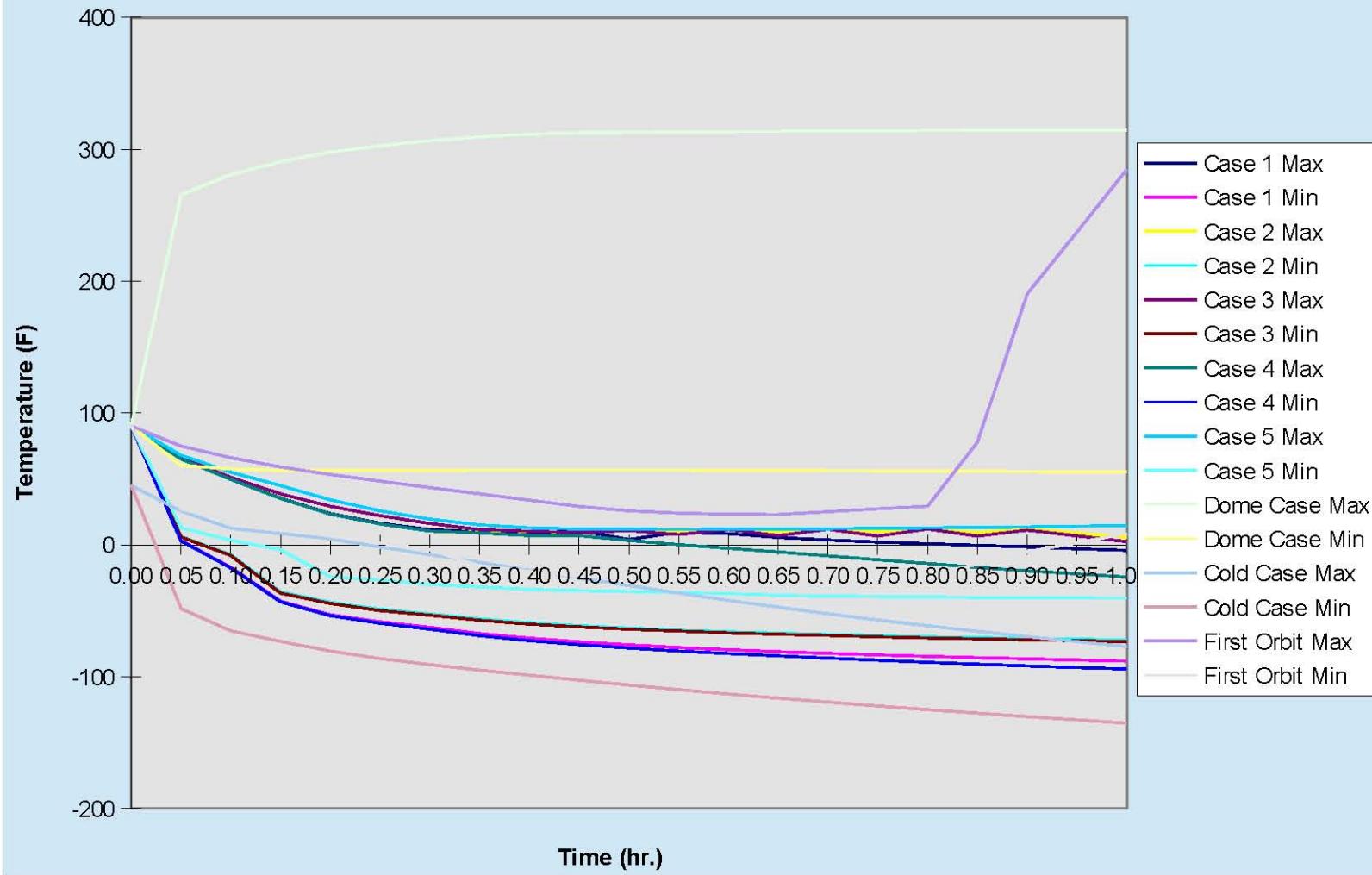
Figure\_12\_dome\_lock\_act

**Figure 12: Dome Lock Act Max/Min Temperature vs. Time**



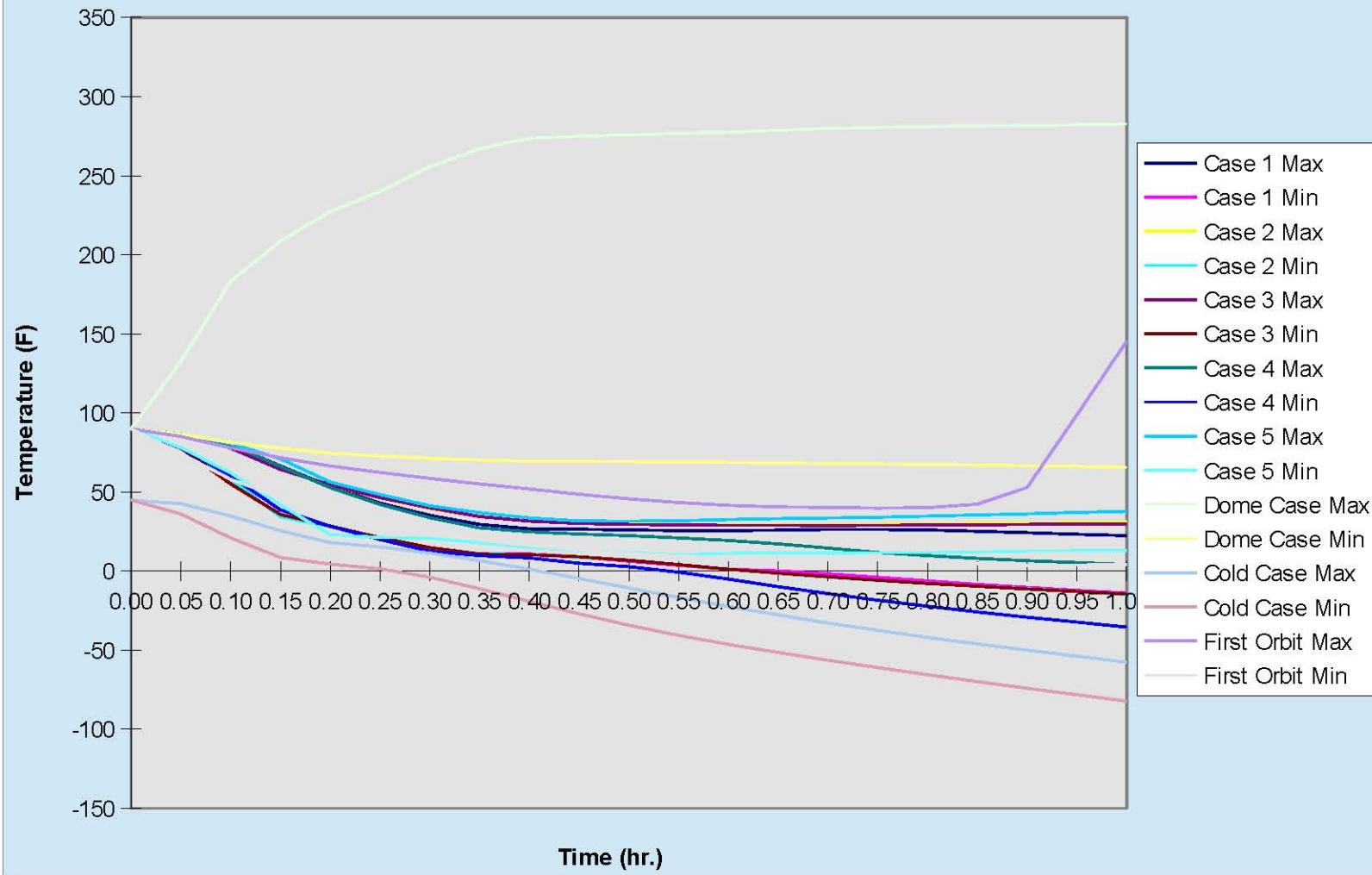
Figure\_13\_dome\_skin\_blanket

**Figure 13: Dome Skin Blanket Max/Min Temperature vs. Time**



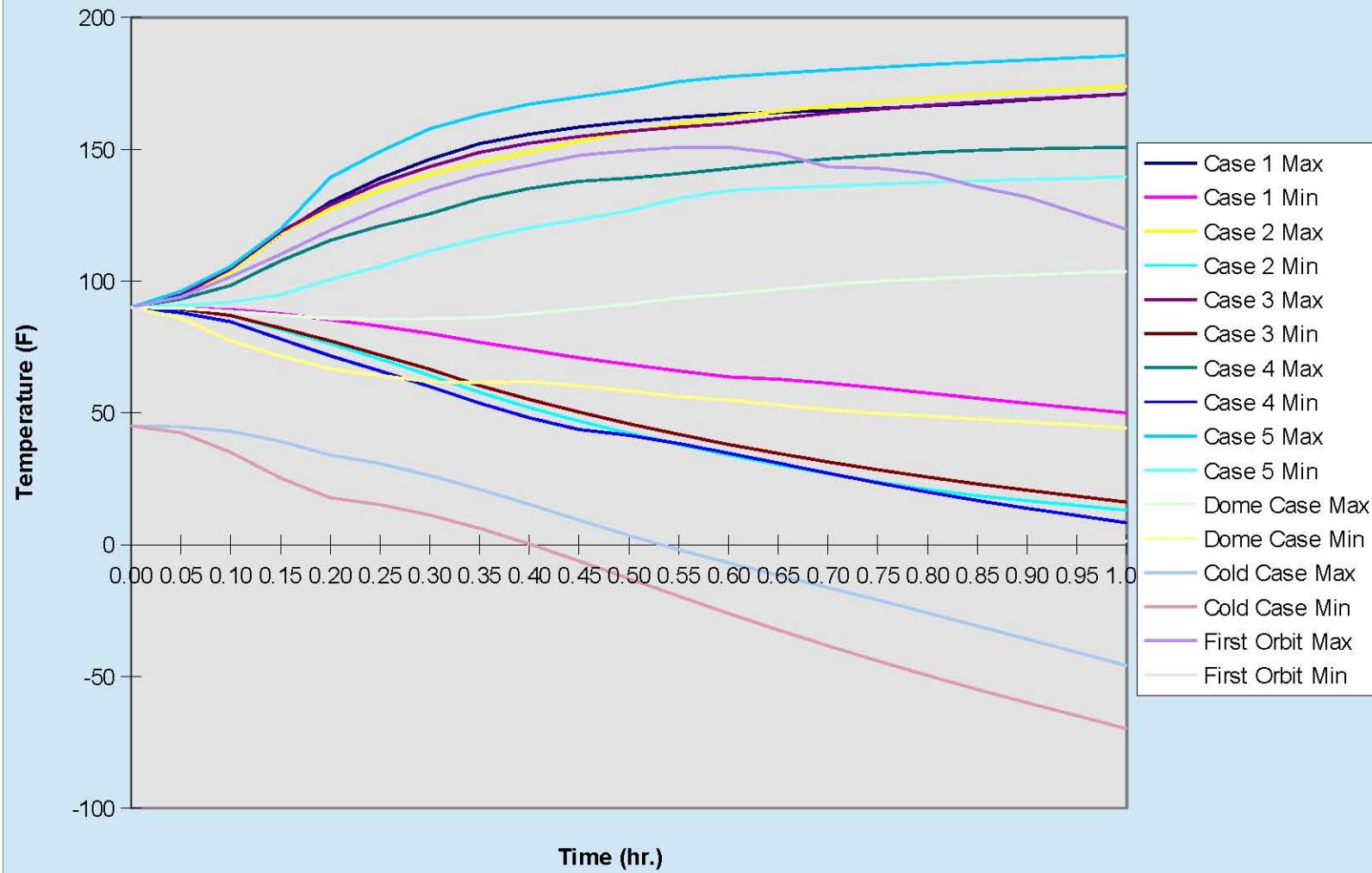
Figure\_14\_dome\_skin\_inner

**Figure 14: Dome Skin Inner Max/Min Temperature vs. Time**



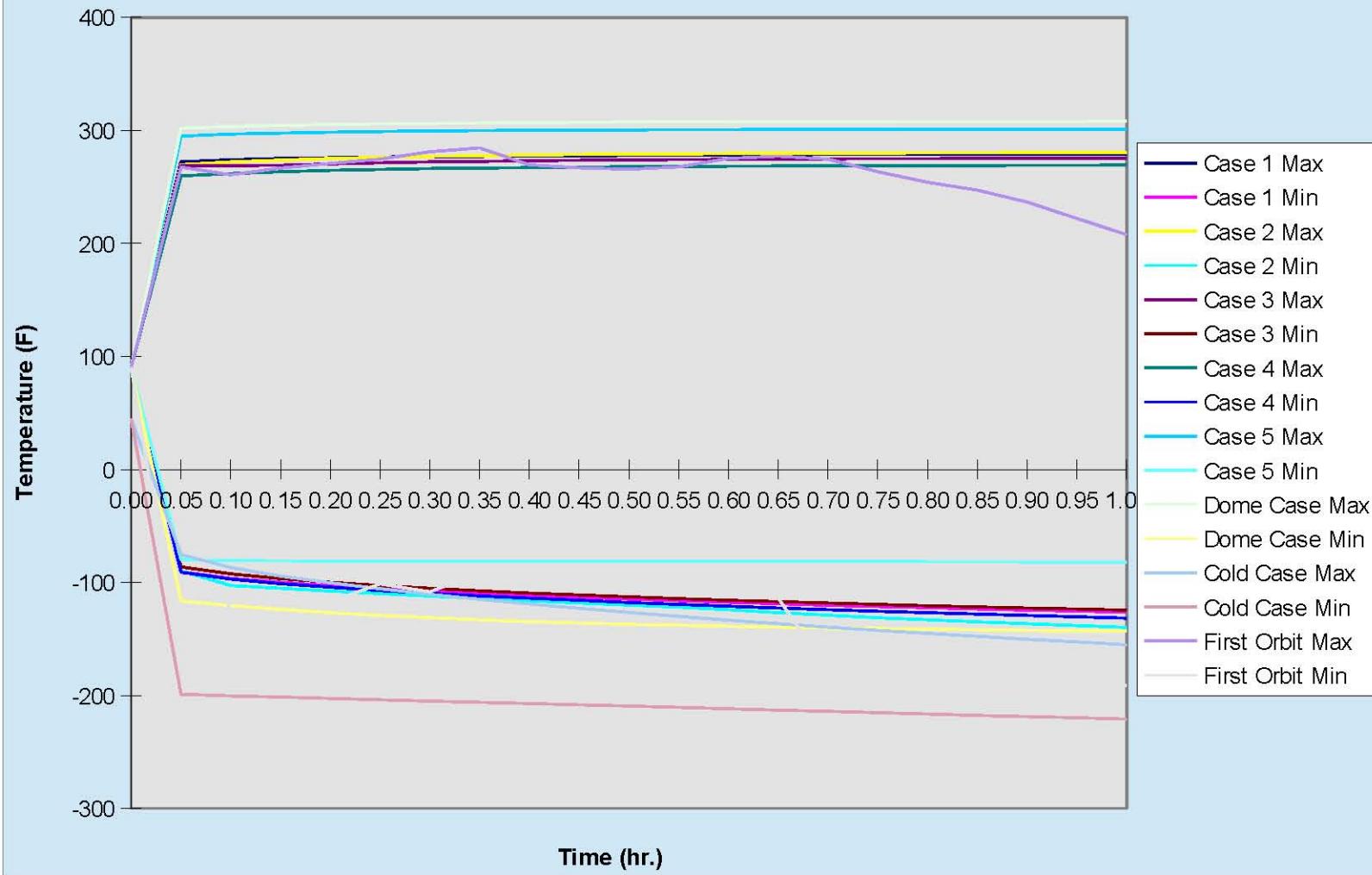
Figure\_15\_dome\_skin\_outer

**Figure 15: Dome Skin Outer Max/Min Temperature vs. Time**



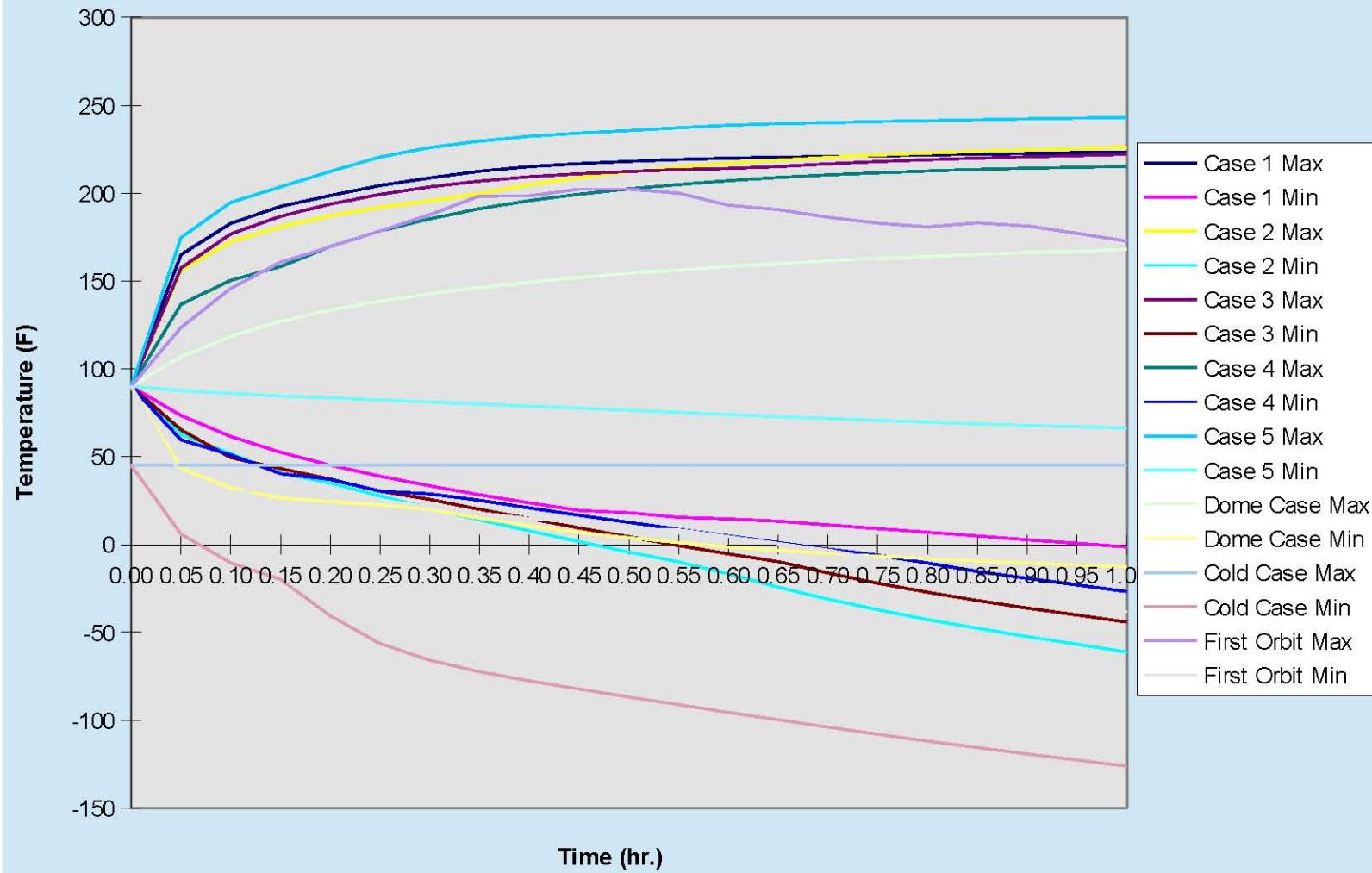
Figure\_16\_dome\_tps\_outer

**Figure 16: Dome TPS Outer Max/Min Temperature vs. Time**

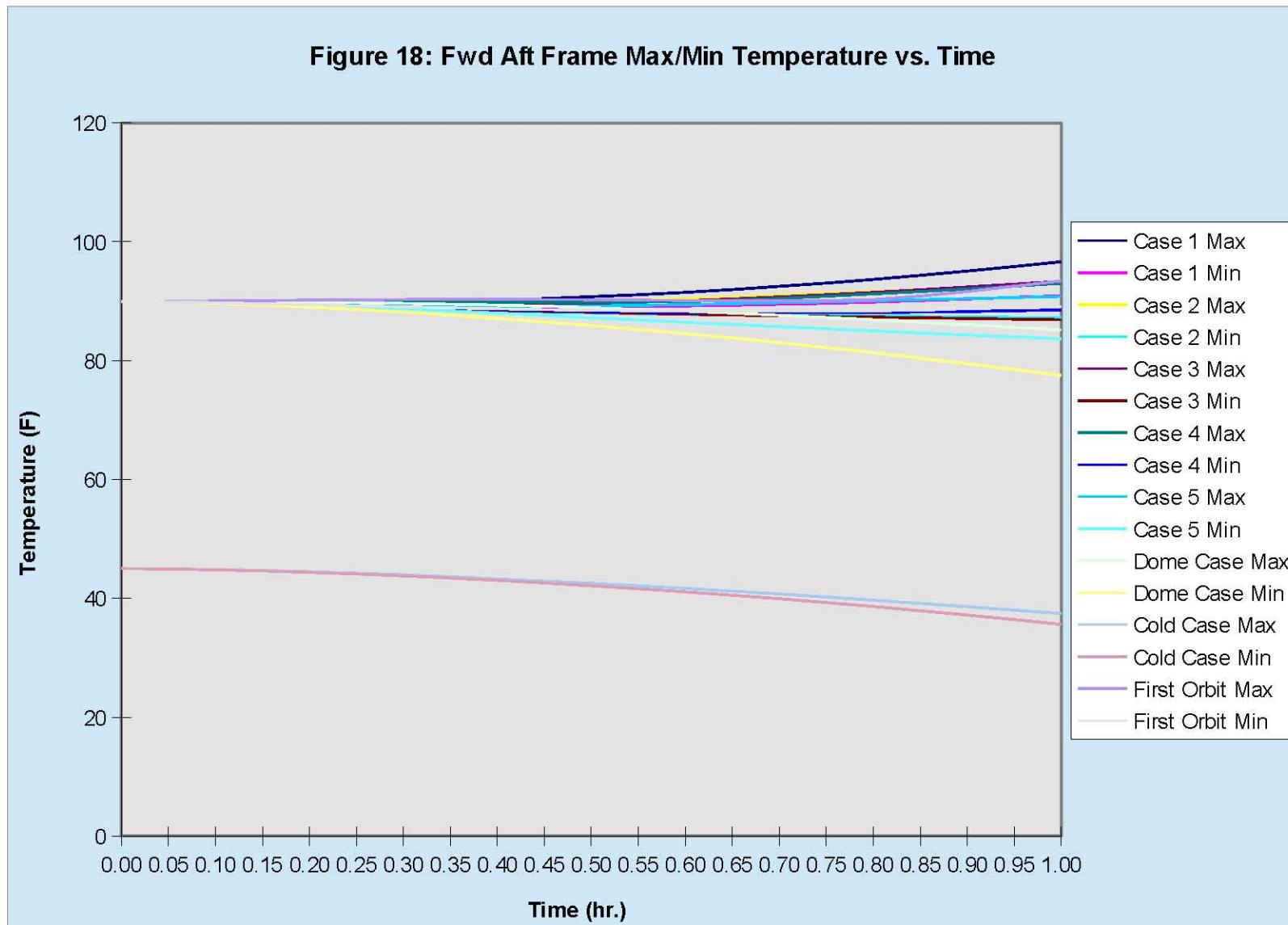


Figure\_17\_dome\_tps\_inner

**Figure 17: Dome TPS Inner Max/Min Temperature vs. Time**

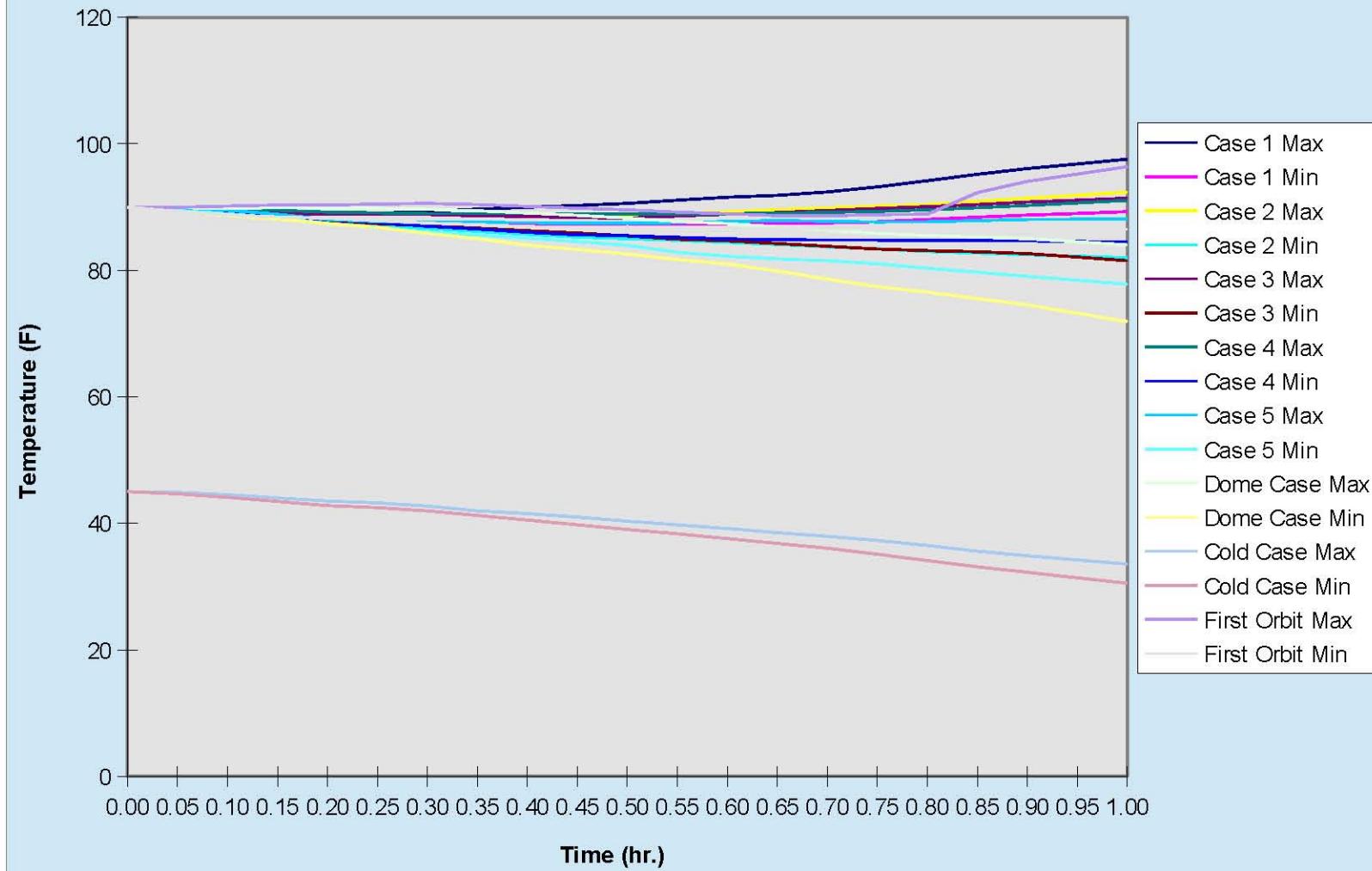


Figure\_18\_fwd\_aft\_frame



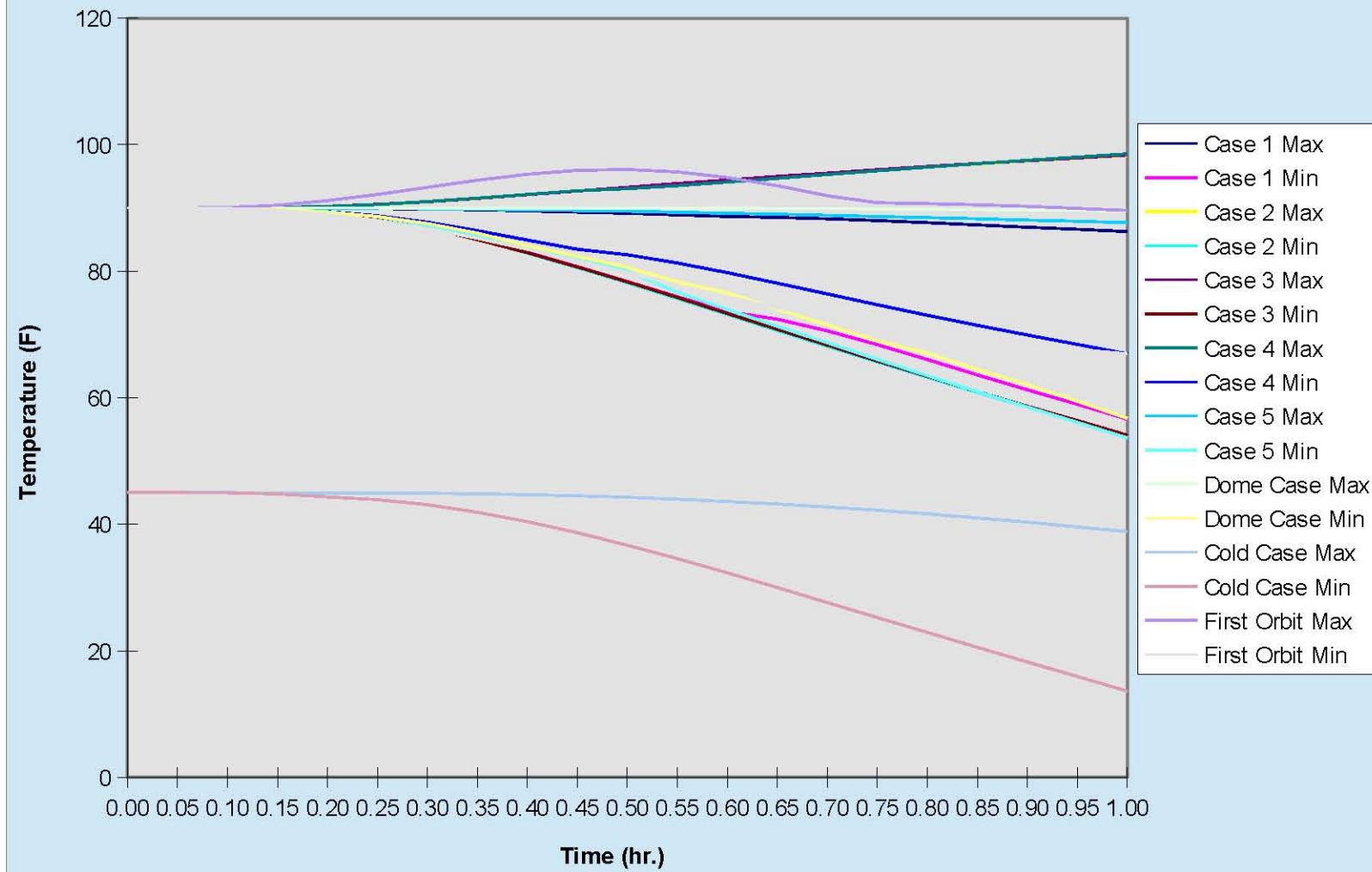
Figure\_19\_fwd\_aft\_frame\_skirt\_I

**Figure 19: Fwd Aft Frame Skirt Inner Max/Min Temperature vs. Time**

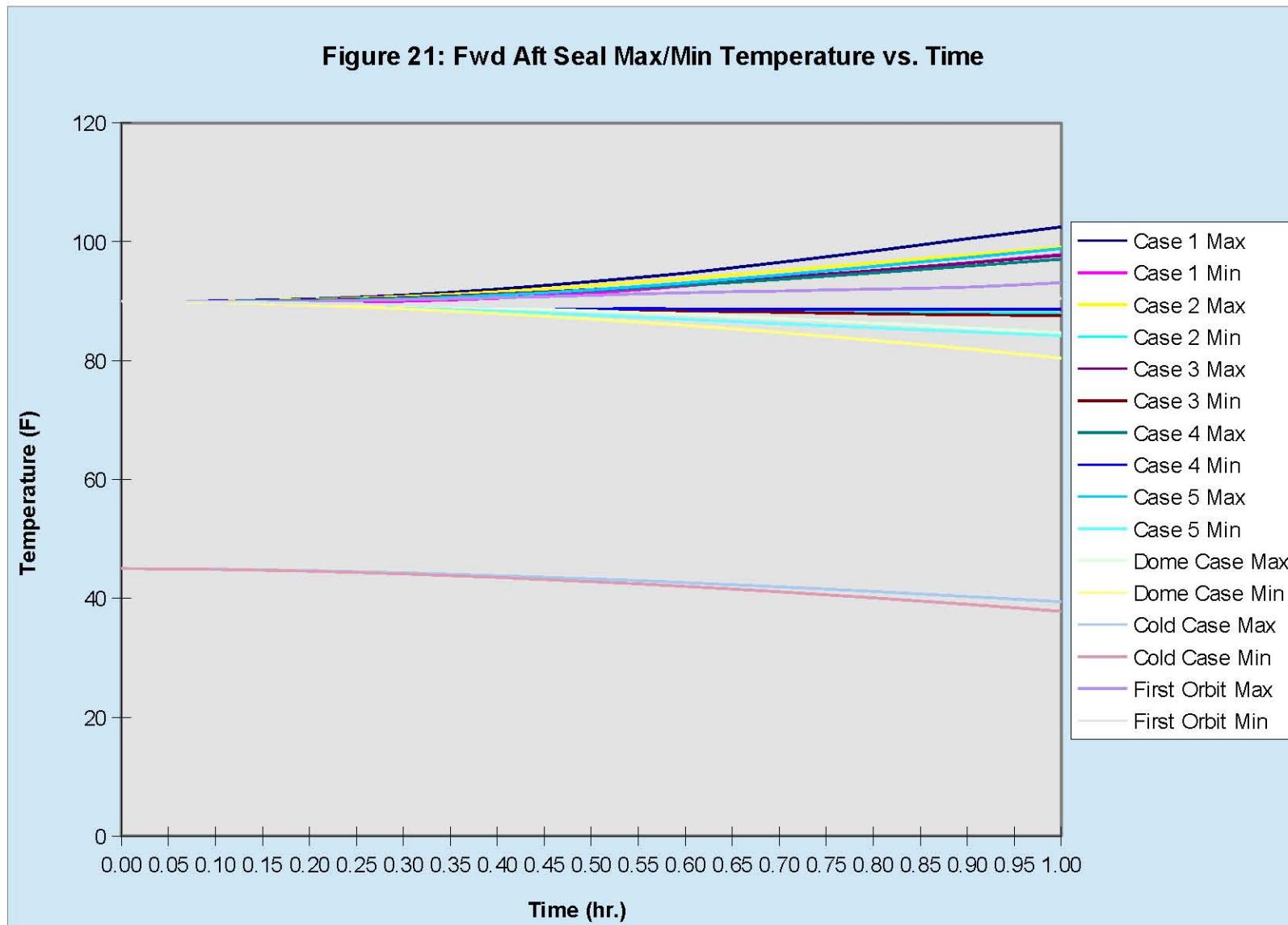


Figure\_20\_fwd\_aft\_frame\_skirt\_O

**Figure 20: Fwd Aft Frame Skirt Outer Max/Min Temperature vs. Time**

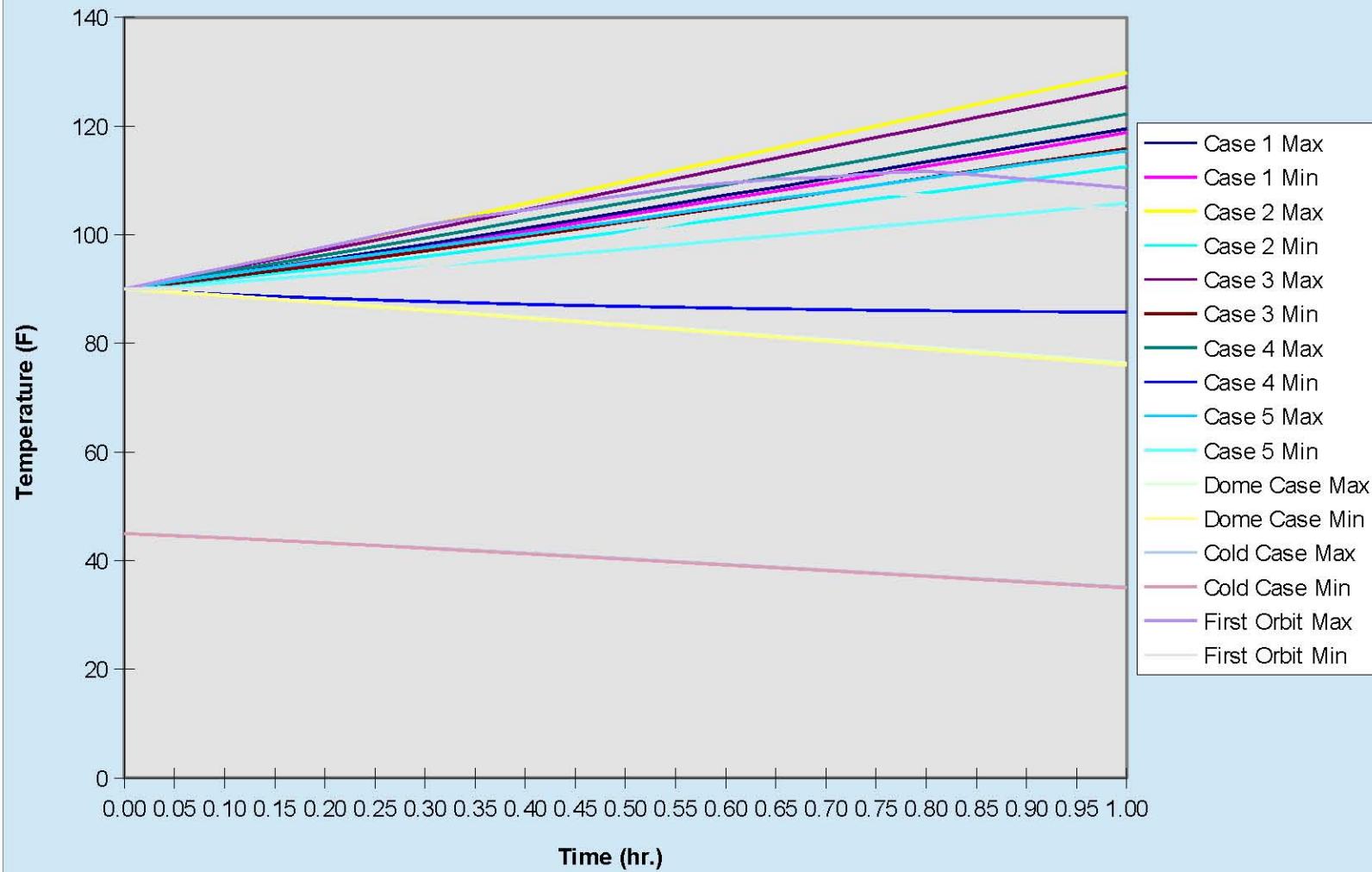


Figure\_21\_fwd\_aft\_seal



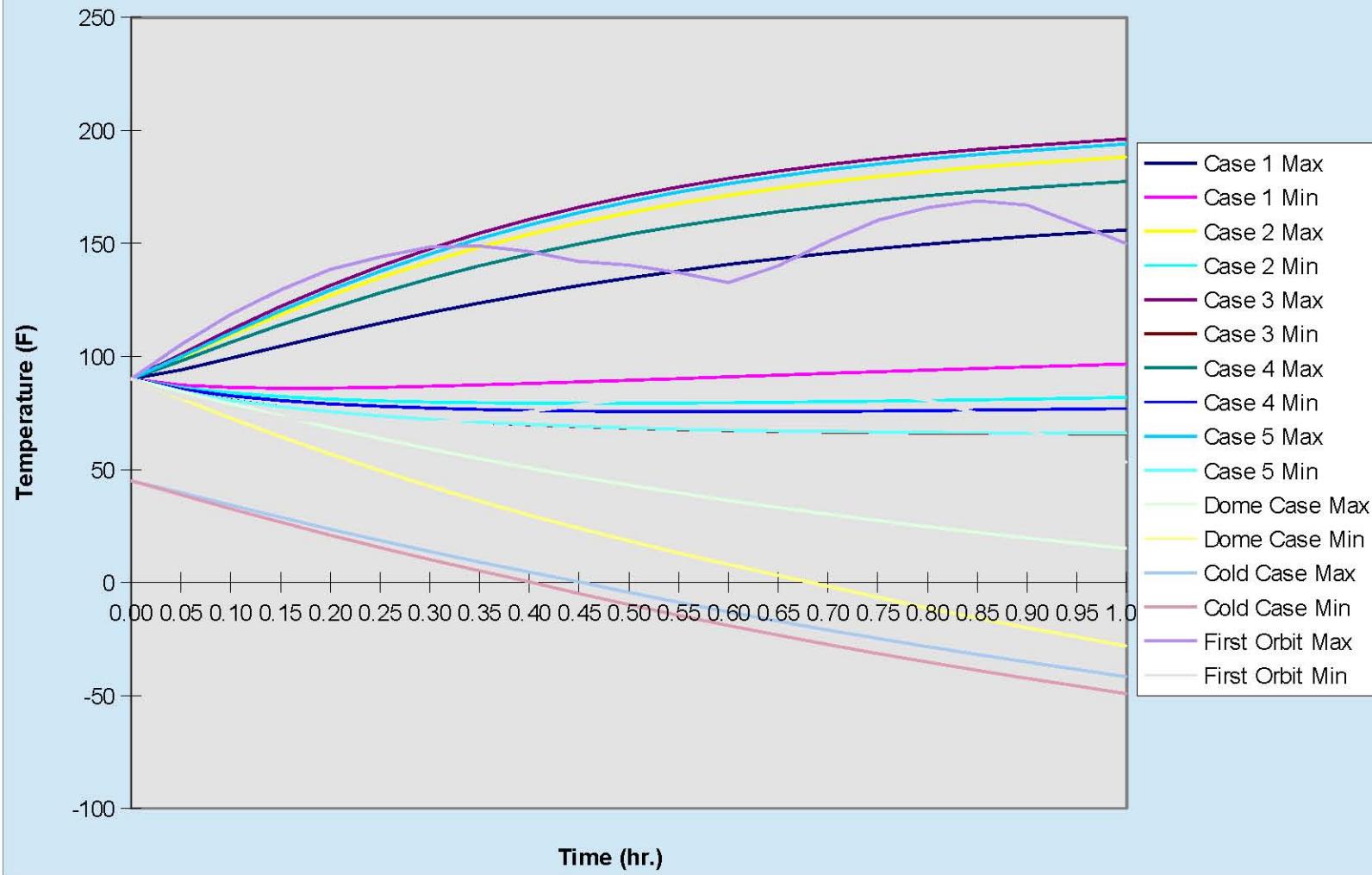
Figure\_22\_fwd\_dome\_actuator

**Figure 22: Fwd Dome Actuator Max/Min Temperature vs. Time**



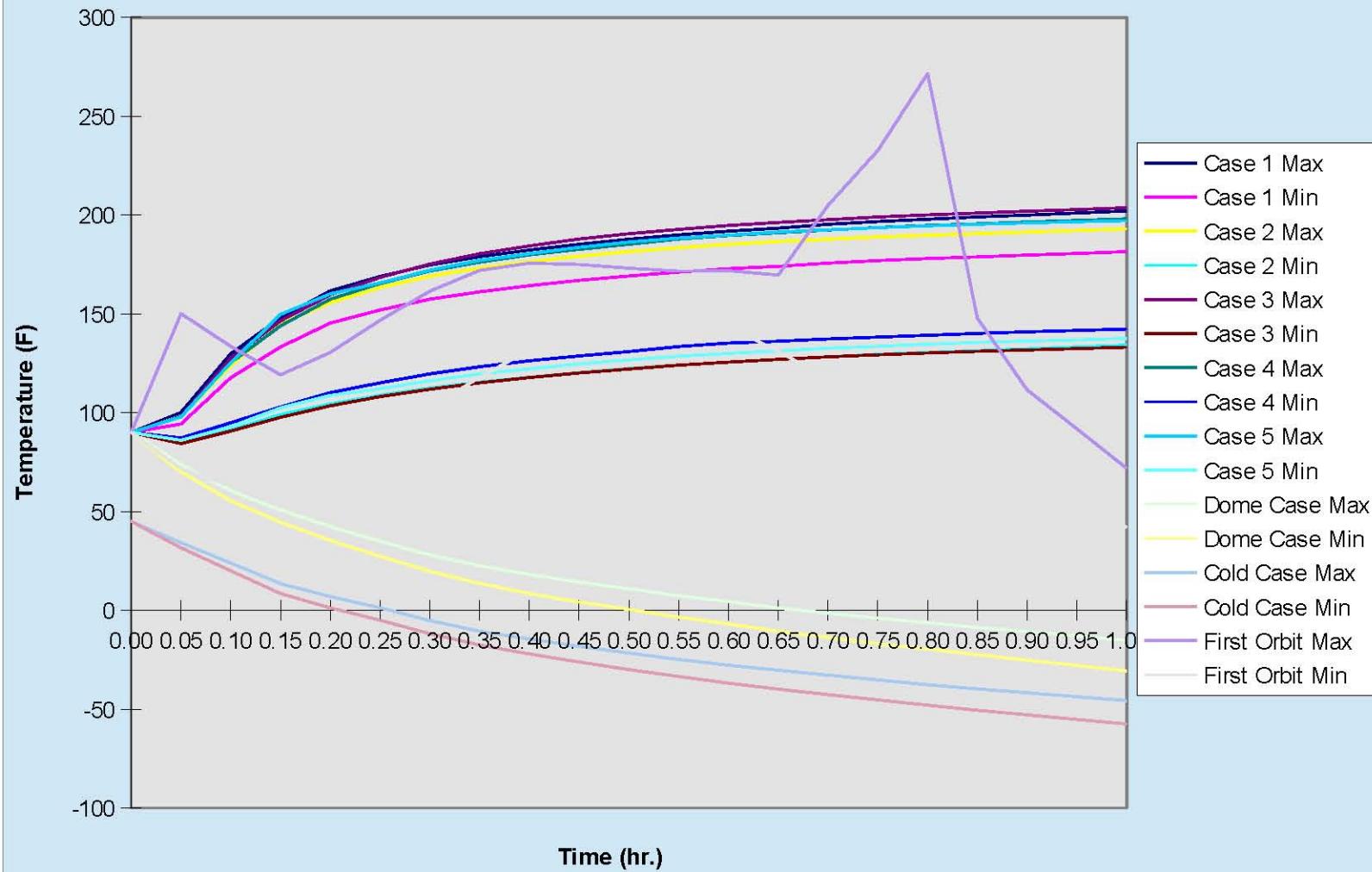
Figure\_23\_fwd\_dome\_seal

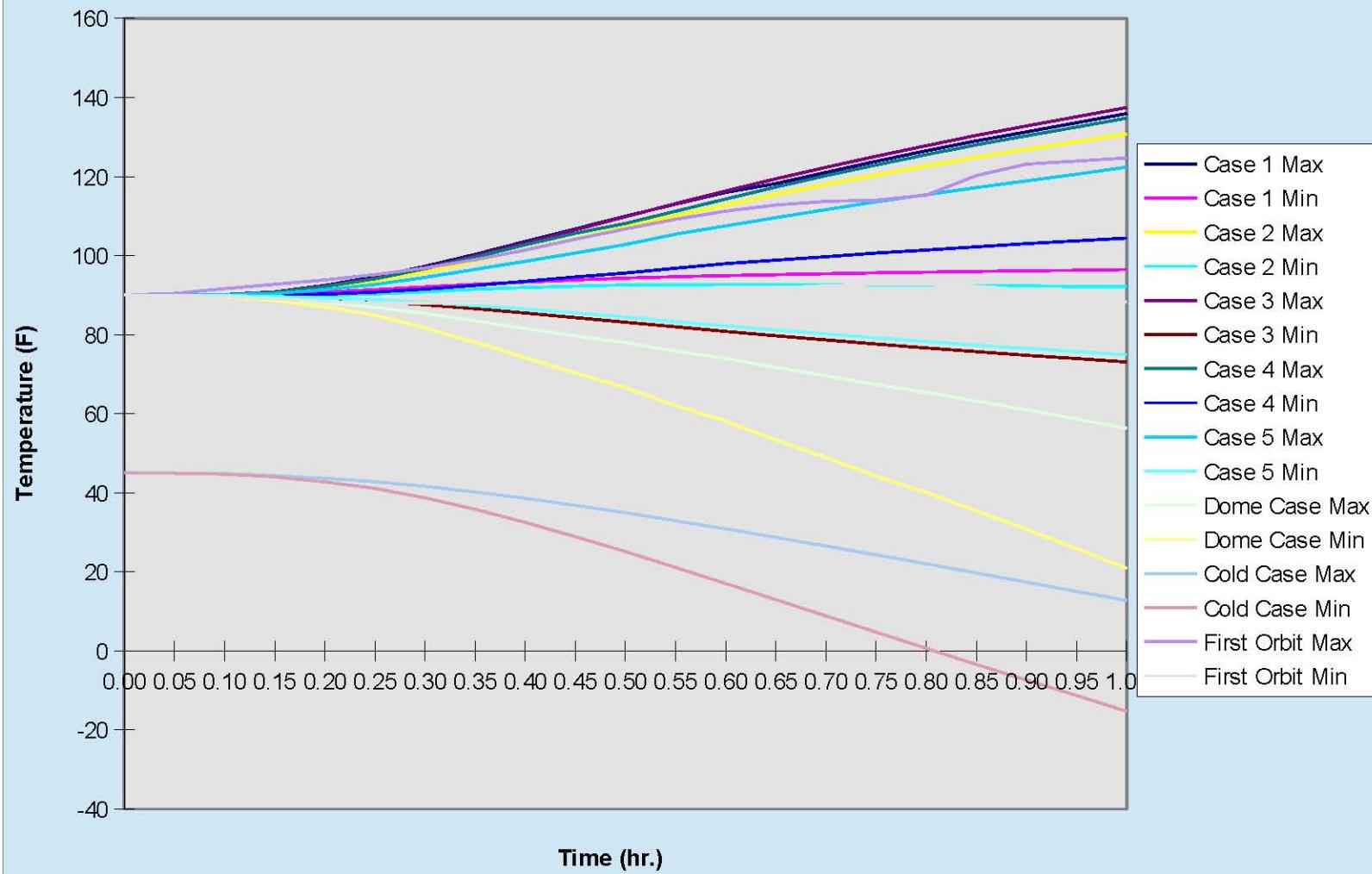
**Figure 23: Fwd Dome Seal Max/Min Temperature vs. Time**



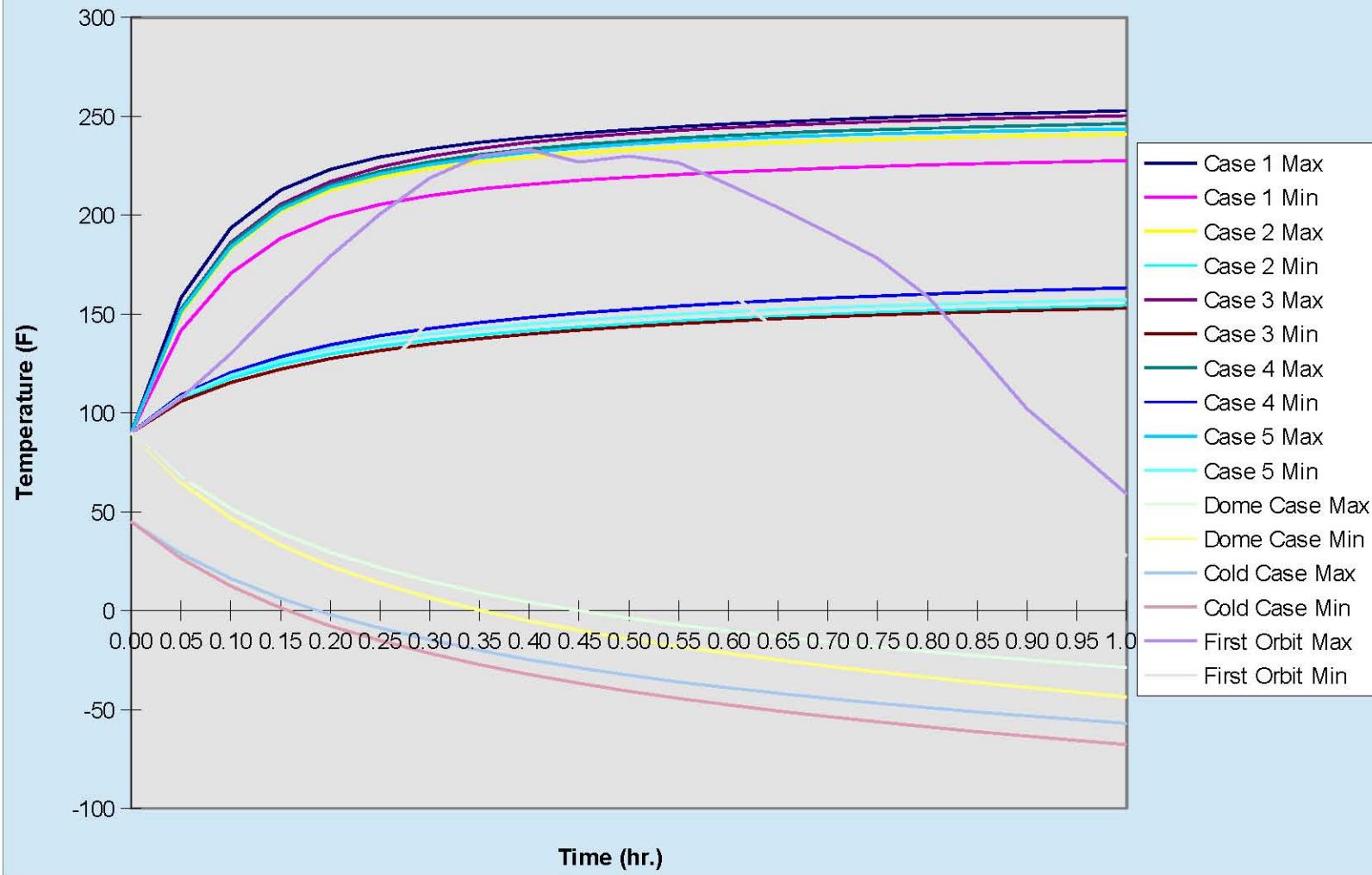
Fig\_24\_fwd\_fwd\_frame\_attach\_in

**Figure 24: Fwd Fwd Frame Attach Inner Max/Min Temperature vs. Time**



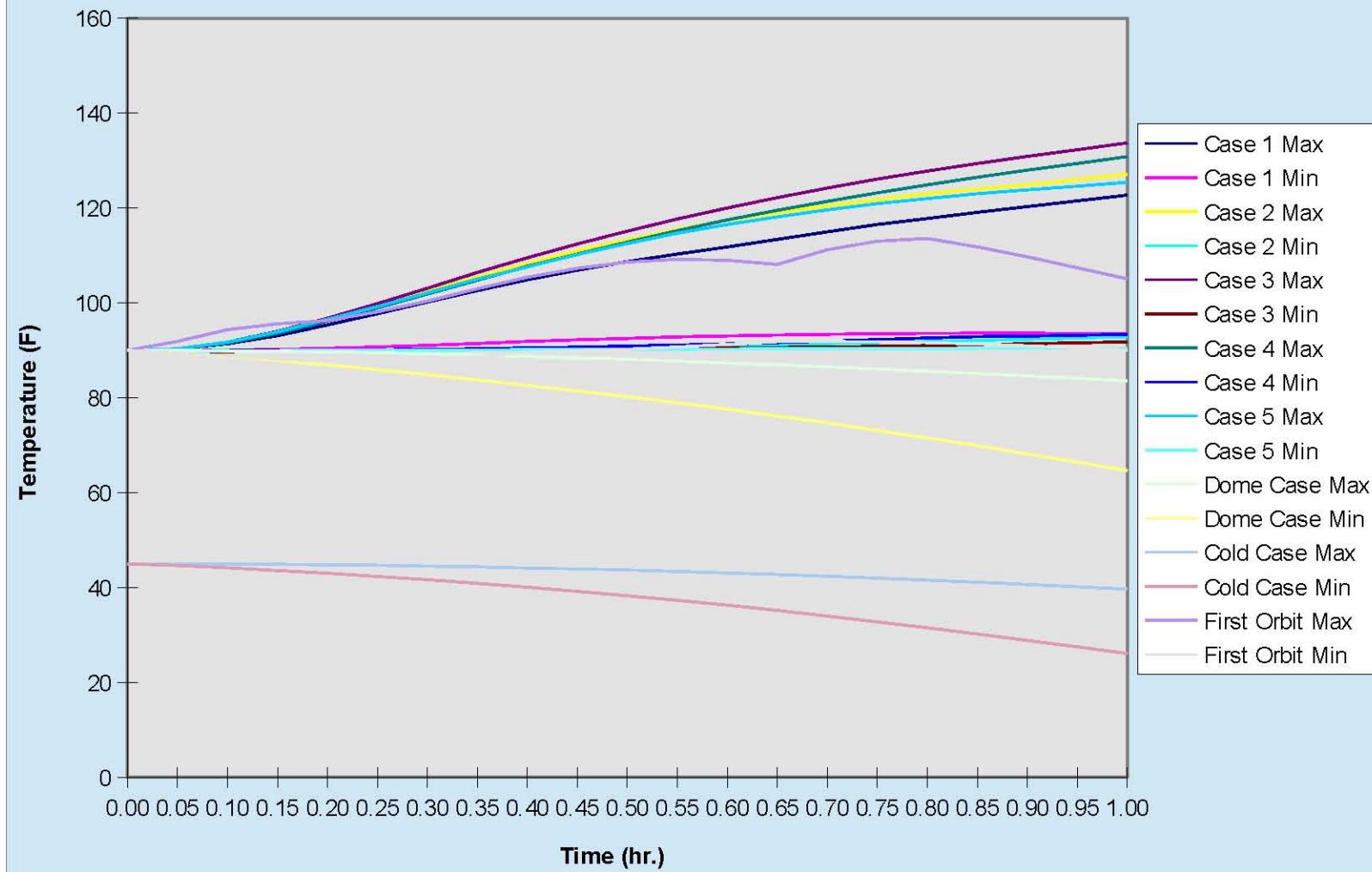
**Figure 25: Fwd Fwd Frame Attach Outer Max/Min Temperature vs. Time**

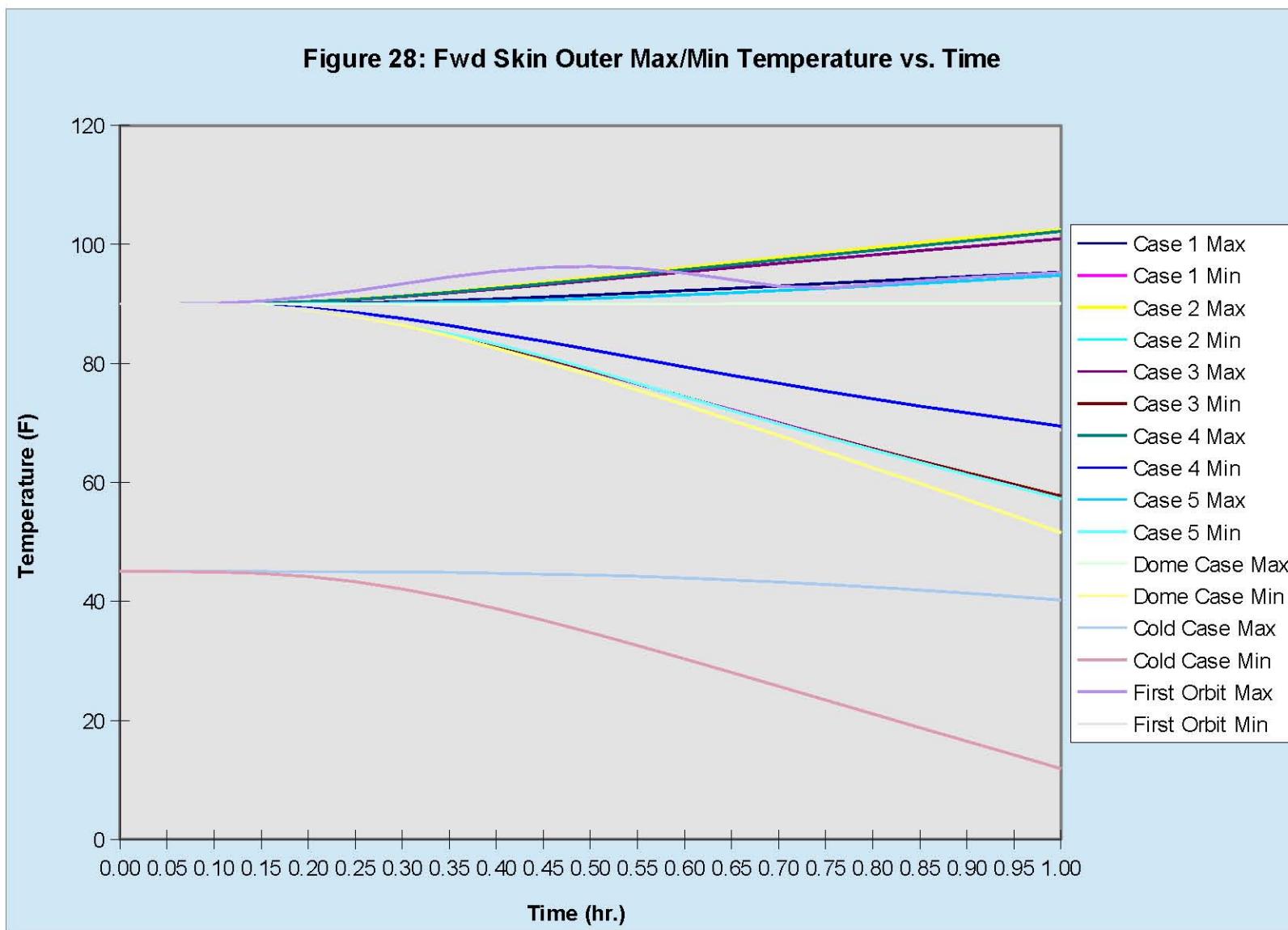
**Figure 26: Fwd Fwd Frame Cap Max/Min Temperature vs. Time**

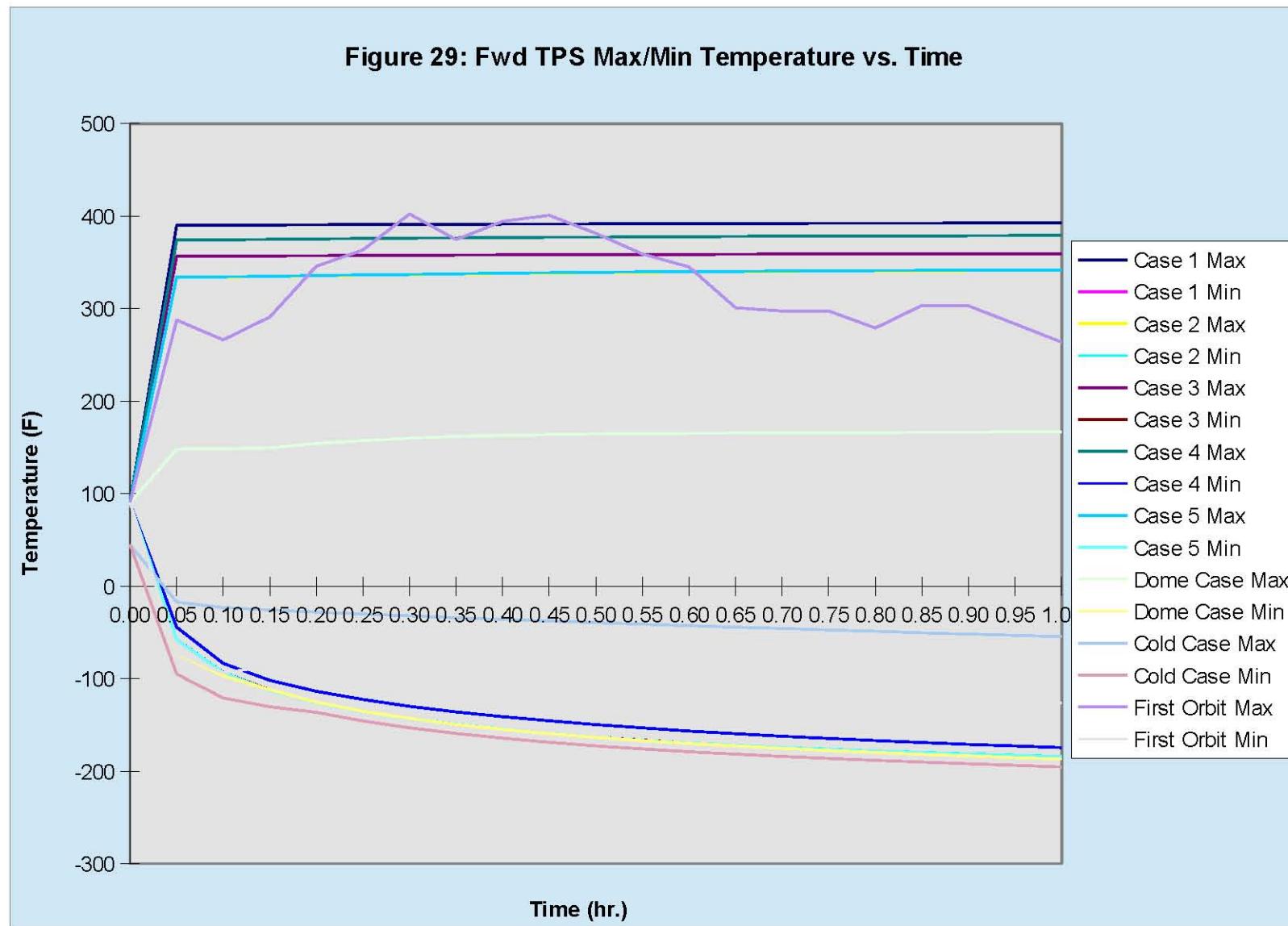


Fig\_27\_fwd\_skin\_inner

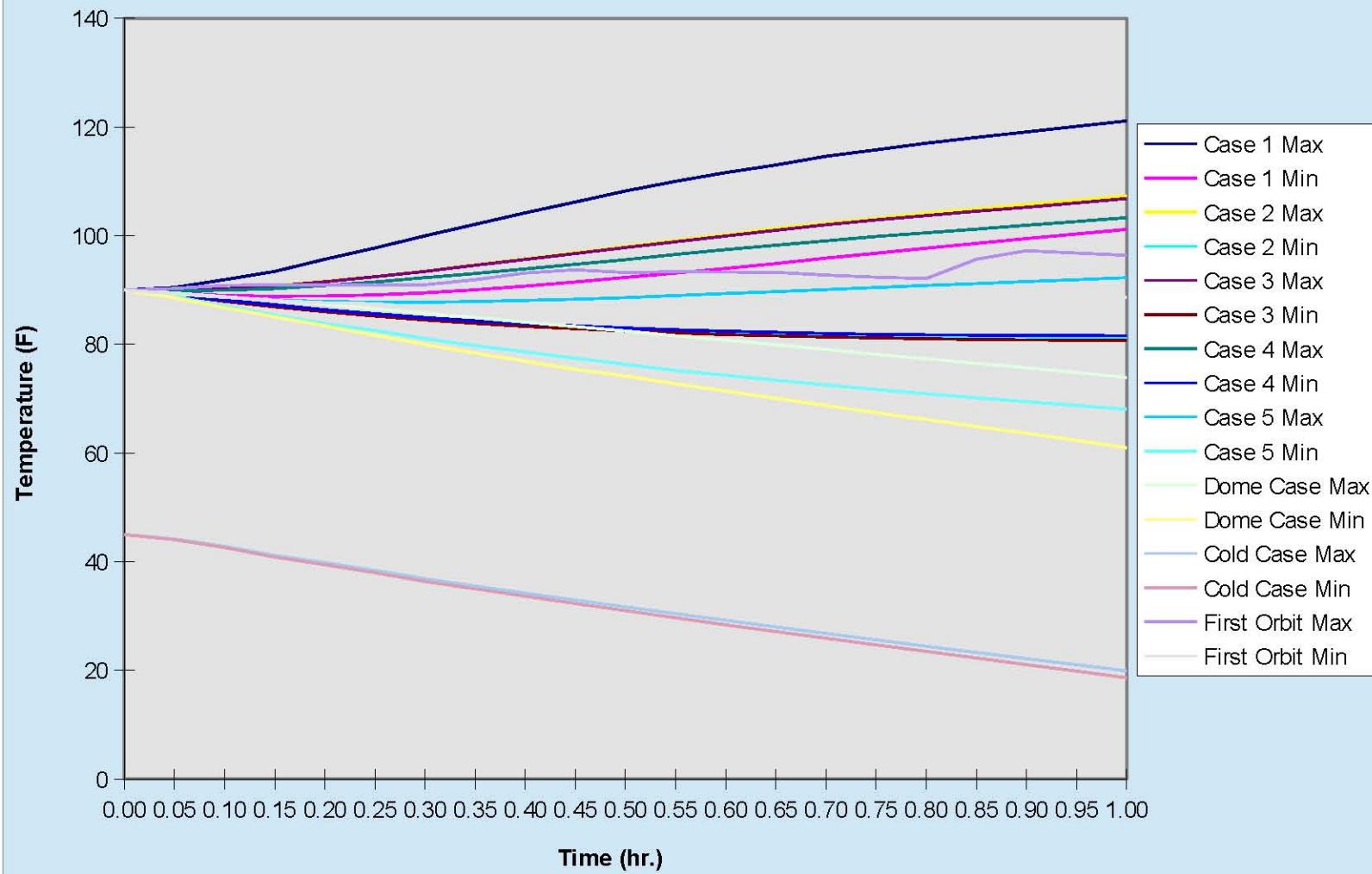
**Figure 27: Fwd Skin Inner Max/Min Temperature vs. Time**



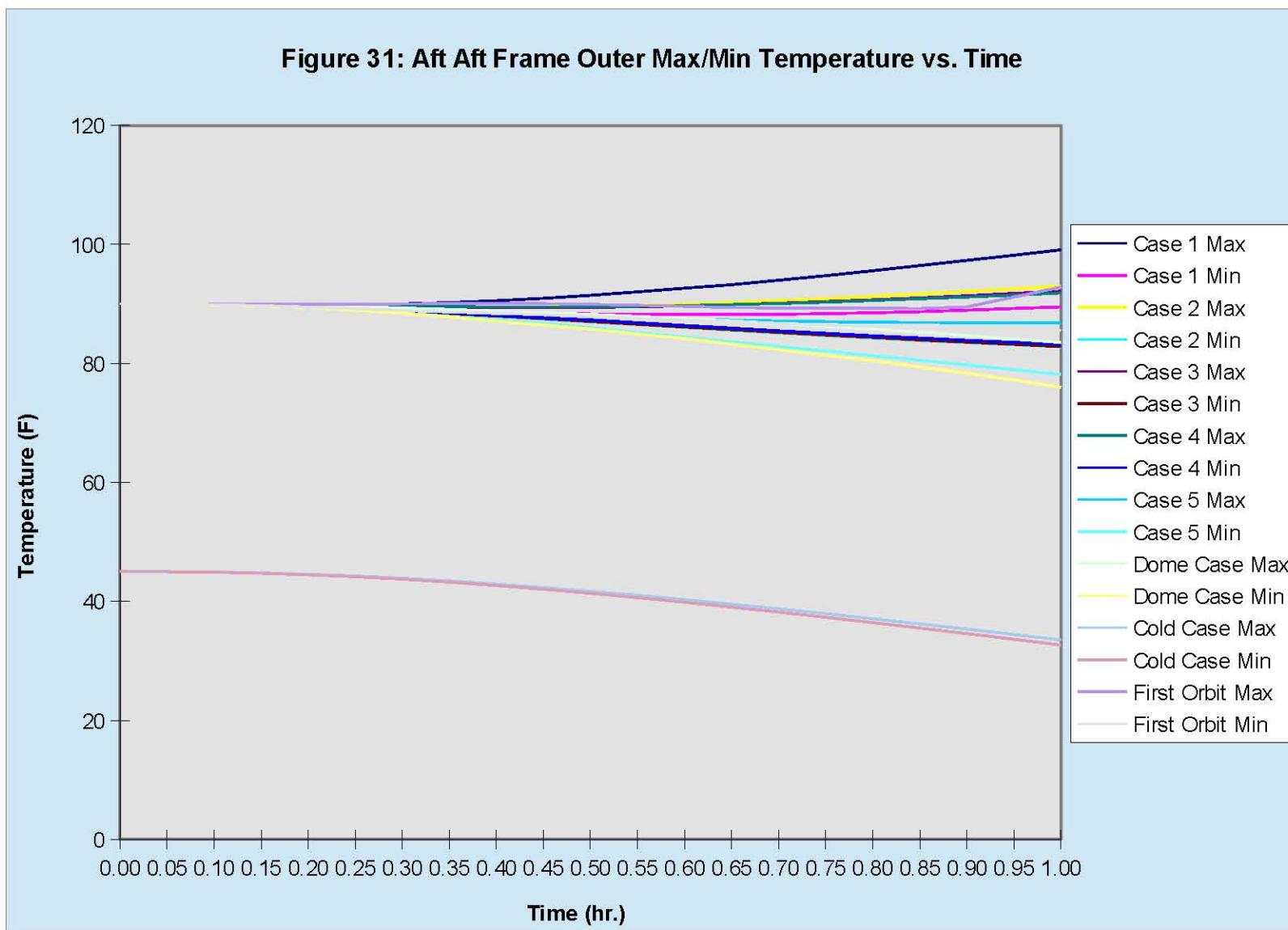
**Figure 28: Fwd Skin Outer Max/Min Temperature vs. Time**

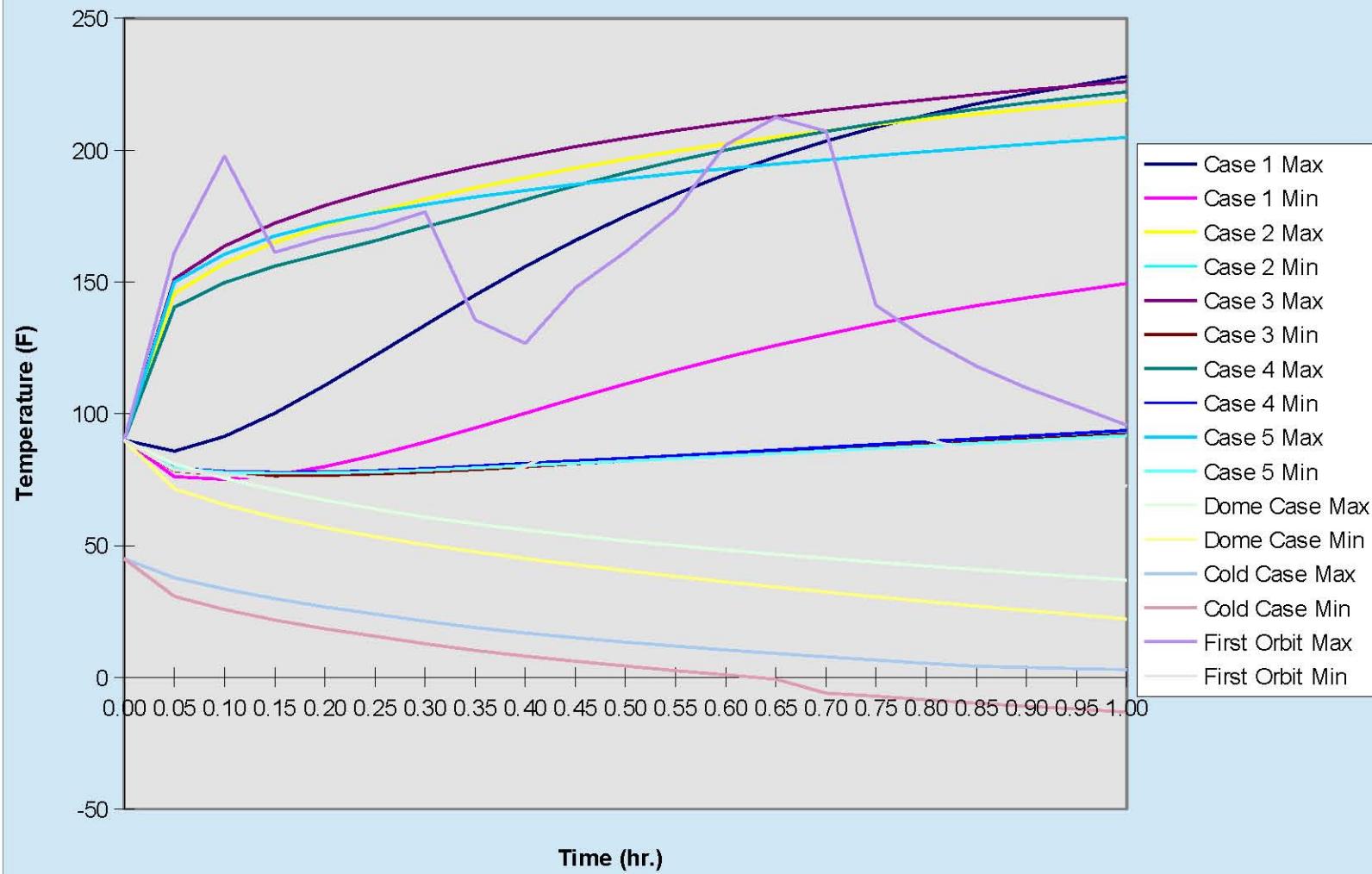


**Figure 30: Aft Aft Frame Inner Max/Min Temperature vs. Time**

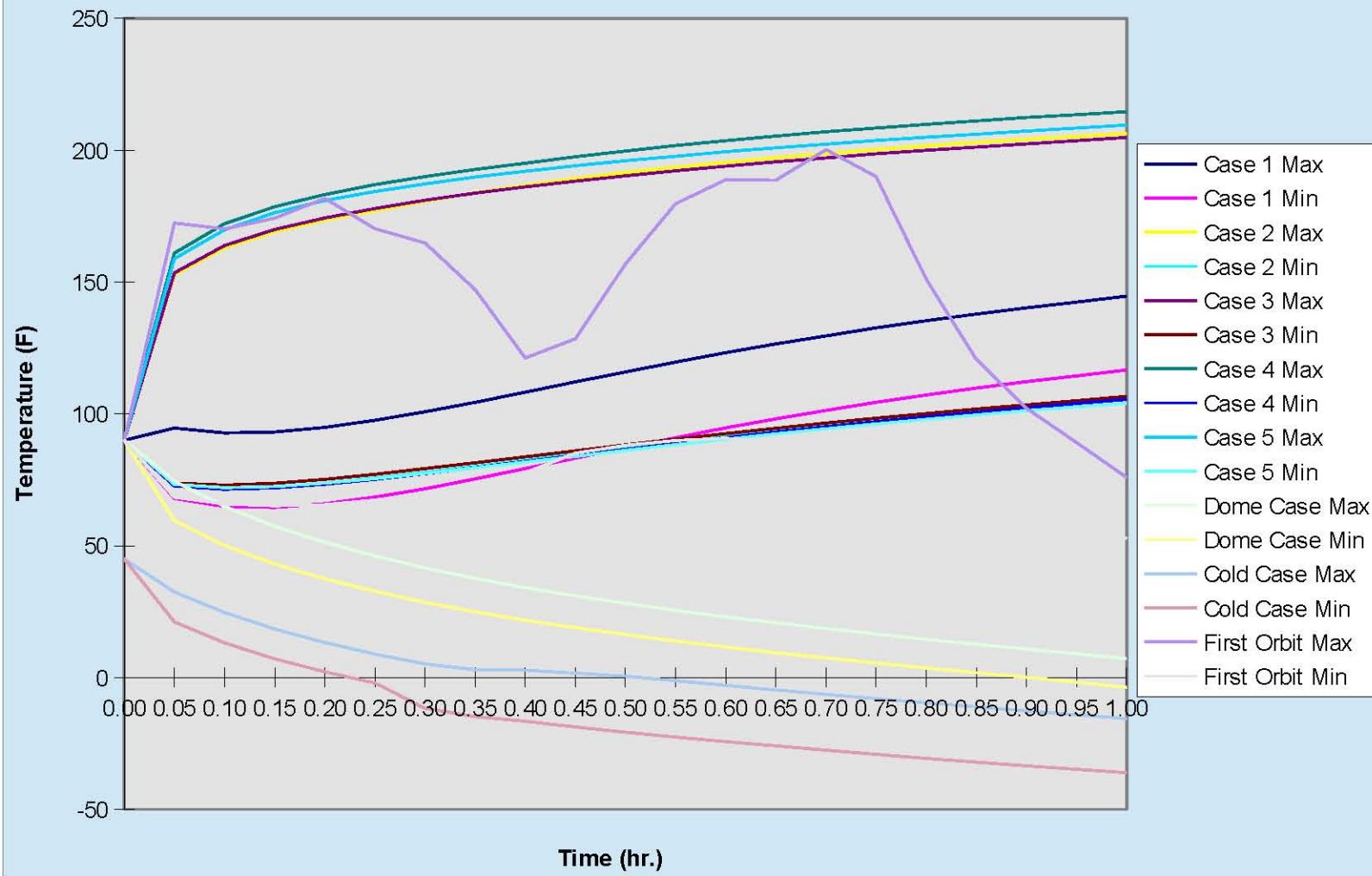


**Figure 31: Aft Aft Frame Outer Max/Min Temperature vs. Time**

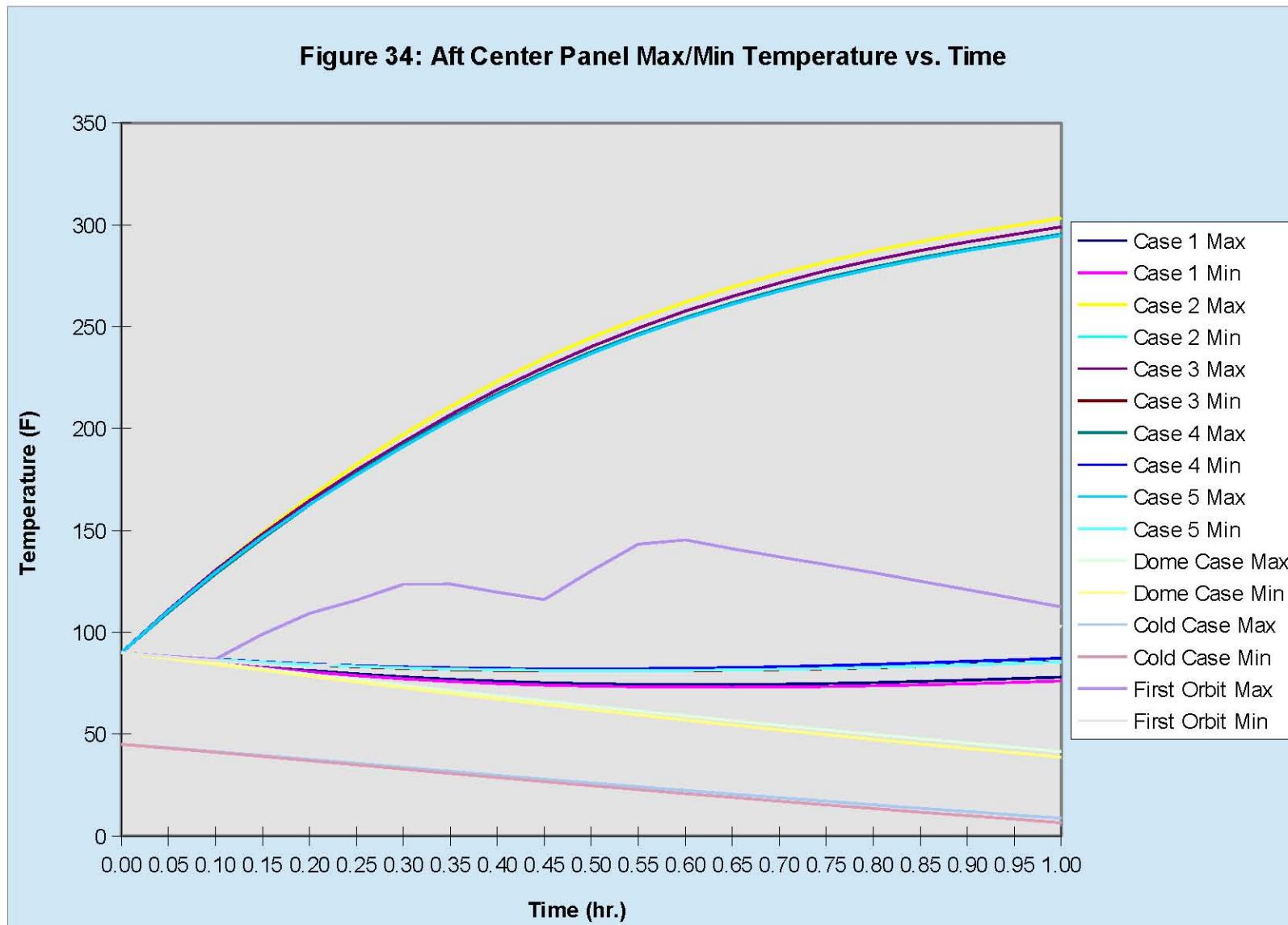


**Figure 32: Aft Blanket Lower Max/Min Temperature vs. Time**

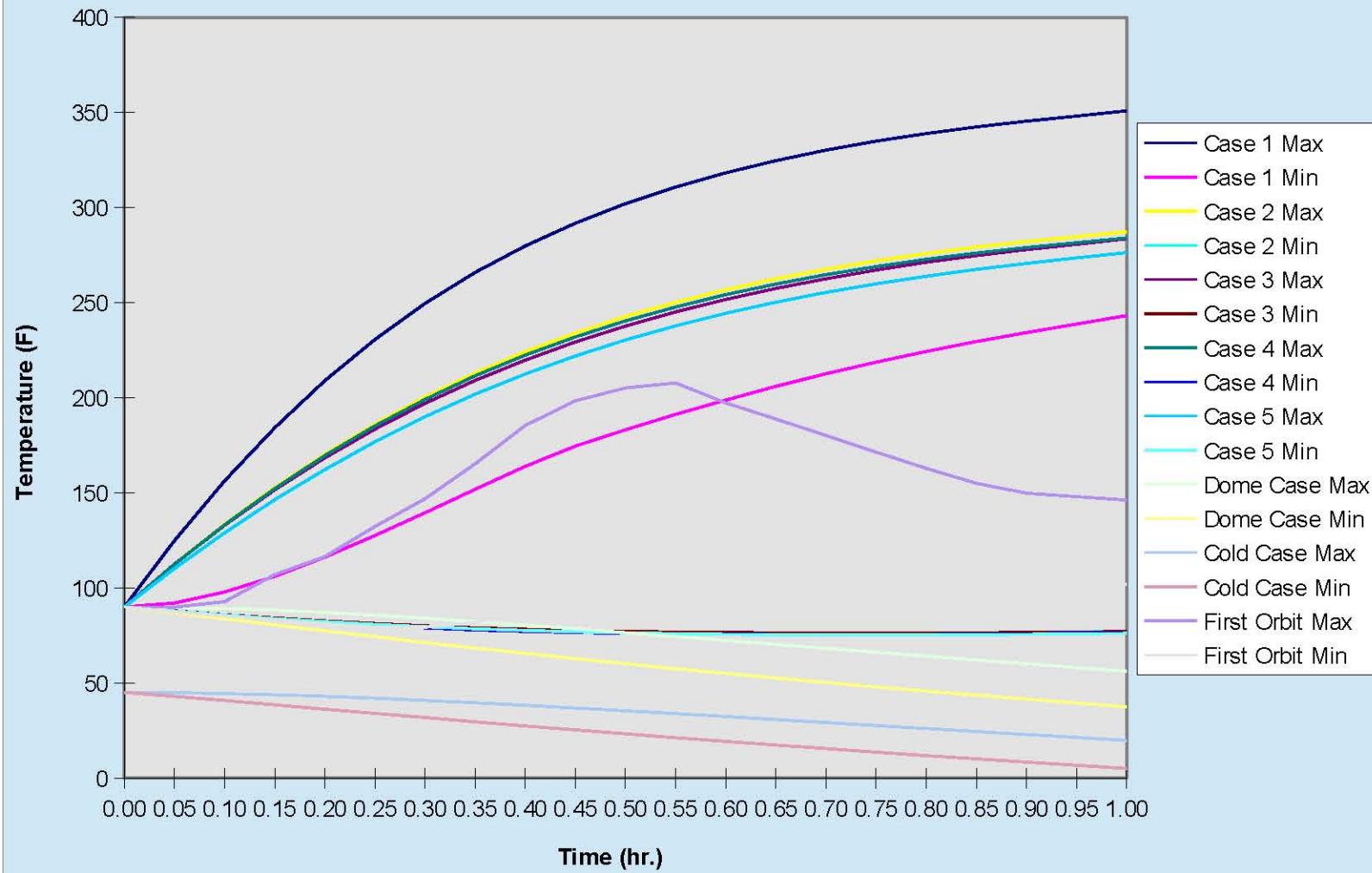
**Figure 33: Aft Blanket Upper Max/Min Temperature vs. Time**



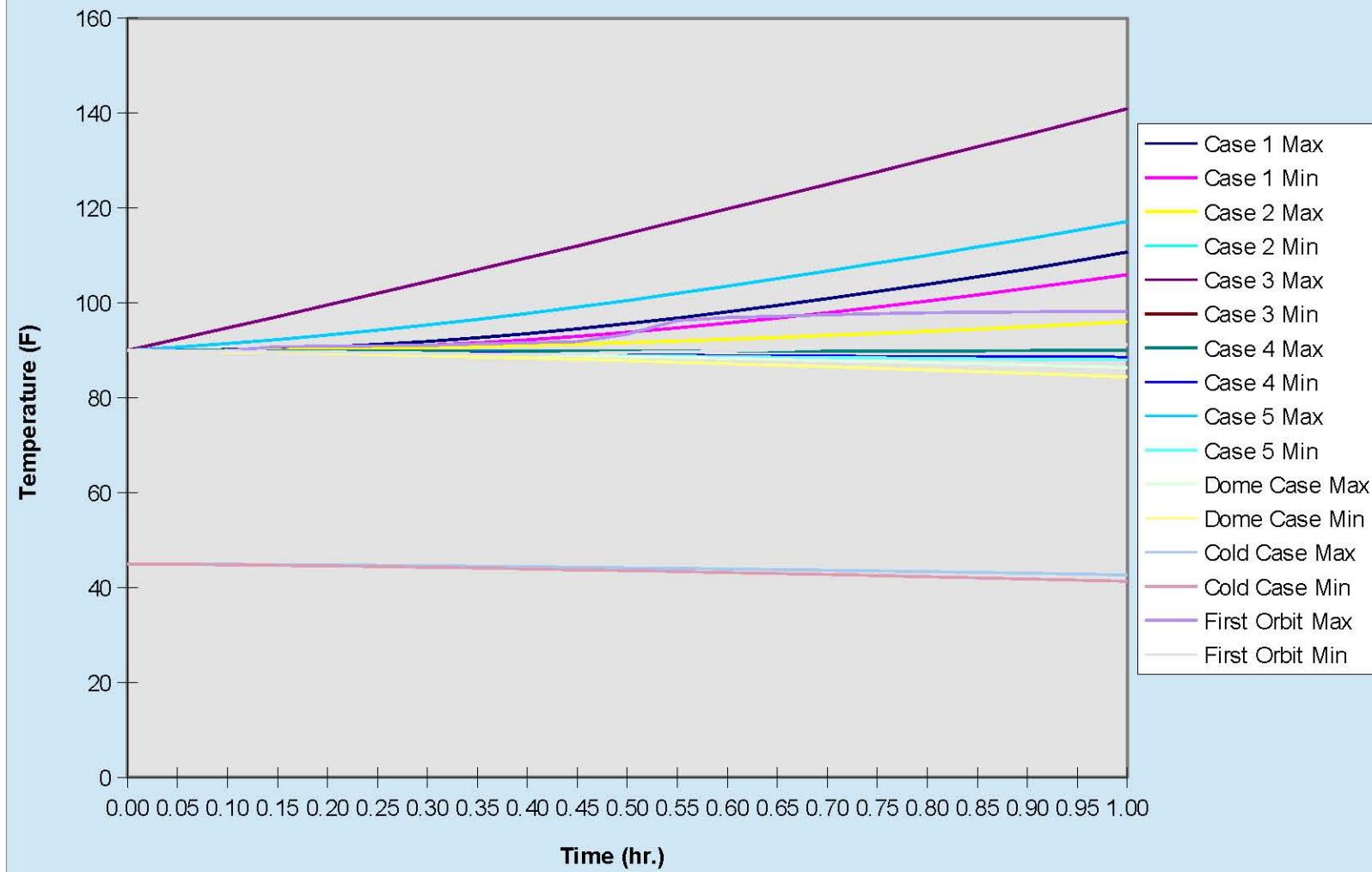
Fig\_34\_aft\_center\_panel

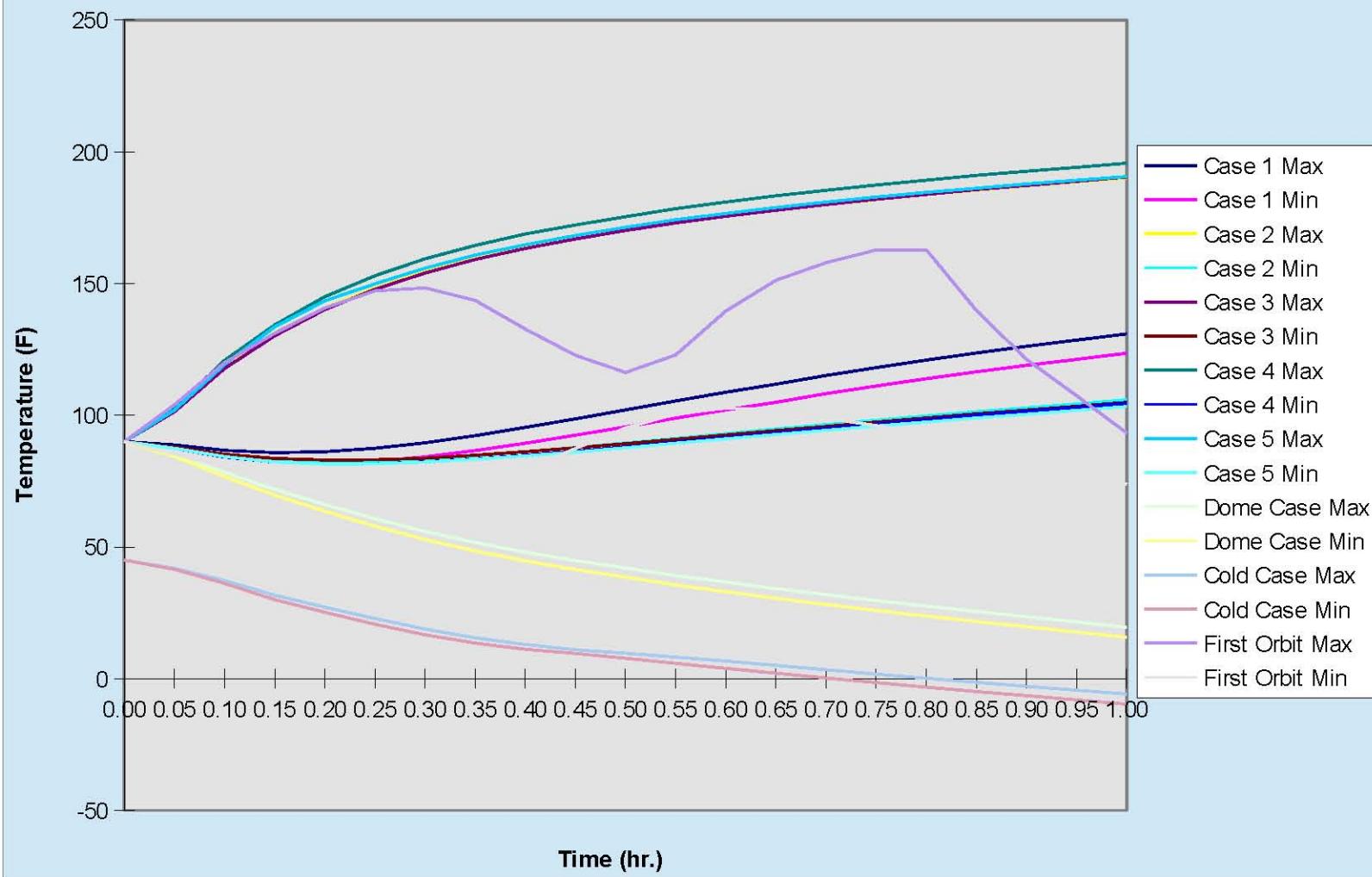


**Figure 35: Aft Closeout Panel Max/Min Temperature vs. Time**

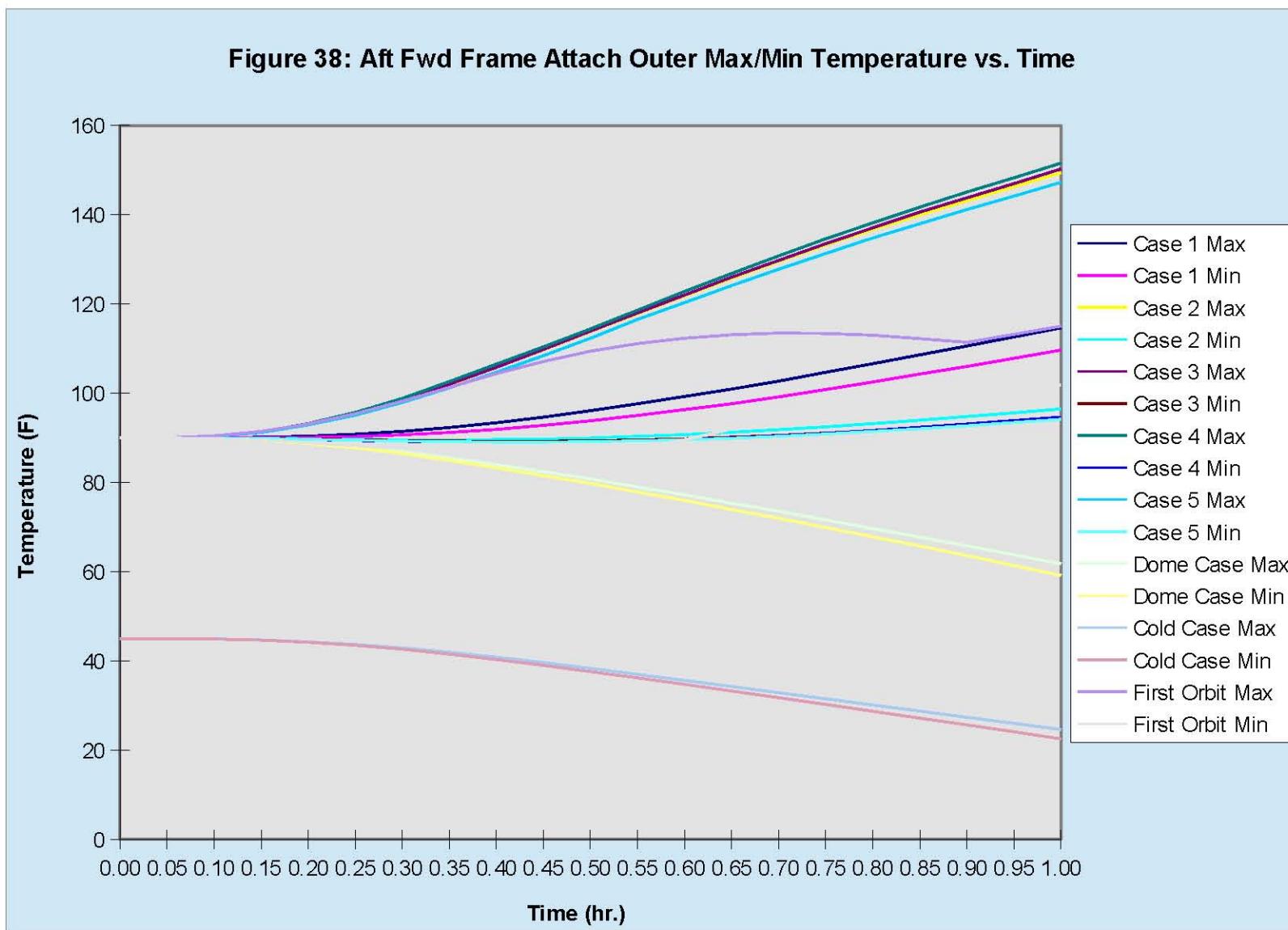


**Figure 36: Aft Closeout Supt Max/Min Temperature vs. Time**

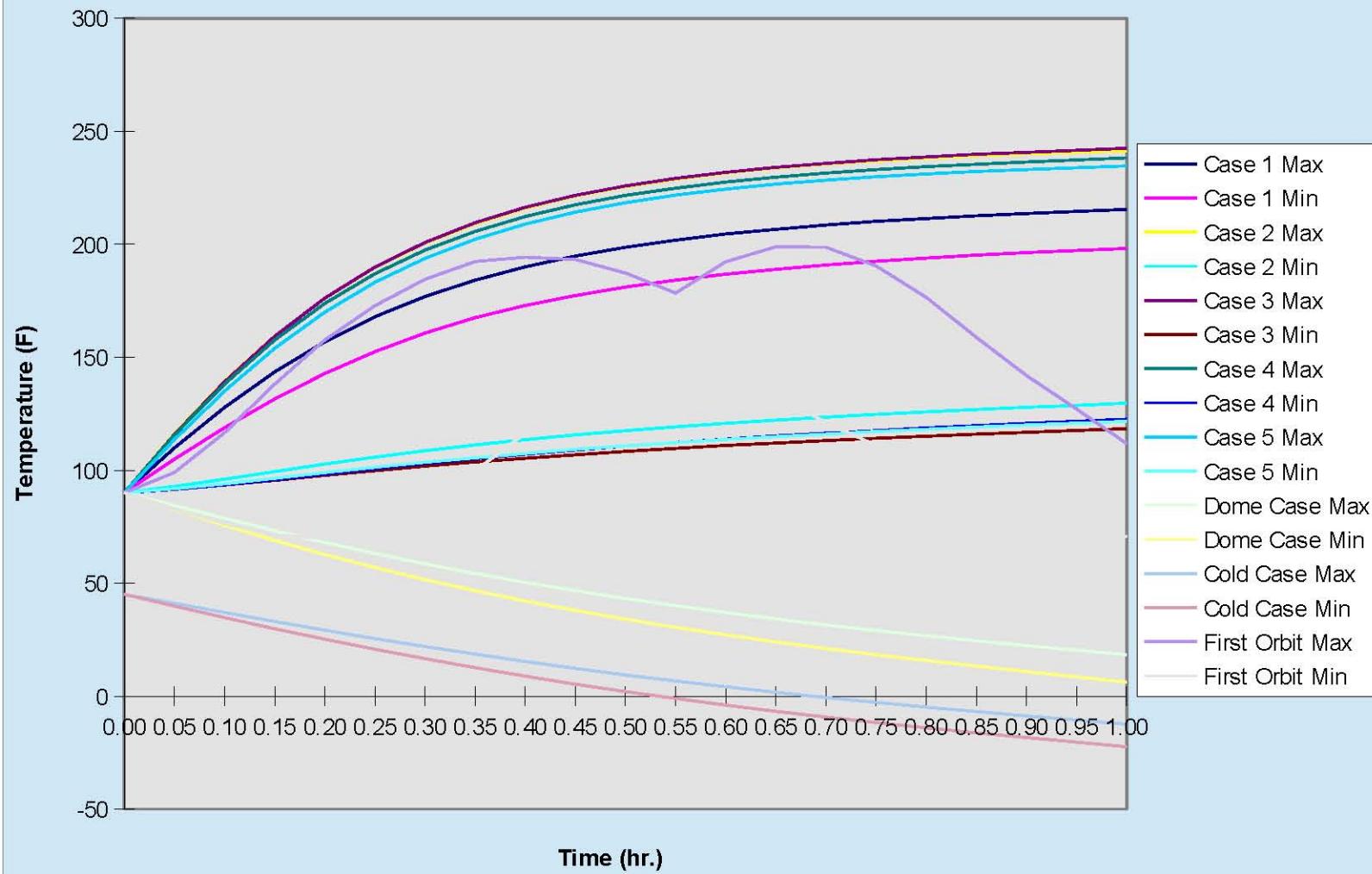


**Figure 37: Aft Fwd Frame Attach Inner Max/Min Temperature vs. Time**

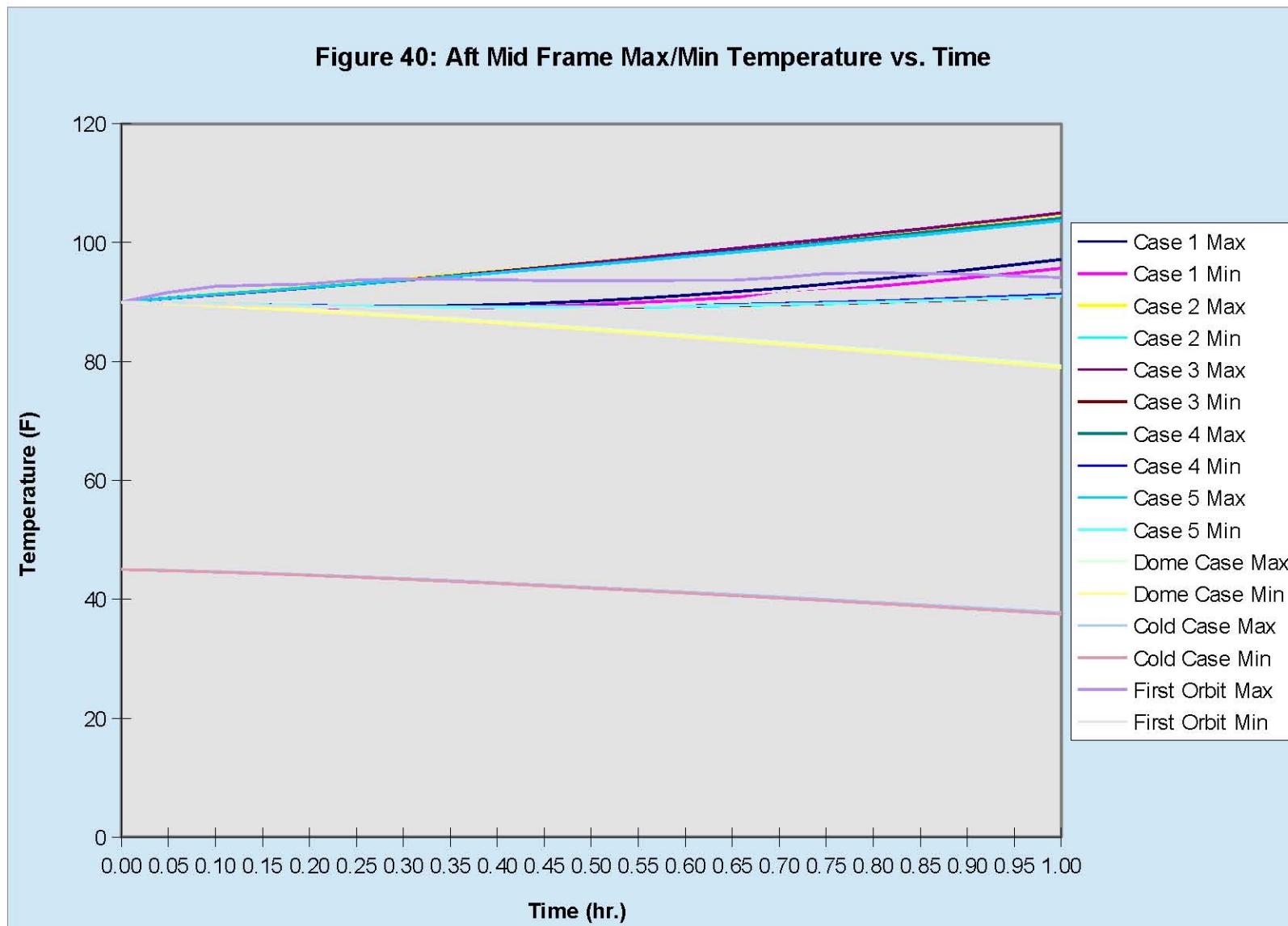
**Figure 38: Aft Fwd Frame Attach Outer Max/Min Temperature vs. Time**



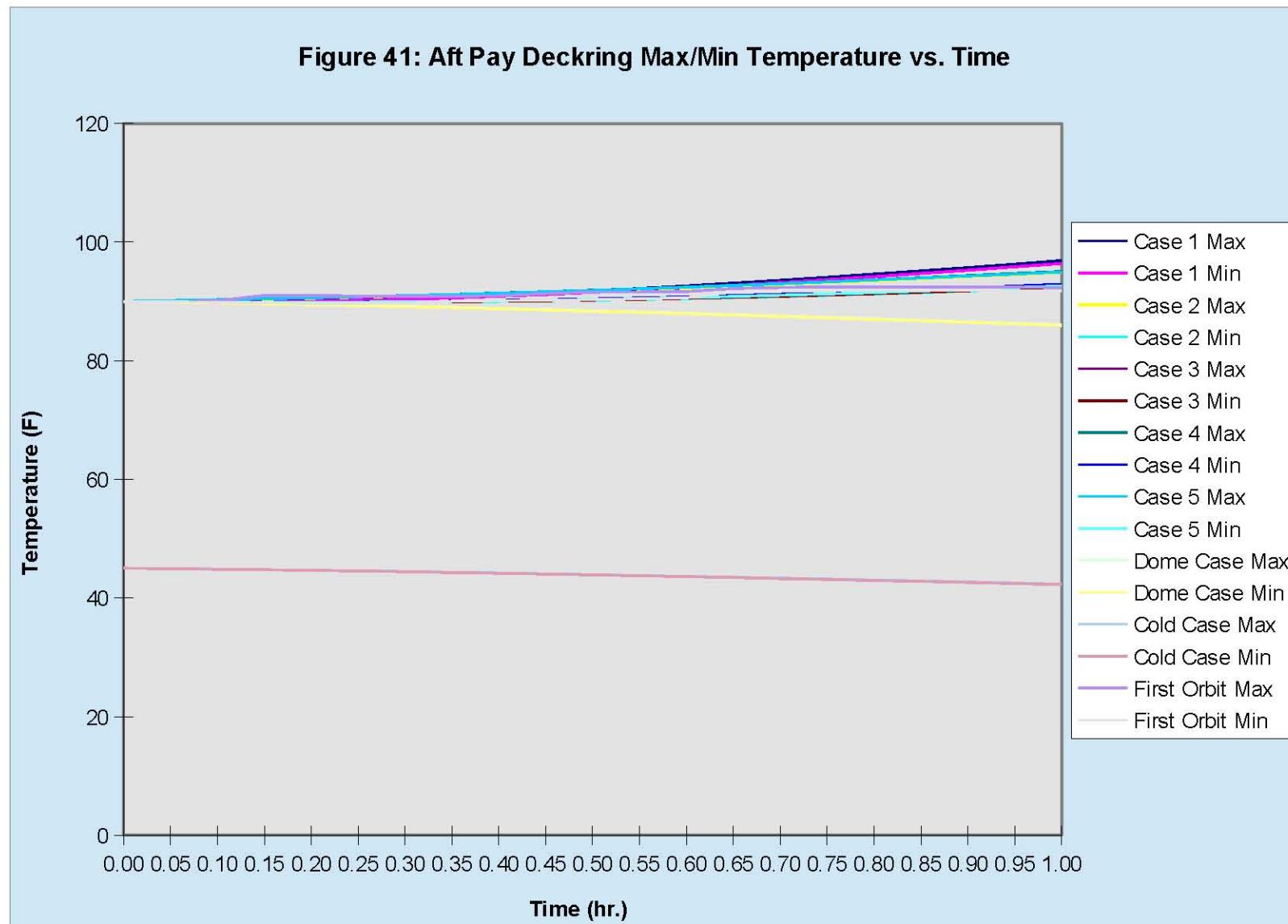
**Figure 39: Aft Fwd Frame Cap Max/Min Temperature vs. Time**

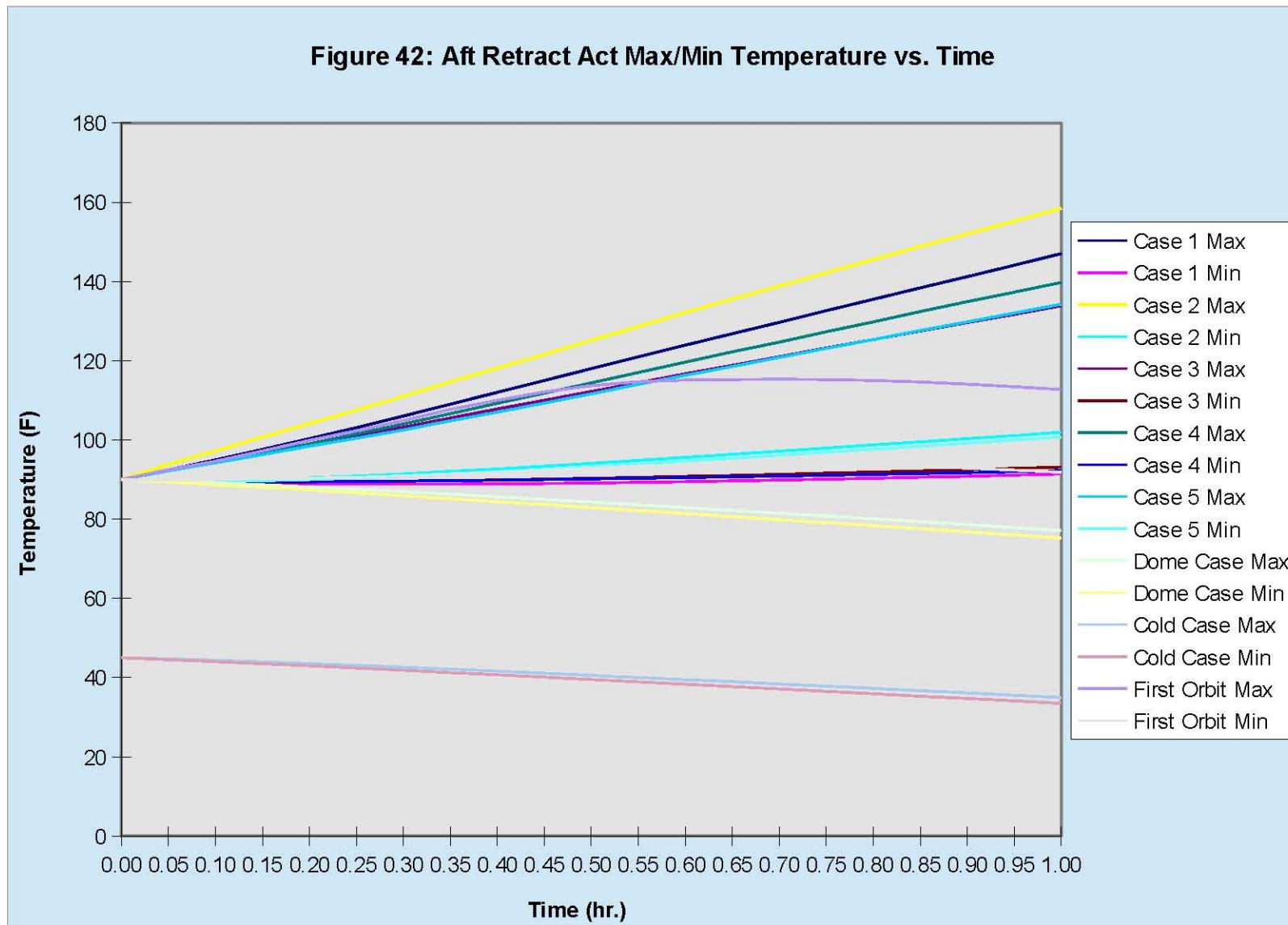


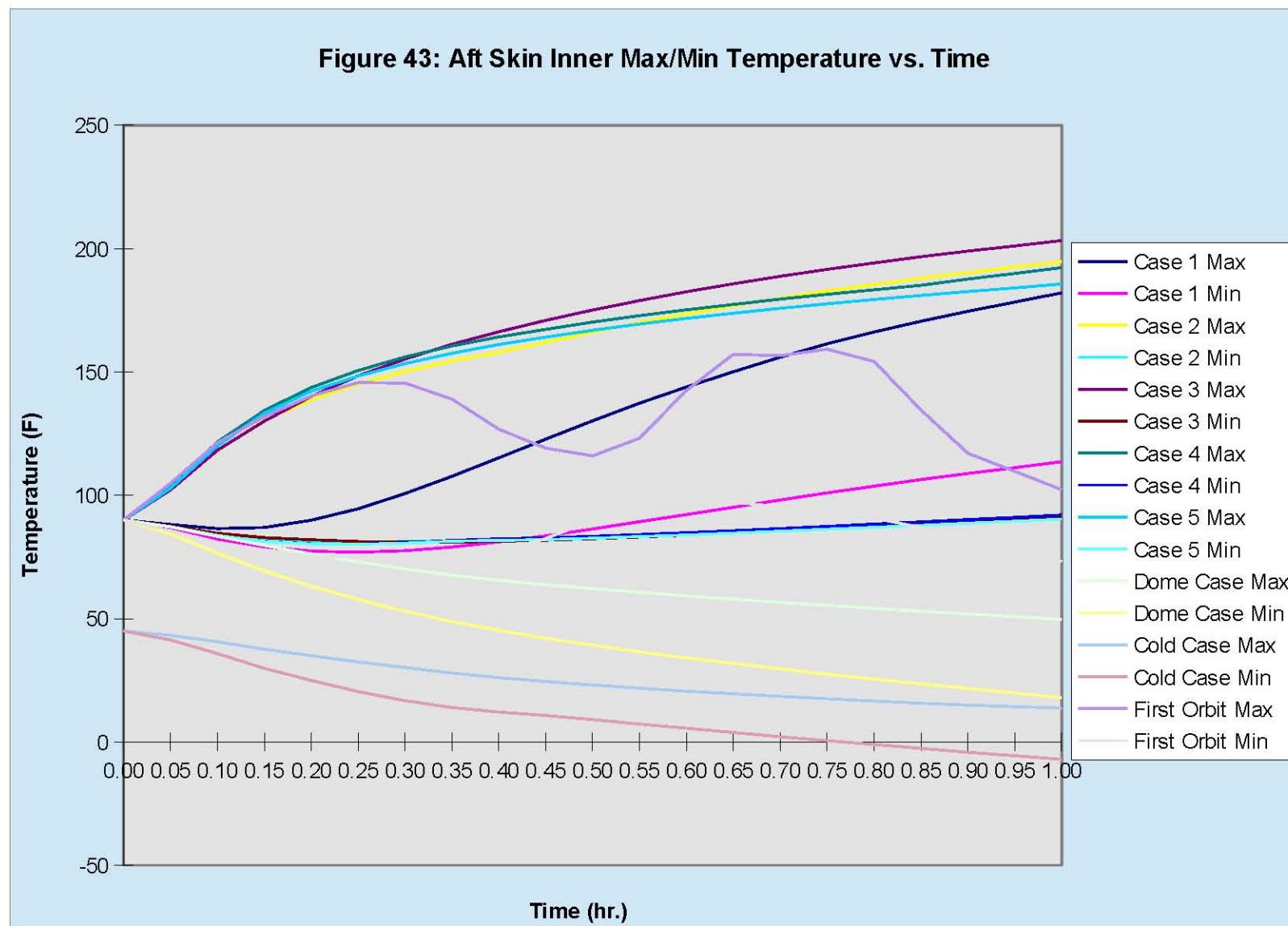
Fig\_40\_aft\_mid\_frame

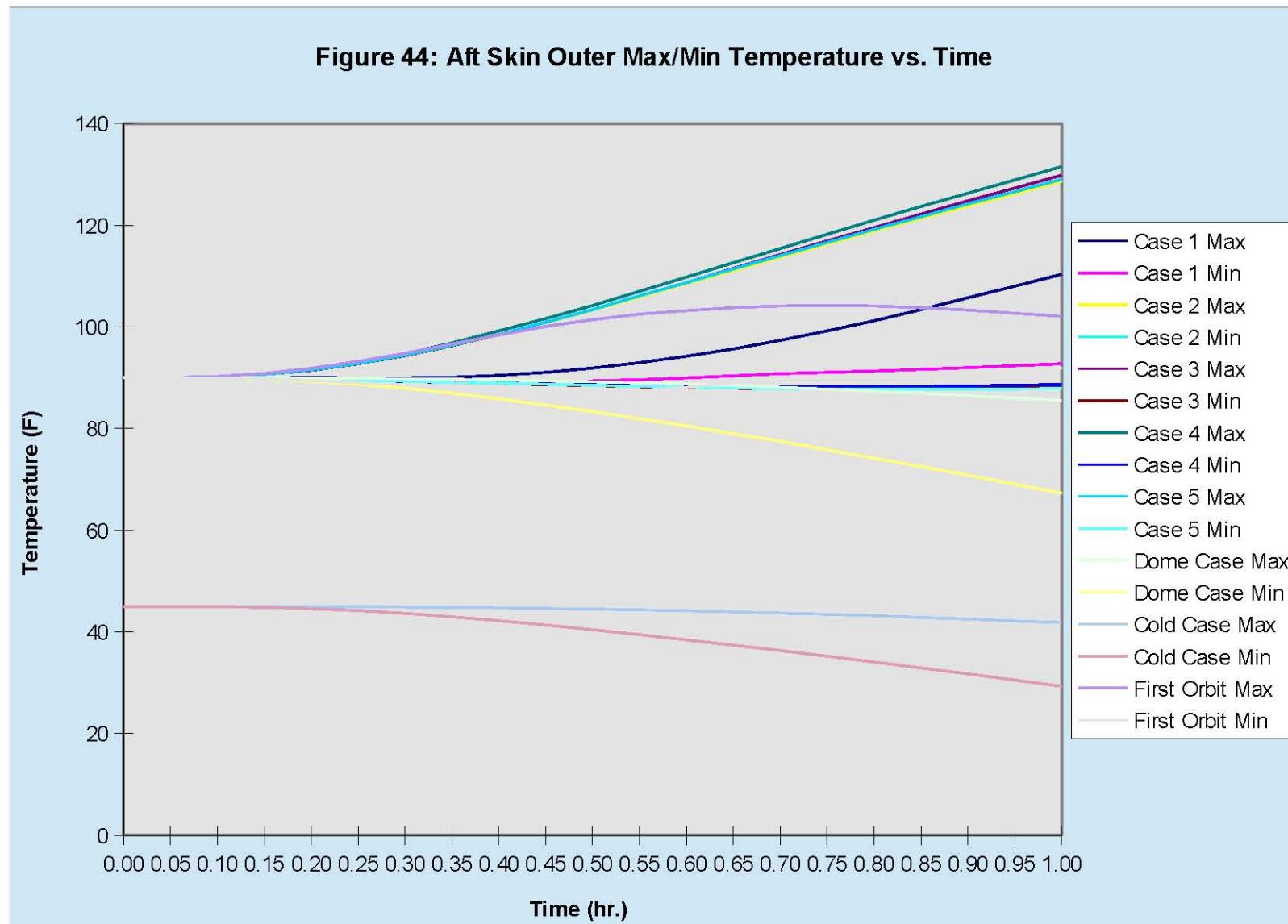


Fig\_41\_aft\_pay\_deckring



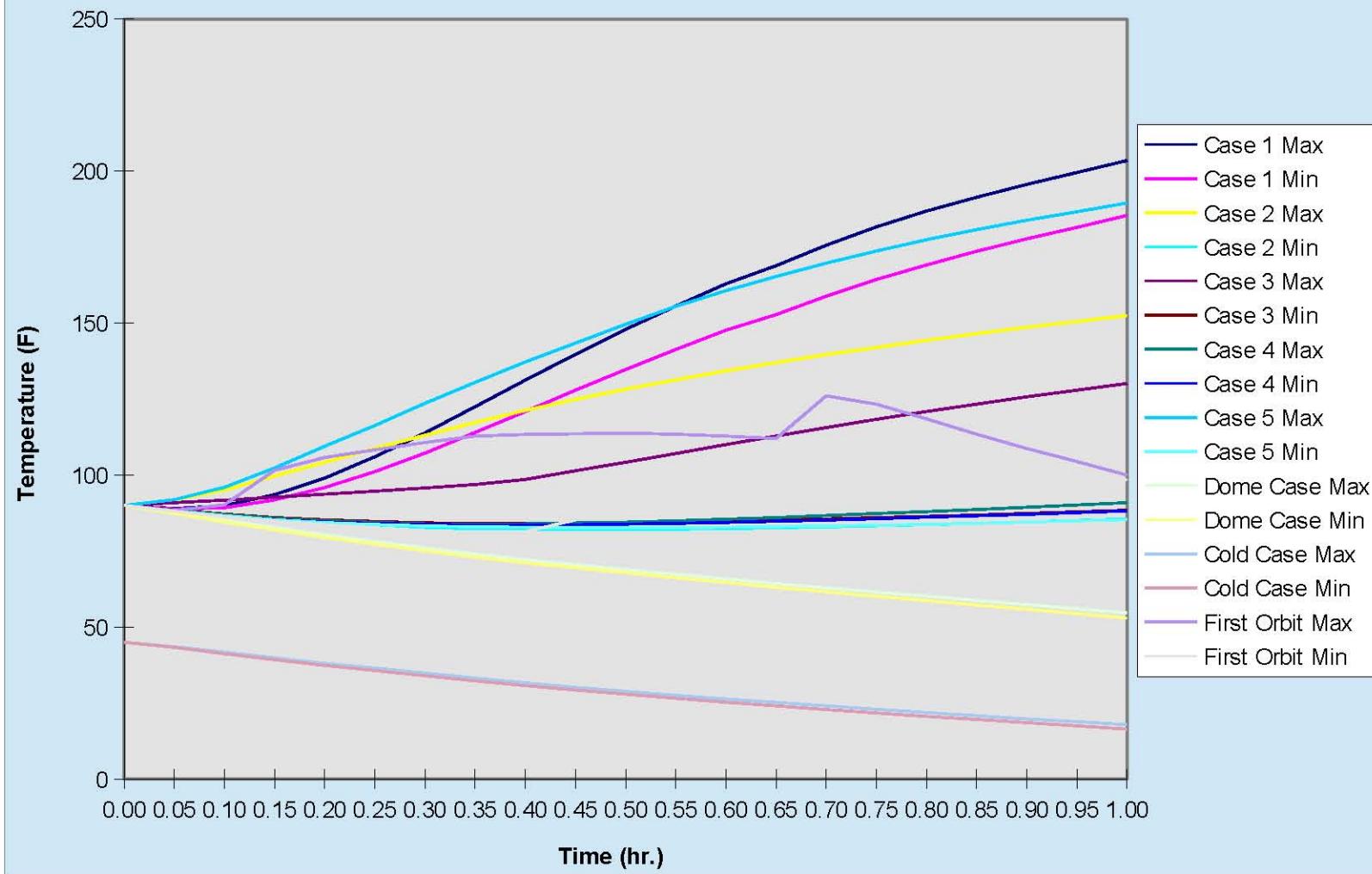




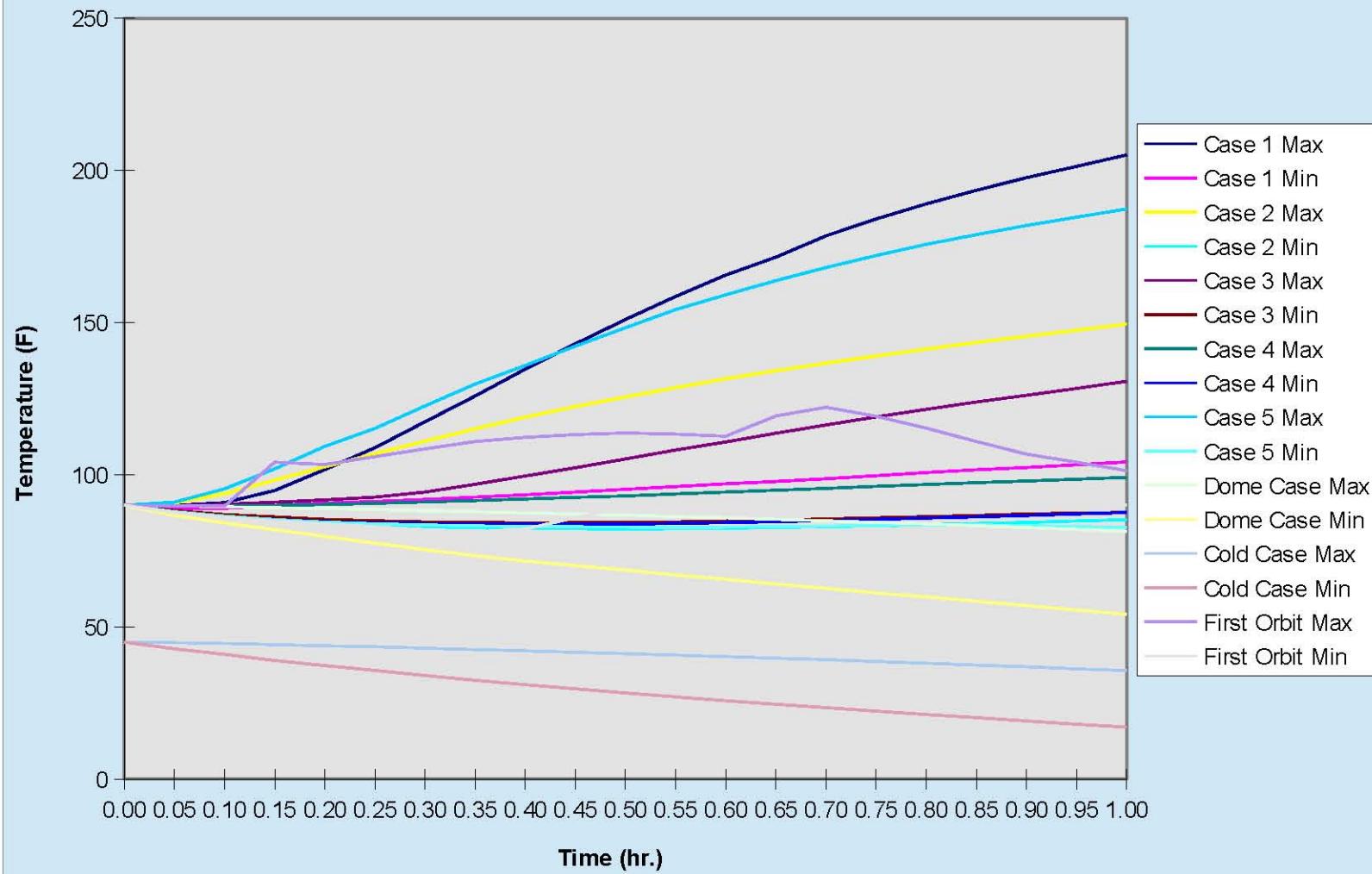


Fig\_45\_aft\_supt\_frame

**Figure 45: Aft Supt Frame Max/Min Temperature vs. Time**

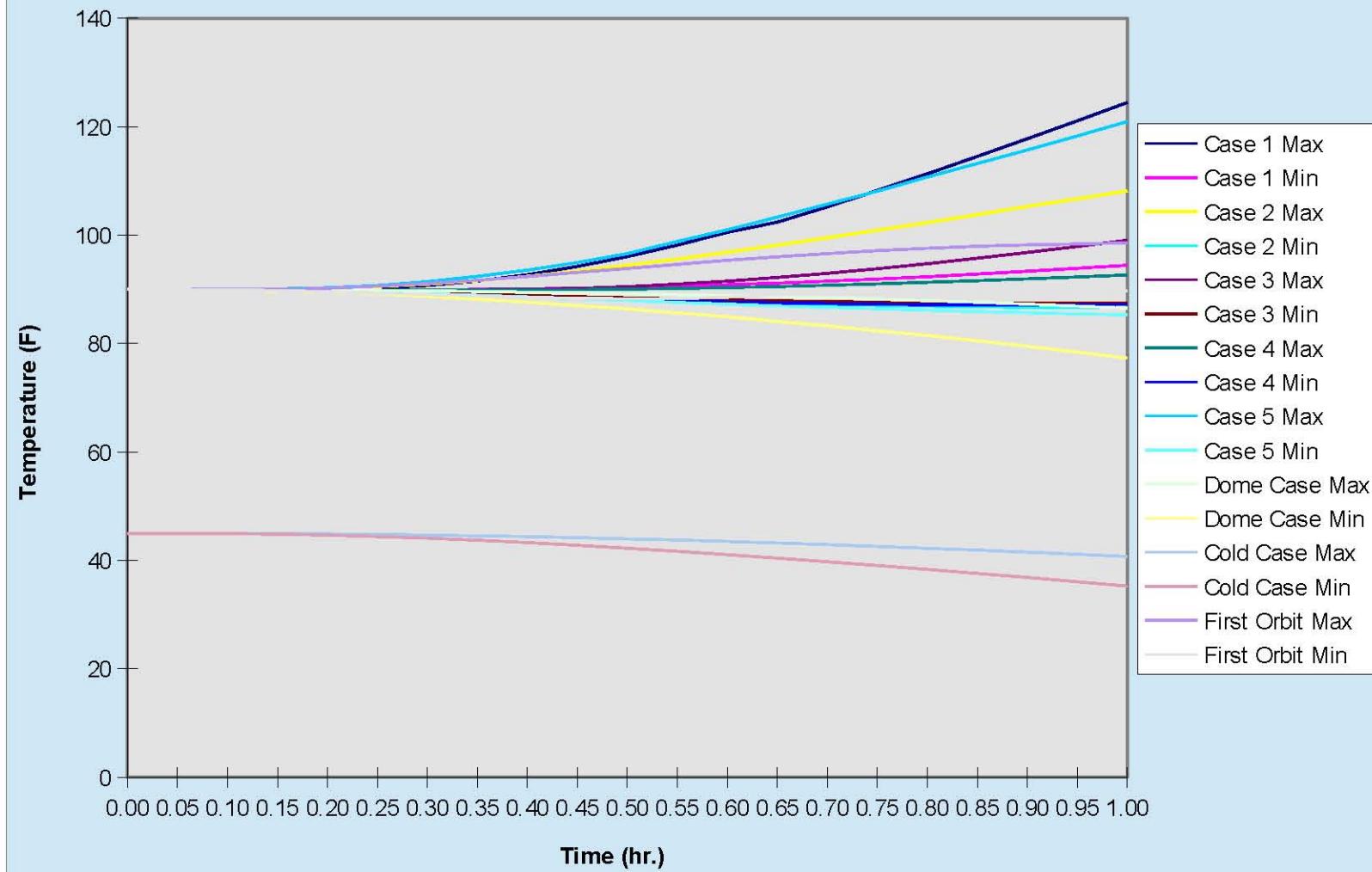


**Figure 46: Aft Supt Frame Spacer Inner Max/Min Temperature vs. Time**

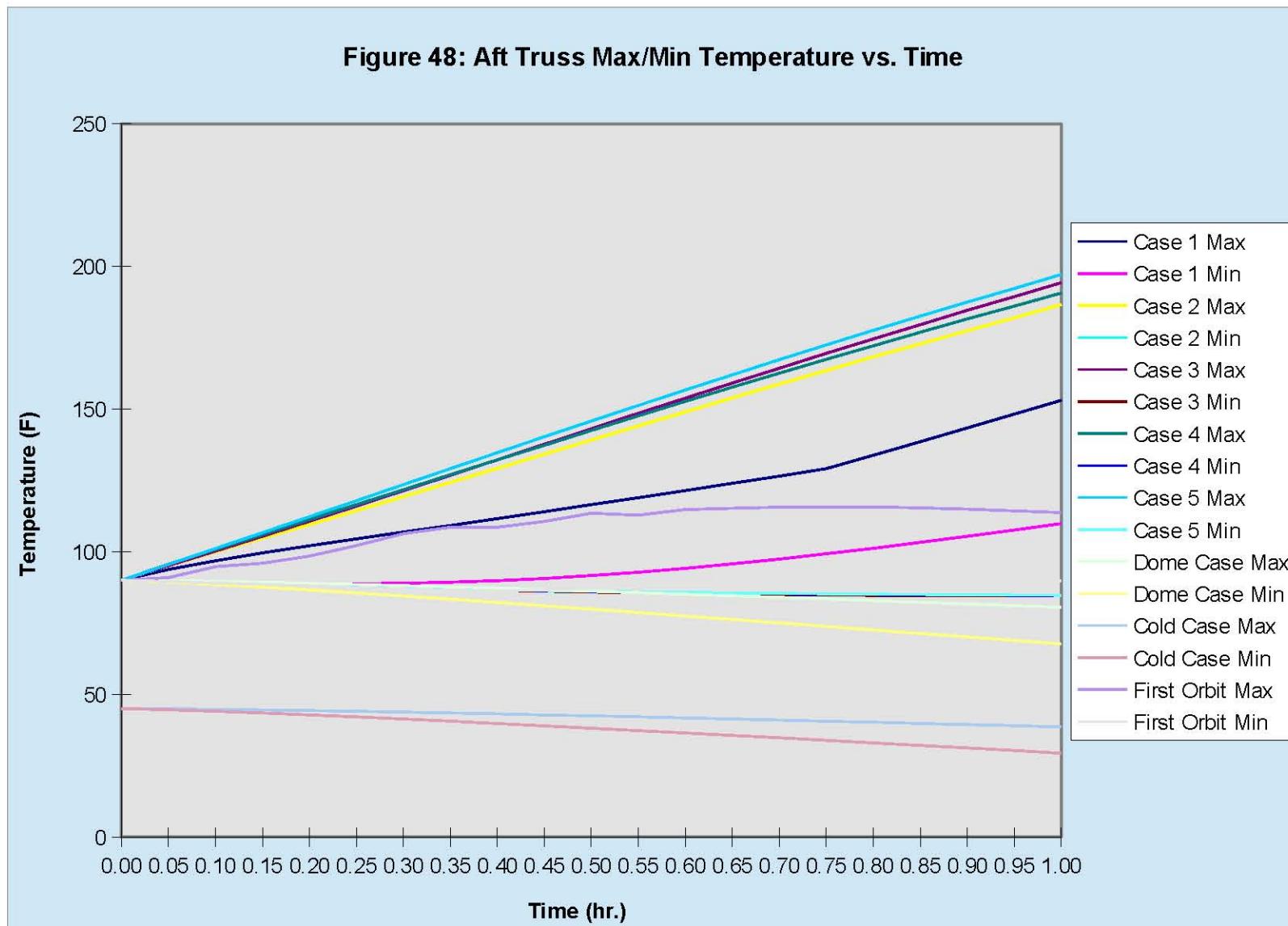


Fig\_47\_aft\_supt\_frame\_spacer\_o

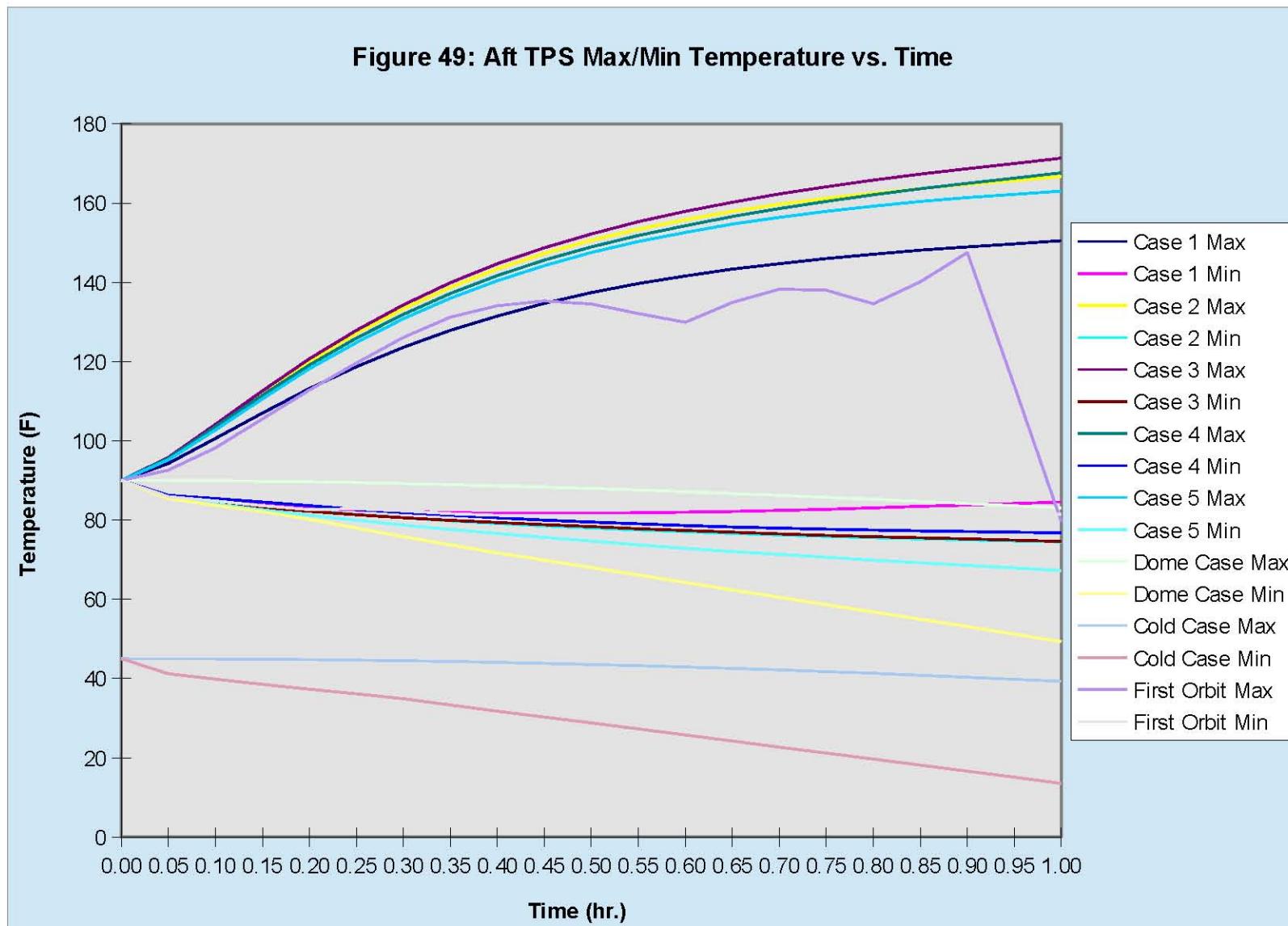
**Figure 47: Aft Supt Frame Spacer Outer Max/Min Temperature vs. Time**



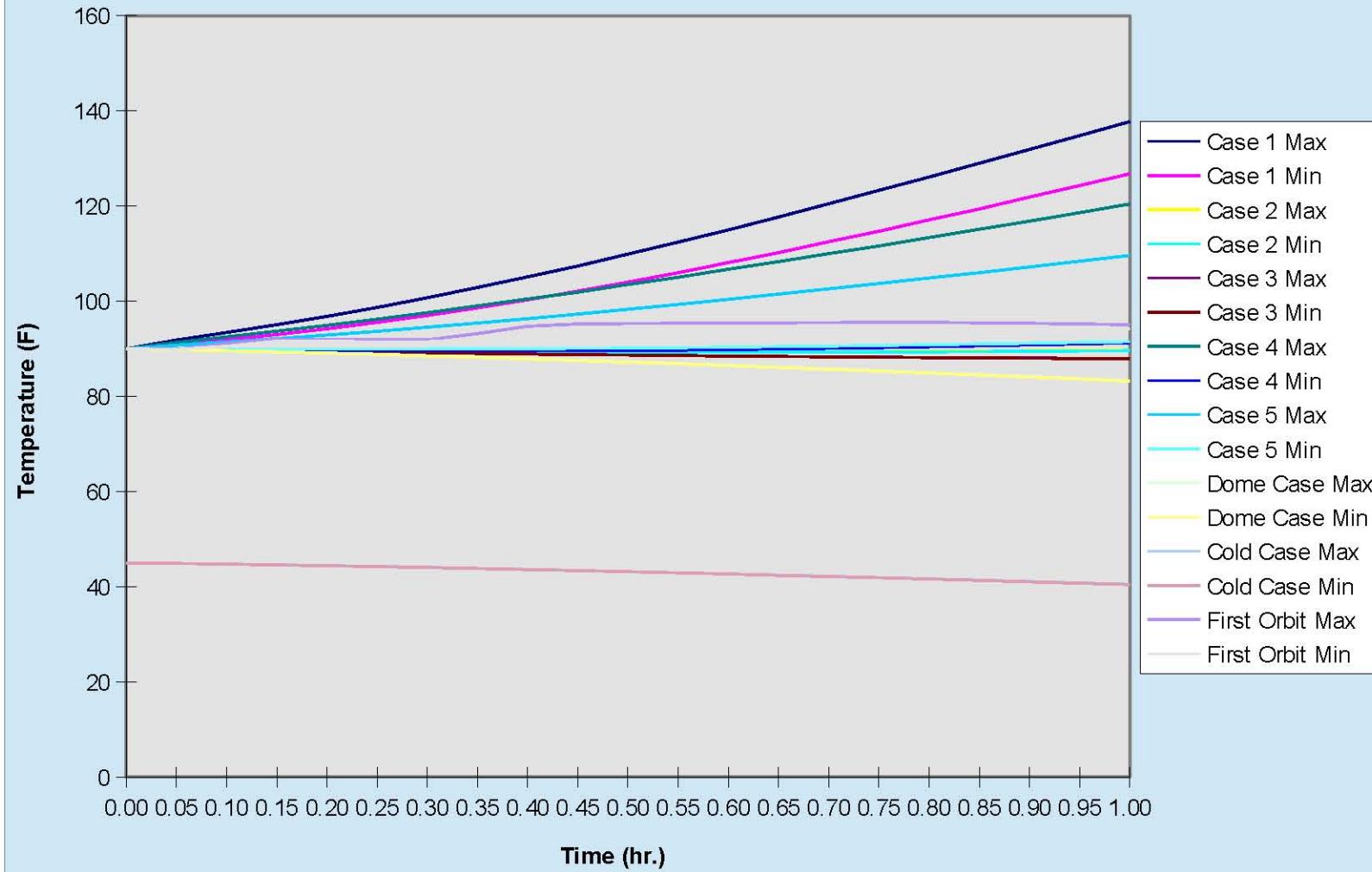
Fig\_48\_aft\_truss



Fig\_49\_aft\_tps

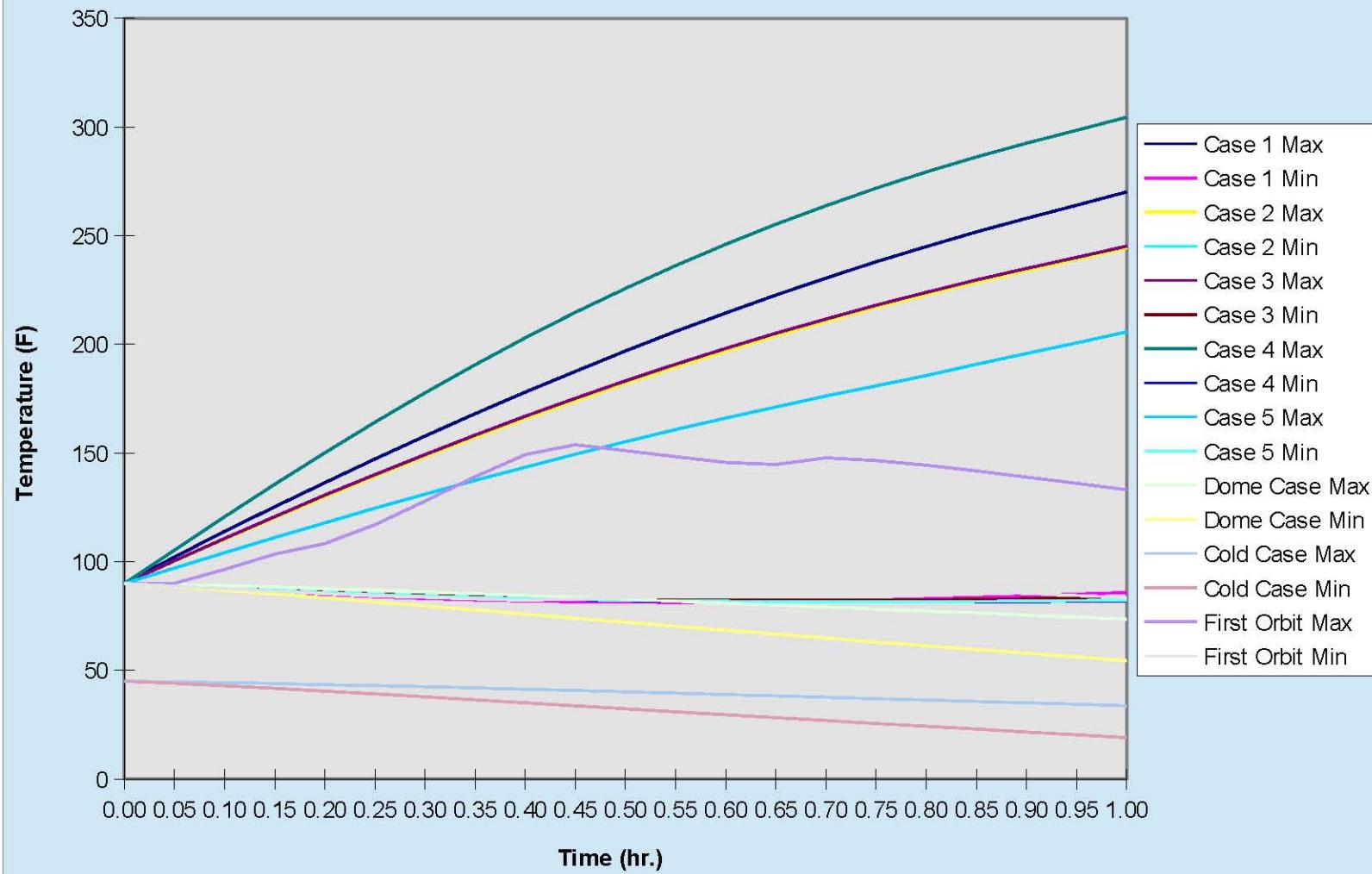


**Figure 50: Elect Controllers Max/Min Temperature vs. Time**



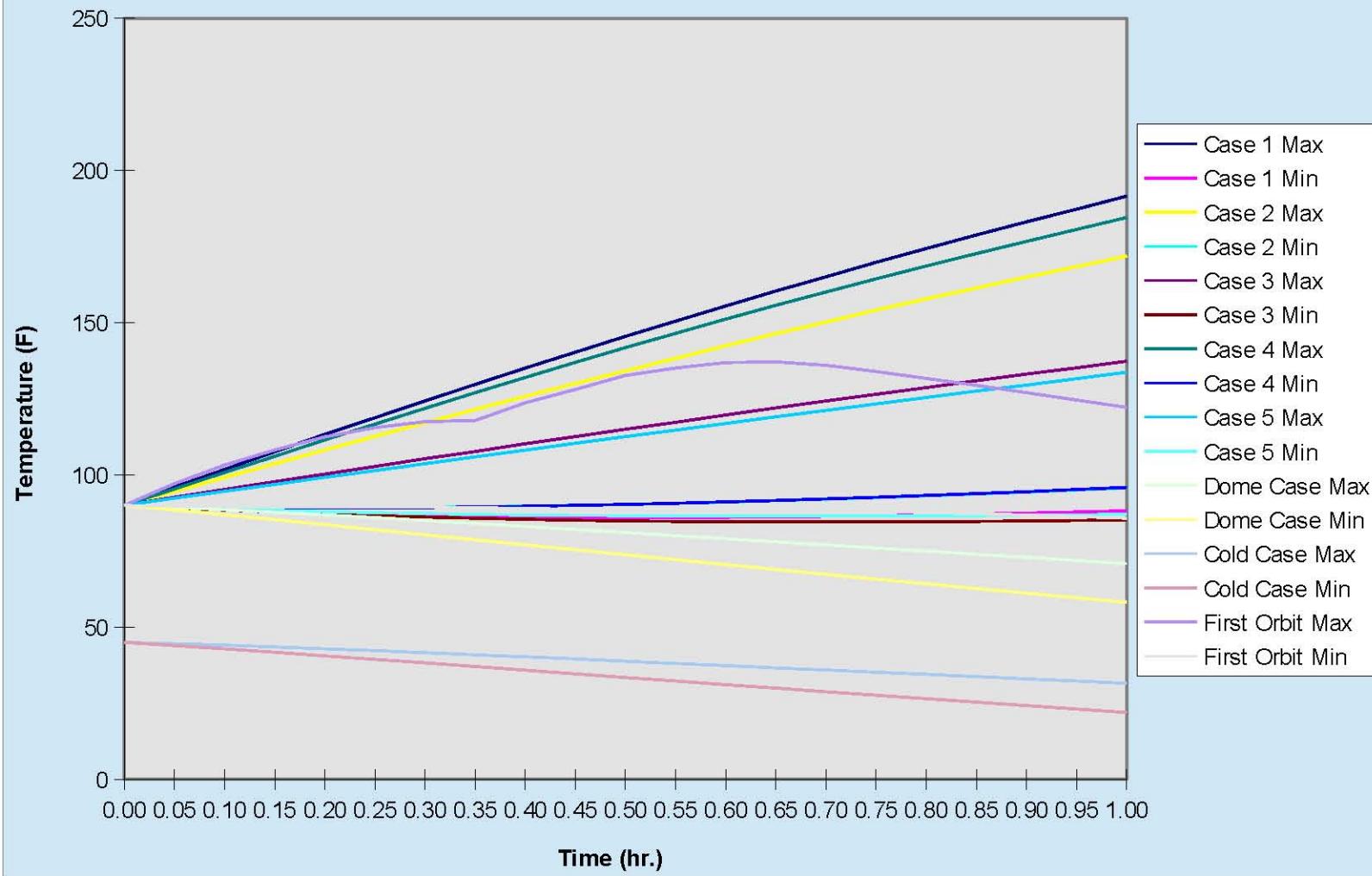
Fig\_51\_elect\_scissors\_elev\_down

**Figure 51: Elect Scissors Elev Down Max/Min Temperature vs. Time**



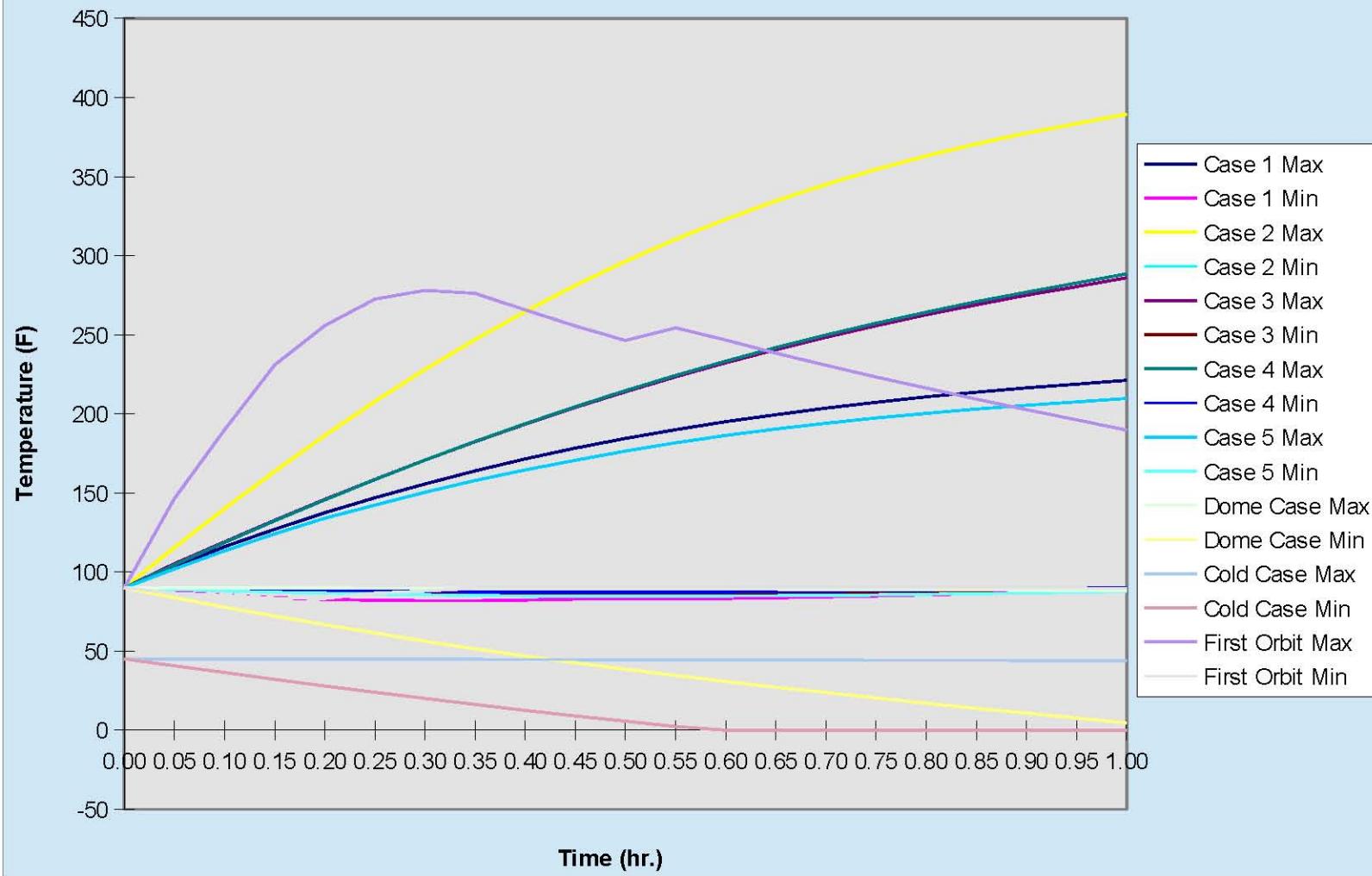
Fig\_52\_elect\_scissors\_fwd\_brack

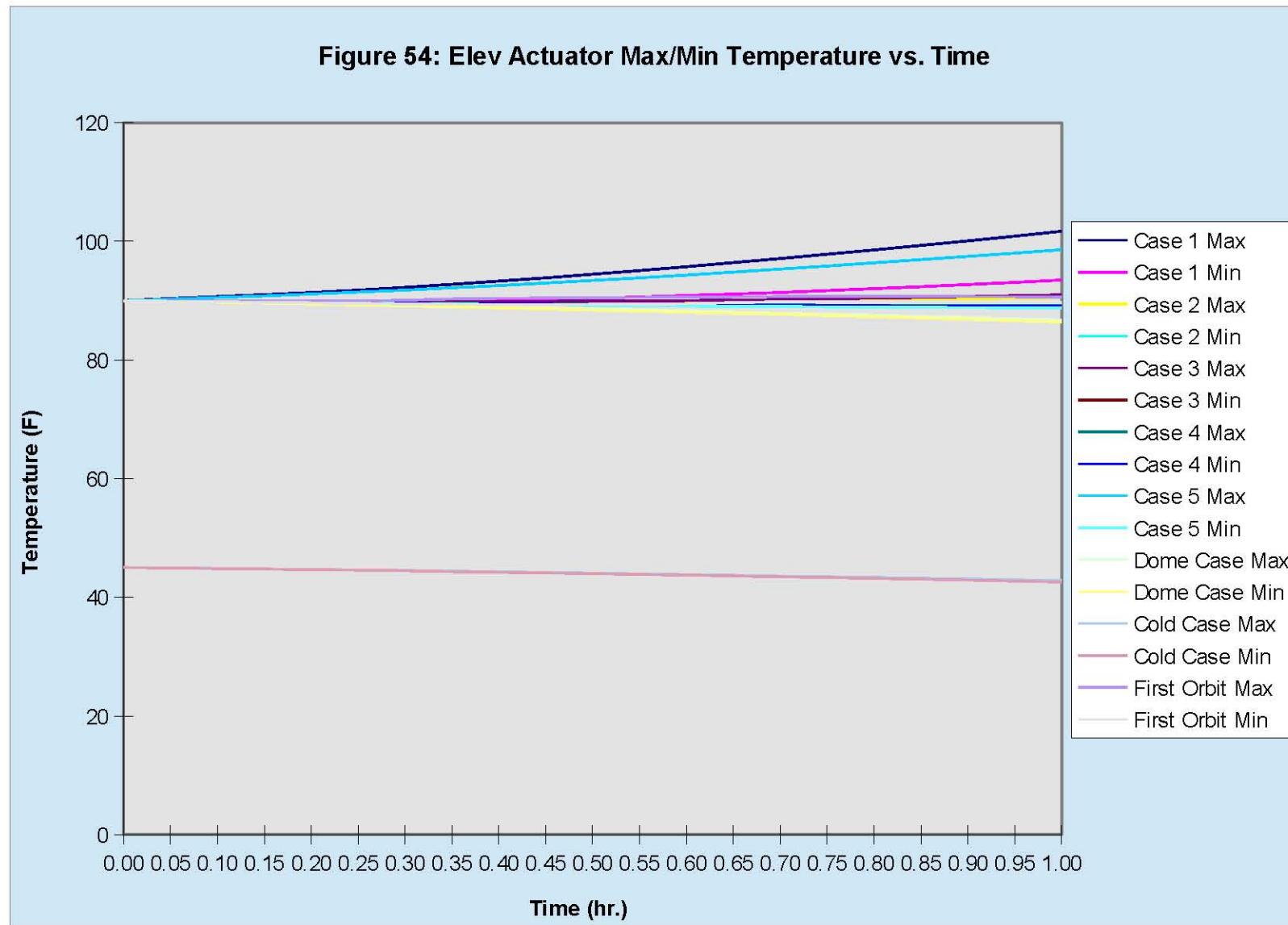
**Figure 52: Elect Scissors Fwd Bracket Max/Min Temperature vs. Time**



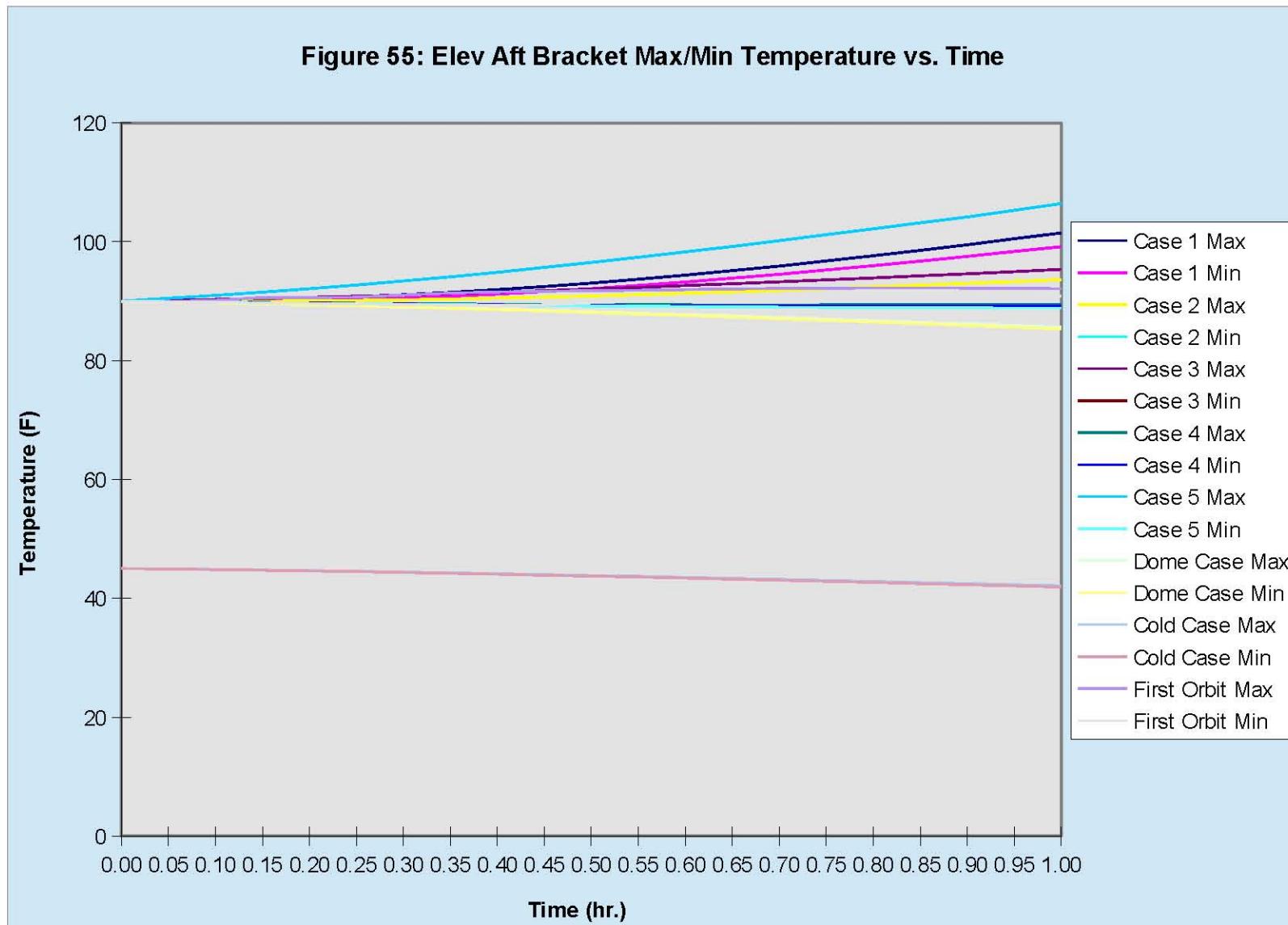
Fig\_53\_elect\_scissors\_fwd\_down

**Figure 53: Elect Scissors Fwd Down Max/Min Temperature vs. Time**

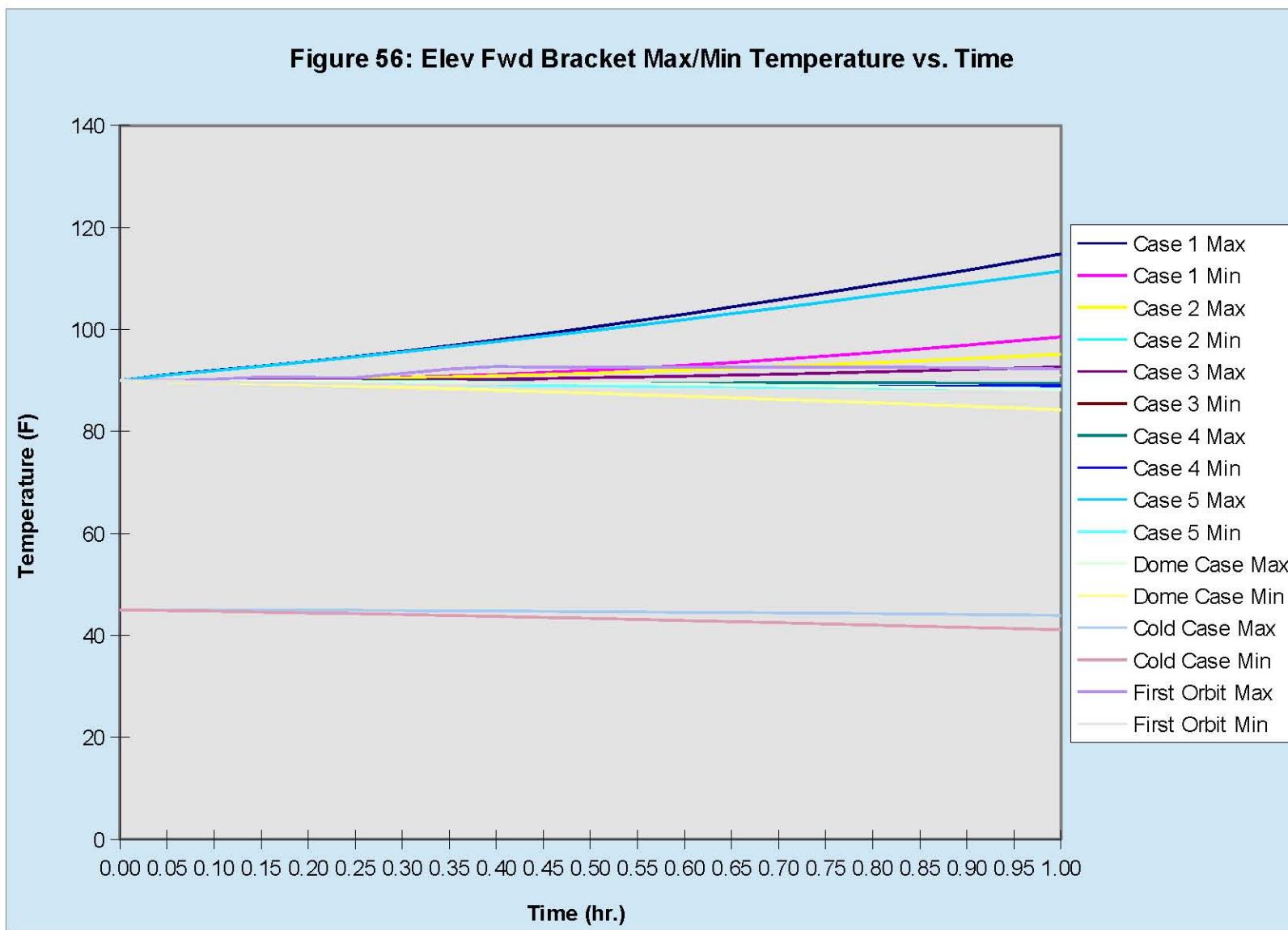




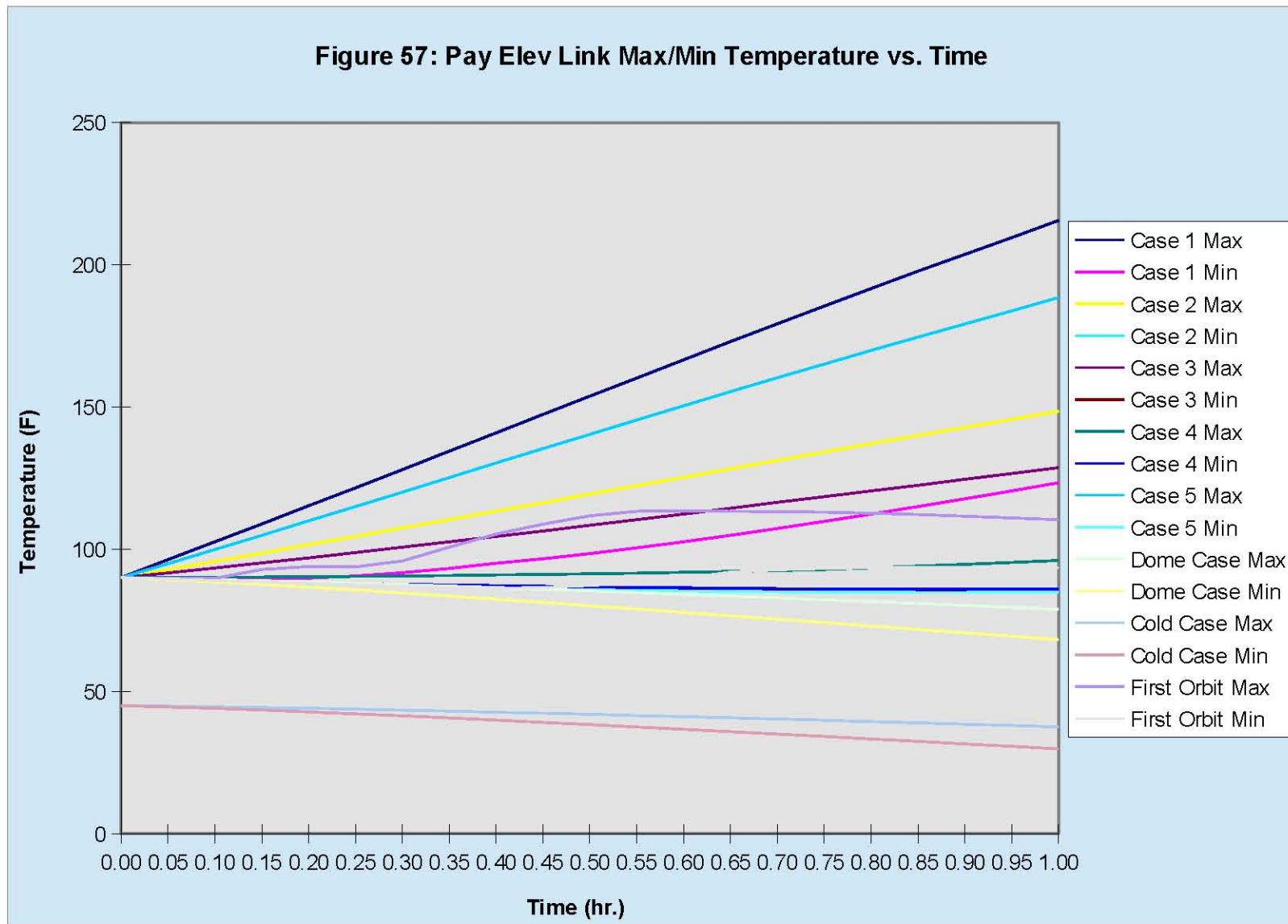
Fig\_55\_elev\_aft\_bracket

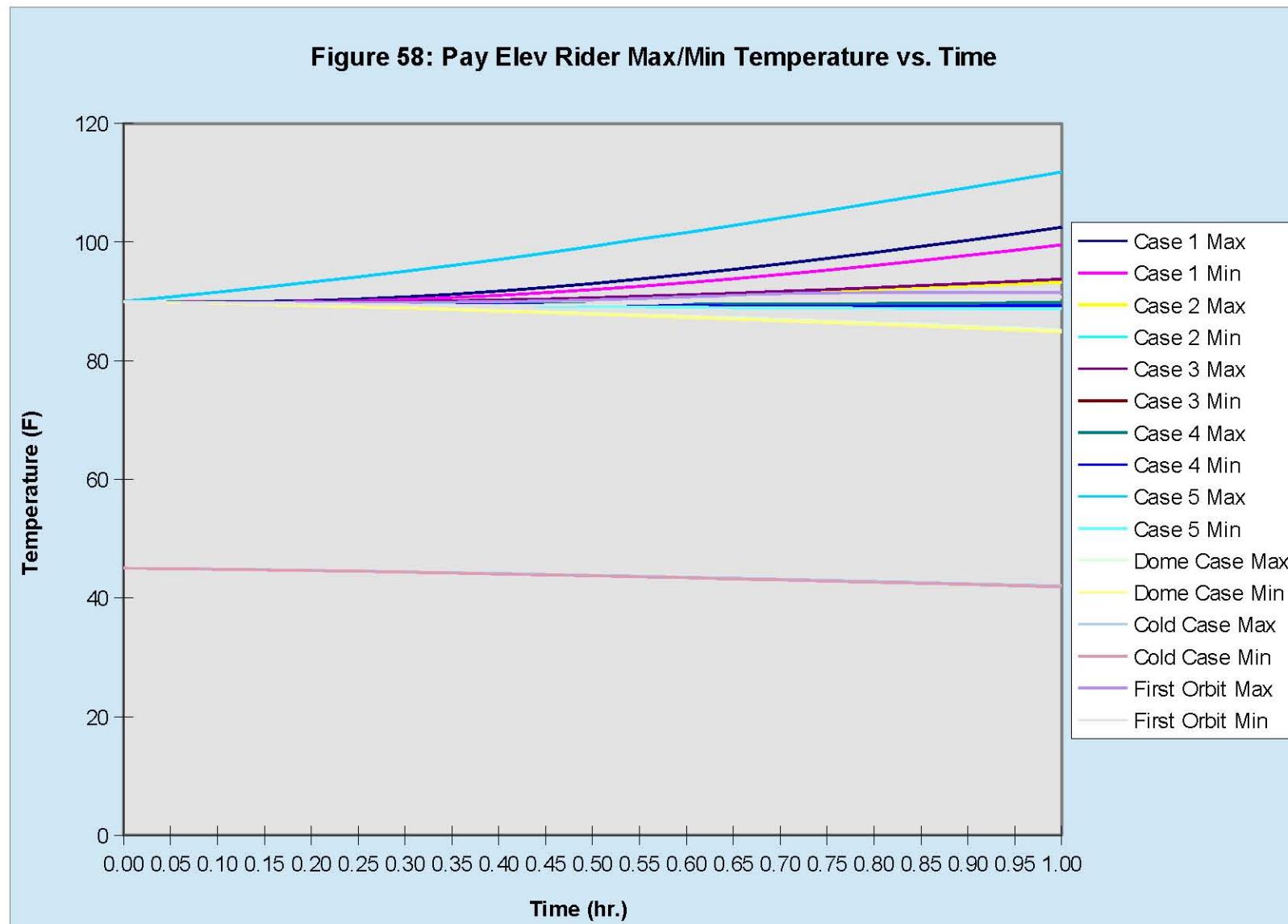


**Figure 56: Elev Fwd Bracket Max/Min Temperature vs. Time**

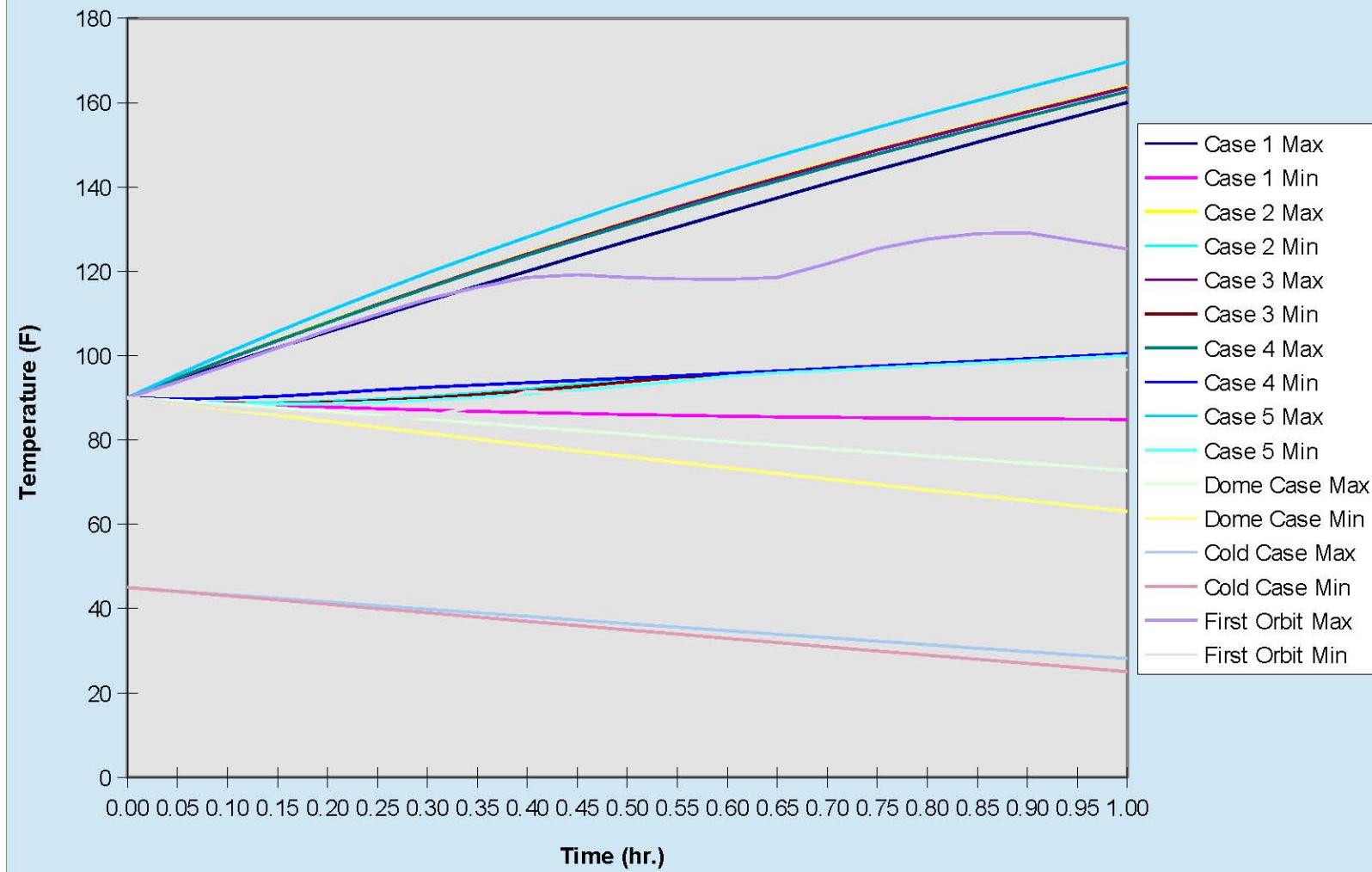


Fig\_57\_pay\_elev\_link





**Figure 59: Pay Globalstar Disp Max/Min Temperature vs. Time**



**Figure 60: Pay Supt Ring Max/Min Temperature vs. Time**

