



Life Support Team – Data Tracking Table



Examples and Practice

Circle One:

Oxygen (O²)

Carbon Dioxide (CO²)

Column	A	B	C (Graph this column)	D	E	F	G
Table Headings	UTC	Content of O ₂ or CO ₂	Partial Pressure of O ₂ or CO ₂	Change in O ₂ or CO ₂	Rate	Direction of Change	Time to Criticality**
Units	24 Hour Clock	%	mmHg	mmHg	mmHg per hour		hours
Calculations	From Data	From Data	$C = 760 \times B/100$	$D = \text{Current C} - \text{Previous C}$	$E = D/0.33$	Look at the graph and check one	$G = \frac{\text{Critical Value} - C}{E}$
Examples and Practice	15:00	0.35	2.66	n/a	n/a	n/a	n/a
	15:20	0.57	4.33	1.67	5.06	toward	0.64
	15:40	0.37	2.81	-1.52	-4.61	away	n/a
	16:00	0.80	6.08	3.27	9.91	toward	0.15
	16:20	1.20	9.12	3.04	9.21	critical	n/a
	16:40	1.40	10.64	1.52	4.61	critical	n/a
	17:00	0.90	6.84	-3.80	-11.52	away	n/a
	17:20	1.80	13.68	6.84	20.73	critical	n/a
	17:40	0.95	7.22	-6.46	-19.57	away	n/a
	18:00	0.74	5.62	-1.60	-4.85	away	n/a
	18:20	0.51	3.88	-1.74	-5.27	away	n/a

Note: Round all calculations to two decimal places. Critical Value for O₂ is 115 mmHg. Critical Value for CO₂ is 7.6 mmHg.



Life Support Team – Data Tracking Table



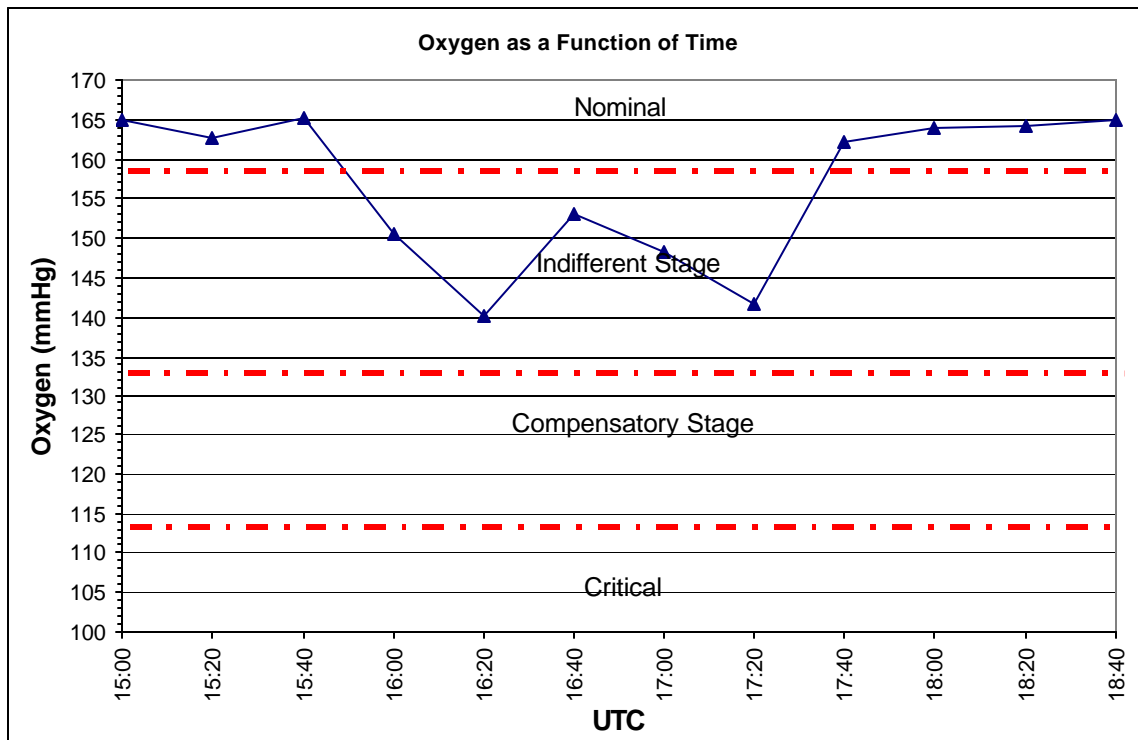
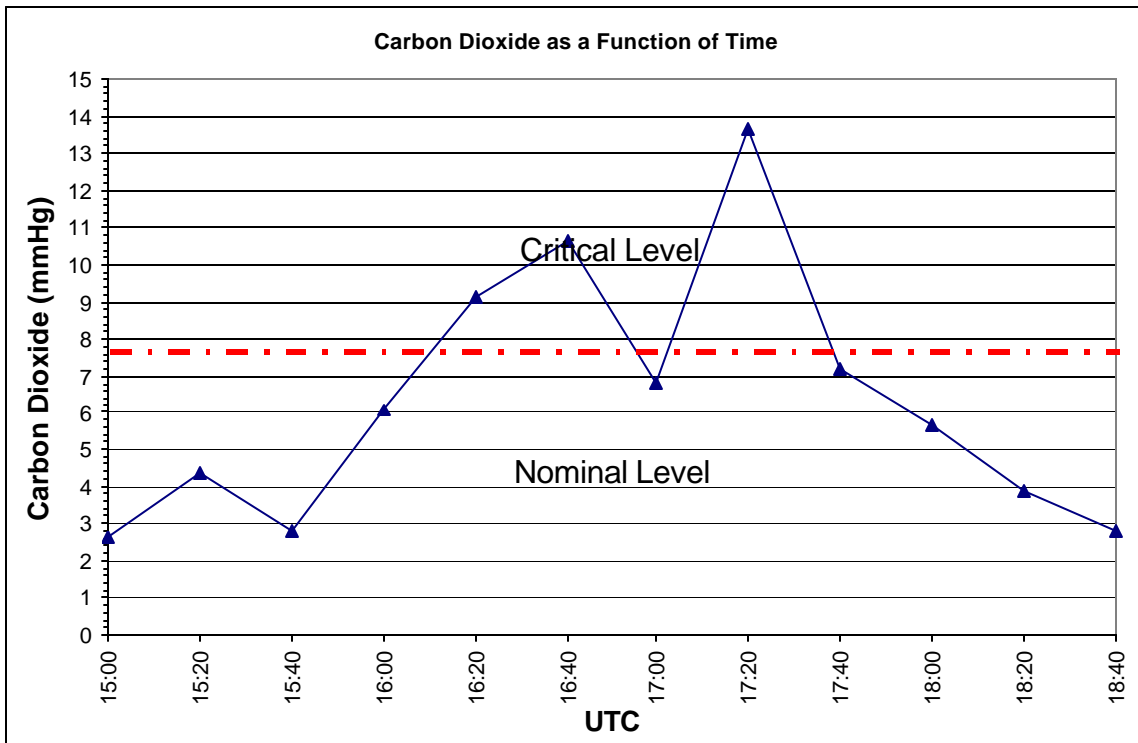
Examples and Practice

Circle One: Oxygen (O²) Carbon Dioxide (CO²)

Column	A	B	C (Graph this column)	D	E	F	G
Table Headings	UTC	Content of O ₂ or CO ₂	Partial Pressure of O ₂ or CO ₂	Change in O ₂ or CO ₂	Rate	Direction of Change	Time to Criticality**
Units	24 Hour Clock	%	mmHg	mmHg	mmHg per hour		hours
Calculations	From Data	From Data	C = 760 x B/100	D = Current C - Previous C	E = D/0.33	Look at the graph and check one	G = $\frac{\text{Critical Value} - C}{E}$
Examples and Practice	15:00	21.70	164.92	n/a	n/a	n/a	n/a
	15:20	21.42	162.79	-2.13	-6.45	toward	7.41
	15:40	21.75	165.30	2.51	7.61	away	n/a
	16:00	19.80	150.48	-14.82	-44.91	toward	0.79
	16:20	18.45	140.22	-10.26	-31.09	toward	0.81
	16:40	20.15	153.14	12.92	39.15	away	n/a
	17:00	19.50	148.20	-4.94	-14.97	toward	2.22
	17:20	18.65	141.74	-6.46	-19.58	toward	1.37
	17:40	21.33	162.11	20.37	61.73	away	n/a
	18:00	21.56	163.86	1.75	5.30	away	n/a
	18:20	21.60	164.16	0.30	0.91	away	n/a

Note: Round all calculations to two decimal places. Critical Value for O₂ is 115 mmHg. Critical Value for CO₂ is 7.6 mmHg.

Practice Data





Life Support Team – Data Tracking Table



For the Mission

Circle One:

Oxygen (O²)

Carbon Dioxide (CO²)

Column	A	B	C (Graph this column)	D	E	F	G
Table Headings	UTC	Content of O ₂ or CO ₂	Partial Pressure of O ₂ or CO ₂	Change in O ₂ or CO ₂	Rate	Direction of Change	Time to Criticality**
Units	24 Hour Clock	%	mmHg	mmHg	mmHg per hour		hours
Calculations	From Data	From Data	C = 760 x B/100	D = Current C - Previous C	E = D/0.33	Look at the graph and check one	G = $\frac{\text{Critical Value} - C}{E}$
For the Mission	15:00	0.37	2.81	n/a	n/a	n/a	n/a
	15:20	0.45	3.42	0.61	1.85	toward	2.26
	15:40	0.58	4.41	0.99	3.00	toward	1.06
	16:00	0.80	6.08	1.67	5.06	toward	0.30
	16:20	1.05	7.98	1.90	5.76	critical	n/a
	16:40	1.19	9.04	1.06	3.21	critical	n/a
	17:00	1.62	12.31	3.27	9.91	critical	n/a
	17:20	1.80	13.68	1.37	4.15	critical	n/a
	17:40	0.95	7.22	-6.46	-19.58	away	n/a
	18:00	0.74	5.62	-1.60	-4.85	away	n/a
	18:20	0.51	3.88	-1.74	-5.27	away	n/a
	18:40	0.37	2.81	-1.07	-3.24	away	n/a

Note: Round all calculations to two decimal places. Critical Value for O₂ is 115 mmHg. Critical Value for CO₂ is 7.6 mmHg.



Life Support Team – Data Tracking Table



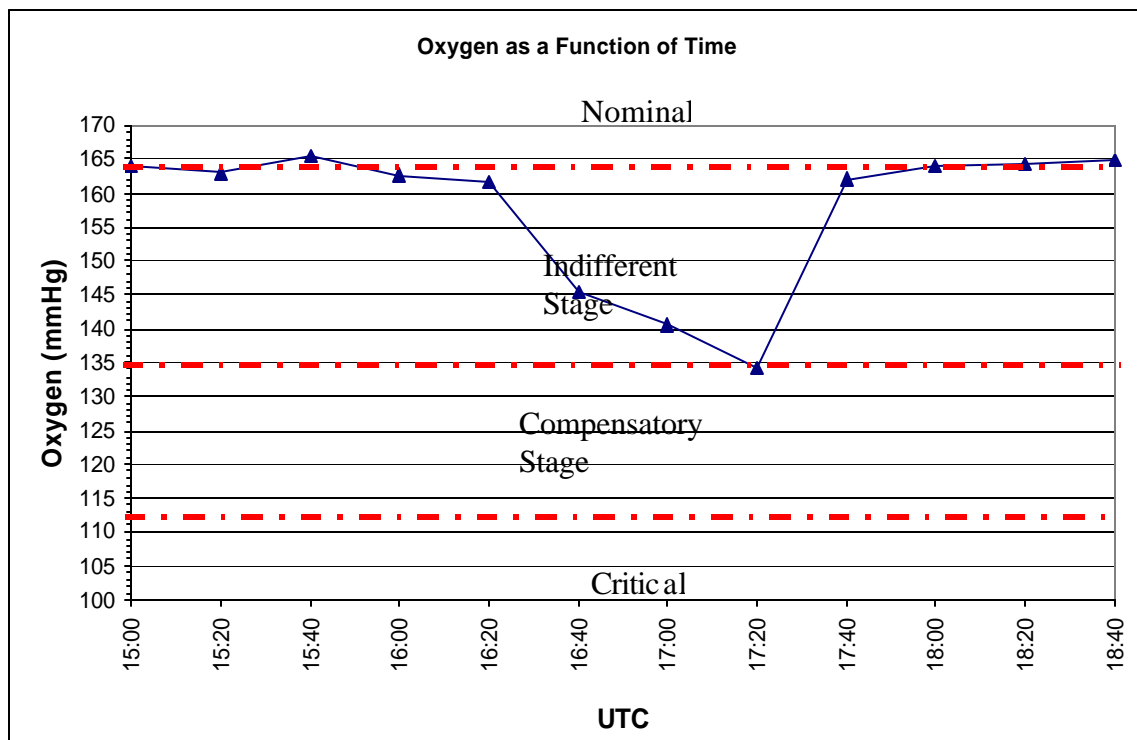
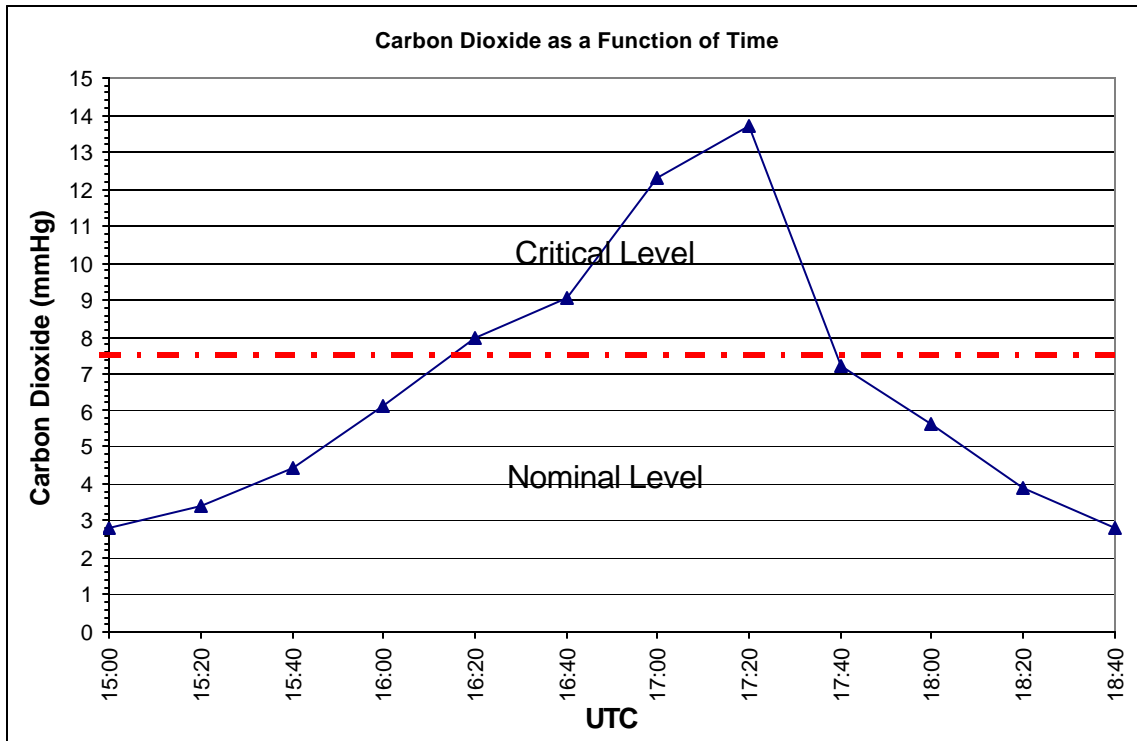
For the Mission

Circle One: Oxygen (O²) Carbon Dioxide (CO²)

Column	A	B	C (Graph this column)	D	E	F	G
Table Headings	UTC	Content of O ₂ or CO ₂	Partial Pressure of O ₂ or CO ₂	Change in O ₂ or CO ₂	Rate	Direction of Change	Time to Criticality**
Units	24 Hour Clock	%	mmHg	mmHg	mmHg per hour		hours
Calculations	From Data	From Data	C = 760 x B/100	D = Current C - Previous C	E = D/0.33	Look at the graph and check one	G = $\frac{\text{Critical Value} - C}{E}$
For the Mission	15:00	21.56	163.86	n/a	n/a	n/a	n/a
	15:20	21.42	162.79	-1.07	-3.24	toward	14.75
	15:40	21.75	165.30	2.51	7.61	away	n/a
	16:00	21.40	162.64	-2.66	-8.06	toward	5.91
	16:20	21.29	161.80	-0.84	-2.55	toward	18.35
	16:40	19.15	145.54	-16.26	-49.27	toward	0.62
	17:00	18.50	140.60	-4.94	-14.97	toward	1.71
	17:20	17.65	134.14	-6.46	-19.58	toward	0.98
	17:40	21.33	162.11	27.97	84.76	away	n/a
	18:00	21.56	163.86	1.75	5.30	away	n/a
	18:20	21.60	164.16	0.30	0.91	away	n/a
	18:40	21.70	164.92	0.76	2.30	away	n/a

Note: Round all calculations to two decimal places. Critical Value for O₂ is 115 mmHg. Critical Value for CO₂ is 7.6 mmHg.

Mission Data





Radiation Team – Data Tracking Table



Circle One: **TEPC1 (Portable)** TEPC2 (Stationary)

Column	A	B	C (Graph this column)	D	E	F (Graph this column and compare to tables in the Reference Guide)
Table Headings	UTC	20 min Dose Total	Cumulative Dose	Dose Rate	Time to Criticality	24 hour Projected Total
Units	24 Hour Clock	rems	rems	rem/hr	hours	rems
Calculations	From Data	From Data	C= B+ Previous C	$D = \frac{B}{0.33}$	$E = \frac{100 - C}{D}$	F = (D X 24) + C
Examples and Practice	15:00	0.43	0.43	1.30	76.59	31.63
	15:20	0.58	1.01	1.76	56.24	43.25
	15:40	1.67	2.68	5.06	19.23	124.12
	16:00	3.56	6.24	10.79	8.69	265.20
	16:20	5.01	11.25	15.18	5.85	375.57
	16:40	4.20	15.45	12.73	6.64	320.97
	17:00	1.83	17.28	5.55	14.90	150.48

Note: Round all calculations to two decimal places.

Column	A	B	C (Graph this column)	D	E	F (Graph this column and compare to tables in the Reference Guide)
Table Headings	UTC	20 min Dose Total	Cumulative Dose	Dose Rate	Time to Criticality	24 hour Projected Total
Units	24 Hour Clock	rems	rems	rem/hr	hours	rems
Calculations	From Data	From Data	C= B+ Previous C	$D = \frac{B}{0.33}$	$E = \frac{100 - C}{D}$	F = (D X 24) + C
For the Mission	15:00	0.24	0.24	0.73	136.66	17.76
	15:20	0.89	1.13	2.70	36.62	65.93
	15:40	1.47	2.60	4.45	21.89	109.40
	16:00	1.35	3.95	4.09	23.48	102.11
	16:20	1.91	5.86	5.79	16.26	144.82
	16:40	2.00	7.86	6.06	15.20	153.30
	17:00	3.45	11.31	10.45	8.49	262.11
	17:20	2.55	13.86	7.73	11.14	199.38
	17:40	1.99	15.85	6.03	13.96	160.57
	18:00	2.04	17.89	6.18	13.29	166.21
	18:20	1.58	19.47	4.79	16.81	134.43
	18:40	1.07	20.54	3.24	24.52	98.30
	19:00	0.24	20.78	0.73	108.52	38.30
	19:20	0.89	21.67	2.70	29.01	86.47

Note: Round all calculations to two decimal places.



Radiation Team – Data Tracking Table



Circle One: **TEPC1 (Portable)** **TEPC2 (Stationary)**

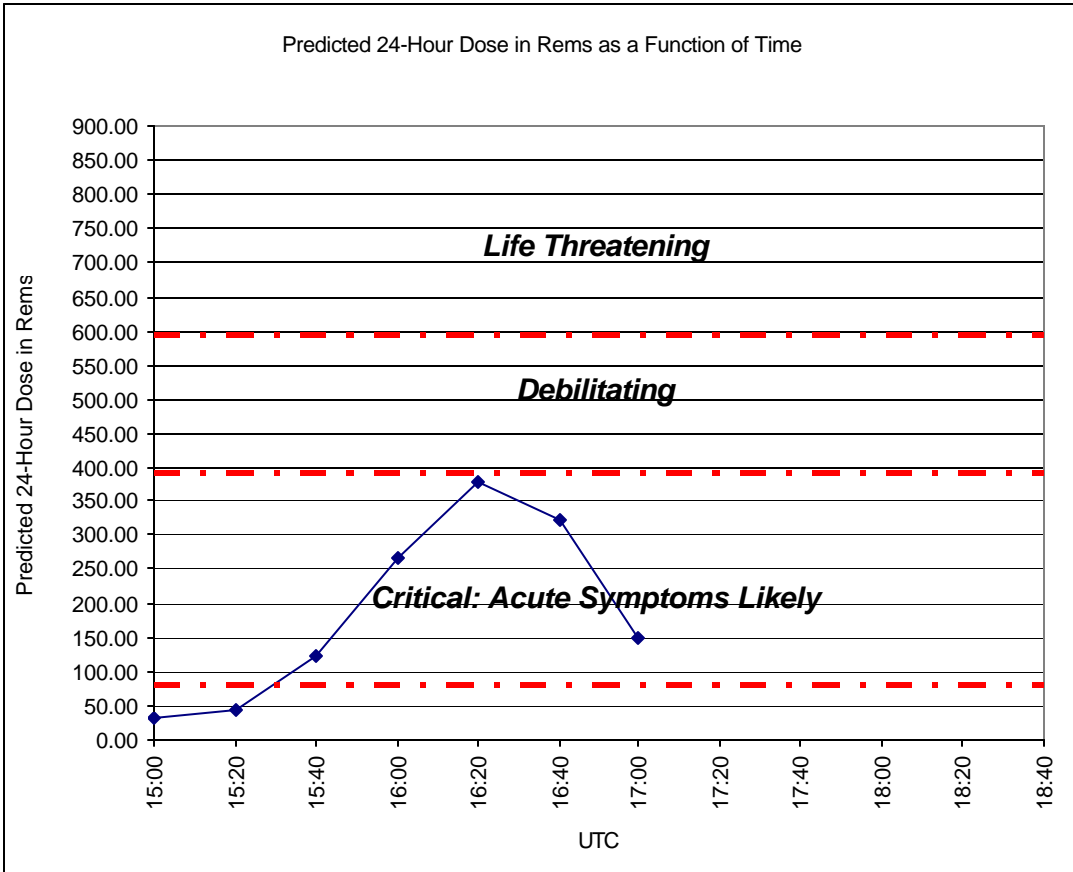
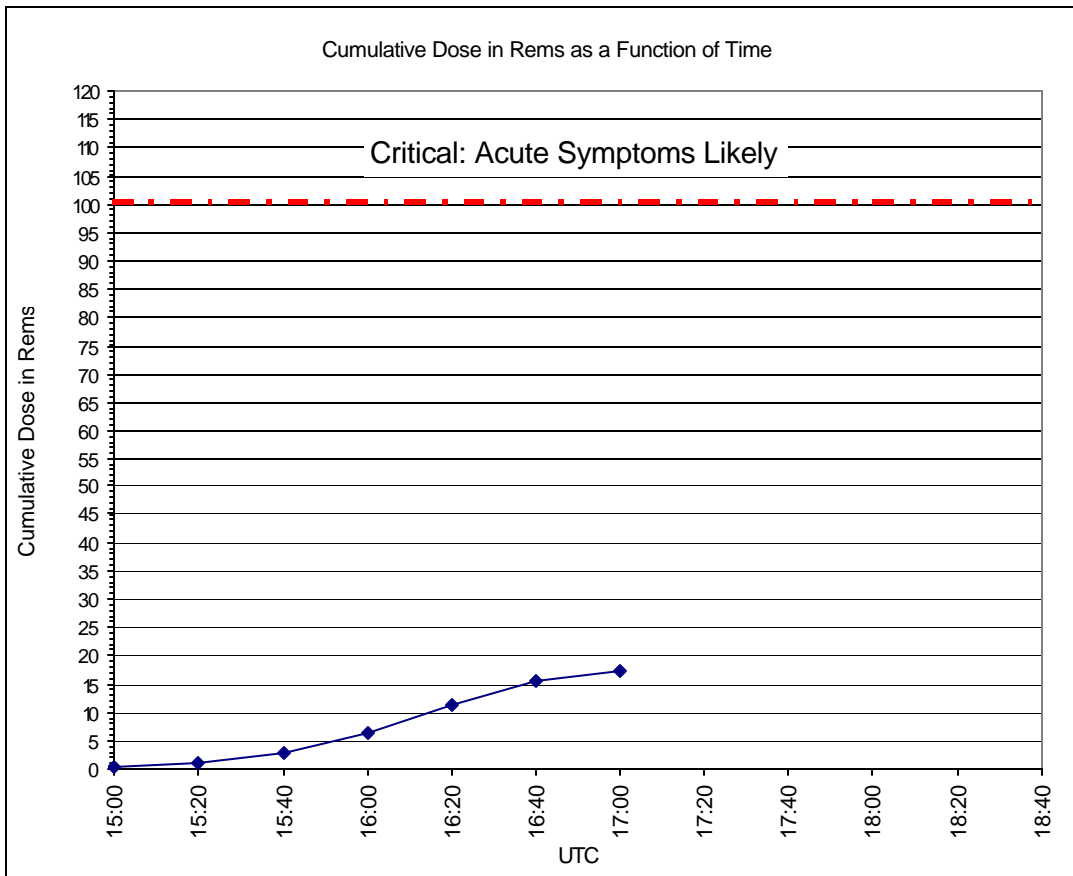
Column	A	B	C (Graph this column)	D	E	F (Graph this column and compare to tables in the Reference Guide)
Table Headings	UTC	20 min Dose Total	Cumulative Dose	Dose Rate	Time to Criticality	24 hour Projected Total
Units	24 Hour Clock	rems	rems	rem/hr	hours	rems
Calculations	From Data	From Data	C= B+ Previous C	$D = \frac{B}{0.33}$	$E = \frac{100 - C}{D}$	F = (D X 24) + C
Examples and Practice	15:00	0.43	0.43	1.30	76.59	31.63
	15:20	0.58	1.01	1.76	56.24	43.25
	15:40	1.67	2.68	5.06	19.23	124.12
	16:00	3.56	6.24	10.79	8.69	265.20
	16:20	5.01	11.25	15.18	5.85	375.57
	16:40	4.20	15.45	12.73	6.64	320.97
	17:00	1.83	17.28	5.55	14.90	150.48

Note: Round all calculations to two decimal places.

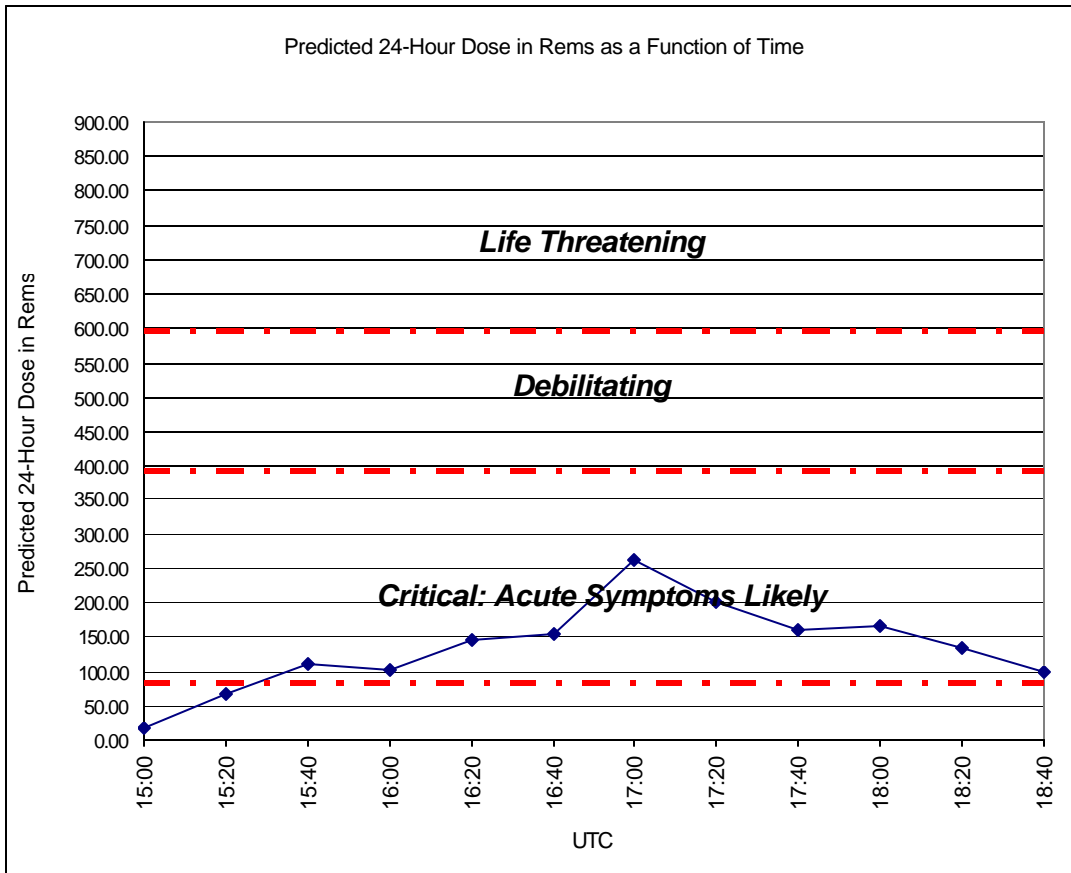
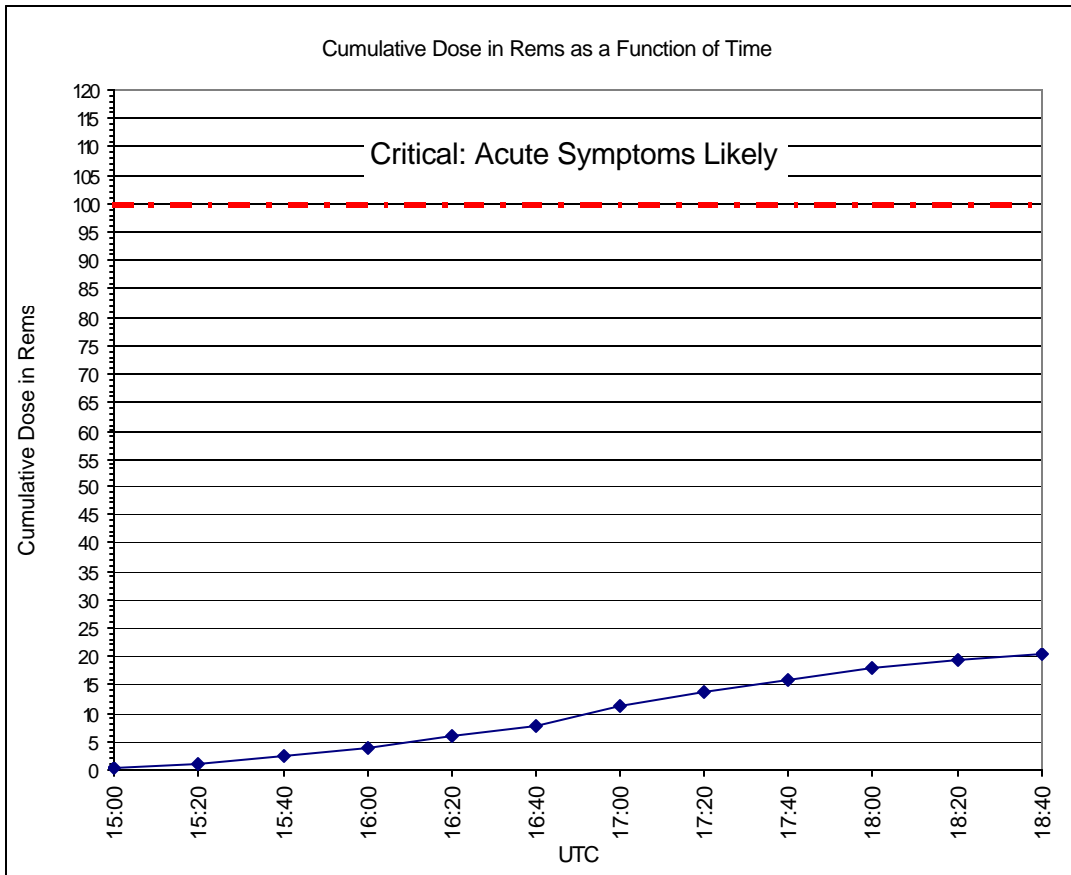
Column	A	B	C (Graph this column)	D	E	F (Graph this column and compare to tables in the Reference Guide)
Table Headings	UTC	20 min Dose Total	Cumulative Dose	Dose Rate	Time to Criticality	24 hour Projected Total
Units	24 Hour Clock	rems	rems	rem/hr	hours	rems
Calculations	From Data	From Data	C= B+ Previous C	$D = \frac{B}{0.33}$	$E = \frac{100 - C}{D}$	F = (D X 24) + C
For the Mission	15:00	0.74	0.74	2.24	44.31	54.5
	15:20	0.77	1.51	2.33	42.27	57.43
	15:40	1.52	3.03	4.61	21.03	113.67
	16:00	1.31	4.34	3.97	24.10	99.62
	16:20	6.23	10.57	18.88	4.74	463.69
	16:40	8.96	19.53	27.15	2.96	671.13
	17:00	11.00	30.53	33.33	2.08	830.45
	17:20	11.64	42.17	35.27	1.64	888.65
	17:40	10.64	52.81	32.24	1.46	820.57
	18:00	7.56	60.37	22.91	1.73	610.21
	18:20	5.09	65.46	15.42	2.24	435.54
	18:40	2.94	68.40	8.91	3.55	282.24
	19:00	0.74	69.14	2.24	13.79	122.90
	19:20	0.77	69.91	2.33	12.93	125.83

Note: Round all calculations to two decimal places.

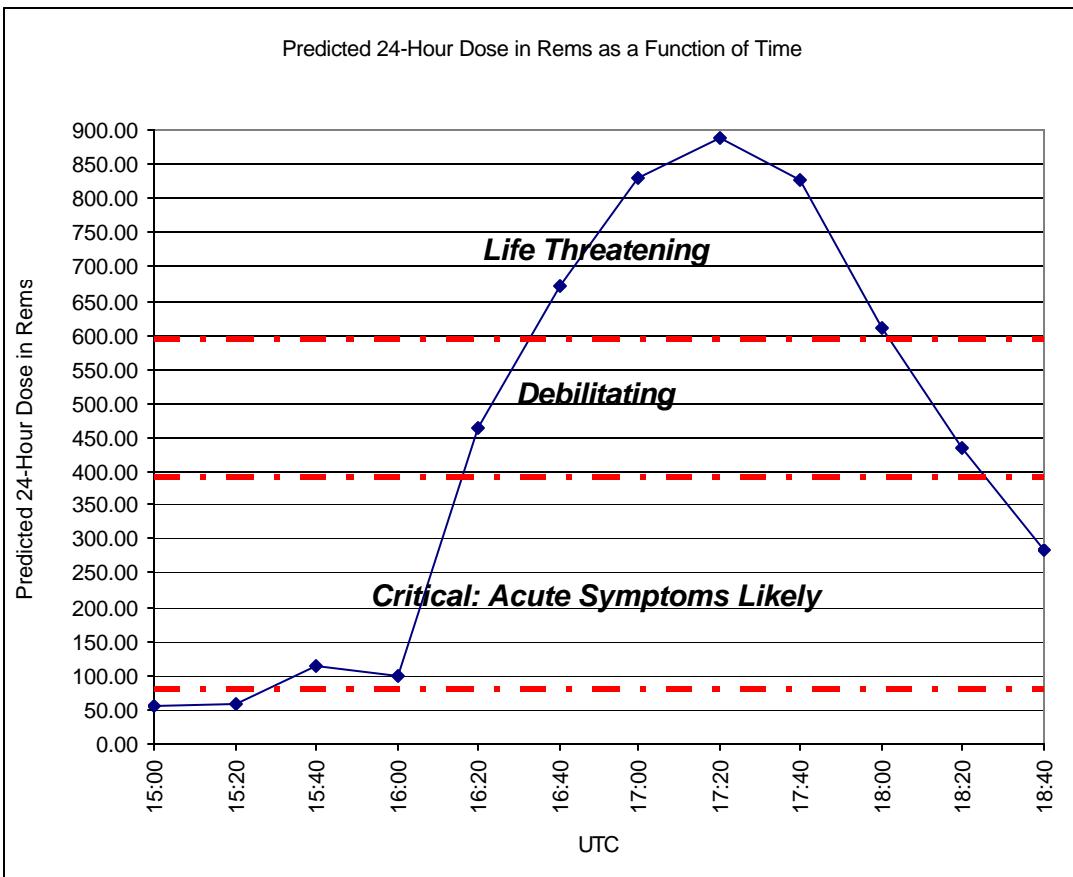
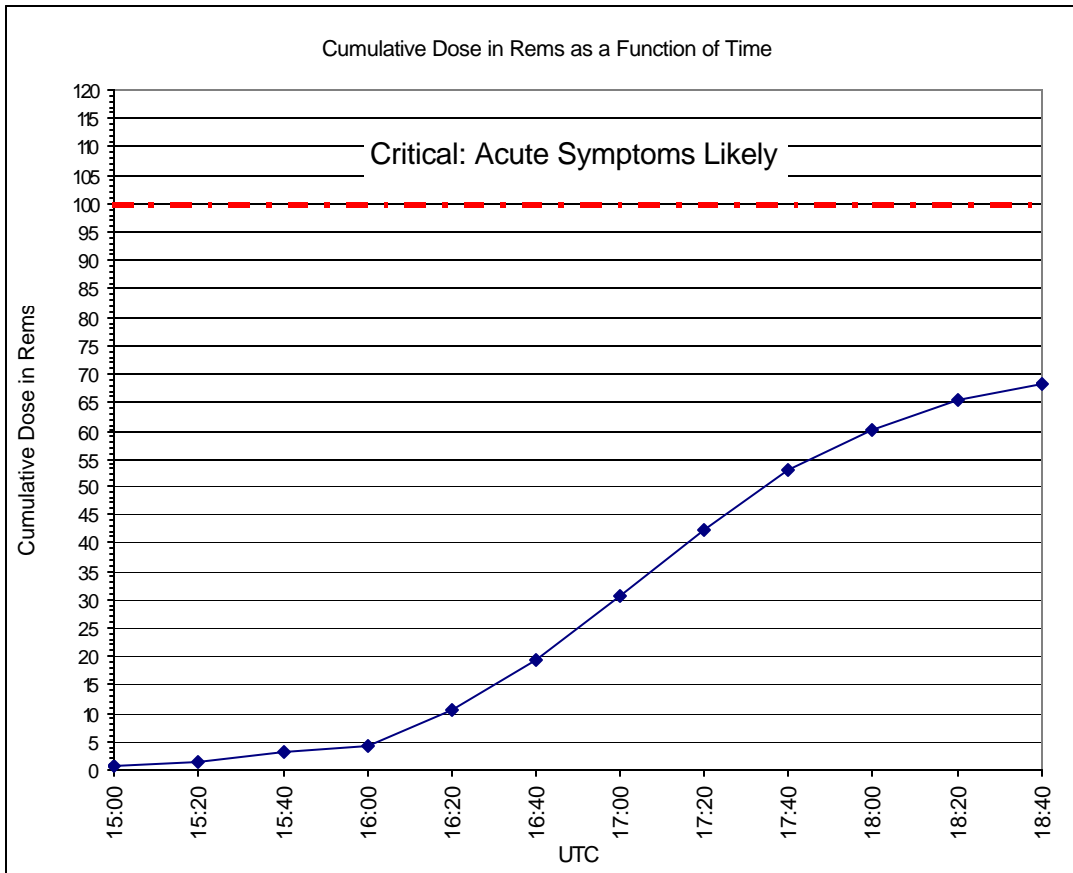
Practice TEPC 1 & 2



Mission Day TEPC1



Mission Day TEPC2





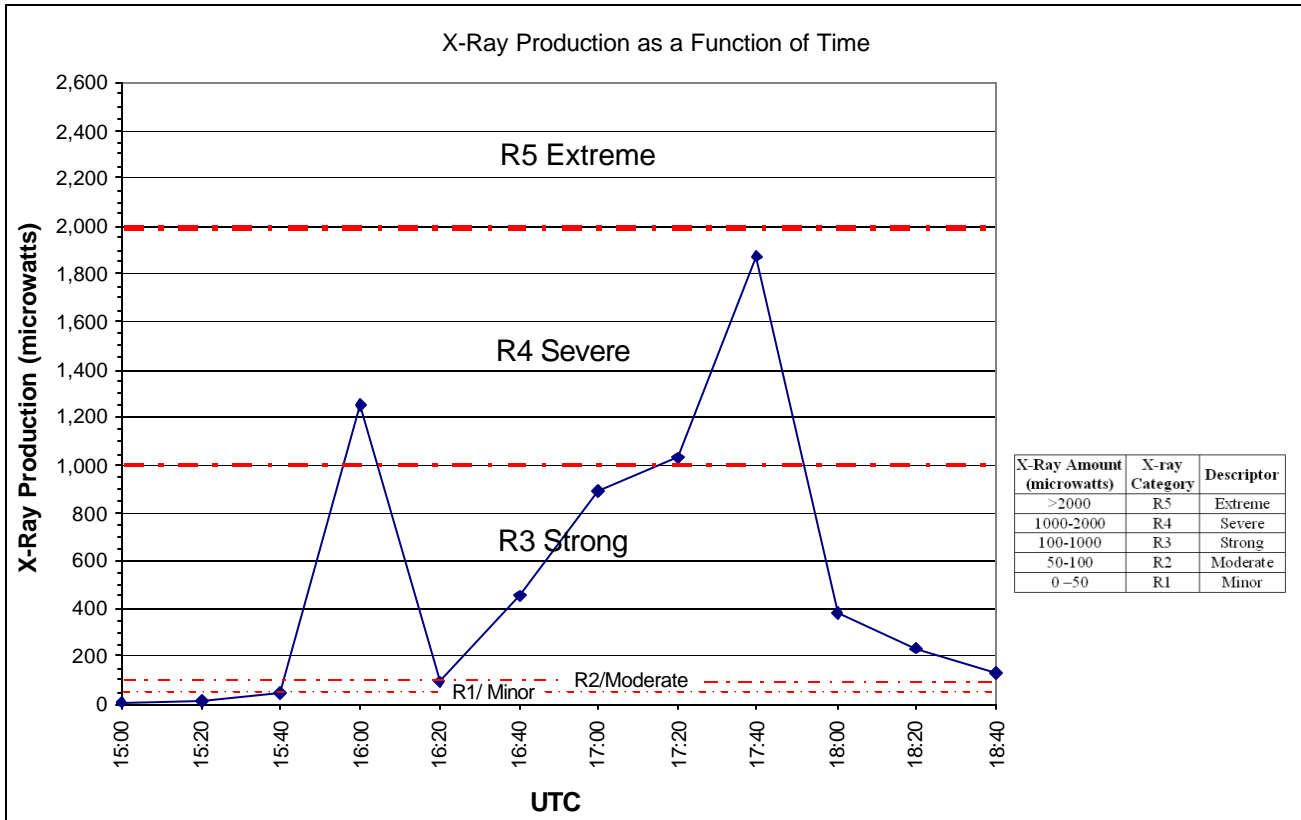
STORM Team – Data Tracking Table: X-Ray Production



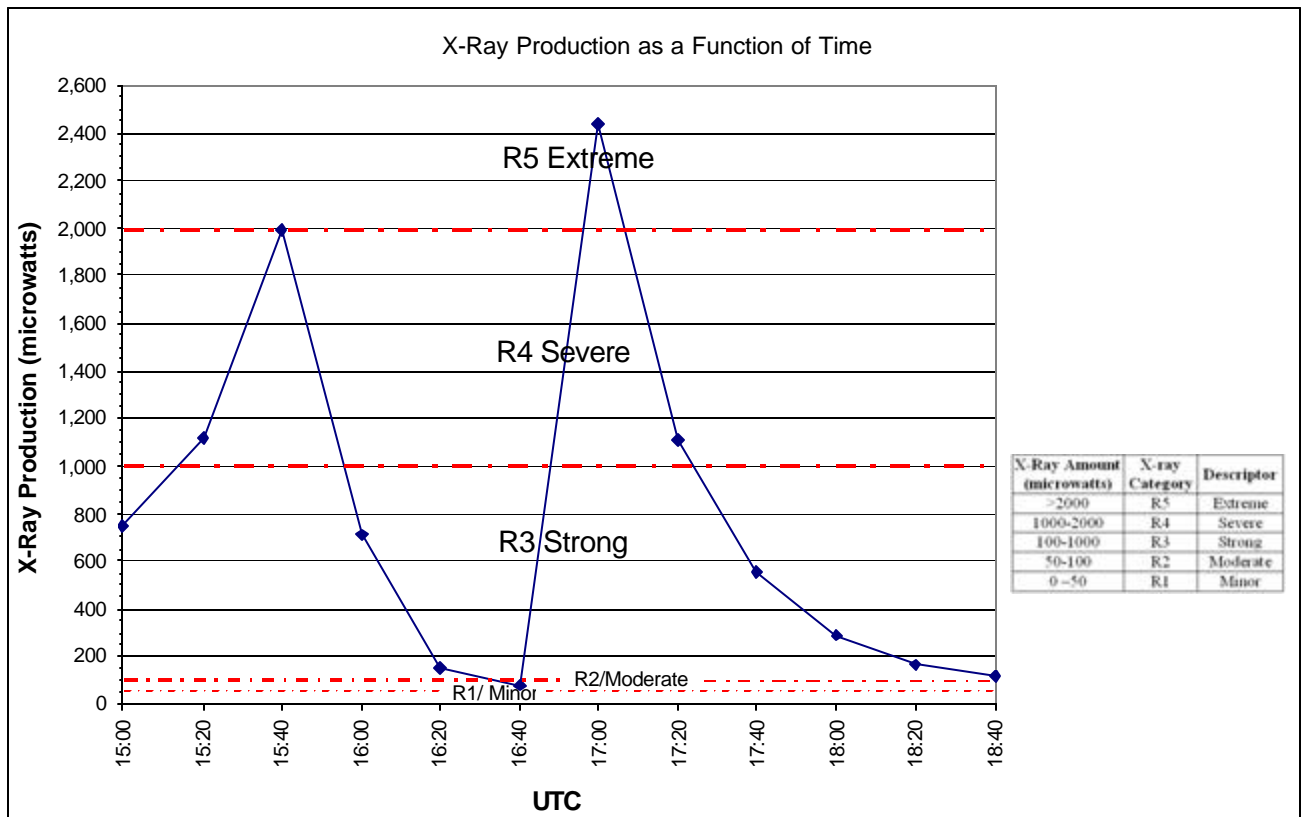
Column	A	B (Graph this column)	C	D	E	F	G
Table Headings	UTC	X-Rays	Category	Change	Rate	Projected X-Ray Production in 1 Hour	Category
Units	24 Hour Clock	Amount of X-Rays	From R1 to R5	Amount of X-Rays	X-Rays/min	X-Ray Production	From R1 to R5
Calculations	From Data	From Data	See Reference Guide	B – Previous B	D / 20 min	(E x 60 min) + B	See Reference Guide
Examples and Practice	15:00	9	R1	n/a	n/a	n/a	n/a
	15:20	16	R1	7	0	16	R1
	15:40	46	R1	30	2	166	R3
	16:00	1250	R4	1204	60	4,850	R5
	16:20	90	R2	-1160	-58	0	R1
	16:40	452	R3	362	18	1,532	R4
	17:00	892	R3	440	22	2,212	R5
	17:20	1029	R4	137	7	1,449	R4
	17:40	1876	R4	847	42	4,396	R5
	18:00	384	R3	-1492	-75	0	R1
	18:20	236	R3	-148	-7	0	R1

Column	A	B (Graph this column)	C	D	E	F	G
Table Headings	UTC	X-Rays	Category	Change	Rate	Projected X-Ray Production in 1 Hour	Category
Units	24 Hour Clock	Amount of X-Rays	From R1 to R5	Amount of X-Rays	X-Rays/min	X-Ray Production	From R1 to R5
Calculations	From Data	From Data	See Reference Guide	B – Previous B	D / 20 min	(E x 60 min) + B	See Reference Guide
For the Mission	15:00	750	R3	n/a	n/a	n/a	n/a
	15:20	1117	R4	367	18	2197	R5
	15:40	1989	R4	872	44	4,629	R5
	16:00	710	R3	-1279	-64	0	R1
	16:20	145	R3	-565	-28	0	R1
	16:40	79	R2	-66	-3	0	R1
	17:00	2439	R5	2360	118	9,519	R5
	17:20	1110	R4	-1329	-66	0	R1
	17:40	554	R3	-556	-28	0	R1
	18:00	288	R3	-266	-13	0	R1
	18:20	163	R3	-125	-6	0	R1
18:40	121	R3	-42	-2	0	R1	

X-Ray Practice



X-Ray Mission





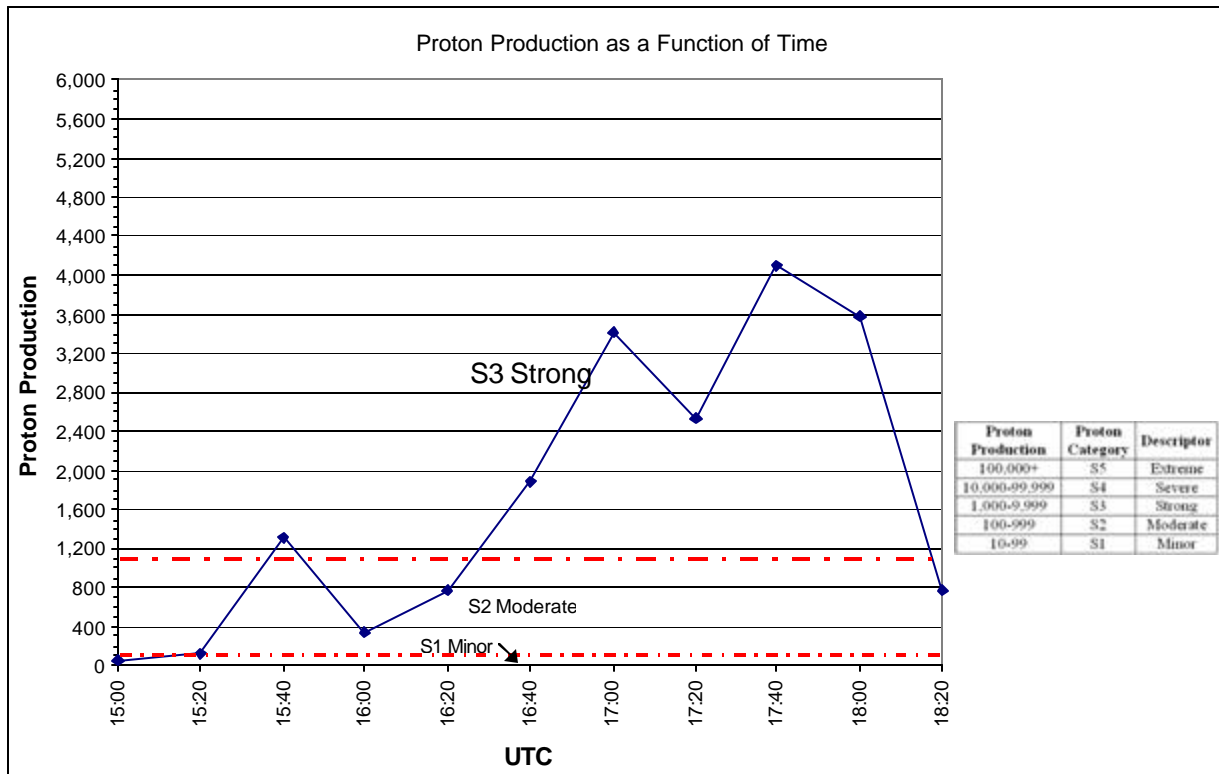
STORM Team – Data Tracking Table: Proton Production



Column	A	B (Graph this column)	C	D	E	F	G
Table Headings	UTC	Protons	Category	Change	Rate	Projected 24 Hour Proton Production	Category
Units	24 Hour Clock	Amount of Protons	From S1 to S5	Amount of Protons	Protons/min	Amount of Protons	From S1 to S5
Calculations	From Data	From Data	See Reference Guide	B – Previous B	D / 20 min	(E x 1440 min) + B	See Reference Guide
Examples and Practice	15:00	45	S1	n/a	n/a	n/a	n/a
	15:20	119	S2	74	4	5,879	S2
	15:40	1,310	S3	1191	60	87,270	S3
	16:00	350	S2	-960	-48	0	S1
	16:20	765	S2	415	21	31,005	S3
	16:40	1,890	S3	1125	56	82,530	S3
	17:00	3,410	S3	1520	76	112,850	S3
	17:20	2,525	S3	-885	-44	0	S1
	17:40	4,100	S3	1575	79	117,860	S3
	18:00	3,575	S3	-525	-26	41,015	S3
18:20	780	S2	-2795	-140	0	S1	

Column	A	B (Graph this column)	C	D	E	F	G
Table Headings	UTC	Protons	Category	Change	Rate	Projected 24 Hour Proton Production	Category
Units	24 Hour Clock	Amount of Protons	From S1 to S5	Amount of Protons	Protons/min	Amount of Protons	From S1 to S5
Calculations	From Data	From Data	See Reference Guide	B – Previous B	D / 20 min	(E x 1440 min) + B	See Reference Guide
For the Mission	15:00	15	S1	n/a	n/a	n/a	n/a
	15:20	213	S2	198	10	14,613	S2
	15:40	1,077	S3	864	43	62,997	S3
	16:00	419	S2	-658	-33	0	S1
	16:20	964	S2	545	27	39,844	S3
	16:40	4,755	S3	3791	190	278,355	S4
	17:00	5,453	S3	698	35	55,853	S3
	17:20	3,358	S3	-2095	-105	0	S1
	17:40	5,200	S3	1842	92	137,680	S4
	18:00	3,000	S3	-2200	-110	0	S1
	18:20	1,510	S3	-1490	-75	0	S1
	18:40	740	S2	-770	-39	0	S1

Proton Practice



Proton Mission

