

Date: _____

STORM Team Data Tracking Table: X-Ray Flux

Column	A	B*	C	D	E	F	G	H*	I	J
Table Headings	UTC	X-Rays	Category	Descriptor	Change	Rate	Time to the Next Critical Level**	Projected X-Ray Flux in 1 Hour	Category	Descriptor
Units	HH:MM	Amount of X-Rays	From R1 to R5	From Minor to Extreme	Amount of X-Rays	X-Rays/Min	Minutes	X-Ray Flux	From R1 to R5	From Minor to Extreme
Calculations	From Data	From Data	See Reference Guide	See Reference Guide	B – Previous B	B /15 min	$G = \frac{\text{Critical Value} - B}{F}$	$(F \times 60 \text{ min}) + B$	See Reference Guide	See Reference Guide
	15:00	90	R2	Moderate	n/a	6	2	450	R3	Strong
	15:15	880	R3	Strong	790	59	2	4,420	R5	Extreme
	15:30	1,920	R4	Severe	1,040	128	1	9,600	R5	Extreme
	15:45	1,210	R4	Severe	-710	81	10	6,070	R5	Extreme
	16:00	119	R3	Strong	-1,091	8	110	599	R3	Strong
	16:15	65	R2	Moderate	-54	4	9	305	R3	Strong
	16:30	1,999	R4	Severe	1,934	133	0	9,979	R5	Extreme
	16:45	1,704	R4	Severe	-295	114	3	8,544	R5	Extreme
	17:00	454	R3	Strong	-1,250	30	18	2,254	R5	Extreme
	17:15	236	R3	Strong	-218	16	48	1,196	R4	Severe
	17:30	134	R3	Strong	-102	9	96	674	R3	Strong
	17:45	99	R2	Moderate	-35	7	0	519	R3	Strong
	18:00	221	R3	Strong	122	15	52	1,121	R4	Severe
	18:15	395	R3	Strong	174	26	23	1,955	R4	Severe
	18:30	89	R2	Moderate	-306	6	2	449	R3	Strong
	18:45	68	R2	Moderate	-21	5	6	368	R3	Strong

* Graph this column

** You must constantly adjust your critical value based on current readings. For instance, if the storm is currently a category R2 or S2, your critical value will be the value for the next most dangerous level—R3 or S3.

Date: _____

STORM Team Data Tracking Table: Proton Production

Column	A	B*	C	D	E	F	G	H*	I	J
Table Headings	UTC	Protons	Category	Descriptor	Change	Rate	Time to the Next Critical Level**	Projected 24 hour Proton Production	Category	Descriptor
Units	HH:MM	Amount of Protons	From S1 to S5	From Minor to Extreme	Amount of Protons	Protons/Min	Minutes	Amount of Protons	From S1 to S5	From Minor to Extreme
Calculations	From Data	From Data	See Reference Guide	See Reference Guide	B – Previous B	B /15 min	$G = \frac{\text{Critical Value} - B}{F}$	(F x 1440 min) + B	See Reference Guide	See Reference Guide
	15:00	10	S1	Minor	n/a	1	90	1,450	S3	Strong
	15:15	160	S2	Moderate	150	11	76	16,000	S4	Severe
	15:30	810	S2	Moderate	650	54	4	78,570	S4	Severe
	15:45	315	S2	Moderate	-495	21	33	30,555	S4	Severe
	16:00	725	S2	Moderate	410	48	6	69,845	S4	Severe
	16:15	780	S2	Moderate	55	52	4	75,660	S4	Severe
	16:30	3,575	S3	Strong	2,795	238	27	346,295	S5	Extreme
	16:45	4,100	S3	Strong	525	273	22	397,220	S5	Extreme
	17:00	2,525	S3	Strong	-1,575	168	44	244,445	S5	Extreme
	17:15	3,410	S3	Strong	885	227	29	330,290	S5	Extreme
	17:30	3,205	S3	Strong	-205	214	32	311,365	S5	Extreme
	17:45	3,505	S3	Strong	300	234	28	340,465	S5	Extreme
	18:00	3,470	S3	Strong	-35	231	28	336,110	S5	Extreme
	18:15	2,160	S3	Strong	-1,310	144	54	209,520	S5	Extreme
	18:30	1,125	S3	Strong	-1,035	75	118	109,125	S5	Extreme
	18:45	750	S2	Moderate	-375	50	5	72,750	S4	Severe

* Graph this column

** You must constantly adjust your critical value based on current readings. For instance, if the storm is currently a category R2 or S2, your critical value will be the value for the next most dangerous level—R3 or S3.