Follow the directions on the UC Berkeley, Stanford World Space Week website (http://cse.ssl.berkeley.edu/segway/wsw.html) under "Activities -> Exploring CMEs effect on Earth's Magnetic Field." After you start to fill out the table below, visit the message board to discuss your findings with other students from around the world. Discuss whether you noticed any CMEs coming towards Earth? Was there ever an increase in magnetic storminess? If so, when?



75 n T

Coronal Mass Ejection not heading toward Earth



Coronal Mass Ejection coming toward Earth



Petersburg, AK magnetometer data with a 75 nT change in the X-direction (Magnetic North) the right to convert the difference in the maximum and minimum x-values for today to a K index. The larger the K index, the stormier it is in Earth's magnetic field.

Use this table on

K index	nT diff.
0	0-5
1	5-10
2	10-20
3	20-40
4	40-70
5	70-120
6	120-200
7	200-330
8	330-500
9	>500

I used magnetometer data from these locations:

Date	Number	CME Toward	Xmax-Xmin	Average of	Maximum	Aurora?
	of	Earth?	(nT) for all	Student	Kp index	(Yes/No)
	Sunspots	(Yes/No)	magnetometers	K indices	1	
	•					
	1				1	