

KMSC

HAUS BOU 110448Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 534A ISSUED 0400Z 11 FEB 1970

A TOTAL OF 1 OR 2 CLASS M FLARES IS EXPECTED DURING THE NEXT 13 HOURS.

A. THE 5-DAY OLD ACTIVE CENTER NOW NEAR N19W06 CONTINUES TO PRODUCE FLARES HEAVILY WEIGHTED TOWARD THE UV AND X-RAY PORTIONS OF THE SPECTRUM. THIS REGION CURRENTLY HAS A 13-DEGREE LONGITUDINAL EXTENT AND A VERY DETAILED PENUMBRAL STRUCTURE. THERE EXISTS AS YET NO INDICATION OF HIGH ENERGY PROTONS IN THE VICINITY OF EARTH. ONE OTHER SPOT GROUP DESERVES MENTION-THAT NEAR S13E16. ITS HYDROGEN PLAGE IS BRIGHT, COMPACT, AND CONTAINS SEVERAL ARCH FILAMENTS.

B. CLASS M FLARES ARE EXPECTED AT A RATE OF ABOUT 3 PER DAY FROM THE NW CENTER. FURTHER GROWTH SHOULD CONTINUE FOR ABOUT 48 MORE HOURS BEFORE STABILIZATION AND SUBSEQUENT DECAY.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 11 FEB/0400Z ENDING 14 FEB/0400Z.

CLASS M OR GREATER 100/100/90

CLASS X 90/100/70

PROTON EVENTS 10/10/10

D. OTTAWA 10.7 CM FLUXES FOR 10 FEB/1700 AND 2000Z WERE BOTH 178.

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KMSC

HAUS BOU 111735Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 534B ISSUED 1700Z 11 FEBRUARY 1970

CLASS X FLARES ARE EXPECTED DURING THE NEXT 11 HOURS.

A. HIGHLIGHTS FOR THE PERIOD 05-11 FEBRUARY 1970--

THE FIRST HALF OF THE ABOVE PERIOD WAS CHARACTERIZED BY NEAR SUNSPOT MINIMUM CONDITIONS WHILE THE LAST THREE DAYS HAVE BEEN VERY ACTIVE. ERUPTIONS BEGAN ON 09 FEBRUARY IN CONJUNCTION WITH AN ALMOST EXPLOSIVE GROWTH FROM MCMATH 568 NEAR N19W13 /L090/ WHICH WAS BORN ON THE DISK THREE DAYS EARLIER. A CLASS X /OPTICAL IMPORTANCE 1B/ FLARE STARTED THE ACTIVITY AT 09/0620Z WITH MODERATE, BUT SHORT-LIVED IONOSPHERIC EFFECTS AND WAS FOLLOWED BY SIX MORE CLASS M FLARES ON THAT DATE. ON 10 FEBRUARY, EIGHT MORE CLASS M EVENTS WERE OBSERVED FROM THIS REGION AS THE CLASS/AREA CLIMBED TO AN E/470. AT 11/0703Z, THIS SAME REGION PRODUCED A VERY ENERGETIC CLASS X /OPTICAL IMPORTANCE 2B/ S-SHAPED FLARE WHICH COVERED 12 DEGREES OF LONGITUDE AND PRODUCED A 1961 F. U. 10 CM RADIO BURST, A 55 MINUTE TOTAL SWF AT MHZ FROM 11/0708Z TO 11/0803Z, AND A LARGE /5.0 X 10-1 ERGS/CM2/SEC/ LONG DURATION 1-8 ANGSTROM X-RAY BURST. THIS REGION CURRENTLY HAS A CLASS/AREA OF E/1070 AND IS COMPLEX MAGNETICALLY WITH A DELTA CONFIGURATION. FLARES OF THE PAST TWO DAYS HAVE NOT PRODUCED A DISCERNABLE INCREASE IN SATELLITE PROTON COUNTING RATES. THE GEOMAGNETIC FIELD HAS BEEN UNUSUALLY QUIET SINCE 06 FEBRUARY.

B. FORECAST FOR THE PERIOD 12-18 FEBRUARY 1970--

ENERGETIC FLARE ACTIVITY SHOULD BE CONCENTRATED WITHIN MCMATH REGION 568 DURING THE COMING WEEK. NO GROUND-LEVEL PCA IS LIKELY TO OCCUR AS A RESULT OF ANTICIPATED M AND X EVENTS. IN A MANNER SIMILAR TO THE REGION DOMINATING THE DISK TWO WEEKS EARLIER, 568 IS NOT LIKELY TO PRODUCE UNSETTLED GEOMAGNETIC CONDITIONS.

28-DAY FORECAST FOR THE PERIOD 12 FEBRUARY-12 MARCH 1970-- THE OVERALL LEVEL OF ACTIVITY SHOULD BE DECLINING THROUGHOUT FEBRUARY AND MARCH WITH THE MONTHLY AVERAGE SUNSPOT NUMBER DROPPING BELOW 100.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 11/1700Z ENDING 14/1700Z.

CLASS M OR GREATER 100/100/100

CLASS X 60/70/70

PROTON EVENTS 20/30/30

D. OTTAWA 10.7 CM FLUX AT 1400Z WAS 191. PREDICTED 192/195/195.

E. MAGNETIC A-FREDERICKSBURG FOR 10 FEB WAS 04. FOR 11 FEB ABOUT

04. PREDICTED AP FOR 12-14 FEB 05/08/08.

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