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HAUS BOU 130500

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 133A ISSUED 0500Z 13 MAY 1971

AN ENERGETIC FLARE IS LIKELY DURING THE NEXT 24 HOURS.

A. SOLAR ACTIVITY HAS REMAINED AT A LOW LEVEL DURING THE PAST SEVEN HOURS, BUT THE DECLINING ACTIVE CENTER AT N12W83 IS STILL POTENTIALLY CAPABLE OF MAJOR FLARE PRODUCTION. THIS NORTHWEST REGION HAS PRODUCED MANY SURGES AND RELATED LIMB EVENTS RECENTLY BUT HAS SHOWN FEW OBSERVABLE STRUCTURAL CHANGES. A NEW REGION CONTAINING EMERGING MAGNETIC FIELDS AND AN ACTIVE FILAMENT IS DEVELOPING AT N06W04. ANOTHER NEW REGION EXHIBITING REVERSED SUNSPOT POLARITIES IS GROWING AT N04E30. THE N06E57 REGION PRESENTLY IS DORMANT. OTHER REGIONS ARE STABLE AND UNIMPRESSIVE. QUIET GEOMAGNETIC CONDITIONS HAVE BEEN OBSERVED DURING THE PAST SEVEN HOURS. PROTON COUNTING RATES ON THE ATS-1 SATELLITE ARE ENHANCED SLIGHTLY DUE TO THE ONE-BRILLIANT FLARE AT 12/0140Z.

B. DURING THE THREE-DAY FORECAST PERIOD, AT LEAST ONE ENERGETIC FLARE, POSSIBLY ACCOMPANIED BY HIGH-ENERGY PROTONS, IS EXPECTED TO BE PRODUCED BY THE REGION NOW LOCATED AT N12W83. THE REGIONS AT N06W04, N04E30, AND N06E57 PROBABLY WILL PRODUCE OCCASIONAL NON-ENERGETIC SUBFLARES AND PERHAPS ONE OR TWO SMALL CLASS M EVENTS. THE GEOMAGNETIC FIELD PROBABLY WILL REMAIN RELATIVELY QUIET UNTIL ABOUT 14/1200Z, WHEN MINOR ACTIVITY IS EXPECTED AS A RESULT OF THE 12/0140Z FLARE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 13 MAY/0000Z ENDING 15 MAY/2400Z.

CLASS M OR GREATER 95/85/70

CLASS X 35/25/15

PROTON EVENTS 50/45/30

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HAUS BOU 132200

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 133B ISSUED 2200Z 13 MAY 1971

A CLASS M FLARE PROBABLE IN THE NEXT 24 HOURS.

A. AN ENERGETIC LIMB EVENT BEGAN AT 13/1748Z AS AN IMPORTANCE TWO SPRAY LOCATION NW10. THIS DEVELOPED INTO A SB/SN FLARE BEGINNING AT 1751Z MAXIMUM AT 1754Z. AT THIS TIME MAJOR IONOSPHERIC DISTURBANCES WERE OBSERVED AND SOLRAD 9 SATELLITE INDICATED AT LEAST A CLASS M7 EVENT. THE RADIO BURST DURING THE FLARE WAS SMALL AND DECAMETRIC CONTINUUM RADIO EMISSION WAS DETECTED. AT 1900Z A MODERATE RADIO BURST OCCURRED WITH ABOUT 260 FLUX UNITS RECORDED ABOVE BACKGROUND AT TEN CM. A BRIGHT SURGE WAS OBSERVED OPTICALLY AT 1913Z WHILE IMPORTANCE 1 LOOPS WERE FORMING AT 1820Z. DURING THIS SECOND RADIO BURST NO SIGNIFICANT INCREASE IN X-RAYS WAS DETECTED. TYPE III DECAMETRIC EMISSIONS OCCURRED BETWEEN 1909Z - 1920Z. AT 13/2120Z A SMALL RISE ABOVE BACKGROUND HAS BEEN NOTED ON THE 20-70 MEV ATS-1 SATELLITE PROTON CHANNEL. THE N06E47 REGION HAS A NEUTRAL LINE WHICH IS PINCHED BETWEEN SEVERAL INTERMEDIATE SPOTS IN A NARROW TWISTED CHANNEL GIVING RISE TO STRONG GRADIENTS AND SPORADIC SMALL FLARE ACTIVITY. THE N19W16 REGION CONTINUES TO GROW AND IS FORMING RUDIMENTARY PENUMBRA ON THE LEADER SPOTS. OTHER REGIONS ARE SMALL AND/OR UNCHANGED.

B. A PCA EVENT, IF ANY, IS EXPECTED TO BE MINOR. THE NW LIMB REGION STILL HAS THE POTENTIAL FOR ONE MORE ENERGETIC EVENT IN THE NEXT 24 HOURS. AFTER THIS PERIOD SMALL FLARES ARE EXPECTED FROM THE VARIOUS SCATTERED REGIONS ON THE DISK - THE MOST PROMISING BEING THE N06E47 REGION.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 14 MAY/0000Z ENDING 16 MAY/2400Z.

CLASS M OR GREATER 85/60/40

CLASS X 25/10/02

PROTON EVENTS 40/10/02

D. OTTAWA 10.7 CM FLUXES FOR 13/1400Z - 13/1700Z AND 13/2000Z WERE 123, 122 AND 124 RESPECTIVELY. PREDICTED 10.7 CM FLUX FOR 14-16 MAY IS 118/116/116.

E. MAGNETIC A-FREDERICKSBURG FOR 12 MAY WAS 03. FOR 13 MAY ABOUT 03 PREDICTED AP FOR 14-16 MAY, 11/09/08.

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