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KMSC

HAUS BOU 210400Z

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 694A ISSUED 0400Z 21 JULY 1970

CLASS M FLARES ARE EXPECTED DURING THE NEXT 13 HOURS.

A. TWO CLASS M EVENTS WERE OBSERVED SINCE THE CLASS X FLARE AT 20/1108Z. ONE CLASS M EVENT AT 20/1657Z AND THE OTHER 20/2010Z WERE BOTH FROM THE REGION N08E42. THIS REGION HAS PRODUCED THE ONLY MAJOR ACTIVITY. LOOPS WERE OBSERVED AS WELL AS STRONG BRIGHTENINGS BEYOND THE EAST LIMB AT N24. PIONEER DATA INDICATES MAJOR ACTIVITY TOOK PLACE ABOUT 20/2000Z BEYOND THE EAST LIMB. A RETURNING REGION IS DUE AT ABOUT THIS LOCATION DURING THE NEXT 24 HOURS. THE GEOMAGNETIC FIELD IS SLIGHTLY DISTURBED.

B. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT PRESENT LEVEL FROM N08E42. THE RETURNING REGION IS LIKELY TO PRODUCE ACTIVITY DURING THE NEXT 36-48 HOURS AS IT RETURNS. THE GEOMAGNETIC FIELD WILL HAVE PERIODS OF DISTURBED CONDITIONS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 21 JULY/0400Z ENDING 24 JULY/0400Z

CLASS M OR GREATER 95/95/95

CLASS X 50/50/55

PROTON EVENTS 10/15/20

D. OTTAWA 10.7 CM FLUXES FOR 20/1700Z AND 20/2000Z WERE 132 AND 139 RESPECTIVELY.

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HAUS BOU 211700Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 694B ISSUED 1700Z 21 JULY 1970

CLASS M FLARES ARE EXPECTED IN THE NEXT 11 HOURS

A. THE N03E34 REGION HAS PRODUCED A LARGE NUMBER OF FLARES TODAY THAT ARE MOSTLY NONENERGETIC ALTHOUGH IT PRODUCED ONE M EVENT AT 0433Z THAT PRODUCED A MINOR IONOSPHERIC DISTURBANCE. THE UMBRA SPOTS IN THE LEADER APPEAR LARGER, CLOSER TOGETHER AND SLIGHTLY ROTATED IN A CLOCKWISE SENSE. PLAGE AND ABSORPTION FEATURES REMAIN PROMINENT WITH REORGANIZATION OF SMALL SPOTS IN THE CENTRAL AND FOLLOWING PORTIONS. THE REGION AT N18W75 HAS SHOWN REFUVENATION AND HAS VERY BRIGHT PLAGE. A RETURNING REGION, WHICH WAS ACTIVE DURING ITS LAST TRANSIT, IS NOW AT N23E83. IT LOOKS UNIPOLAR WITH H TYPE SPOTS. FREDERICKSBURG MAGNETIC OBSERVATORY REPORTED A GRADUAL COMMENCEMENT OF A STORM AT 21/0700Z. THIS DISTURBANCE WAS BELIEVED NOT TO BE FLARE ORIGINATED. ATIS-1 SATELLITE PROTON COUNTS HAVE BEEN SLIGHTLY ABOVE BACKGROUND SINCE 21/0700Z.

B. DEVELOPMENTS IN THE LEADER OF THE N03E34 REGION INCREASE PROBABILITIES OF A PROTON EVENT HERE. M FLARES ARE EXPECTED IN THE NEXT THREE DAYS FROM THE NE REGIONS AND INFREQUENTLY FROM THE N18W75 REGION. X FLARES MAY OCCUR AT A RATE OF ONE EVERY TWO DAYS. THE GEOMAGNETIC FIELD IS EXPECTED TO SUFFER PERIODS OF DISTURBED CONDITIONS THE NEXT SEVERAL DAYS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 21 JULY/1700Z ENDING 24 JULY/1700Z.

CLASS M OR GREATER 95/95/95

CLASS X 50/50/50

PROTON EVENTS 15/20/25

D. OTTAWA 10.7CM FLUX FOR 21/1400Z WAS 150. PREDICTED 10.7CM FLUX FOR 22-24 JULY IS 155/160/165.

E. MAGNETIC A-FREDERICKSBURG FOR 20 JULY WAS 05. FOR 21 JULY ABOUT 18. PREDICTED AP FOR 22-24 JULY IS 15/15/15.

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