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NNNNBMVAG0358

NNNNDMVUMVGM

KMSC

HAUS BOU 200400Z

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 693A ISSUED 0400Z 20 JULY 1970

CLASS M FLARES ARE EXPECTED DURING THE NEXT 13 HOURS.

A. DURING THE PAST 11 HOURS THE REGION N08E54 HAS PRODUCED ONLY A FEW SUBFLARES. THIS REGION HAS CONTINUED ITS GROWTH AND DEVELOPMENT. THE TOTAL PLAGE AREA HAS INCREASED AND IS GROWING TO THE EAST. THE LEADER PORTION STILL CONTAINS A DELTA CONFIGURATION. THE REGION N17E10 HAS ALSO SHOWN GROWTH. THE GEOMAGNETIC FIELD IS QUIET.

B. THE REGION N08E54 IS EXPECTED TO CONTINUE PRODUCING CLASS M FLARES DURING THE NEXT SEVERAL DAYS AT A RATE OF 2 OR 3 A DAY. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN QUIET. PERIODS OF MAGNETIC DISTURBANCE WILL START 21 JULY.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 20 JULY/0400Z ENDING 23 JULY/0400Z

CLASS M OR GREATER 85/85/85

CLASS X 15/15/20

PROTON EVENTS 01/01/05

D. OTTAWA 10.7 CM FLUXES FOR 19/1700Z AND 19/2000Z WERE 132 AND 133 RESPECTIVELY.

SOLTERWARN

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HAUS BOU 201718Z

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 693B ISSUED 1700Z 20 JULY 1970

CLASS M FLARES ARE EXPECTED AND A FAIR CHANCE EXISTS FOR A CLASS X FLARE DURING THE NEXT 11 HOURS.

A. AN IMPORTANCE TWO BRILLIANT FLARE BEGAN AT 20/1103Z MAX AT 1125Z AND END AT 1220Z. THE FLARE OCCURRED IN THE FOLLOWER OF THE COMPLEX NE REGION AT N08E55. THE FLARE WAS DESCRIBED AS PARALLELED FILAMENTS FOLLOWING THE NEUTRAL LINE IN A NORTHEASTERLY DIRECTION. A MAJOR RADIO BURST ACCOMPANIED THE EVENT WITH 2150 FLUX UNITS ABOVE BACKGROUND ON TEN CM. IT WAS A STRONG X EVENT WITH .54 ERGS/CM²/ SEC X- RAY FLUX REPORTED BY SOLRAD 9 SATELLITE. TOTAL SHORT WAVE FADES WERE RECORDED AS HIGH AS 22 MHZ AND CANARY ISLANDS REPORTED 3.3DB ABSORPTION ON THEIR 30MHZ RIOMETER. THE REGION HAS RETAINED ITS COMPEXITY AND HAS SHOWN UMBRAL GROWTH IN THE LEADER AND PENUMBRAL GROWTH IN THE TRAILER. BOTH LEADER AND TRAILER ARE SHOWN TO HAVE MAGNETICALLY DELTA CONTIGURATIONS BY SPECTROHELIOSCOPE ANALYSIS, HOWEVER, THE LEADERS DELTA IS MUCH STRONGER AND HAS A EAST-WEST NEUTRAL LINE PASSING THROUGH THE SPOT. IT HAS BEEN THE ONLY SOURCE AT FLARE ACTIVITY TODAY. SEVERAL REGIONS HAVE SHOWN GROWTH BUT ARE SMALL AND INCON-SEQUENTIAL TO THE NE REGION.

B. THE NE REGION IS EXPECTED TO CONTINUE ITS PRODUCTION OF ENERGETIC FLARES WITH INCREASING CHANCES OF A PROTON EVENT AS THE REGION MOVES WESTWARD. THE CHANCES FOR A MAGNETIC STORM RESULTING FROM THE 2B FLARE ARE SLIM DUE TO THE EAST LONGITUDE OF THE EVENT. IT IS BELIEVED THAT PROTONS WERE PRODUCED BY THE FLARE BUT THEY AREN'T EXPECTED TO INTERCEPT EARTH. PIONEER SATELLITES SHOULD VERIFY THIS PREDICTION SHORTLY.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNIGN 20 JULY /1700Z ENDING 22 JULY/1700Z.

CLASS M OR GREATER 95/95/95

CLASS X 45/50/55

PROTON EVENTS 10/15/20

D. OTTAWA 10.7 CM FLUX FOR 20/1400Z WAS 137.

PREDICTED 10.7 CM FLUX FOR 21-23 JULY IS 145/152/160.

E. MAGNETIC A-FREDERICKSBURG FOR 19 JULY WAS 05. FOR 20 JULY ABOUT 05 PREDICTED AP FOR 21-23 JULY, 05/10/15.

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