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KMSC

HAUS BOU 190425Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 542A ISSUED 0400Z 19 FEB 1970

WEAK M FLARES ARE LIKELY TO OCCUR DURING THE NEXT 13 HOURS.

A. DURING THE PAST 24-HOUR PERIOD FLARE ACTIVITY HAS BEEN CONCENTRATED IN AN AREA BETWEEN TWO SMALL BIPOLAR GROUPS, NAMELY THE S14E44 AND S19E47 REGIONS. WHAT MUST BE CLASSIFIED AS NOT PARTICULARLY ENERGETIC M EVENTS OCCURRED THERE YESTERDAY AT 0430Z(IN) AND 0544Z(1F). MORE RECENTLY, ANOMALOUS ERUPTIONS WERE OBSERVED IN THE SAME VICINITY AT 1808 AND 2130Z. (SOLRAD X-RAY DATA ARE NOT YET AVAILABLE CONCERNING THESE LAST TWO FLARES.) ALTHOUGH THE 10.7 CM FLUX IS NEAR THE LEVEL ATTAINED DURING LAST WEEK'S SUSTAINED M AND X ACTIVITY (GREATER THAN 200) THIS OVERALL SOLAR INDEX IS POSSIBLY MISLEADING SINCE THE 1-8A BACKGROUND ABOARD THE SOLRAD SATELLITE DOES NOT APPEAR ENHANCED. A LARGE J TYPE SPOT HAS ROTATED INTO VIEW NEAR S03. SMALL BUT BRIGHT SURGES OBSERVED ALONG THE LIMB (S03-06) INDICATE THAT A FOLLOWER MAY YET APPEAR.

B. THE S19E47 GROUP IS THE MOST LIKELY SOURCE OF M FLARES DURING THE NEXT 3 DAYS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 19 FEB/0400Z ENDING 22/0400Z.

CLASS M OR GREATER 80/70/60

CLASS X 05/05/02

PROTON EVENTS 05/05/02

D. OTTAWA 10.7 CM FLUXES FOR 18/1700 AND 2000Z WERE BOTH 202.

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HAUS BOU 191705Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 542B ISSUED 1700Z 19 FEBRUARY 1970

CLASS M FLARES ARE EXPECTED DURING THE NEXT 11 HOURS

A. THREE CLASS M FLARES HAVE OCCURRED IN THE LAST 24 HOURS--

18/2122Z IMP SUBNORMAL, AND 19/0325Z IMP ONE BRIGHT IN THE

REGION NOW NEAR S19E40 AND 19/0925Z IMP SUBNORMAL IN THE

S20W05 REGION. THE 2122Z AND 0925Z FLARES PRODUCED MINOR

IONOSPHERIC EFFECTS. THE 0325Z FLARE WAS ACCOMPANIED BY

MODERATE IONOSPHERIC DISTURBANCES AND RADIO EMISSION. THE

S12W30 REGION HAS PRODUCED SEVERAL CLASS C SUBFLARES.

LITTLE CHANGE IS NOTED IN DISK FEATURES. SOME SPOT

DEVELOPMENT HAS OCCURRED WEST OF THE FOLLOWER OF THE S20W05

REGION. A C-TYPE SPOT GROUP HAS ROTATED ONTO THE DISK AND IS

NOW LOCATED NEAR S03E76. THE GEOMAGNETIC FIELD HAS BEEN QUIET.

B. INFREQUENT CLASS M FLARES ARE EXPECTED DURING THE NEXT 72

HOURS FROM THE S19E40 AND S20W05 REGIONS. CLASS M EVENTS ARE

ALSO POSSIBLE BUT LESS LIKELY FROM THE S12W30 REGION. THE LEVEL

OF CLASS M ACTIVITY IS EXPECTED TO DECLINE GRADUALLY DURING THE

PERIOD.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24

hour periods beginning 19 FEB/1700Z ending 22/1700Z.

CLASS M OR GREATER 80/70/60

CLASS X 10/05/05

PROTON EVENTS 05/05/02

D. OTTAWA 10.7 CM FLUX 1400Z 198. PREDICTED 195/190/185.

E. MAGNETIC A-FREDERICKSBURG FOR 18 FEB WAS 09. FOR 19 FEB

ABOUT 08. PREDICTED AP FOR 20-22 FEB 08/08/08.

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