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PP KGFF

DE BOU 011810Z

HERE IS THE MESSAGE FOR REFILE PASS TO HENV HOUSTON

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 187A ISSUED 1700Z 01 MARCH 1969

CLASS M FLARES ARE EXPECTED IN THE NEXT 12 HOURS

A. SOLAR ACTIVITY APPEARS DIMINISHING WITH WEST LIMB TRANSIT OF THE REGION RESPONSIBLE FOR THE MAJOR ACTIVITY OF THE LAST WEEK. THE REGIONS CURRENTLY AT S15W03 AND S19W04 ARE EVIDENCING CONSIDERABLE INTERACTION AS EVIDENCED BY PENUMBRAL DISTORTIONS AND PLAGE PERTURBATIONS. MINOR ACTIVITY HAS BEEN REPORTED FROM A REGION NEAR N17E55. GEOPHYSICAL RESULTS OF THE LAST WEEK'S FLARES ARE STILL IN EVIDENCE. A MINOR PCA BEGAN 28/2200Z WITH MAXIMUM ABSORPTION OF PERHAPS 3.4 DB AT FT YUKON, ALTHOUGH SOME AURORAL CONTAMINATION IS LIKELY. MAXIMUM OCCURRED AT ABOUT 0100Z, FOLLOWING BY FIVE HOURS A REPORTED ENHANCEMENT IN 3-20 MEV PROTONS AT SATELLITE HEIGHTS. THE PREDICTED MAGNETIC DISTURBANCE /SDF 186B/ HAS NOT MATERIALIZED, DESPITE THE FACT THAT MEUDON REPORTED A 4 PERCENT FORBUSH AT 28/0900Z THUS CONFIRMING THE THULE REPORT /SDF 186B/. THE GEOMAGNETIC FIELD IS CURRENTLY RELATIVELY QUIET.

B. CLASS M FLARE ARE EXPECTED FROM THE REGION AT S19W04. PROTON EVENT PROBABILITIES BELOW ARE STATED FOR FUTURE SOLAR FLARES GIVING HIGH ENERGY PROTON FLUXES DETECTABLE AT EARTH.

FORECASTS FOR 02-04 MARCH

C. DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS

CLASS M OR GREATER 50/50/50

CLASS X 20/10/10

PROTON EVENTS 10/10/10

D. OTTAWA 10.7 CM FLUX TODAY IS 171. PREDICTED 165/160/155.

E. N/A.

F. KP ESTIMATED 1200-1500Z WAS 2. KP FORECAST FOR NEXT 24 HOURS PER KP 15.3;2,3,2,2,2,2,3.

NOTE-BEGINNING WITH SDF NUMBER 128A, 01 JANUARY 1969, THE DEFINITIONS OF THE FORECAST PARAMETERS ARE BEING CHANGED. THIS IS BECAUSE OF THE FREQUENT LACK OF CORRESPONDENCE BETWEEN OPTICAL FLARE AREA, DENOTED BY ITS IMPORTANCE, AND THE SIGNIFICANCE OF THE EVENT IN TERMS OF X-RAY, RADIO NOISE AND ENERGETIC PARTICLE PRODUCTION.

THE NEW EVENT CLASSIFICATION IS AS FOLLOWS COLON

CLASS C SOLAR EVENTS NOT ASSOCIATED WITH ANY SIGNIFICANT X-RAYS OR RADIO NOISE.

CLASS M SOLAR EVENTS WHICH ARE ACCOMPANIED BY SIGNIFICANT X-RAY PRODUCTION AS DETERMINED BY SID(SWF OR SPA) OR SATELLITE DATA, OR BY AT LEAST 75 FLUX UNIT 10 CM RADIO NOISE BURST.

CLASS X SOLAR EVENTS WHICH PRODUCE VERY GREAT X-RAY EFFECTS (SUCH AS SWF OF GREATER THAN 4 HOUR TOTAL OUTAGE), OR GREATER THAN 1000 FLUX UNIT 10 CM RADIO NOISE OUTBURST.

NOTE COLON BOTH CLASS M AND X EVENTS MAY, UNDER CERTAIN CONDITIONS, PRODUCE ENERGETIC PROTONS WHICH MAY BE DETECTED BY SPACECRAFT OR AT THE EARTH. UNTIL MORE REFINED TECHNIQUES HAVE BEEN DEVELOPED, THE DISCUSSION OF PROBABLE PROTON FLARES, AND GROUND DETECTED EVENTS (PCA), WILL BE COVERED IN THE VERBAL STATEMENTS. THE PROBABILITY PROTON EVENT STATEMENT WILL REFER TO FLARE PRODUCED PROTONS (ESTIMATED AT GREATER THAN 20 MEV) DETECTED BY ANY TECHNIQUES.

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DE BOU 012315Z
THIS IS THE MESSAGE FOR REFILE
PASS TO H E N V HOUSTON

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 187B ISSUED 2300Z MARCH 1 1969
CLASS M FLARES ARE EXPECTED IN THE NEXT 12 HOURS.
A. SOLAR ACTIVITY IN THE LAST 12 HOURS HAS MAINLY BEEN IN THE FORM
OF EPL ACTIVITY. ONE SUCH EVENT WAS REPORTED AT 01/2140Z. ANOTHER
IS THOUGHT TO HAVE OCCURRED AT 01/1905Z. RADIO BURSTS AND IONO-
SPHERIC EFFECTS WERE NOTED IN CONJUNCTION WITH THESE EVENTS.
LITTLE OTHER ACTIVITY APPEARS TO HAVE BEEN OBSERVED. THE MINOR PCA
MENTIONED IN SDF 187A APPEARS TO HAVE FALLEN BELOW THRESHOLD OF
GROUND-BASED SENSORS. A MINOR ABSORPTION EVENT BEGINNING 01/1610Z
APPEARS TO BE AN AURORAL DISTURBANCE. THE GEOMAGNETIC FIELD IS
MODERATELY DISTURBED AT HIGH LATITUDES.
SECTIONS B C AND D REMAIN UNCHANGED FROM SDF 187A.
E. MAGNETIC A-FREDERICKSBURG FOR 28 FEBRUARY WAS 13. FOR 01 MARCH
ABOUT 08. PREDICTED AP FOR 02-04 MARCH 50/30/15.
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