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DE BOU 011812Z

HERE IS THE MESSAGE FOR REFILE PASS TO HENV HOUSTON

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 137A ISSUED 1700Z 01 MARCH 1969

CLASS M FLARES ARE EXPECTED IN THE NEXT 12 HOURS

A. SOLAR ACTIVITY APPEARS DIMINISHING WITH WEST LIME TRANSIT
OF THE REGION RESPONSIBLE FOR THE MAJOR ACTIVITY OF THE LAST
WEEK. THE REGIONS CURRENTLY AT S15W03 AND S19W04 ARE EVID-
ENCING CONSIDERABLE INTERACTION AS EVIDENCED BY PENUMERAL
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 MINOP 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
PFPORATED 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;2,3,2,2,2,2,2,3.

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 ACCCOMPANIED 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 (ESTI-
MATED 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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