

NNNN0555
NNNN0555
NNNN
KMSC

HAUS BOU 300600Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 581A ISSUED 0400Z 30 MARCH 1970

M FLARES ARE EXPECTED FROM THE N14W51 ACTIVE CENTER DURING THE NEXT 13-HOUR PERIOD.

A. NO ENERGETIC ERUPTIONS HAVE BEEN OBSERVED SINCE YESTERDAY'S 0011Z CLASS X EVENT. IN THE PCA THAT FOLLOWED THIS FLARE MAXIMUM RIOMETER ABSORPTIONS RECORDED ALONG SPAN'S ALASKAN CHAIN WERE ABOUT 2.1 DB. BOTH GROUND-BASED SENSORS AND THE ATS-1 SATELLITE INDICATE THAT THE EVENT HAS PASSED THROUGH ITS MAXIMUM. PROTON FLUXES FROM THE AERO-SPACE ATS-1 EXPERIMENT AT MESSAGE TIME WERE OF THE FOLLOWING MAGNI-TUDE- 380 PARTICLES/CM²/SEC ON THE 5-20 MEV CHANNEL AND 140 PARTI-CLES/CM²/SEC IN THE 20-70 MEV WINDOW. (THESE SATELLITE FLUXES CORR-ESPOND THEORETICALLY TO DAYTIME 30MHZ RIOMETER ABSORPTION OF THE SAME ORDER OF MAGNITUDE AS THAT REPORTED FROM ALASKA.) ONLY MINOR STRUCTURAL CHANGES HAVE BEEN OBSERVED WITHIN THE NINE SPOT GROUPS CURRENTLY VISIBLE. BACKGROUND FLARE ACTIVITY OVER THE DISK REMAINS LOW.

B. THE FREQUENCY OF ENERGETIC FLARES IS EXPECTED TO RISE SHARPLY IN APPROXIMATELY 2 TO 2.5 DAYS AS A RESULT OF CURRENTLY ACTIVE REGIONS JUST BEHIND THE EAST LIMB. WITHIN THE LAST 24 HOURS PIONEERS 6 AND 7 HAVE DETECTED EXTREMELY HIGH-ENERGY SOLAR COSMIC RAYS. THE 13-70, 70-190, AND GREATER THAN 190 MEV CHANNELS ARE ABOUT 300, 10, AND 2 TIMES ABOVE BACKGROUND RESPECTIVELY, REPRESENTING SOME OF THE HIGH-EST VALUES RECORDED IN THESE ENERGY WINDOWS IN THE PAST 3 YEARS. THE REGION OR POSSIBLY REGIONS OF INTEREST APPEAR TO BE SITUATED NEAR THE CHARACTERISTICALLY ACTIVE LONGITUDE OF 070. MAGNETIC EFFECTS ASSOCIATED WITH THE 29/0011Z FLARE ARE EXPECTED TO BEGIN IN THE NEXT 2 TO 4 HOURS. A BOULDER A-INDEX FOR TODAY IS PREDICTED NEAR 17.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 30 MAR/0400Z ENDING 02 APR/0400Z

CLASS M OR GREATER 70/80/90

CLASS X 15/20/30

PROTON EVENTS 07/10/15

D. OTTAWA 10.7 CM FLUXES FOR 29/1700 AND 2000Z WERE 154 AND 151 RESPECTIVELY.

SOLTERWARN

SPAN

BT

NNNN
KMSC

HAUS BOU 301745Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 581B ISSUED 1700Z 30 MARCH 1970

CLASS-M FLARES ARE LIKELY DURING THE NEXT ELEVEN HOURS.

A. ONLY CLASS-C FLARES HAVE BEEN REPORTED SINCE THE 0400Z
FORECAST. THE LARGEST FLARE REPORTED WAS A ONE-NORMAL AT
0626Z FROM THE REGION AT N15W53. AN IMPORTANCE-ONE SURGE AT
0937Z AT N14EL TURNED INTO A SPRAY THAT EXTENDED OUT 0.1 SOLAR
RADIUS BEYOND THE LIMB. STRONG GREEN-LINE CORONA, SURGES ON THE
LIMB IN THE NORTHEAST AND SOUTHEAST, AND DATA FROM THE PIONEER
6,7, AND 8 SATELLITES INDICATE THE EXISTENCE OF VERY ACTIVE
REGIONS JUST BEHIND THE EAST LIMB. THE ATS-1 SATELLITE PROTON COUNTS
ARE STILL ENHANCED; THE 5-20 MEV CHANNEL IS READING ABOUT 250
PARTICLES/CM²/SEC, AND THE 20-70 MEV CHANNEL IS READING ABOUT
40 PARTICLES/CM²/SEC. THE GEOMAGNETIC FIELD IS SLIGHTLY DISTURBED.

B. CLASS-M FLARES ARE LIKELY DURING THE NEXT 24 HOURS. THE FREQUENCY
OF ACTIVE FLARES IS EXPECTED TO RISE WITHIN THE NEXT TWO DAYS WITH
THE RETURN OF THE CURRENTLY ACTIVE REGIONS BEHIND THE EAST LIMB.
A MAGNETIC DISTURBANCE IS EXPECTED TO BEGIN WITHIN THE NEXT 24
HOURS; DATA FROM THE PIONEER SATELLITES SUGGESTS THAT THIS MAGNETIC
DISTURBANCE MAY WELL REACH STORM MAGNITUDE WITH THE NEXT TWO DAYS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24
HOUR PERIODS BEGINNING 30 MAR/1700Z ENDING 02 APR/1700Z.

CLASS M OR GREATER 80/80/90

CLASS X 15/20/30

PROTON EVENTS 10/10/15

D. OTTAWA 10.7 CM FLUX TODAY IS 147. PREDICTED 142/138/145.

E. MAGNETIC A-FREDERICKSBURG FOR 29 MARCH WAS 14. FOR 30 MARCH
ABOUT 14 PREDICTED AP FOR 31 MAR-2 APR, 30/50/15.

SOLTERWARN

SPAN

BT