

NNNN0402

NNNN

KMSC

HAUS BOU 250400

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 821A ISSUED 0400Z 25 NOV 1970

CLASS-C FLARES ARE EXPECTED DURING THE NEXT 13 HOURS.

A. SOLAR ACTIVITY HAS REMAINED AT A LOW LEVEL DURING THE PAST 11 HOURS; ONLY ONE CLASS-C FLARE, A SUB-NORMAL EVENT AT N13W85 AT 24/1736Z, HAS BEEN REPORTED. OCCASIONAL SURGES HAVE OCCURRED FROM THE REGIONS NOW UNDERGOING LIMB PASSAGE IN THE NORTHWEST, AND A FEW SURGES ALSO WERE SEEN NEAR NE12. ACCORDING TO THE MOUNT WILSON OBSERVATORY, THE C/10 SPOT GROUP AT S18W27 CONTAINS A MAGNETIC DELTA COMPLEX IN THE TRAILER PENUMBRA, BUT NO ACTIVITY HAS BEEN NOTED IN THAT REGION DURING THE PAST 11 HOURS. PRESENTLY ALL REGIONS ARE UNIMPRESSIVE. THE GEOMAGNETIC FIELD HAS BEEN RELATIVELY QUIET DURING THE PAST 24 HOURS.

B. DURING THE THREE-DAY FORECAST PERIOD, OCCASIONAL CLASS-C FLARES ARE EXPECTED, WHILE SIGNIFICANT ENERGETIC ACTIVITY IS UNLIKELY. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN RELATIVELY QUIET UNTIL ABOUT 26/0900Z, WHEN A MAGNETIC DISTURBANCE DUE TO THE PASSAGE OF AN INTER-PLANETARY SECTOR BOUNDARY IS EXPECTED.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 25 NOV/0400Z ENDING 28 NOV/0400Z.

CLASS M OR GREATER 35/35/35

CLASS X 02/01/01

PROTON EVENTS 01/01/01

D. OTTAWA 10.7 CM FLUXES FOR 24/1700Z AND 4/2000Z WERE 138 AND 136 RESPECTIVELY.

SOLTERWARN

SPAN

BT

HAUS BOU 251700

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 821B ISSUED 1700Z 25 NOV 1970

THE NEXT 11 HOURS SHOULD BE CHARACTERIZED BY NOTHING MORE ENERGETIC THAN CLASS-C FLARES.

A. ONLY MINOR ACTIVITY ACROSS THE DISK HAS BEEN OBSERVED SINCE THE LAST MESSAGE. SEVEN GROUPS ARE CURRENTLY VISIBLE AND EACH REGION IS SMALL AND UNINTERESTING. THE GEOMAGNETIC FIELD IS QUIET.

B. A CLASS-C FLARE LEVEL IS EXPECTED TO PERSIST THROUGH AT LEAST THE NEXT 3 DAYS. PIONEER 8 SOLAR WIND SPEED DATA IMPLY A SECTOR BOUNDARY PASSAGE TIME NEAR 26/0900Z. AS A RESULT-INDICES NOT EXCEEDING 4 ARE ANTICIPATED.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 25 NOV/1700Z ENDING 28 NOV/1700Z.

CLASS M OR GREATER 30/25/25

CLASS X 01/01/01

PROTON EVENTS 01/01/01

D. OTTAWA 10.7 CM FLUX FOR 25/1400Z WAS 36. PREDICTED

10.7 CM FLUX FOR 26-28 NOV IS 130/127/127.

E. MAGNETIC A-FREDERICKSBURG FOR 24 NOV WAS 11. FOR 25 NOV ABOUT 08. PREDICTED AP FOR 26-28 NOV, 07/13/09.

SOLTERWARN

SPAN

BT

KMSC

HAUS BOU 250000

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SESC-PRF 003 ISSUED 25 NOVEMBER 1970

HIGHLIGHTS FOR THE PERIOD 18-24 NOVEMBER 1970--

ENERGETIC SOLAR ACTIVITY CONTINUED TO BE ENHANCED DURING THE PAST SEVEN DAYS, BUT THE LEVEL WAS MUCH LOWER THAN THAT ATTAINED DURING 14-17 NOVEMBER. EVENT TOTALS FOR THE WEEK STAND AT TWO CLASS X AND TWENTY CLASS M EVENTS. MCMATH REGION 026/029 (N16, L035), WHICH PRODUCED 32 CLASS M AND 7 CLASS X EVENTS THE PRECEDING WEEK, PRODUCED ONLY THREE ADDITIONAL ENERGETIC EVENTS BEFORE CROSSING THE WEST LIMB ON 21 NOVEMBER. THESE INCLUDED A CLASS X1 SUBNORMAL FLARE AT 18/0408Z AND A CLASS M9 WEST LIMB EVENT AT 21/1540Z, BOTH OF WHICH PRODUCED MODERATE SID AND RADIO BURSTS. THIS REGION WAS DECAYING FROM 18 NOVEMBER ONWARD. MCMATH REGION 035 (N09, L344) WAS THE MOST ACTIVE REGION, PRODUCING ONE CLASS X AND TWELVE OF THE CLASS M EVENTS. THE SPOTS ASSOCIATED WITH THIS PAGE WERE BORN NEAR THE EAST LIMB ON 13 NOVEMBER AND REACHED PEAK DEVELOPMENT ON 19-21 NOVEMBER WITH A TOTAL AREA OF ABOUT 400 MILLIONTHS OF THE SOLAR HEMISPHERE. ALL THE EVENTS FROM REGION 035 WERE CLASS M4 OR SMALLER EXCEPT FOR THE CLASS X3 SUBNORMAL FLARE AT 18/0123Z. THIS LATTER EVENT PRODUCED MAJOR IONOSPHERIC DISTURBANCES BUT WAS ACCOMPANIED BY ONLY MINOR RADIO EMISSION. THE OTHER CLASS M EVENTS WERE SMALL AND FROM ASSORTED SOURCES. THE ATS-1 SATELLITE DETECTED A SMALL PROTON ENHANCEMENT BEGINNING AT ABOUT 23/1500Z. THE PEAK 21-70 MEV FLUX WAS REACHED BY 23/1900Z AND AMOUNTED TO ONLY 2 PARTICLES PER SQ CM PER SEC, A FACTOR OF FOUR ABOVE BACKGROUND. THESE PROTONS HAVE NOT BEEN ASSOCIATED WITH ANY SPECIFIC SOLAR EVENT. TWO MINOR MAGNETIC STORMS OCCURRED DURING THE WEEK. THE FIRST BEGAN WITH A SUDDEN COMMENCEMENT AT 18/1225Z AND ENDED AROUND 19/0900Z (A-FREDERICKSBURG OF 19 ON 19 NOVEMBER). A PERIOD OF VERY QUIET CONDITIONS WAS THEN FOLLOWED BY THE SECOND DISTURBANCE BEGINNING AT 20/2058Z AND ENDING ON 22 NOVEMBER (A-FREDERICKSBURG OF 26 ON 21 NOVEMBER).

FORECAST FOR THE PERIOD 26 NOVEMBER-02 DECEMBER 1970--

A GENERALLY LOW LEVEL OF ACTIVITY IS EXPECTED WITH AN AVERAGE OF 2-3 CLASS M EVENTS PER DAY BEING THE UPPER LIMIT ON ENERGETIC ACTIVITY. THE CONTRIBUTION OF CURRENT DISK FEATURES IS EXPECTED TO BE MINOR. MCMATH REGION 019 (S10, L125) MAY BE ACTIVE ON ITS RETURN TO EAST LIMB 26-27 NOVEMBER. A SECTOR BOUNDARY TYPE MAGNETIC DISTURBANCE IS EXPECTED ON 26-27 NOVEMBER.

28-DAY FORECAST FOR THE PERIOD 26 NOVEMBER-24 DECEMBER 1970--
ENHANCED ACTIVITY IS POSSIBLE DURING 05-22 DECEMBER, THE NEXT PASSAGE OF MCMATH REGIONS 026/029 AND 035. ANOTHER SPURT OF INTENSE ACTIVITY IS PROBABLE SOMETIME DURING THE FIRST HALF OF JANUARY.

SOLTERWARN

SPAN

BT