HEUS 1 BOU 231400
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 082A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1200UT 23 MARCH 1981
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200UT
TO 23/1200UT:
SOLAR ACTIVITY HAS BEEN MODERATE SINCE 22/2200UT DUE TO FOUR M-CLASS
XRAY EVENTS: AN M8/2B AT 22/2356UT AND ANOTHER M8/2B AT 23/0706UT,
BOTH FROM REGION 2984 (N08W49), AND TWO UNASSOCIATED FLARES, AN
M2 AT 23/1021UT AND AN M1 AT 23/1129UT. THE FIRST TWO FLARES
WERE ACCOMPANIED BY SIGNIFICANT RADIO BURSTS. REGION 2984
PROBABLY CONTAINS MORE THAN ONE DELTA, BUT NO MAGNETIC DATA MAKES
FURTHER ANALYSIS DIFFICULT. THIS REGION IS THE MOST ACTIVE.
IB. SOLAR ACTIVITY FORECAST:
SOLAR ACTIVITY IS EXPECTED TO CONTINUE MODERATE DUE TO THE HISTORY
AND APPARENT SUSTAINED POTENTIAL OF REGION 2984.
II. GEOPHYSICAL SUMMARY AND FORECAST:
THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS.
UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED 24 MAR, ACTIVE ON 25
MAR DUE TO A M8/2B FLARE ON 22/2356UT WHICH HAD A TYPE II RADIO
BURST, AND UNSETTLED TO SLIGHTLY ACTIVE ON 26 MAR.
III. EVENT PROBABILITIES 24-26 MAR
CLASS M 75/75/75
CLASS X 10/10/10
PROTON 10/05/01
PCAF YELLOW
IV. OTTAWA 10.7CM FLUX
OBSERVED 22 MAR 184
ESTIMATED 23 MAR 190
PREDICTED 24-26 MAR 196/198/200
90-DAY MEAN 22 MAR 197
V. GEOMAGNETIC A INDICES
OBSERVED AFR 21 MAR 07 AP 22 MAR 06
ESTIMATED AFR 22 MAR 05 AFR/AP 23 MAR 06/12
PREDICTED AFR/AP 24-26 MAR 15/25 - 20/25 - 14/20
SOLTERWARN
RT

HEUS 3 BOU 232200
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 082B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200UT 23 MARCH 1981
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/1200UT
TO 23/2200UT.
SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 10 HOURS. REGION
2984 (N09W54) PRODUCED AN M1/1B FLARE AT 1738Z MAXIMUM IN THE
WESTERN PORTION OF THE REGION WHERE A STRONG DELTA IS LOCATED.
THIS LARGE 1B HAD NO SIGNIFICANT RADIO BURSTS ASSOCIATED WITH
IT. A LARGE DARK FILAMENT LOCATED EAST OF THE REGION WAS OBSERVED
TO HAVE BECOME ACTIVE JUST PRIOR TO THE FLARE INDICATING SOME
POSSIBLE INTERACTION. AN M3 AT 1209Z MAXIMUM WHICH HAD NO
OPTICAL CORRELATION PRODUCED MINOR RADIO BURSTS ALONG WITH
SHORT WAVE FADES.
IB. SOLAR ACTIVITY FORECAST:
MODERATE SOLAR ACTIVITY IS PROBABLE FROM REGIONS 2984 AND 2993
(N15E11) WITH BOTH CONTINUING TO DEVELOP SLOWLY IN SPOT AREA AND
COMPLEXITY. ISOLATED X-CLASS EVENTS ARE POSSIBLE FROM THESE TWO
REGIONS. THE POSSIBILITY OF SMALL M-CLASS EVENTS IS INCREASING
IN REGIONS 2990 (N20W17) AND 2996 (S18E15).
II. GEOPHYSICAL SUMMARY AND FORECAST:
THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE PAST 10 HOURS.
INCREASINGLY UNSETTLED CONDITIONS ARE EXPECTED THROUGH THE NEXT 24
HOURS IN RESPONSE TO THE FLARE ACTIVITY OBSERVED DURING THE PAST 48
HOURS AND A FAVORABLY LOCATED CORONAL HOLE.
III. EVENT PROBABILITIES 24-26 MARCH
CLASS M 75/75/75
CLASS X 10/10/10
PROTON 10/10/10
PCAF YELLOW
IV. OTTAWA 10.7 CM FLUX
OBSERVED 23 MAR 189
PREDICTED 24-26 MAR 196/198/200
90-DAY MEAN 23 MAR 196
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 22 MAR 05/06
ESTIMATED AFR/AP 23 MAR 05/07
PREDICTED AFR/AP 24-26 MAR 15/25 - 20/25 - 14/20
SOLTERWARN
RT