

HFUS 1 BOW 232200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 205

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 23 JULY 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.
REGION 2579 (S19E03) PRODUCED THE MOST SIGNIFICANT EVENT IN
SEVERAL DAYS, AN M8/2B AT 0103Z MAXIMUM. THE FLARE WAS IMPRESSIVE
IN ALL PARAMETERS WITH A STRONG TYPE IV LONG DURATION
RADIO SWEEP, AN IMPORTANCE TWO TYPE II SWEEP, CASTELLI-U
SIGNATURE WITH 660 FLUX UNITS OBSERVED AT 2.695 MHZ, AND PARALLEL
RIBBONS WITH FAINT EMISSION IN WHITE LIGHT OBSERVED FOR FLARE
CHARACTERISTICS. ALL THESE PARAMETERS INDICATED A GOOD POTENTIAL
FOR A PROTON ENHANCEMENT AT SATELLITE ALTITUDES, HOWEVER, NONE
HAVE BEEN OBSERVED PROBABLY DUE TO THE EAST 20 LOCATION. SLOW
GROWTH, AN ACTIVE NEUTRAL LINE WITH DELTA CONFIGURATION AND
SIGNIFICANT RESTRUCTURING IN THIS REGION HAS BEEN REPORTED.
REGIONS 2570 (S26W50), 2571 (S21W37), 2575 (S25W80), AND 2584
(S26W76) HAVE ALL PRODUCED SUBFLARES TODAY. NEW REGION 2588
(S07E76) HAS ROTATED OVER THE EAST LIMB TODAY WITH A LARGE
H-TYPE SPOT VISIBLE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE PREDOMINANTLY LOW DURING
THE FORECAST PERIOD WITH THE POSSIBILITY OF AN ISOLATED M-CLASS
EVENT OCCURRING FROM REGION 2579, 2570 OR 2571. IF REGION 2579
CONTINUES TO GROW, A SIGNIFICANT FLARE IS POSSIBLE. ONLY SMALL
ACTIVITY IS EXPECTED FROM THE REMAINING DISK REGIONS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TODAY. UNSETTLED
CONDITIONS ARE EXPECTED UNTIL LATE IN THE UT DAY TOMORROW, WHEN
A SUDDEN COMMENCEMENT AND ACTIVE CONDITIONS ARE FORECAST AS A
RESULT OF TODAY'S M8 FLARE.

III. EVENT PROBABILITIES 24 JULY - 26 JULY

CLASS M 70/70/60

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JULY 228

PREDICTED 24-26 JULY 219/210/200

90-DAY MEAN 23 JULY 204

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 22 JULY 06

ESTIMATED AFR/AP 23 JULY 07/08

PREDICTED AFR/AP 24-26 JULY 08/10 - 18/18 - 10/12

SOLTERWARN

BT