

HFUS3 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 190

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 09 JUL 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 08/2100 TO 09/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. THE MOST ENERGETIC ACTIVITY OBSERVED WAS A M2/1B FLARE WHICH ATTAINED MAXIMUM AT 0204Z. THE PARALLEL RIBBON EVENT INCLUDED A 360 FLUX UNIT BURST AT 2695 MHZ, TYPE II IMPORTANCE THREE, AND TYPE IV IMPORTANCE THREE SWEEP. THE SOURCE OF THE FLARE WAS REGION 4671 (S15W36), A DKI SUNSPOT GROUP WITH BETA-GAMMA DELTA MAGNETIC CONFIGURATION. SINCE THAT FLARE THE REGION HAS BEEN MOSTLY STABLE WHILE GENERATING INFREQUENT C-CLASS SUBFLARES. NEW REGION 4676 (N04W08), BORN ON THE DISK TODAY, IS A SIMPLE BIPOLE. THE REMAINDER OF THE DISK AND THE LIMBS HAS BEEN PREDOMINANTLY QUIET AND STABLE.

IB. SOLAR ACTIVITY FORECAST: C-CLASS SUBFLARES SHOULD BE COMMON THROUGHOUT THE NEXT 72 HOURS. REGION 4671 REMAINS POTENT AND MAY CONTINUE TO YIELD ISOLATED M-CLASS EVENTS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 08/2100Z TO 09/2100Z: A GREATER THAN 10 MEV PROTON ENHANCEMENT WAS ASSOCIATED WITH THE M2 FLARE IN REGION 4671. THE EVENT BEGAN AT 0235Z, REACHED MAXIMUM AT 0325Z, AND ENDED AT 1325Z. THE PEAK FLUX OBSERVED WAS 140 PARTICLES / SQUARE CM. -SEC.-SR. THIS INCREASE CORRELATES WITH A 1.7 DB ABSORPTION RECORDED BY THE THULE RIOMETER. UNSETTLED TO ACTIVE LEVELS PREVAILED IN THE GEOMAGNETIC FIELD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: A MINOR GEOMAGNETIC STORM IS EXPECTED TO BEGIN IN THE NEXT 12 TO 24 HOURS. THIS DISTURBANCE IS THE RESULT OF THE AFOREMENTIONED FLARE ACTIVITY AND SHOULD CONTINUE THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 10 JUL-12 JUL

CLASS M 50/50/50

CLASS X 10/10/10

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 JUL 101

PREDICTED 10 JUL-12 JUL 101/101/099

90 DAY MEAN 09 JUL 079

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 JUL 016/022

ESTIMATED AFR/AP 09 JUL 013/021

PREDICTED AFR/AP 10 JUL-12 JUL 015/035-030/030-025/025

SOLTERWARN

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