

HFUS 1 BOU 112200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 193

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 11 JULY 1980

IA. SOLAR ACTIVITY HAS INCREASED TO HIGH WITHIN THE PAST SEVERAL HOURS. ALMOST ALL OF TODAY'S ACTIVITY HAS COME FROM REGION 2562 (S12E65) WHICH ROTATED OVER THE EAST LIMB YESTERDAY. THE LARGEST EVENT THIS REGION PRODUCED WAS AN X1/2B AT 1903Z MAXIMUM. RADIO BURSTS FROM THIS EVENT WEREN'T AS IMPRESSIVE AS MIGHT BE EXPECTED AND THERE WAS NO TYPE II/IV SWEEPS REPORTED. SHORT WAVE FADES TO 22 MHZ WERE REPORTED ALONG WITH A LIMB SPRAY TO .24 RADII. THIS REGION ALSO PRODUCED AN M3/1B AT 1644Z MAXIMUM AND A C8/1B AT 1258Z MAXIMUM. THE ONLY OTHER REGION TO FLARE WAS REGION 2554 (N18W03) WHICH HAS BEEN FLUCTUATING TODAY. THE 2559/2563 COMPLEX (N17E45) HAS BEEN SURPRISINGLY QUIET. NEW REGION 2564 (S11W30) HAS EMERGED ON THE DISK WITH RAPID GROWTH REPORTED. PROMINENCES LOCATED ON THE SOUTHEAST LIMB HAVE BEEN ACTIVE DURING THE PERIOD AND COULD ERUPT AT ANY TIME.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH DURING THE FORECAST PERIOD. ALTHOUGH NOT EXCEPTIONALLY IMPRESSIVE LOOKING IN WHITE LIGHT, REGION 2562 EVIDENTLY IS UNDERGOING SIGNIFICANT STRESS AS EVIDENCED BY THE FREQUENCY OF EVENTS IT'S PRODUCED. THE MOST ACTIVE LONGITUDES OF LAST ROTATION HAVE YET TO COME OVER EAST LIMB INDICATING STILL MORE ACTIVE REGIONS ARE DUE BACK.

II. THE GEOMAGNETIC FIELD HAS BEEN MILDLY UNSETTLED DURING THE PAST 24 HOURS. UNSETTLED CONDITIONS ARE EXPECTED TO CONTINUE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 12 - 14 JULY

CLASS M 90/90/90

CLASS X 15/20/25

PROTON 01/01/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 JULY 168

PREDICTED 12 JULY - 14 JULY 175/182/190

90-DAY MEAN 11 JULY 201

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 10 JULY 05

ESTIMATED AFR/AP 11 JULY 08/08

PREDICTED AFR/AP 12 - 14 JULY 07/08 10/12 08/10

SOLTERWARN

BT