

HFUS 1 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO.

SDF NUMBER 142

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 21 MAY 1980

IA. SOLAR ACTIVITY HAS BEEN LOW UNTIL 2054Z ON THE 21ST. A X 1/2B FLARE BEGAN AT THAT TIME IN REGION 2456 (S13W18) MAXIMUM WAS REACHED AT 2107Z, WITH ASSOCIATED TENFLARE, SHORTWAVE FADE. NEW REGIONS NUMBERED ARE 2473 (S11W34), 2474 (S17E81), 2475 (S12E18). OF THE RATHER LARGE NUMBER OF ACTIVE REGIONS ON THE DISK, REGIONS 2466 (S08E43), 2470 (S20E54), APPEAR MOST COMPLEX MAGNETICALLY. OTHER REGIONS NEAR THE EAST LIMB ARE COMPLEX, AND REGION 2474 (S17E81) MAY BE A LARGER REGION JUST SHOWING ON THE DISK.

IB. SOLAR ACTIVITY SHOULD BE MODERATE TO HIGH DURING THE NEXT PERIOD. REGIONS 2466, 2470 ARE LIKELY TO PRODUCE ACTIVITY, REGION 2456 STILL HAS POTENTIAL. THE PROBABILITY OF PROTONS ARRIVING IS HIGH DURING THE FORECAST PERIOD BECAUSE OF THE X1 EVENT.

II. GEOMAGNETIC ACTIVITY HAS BEEN LOW. IT SHOULD REMAIN LOW FOR THE FORECAST PERIOD. A SUDDEN COMMENCEMENT IS LIKELY LATE ON 23 MAY. THE GEOMAGNETIC FIELD WILL BECOME ACTIVE AT THAT TIME. MAGNETIC CROCHET ACCCOMPANIED THE X1 FLARE.

III. EVENT PROBABILITIES 22 MAY - 24 MAY

CLASS M 80/80/80

CLASS X 15/15/15

PREDICTED 15/15/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 MAY 246

PREDICTED 22-24 MAY 255/255/250

90-DAY MEAN 21 MAY 192

V. GEOMAGNETIC ACTIVITIES

OBSERVED FREDERICKSBURG 20 MAY 07

ESTIMATED AFR/AP 21 MAY 05/06

PREDICTED AFR/AP 22-24 MAY 12/12 - 30/20 - 20/30

SOLTERWARN

BT