

HFUS 3 BOU 062200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 157

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 06 JUN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 05/2100 TO 06/2100Z: SOLAR ACTIVITY HAS BEEN HIGH. REGION 4201 (S09W23) PRODUCED AN IMPULSIVE X1/1B FLARE AT 1348Z MAXIMUM. DISCRETE FREQUENCY BURSTS ASSOCIATED WITH THE EVENT INCLUDED 270 SOLAR FLUX UNITS AT 2695MHZ AND 415FU AT 2300MHZ. DUE TO EQUIPMENT OUTAGE, IT IS UNKNOWN IF THERE WAS A TYPE II OR IV SWEEP ASSOCIATED WITH THIS EVENT. THIS REGION HAS ALSO PRODUCED FOUR M-CLASS XRAY EVENTS DURING THE PAST 24 HOURS. REGION 4201 HAS CONTINUED TO DISPLAY GROWTH (SPOT AREA 1300 MILLIONTHS NOW) ALONG WITH A VERY COMPLEX AND ACTIVE NEUTRAL LINE WITH SEVERAL MAGNETIC DELTAS VISIBLE. THE STRONGEST MAGNETIC GRADIENTS ARE LOCATED IN THE NORTHERN CENTRAL PORTION OF THE REGION AROUND AN ISOLATED LEADER POLARITY POLE. REGION 4204 (S10E56) HAS PRODUCED MINOR SUBFLARES DURING THE PAST 24 HOUR PERIOD. THIS REGION ALSO DISPLAYS COMPLEXITY WITH A BETA-GAMMA DELTA MAGNETIC CONFIGURATION. NEW REGION 4205 (S12E76) HAS EMERGED ON THE DISK JUST BEHIND REGION 4204 AND IS A SIMPLE BIPOLAR STRUCTURE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE TO HIGH THROUGH THE FORECAST PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 05/2100Z TO 06/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE FIELD IS EXPECTED TO BECOME ACTIVE DURING THE NEXT 12 HOURS IN RESPONSE TO A FAVORABLY LOCATED CORONAL HOLE. ACTIVE TO OCCASIONAL MINOR STORM CONDITIONS ARE POSSIBLE BY EARLY ON THE 8TH DUE TO TODAY'S FLARE ACTIVITY.

III. EVENT PROBABILITIES 07 JUN-09 JUN

CLASS M 99/99/99

CLASS X 50/50/40

PROTON 25/25/25

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 06 JUN 148

PREDICTED 07 JUN-09 JUN 175/172/169

90 DAY MEAN 06 JUN 125

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 05 JUN 008/010

ESTIMATED AFR/AP 06 JUN 010/015

PREDICTED AFR/AP 07 JUN-09 JUN 020/020-040/025-025/025

SOLTERWARN

BT