

HFUS 1 BOU 071400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 097A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 07 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

06/1200UT TO 07/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.

REGION 3027 (N19E36) PRODUCED A M1/IN WITH X-RAY MAX AT

0139Z. A DOUBLE SET OF CENTIMETRIC RADIO BURSTS WERE

REPORTED DURING THE FLARE. BOTH OPTICAL AND X-RAY WERE SLOW

RISE/FALL IN SIGNATURE. THIS REGION HAS SHOWN SOME PENUMBRAL

GROWTH WITH A WEAK DELTA REMAINING. A M1 EVENT, BEGINNING AT

0400Z, WAS ASSOCIATED WITH A 1N IN REGION 3025 (N09E09) AND A

SN IN REGION 3026 (N09E21). THE OPTICAL FLARE HAD MULTIPLE

ERUPTIVE CENTERS ON EITHER SIDE OF THE NEUTRAL LINE SEPARATING

THE TWO REGIONS. CENTIMETRIC BURSTS WERE MINOR (68 FU AT 2695

MHZ). HOWEVER, CULGOORA REPORTED STRONG TYPE III (0418-0436Z)

AND TYPE II (0430-0506Z) DEKAMETRIC BURSTS WITH THIS EVENT.

LEARMONTH REPORTED AN H-TYPE SPOT VISIBLE NEAR NE20 WHERE

AN EPL AND LOOPS WERE OBSERVED YESTERDAY. SURGING IS REPORTED

OVER ABOUT 5 DEGREES OF LATITUDE. SOME GROWTH HAS BEEN RE-

PORTED IN REGIONS 3011 (S05W41) AND 3026.

IR. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. GENERALLY

UNSETTLED CONDITIONS ARE EXPECTED THROUGH THE NEXT 3 DAYS.

IIIB. EVENT PROBABILITIES: 08-10 APR

CLASS M 80/80/80

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 06 APR 235

ESTIMATED 07 APR 239

PREDICTED 08-10 APR 242/245/250

90 DAY MEAN 06 APR 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR 05 APR 05 AP 06 APR 13

ESTIMATED AFR 06 APR 10 AFR/AP 07 APR 07/10

PREDICTED AFR/AP 08-10 APR 10/12 10/12 12/12

SOLTERWARN

BT

HFUS 3 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 097B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 07 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

07/1200UT TO 07/2200UT:

SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 10 HOURS. THE LARGEST EVENT HAS BEEN A C5 X-RAY FLARE AT 1547Z ASSOCIATED WITH A FAINT OPTICAL FLARE IN REGION 3026 (N09E14) AND A LARGE SPRAY EJECTION FROM REGION 3033 (N20E69). REGION 3033 NOW SHOWS A SMALL SPOT GROUP BUT A LARGE, BRIGHT AND COMPLEX PLAGE. REGION 3033 IS BEGINNING EAST LIMB TRANSIT AT N13 WITH A STRONG LEADER SUNSPOT AND A BRIGHT MOUND PROMINENCE. REGION 3026 HAS DECLINED IN SPOT COUNT BUT HAS DEVELOPED A SMALL AREA OF COMPLEX MAGNETIC FIELDS IN ITS TRAILER SPOTS. REGION 3027 (N19E29) CONTINUES AS A COMPACT CLASS E SPOT GROUP WITH A WEAK DELTA CONFIGURATION AND AN OVERALL SHAPE SIMILAR TO PAST PROTON FLARE SOURCES. HOWEVER, THE RATE OF EVOLUTION IS SLOWER THAN MOST MAJOR FLARING REGIONS. REGION 3031 (N05W18) HAS NOT GROWN MUCH LARGER THAN YESTERDAY BUT IMPORTANT SPOT MOTIONS AND NEW SPOT FORMATION ARE TAKING PLACE. A MINOR NEW REGION (3034) HAS FORMED AT N12W14.

IB. SOLAR ACTIVITY FORECAST:

MODERATE FLARE ACTIVITY IS EXPECTED THROUGHOUT THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED TODAY. A SUDDEN IMPULSE OF 20 GAMMAS WAS OBSERVED IN BOULDER AT 1954Z AND MAY INDICATE A PERIOD OF ACTIVE CONDITIONS IN THE NEXT 12-24 HOURS. NO MAJOR ACTIVITY IS EXPECTED. QUIET CONDITIONS ARE EXPECTED TO DOMINATE THE SECOND AND THIRD DAYS OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 8-10 APRIL

CLASS M 80/80/80

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 07 APRIL 242

PREDICTED 08-10 APRIL 250/255/245

90 DAY MEAN 07 APRIL 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 APRIL 11/13

ESTIMATED AFR/AP 07 APRIL 10/10

PREDICTED AFR/AP 08-10 APRIL 15/12 10/12 12/12

SOLTERWARN

BT