

HFUS 1 BOU 231404

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 113A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 23 APR 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

22/1200UT TO 23/1200UT:

SOLAR ACTIVITY INCREASED TO MODERATE LEVELS DURING THE PAST 24 HOURS. ACTIVITY AT THE NORTHWEST LIMB (FAINT LOOPS, CORONAL RAIN, ETC.) RAISED THE XRAY FLUX TO THE M3 LEVEL AT 22/1855 UT. REGION 3049 (N14W39) PRODUCED AN M1/1N FLARE AT 2007 UT. THIS REGION IS STILL GROWING AND NOW HAS MORE SPOT AREA (900 MILLIONTHS) THAN ALL OTHER REGIONS COMBINED. A STRONG MAGNETIC DELTA IS STILL PRESENT. THE REMAINDER OF THE SUN REMAINED IN A GENERAL STATE OF DECLINE, AS EVIDENCED BY THE 10 CM BACKGROUND FLUX. THIS DECLINE WILL PROBABLY CONTINUE, SINCE MOST OF THE CURRENT ACTIVE REGIONS ARE WEST OF CENTRAL MERIDIAN AND NEARING THE WEST LIMB.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH. WE STILL FEEL THAT A MAJOR FLARE (M5 OR GREATER) FROM REGION 3049 IS IMMINENT.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD IS STILL ACTIVE, SHOWS NO SIGNS OF BECOMING QUIETER, AND WE ARE NOT FORECASTING ANY CHANGE OVER THE NEXT FEW DAYS.

III. EVENT PROBABILITIES: 24-26 APR

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 10/15/15

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 22 APR 189

ESTIMATED 23 APR 183

PREDICTED 24-26 APR 180/175/170

90 DAY MEAN 22 APR 211

V. GEOMAGNETIC A INDICES

OBSERVED AFR 21 APR 28 AP 22 APR 34

ESTIMATED AFR 22 APR 28 AFR/AP 23 APR 17/25

PREDICTED AFR/AP 24-26 APR 20/25 18/20 18/20

SOLTERWARN

BT

HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 113B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 23 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

23/1200UT TO 23/2200UT:

SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 10 HOURS. THE LARGEST X-RAY BURST WAS A C7 WITH MAX AT 2025Z. NO OPTICAL REPORT WAS RECEIVED FOR THIS X-RAY FLARE. REGION 3049 (N15W43) RETAINS ITS DELTA CONFIGURATION WITH MODERATE MAGNETIC GRADIENTS. REGION 3066 (N15E71) HAS ROTATED ON TO THE DISK BUT IS STILL TOO CLOSE TO THE LIMB FOR EVALUATION.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH A CHANCE OF A MAJOR FLARE IN REGION 3049.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. THE FIELD IS EXPECTED TO BE MODERATELY UNSETTLED TO ACTIVE THROUGH THE NEXT THREE DAYS.

III. EVENT PROBABILITIES: 24-26 APRIL

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 23 APR 203

PREDICTED 24-26 APR 205/205/200

90 DAY MEAN 23 APR 212

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 APR 28/34

ESTIMATED AFR/AP 23 APR 20/35

PREDICTED AFR/AP 24-26 APR 15/15 12/12 12/12

SOLTERWARN

BT