

HFUS 1 BOU 091400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDR NUMBER 099A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 09 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
08/1200UT TO 09/1200UT:

SOLAR ACTIVITY HAS INCREASED TO MODERATE LEVELS. THE XRAY BACK-GROUND LEVEL WAS ENHANCED MOST OF THE DAY BEGINNING AT 08/1653UT WITH AN M5/2B FLARE AND 270 FU RADIO BURST AT 2695 MHZ IN REGION 3025 (N08W21). THE SPOT GROUP IN THIS REGION HAS GROWN RAPIDLY IN THE TRAILER PORTION SINCE YESTERDAY. REGION 3035 (N15E61) PRODUCED AN M1/SB AT 08/1253UT, AN M1 WITH ASSOCIATED LOOP PRO-MINENCE SYSTEM AT 08/1326UT, AN M1/SB AT 09/0947UT AND 15 SMALL FLARES THROUGHOUT THE DAY. THIS REGION CONTAINS A COMPLEX GROWING SPOT GROUP AND IS NOT YET COMPLETELY VISABLE. REGION 3027 (N19E11) CONTINUES TO SHOW SIGNS OF SLIGHT DECAY BUT IT IS STILL THE LARGEST SPOT GROUP ON THE DISK. REGIONS 3026 (N09W05) AND 3031 (N05W35) ARE GROWING COMPACT REGIONS WHICH ALSO PRODUCED NUMEROUS SUBFLARES TODAY.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY WILL REMAIN MODERATE WITH A CLASS X EVENT POSSIBLE FROM REGION 3025 OR 3035 AND ALL OF THE ABOVE REGIONS CAPABLE OF CLASS M LEVEL ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. UNSETLED CONDITIONS ARE EXPECTED TO CONTINUE WITH A SLIGHT INCREASE LATE ON 11 APRIL RELATED TO THE FLARE ACTIVITY ON 08/09 APRIL.

III. EVENT PROBABILITIES: 10-12 APRIL

CLASS M 85/85/85

CLASS X 05/05/05

PROTON 05/05/05

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 08 APRIL 269

ESTIMATED 09 APRIL 275

PREDICTED 10-12 APRIL 280/280/275

90 DAY MEAN 08 APRIL 199

V. GEOMAGNETIC INDICES

OBSERVED AFR 07 APRIL 11 AP 08 APRIL 10

ESTIMATED AFR 08 APRIL 12 AFR/AP 09 APRIL 12/12

PREDICTED AFR/AP 10-12 APRIL 12/12 15/15 15/18

SOLTERWARN

PT

HFUS 3 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 099B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200UT 09 APRIL 1981

I.A. ANALYSIS OF SOLAR ACTIVITY REGIONS AND ACTIVITY FROM
09/1200UT TO 09/2200UT:

SOLAR ACTIVITY REMAINED AT MODERATE LEVELS, WITH BACKGROUND X-RAY
LEVELS NEAR THE M1 LEVEL MOST OF THE DAY. THE LARGEST EVENT WAS
AN M4/1B AT 1712UT FROM REGION 3035 (N11E55), WITH TWO OR THREE
OTHER REGIONS FLARING AT ABOUT THE SAME TIME. THE SUN WAS ACTIVE
DURING THIS PERIOD IN THE RADIO WAVELENGTHS, WITH A TENFLARE
FROM REGION 3025 (N09W25) AT 1849UT AND SEVERAL OTHER MINOR RADIO
BURSTS.

I.B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH. REGIONS 3025,
3035, 3026 (N08E00), AND 3031 (N06W33) ARE ALL CAPABLE OF M-
CLASS OR X-CLASS ACTIVITY.

I.I. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED AND IS FORECAST TO
REMAIN UNSETLED UNTIL 11-13 APRIL, WHEN FLARE-RELATED ACTIVE
CONDITIONS ARE LIKELY.

III. EVENT PROBABILITIES: 10-12 APRIL

CLASS M 95/95/95

CLASS X 20/20/20

PROTON 15/20/20

PCAF 100% YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 10-12 APR 273

PREDICTED 10-12 APR 280/280/275

90 DAY MEAN 10-12 APR 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 APR 13/10

ESTIMATED AFR/AP 09 APR 12/12

PREDICTED AFR/AP 10-12 APR 12/12 15/15 18/18

SOLARFLARE WARN

BT