

HFUS 1 BOU 281300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 241A **240 A**

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 28 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

27/1200Z TO 28/1200Z:

SOLAR ACTIVITY WAS MODERATE ONLY BY A SINGLE EVENT; OTHERWISE IT WAS LOW. REGION 3293 (N12W47) PRODUCED AN M5/1B FLARE AT 0347Z ACCCOMPANIED BY MODERATE TYPE II AND TYPE III RADIO BURSTS. THE SUNSPOT AREA IN THIS SMALL CLASS F GROUP WAS DISTINCTLY REDUCED AFTER THE FLARE. THE MAGNETIC FIELD CONTAINS HIGH GRADIENTS AND COMPLEX FORMS ON A SMALL SCALE. REGION 3284 (S11W55) IS EVOLVING SLOWLY AND STILL HAS COMPLEX FIELDS WHERE STRONG SPOTS EMERGED TWO DAYS AGO. ALL OTHER REGIONS ARE LITTLE CHANGED OR HAVE DECAYED SLIGHTLY. A SMALL REGION IS SURGING AT S25E90.

IB. SOLAR ACTIVITY FORECAST:

MODERATE FLARES ARE LIKELY FROM REGIONS 3284, 3293 AND 3300 (S13E55). A LARGE REGION IS DUE AT S05-10 EAST LIMB LATE TOMORROW. SOLAR INDICES ARE EXPECTED TO DECLINE WITH THE LOSS OF REGION 3279 NOW PASSING SW LIMB. SLOW DECAY IN MOST VISIBLE REGIONS SHOULD CONTINUE THE DECLINE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS AT MINOR STORM LEVEL PART OF THIS PERIOD AND OTHERWISE ACTIVE TO UNSETTLED. THIS UNPREDICTED DISTURBANCE MAY HAVE ORIGINATED FROM A FILAMENT DISAPPEARANCE ON 23 AUGUST. ACTIVE CONDITIONS ARE EXPECTED FOR MOST OF THE NEXT TWO DAYS AS A CORONAL HOLE RELATED DISTURBANCE ARRIVES AT EARTH.

III. EVENT PROBABILITIES: 29-31 AUGUST

CLASS M 70/70/60

CLASS X 10/10/10

PROTON 05/05/05

IV. OTTAWA 10.7 FLUX

OBSERVED 27 AUGUST 255

ESTIMATED 28 AUGUST 252

PREDICTED 29-31 AUGUST 245/238/234

90 DAY MEAN 27 AUGUST 186

V. GEOMAGNETIC A INDICES

OBSERVED AFR 26 AUGUST 07 AP 27 AUGUST 19

ESTIMATED AFR 27 AUGUST 18 AFR/AP 28 AUGUST 15/20

PREDICTED AFR/AP 29-31 AUGUST 15/18 20/23 12/15

SOLTERWARN

BT

HFUS 3 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLO.

SDF NUMBER 240B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 28 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
28/1200Z TO 28/2100Z

SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 9 HOURS. THREE M-CLASS FLARES HAVE BEEN OBSERVED DURING THAT PERIOD. THESE FLARES WERE AN M1/1B AND AN M1/SN FROM REGION 3300 (S13E49) WITH MAXIMA AT 1511 AND 1852 UT AND AN M1/1N FROM REGION 3287 (S09W47) WITH MAXIMUM AT 1925 UT. DURING THE 1852 EVENT STRONG SURGES WERE NOTED AT SE20 AND THE X-RAY SIGNATURE WAS CHARACTERISTIC OF LIMB FLARES, SO ALL THE X-RAYS MAY NOT HAVE COME FROM REGION 3300.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE MODERATE WITH M-CLASS FLARES POSSIBLE FROM SEVERAL OF THE FIFTEEN REGIONS NOW VISIBLE ON THE SOLAR DISK.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN AT UNSETLED TO QUIET LEVELS DURING THE PAST 9 HOURS. CONDITIONS ARE LIKELY TO BE GENERALLY UNSETLED FOR THE NEXT 24 HOURS.

III. EVENT PROBABILITIES: 29 - 31 AUG 81

CLASS M 70/70/60

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 28 AUG 270

PREDICTED 29 - 31 AUGUST 265/258/253

90 DAY MEAN 28 AUGUST 187

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 27 AUG 20/19

ESTIMATED AFR/AP 28 AUG 15/20

PREDICTED AFR/AP 29 - 31 AUG 15/18 20/23 12/15

SOLTERWARN

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