

HFUS-1 BOU 291300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 149A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 29 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/1200Z TO 29/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS WITH FOUR M-CLASS FLARES OBSERVED. TWO WERE PRODUCED BY REGION 3739 (N14W90) AND TWO BY REGION 3753 (S04E15). AN M2/2B FLARE OCCURRED IN REGION 3753 AT 0209Z MAXIMUM WITH MINOR DISCRETE FREQUENCY RADIO BURSTS, WHILE REGION 3739 PRODUCED AN M1/ACTIVE SURGE AT 0614Z MAXIMUM. THIS FLARE PRODUCED STRONG SHORT WAVE FADES TO 15MHZ. REGION 3739 IS APPARENTLY GROWING AS IT CROSSES WEST LIMB. REGION 3753 HAS INCREASED IN COMPLEXITY (NOW A BETA GAMMA DELTA) WHILE MAINTAINING ITS SLOW GROWTH PHASE. THERE IS APPARENTLY SOME INTERACTION WITH NEW REGION 3754 (S04E5S). SYMPATHETIC FLARING HAS BEEN OBSERVED FROM THESE TWO REGIONS. REGION 3751 (S21W62) HAS GROWN ALMOST AS FAST AS 3753, BUT HAS REMAINED RELATIVELY DORMANT DURING THE PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE. REGION 3739 COULD STILL BE HEARD FROM DURING THE NEXT 24 HOURS AS IT ROTATES AROUND EAST LIMB. M-CLASS ACTIVITY IS LIKELY FROM REGION 3753 WITH THE POSSIBILITY OF AN ISOLATED X-CLASS EVENT IF ITS GROWTH CONTINUES. REGION 3751 SHOULD ALSO BEGIN FLARING.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN AT MINOR STORM LEVELS DURING THE PAST 24 HOURS AS A RESULT OF A CORONAL HOLE INDUCED HIGH SPEED SOLAR WIND STREAM. THIS ACTIVITY IS EXPECTED TO GRADUALLY TREND TOWARDS ACTIVE CONDITIONS DURING THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 30 MAY-01 JUN

CLASS M 70/80/80

CLASS X 01/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 MAY 171

ESTIMATED 29 MAY 168

PREDICTED 30 MAY-01 JUN 165/163/160

90 DAY MEAN 28 MAY 175

V. GEOMAGNETIC A INDICES

OBSERVED AFR 27 MAY 03 AP 28 MAY 046

ESTIMATED AFR 28 MAY 035 AFR/AP 29 MAY 030/030

PREDICTED AFR/AP 30 MAY-01 JUN 018/020-014/018-012/015

SOLTERWARN

BT

HXUS BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 149B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 29 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/1200Z TO 29/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 9 HOURS. REGIONS 3740/3739, WHICH ARE BEYOND THE WEST LIMB AT NW22/NW10, HAVE BEEN SURGING THROUGHOUT THE PERIOD AND HAVE PRODUCED SEVERAL X-RAY EVENTS. THE LARGEST WAS AN M1 MAXING AT 1704Z BUT ANOTHER M-CLASS EVENT WAS IN PROGRESS AT 2100Z, MAXING AT M1 AT 2107Z. REGION 3753 (S04E09) HAS RELAXED CONSIDERABLY IN MAGNETIC COMPLEXITY DURING THE PAST FEW HOURS AND IS NOW A SIMPLE BIPOLE GROUP. REGION 3751 (S21W67) HAS RETAINED ITS MIXED POLARITIES BUT HAS NOT PRODUCED AN ENERGETIC EVENT. THREE NEW REGIONS EMERGED ON THE DISK TODAY. THEY ARE 3755 (S20W07) AND 3756 (N06W22), B-TYPE GROUPS, AND 3757 (N10E12), AN A-TYPE GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXP FCTED TO BE MODERATE. REGION 3753 MAY STILL BE CAPABLE OF SIGNIFICANT FLARES. X-CLASS EVENTS APPEAR TO BE UNLIKELY AT THIS TIME.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE FOR THE PAST 9 HOURS. GEOMAGNETIC LEVELS ARE EXPECTED TO TREND TOWARD UNSETTLED CONDITIONS TOMORROW, AND THEN REMAIN UNSETTLED FOR THE REMAINDER OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 30 MAY-01 JUN

CLASS M 70/70/70

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 MAY 170

PREDICTED 30 MAY-01 JUN 165/163/160

90 DAY MEAN 29 MAY 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 MAY 040/046

ESTIMATED AFR/AP 29 MAY 028/036

PREDICTED AFR/AP 30 MAY-01 JUN 018/020-014/018-012/015

SOLTERWARN

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HXUS BOU 292200

PREDM 07030 07031 07001

PREDX 00130 00131 00101

PREDP 00130 00131 00101

PCAF 00130

TENCM 16530 16331 16001

AFRED 01830 01431 01201

AFAPT 02030 01831 01501

BT