

HFUS 3 BOU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 131

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 10 MAY 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/2100

TO 10/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 4481

(N07E23) PRODUCED AN M4/2B FLARE AT 1719Z. THE OPTICAL FLARE

HAD SEVERAL ERUPTIVE CENTERS. MODERATE TO STRONG RADIO BURSTS

WERE RECORDED AT CHROMOSPHERIC AND TRANSITION LEVEL

FREQUENCIES. A 338 FU BURST WAS RECORDED AT 2800 MHZ BY

ALGONQUIN OBSERVATORY (OTTAWA). HOWEVER, NO RADIO BURSTS WERE

RECORDED AT CORONAL FREQUENCIES. NUMEROUS LESSER FLARES HAVE

OCCURRED IN REGION 4481 DURING THE PAST 24 HOURS. THE DELTA IN

THE TRAILER IS FIRMLY FIXED WITH MODERATE GRADIENT. A NEW

DEVELOPMENT IS A DELTA IN THE LARGE LEADER PENUMbra. THIS DELTA

CURRENTLY HAS A STRONG GRADIENT. REGION 4484 (S12W73), WHICH

EMERGED TODAY, HAS HAD SEVERAL FLARES AND CONTAINS A MODERATE

INTENSITY PLAGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH OCCASIONAL CLASS M FLARES FROM REGION 4481. AN ISOLATED CLASS X FLARE FROM THIS REGION IS POSSIBLE.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 09/2100Z TO 10/2100Z: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE WITH PERIODS AT STORM LEVEL.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE GENERALLY AT STORM LEVEL ON 11-12 MAY WITH A REDUCTION TO ACTIVE/UNSETTLED CONDITIONS ON 13 MAY.

III. EVENT PROBABILITIES 11 MAY-13 MAY

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 MAY 148

PREDICTED 11 MAY-13 MAY 153/156/159

90 DAY MEAN 10 MAY 130

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 MAY 019/019

ESTIMATED AFR/AP 10 MAY 024/020

PREDICTED AFR/AP 11 MAY-13 MAY 032/040-036/040-014/020

SOLTERWARN

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