

HFUS 3 RCU 052230
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 156

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 05 JUN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 04/2100
TO 05/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE WITH AN INCREASING
OCCURRENCE OF M-CLASS XRAY EVENTS DURING THE PAST FEW HOURS.
REGION 4201 (S09W10) HAS PRODUCED ALL THREE OF THE M-CLASS
FLARES TODAY. THE FIRST, AN M1/SB OCCURRED AT 1551Z MAXIMUM
WITH MINOR RADIO RESPONSE. THE SECOND EVENT WAS AT 1756Z (AN
M1/1B), AND THE THIRD WAS AT 1944Z (AN M1/SB). FLARES FROM
REGION 4201 HAVE BEEN NEARLY CONTINUOUS SINCE 1200Z WITH THE
XRAY BACKGROUND DISPLAYING A GRADUAL INCREASE DURING THIS SAME
PERIOD. THIS REGION'S SPOT AREA HAS INCREASED BY ONE-HALF
DURING THE PAST 24 HOURS WHILE ITS MAGNETIC FIELD STRENGTHS AND
GRADIENTS HAVE DOUBLED. STRONG OPPOSITE POLARITY INTRUSIONS ARE
EVIDENT IN BOTH THE NORTHERN AND SOUTHERN PORTIONS OF THE
LARGE TRAILER PENUMBRA. REGION 4204 (S09E68) HAS BEGUN TO
PRODUCE MINOR SUBFLARE ACTIVITY AS IT NOW BECOMES TOTALLY
VISIBLE ON THE DISK. THIS SPOT GROUP IS A D-TYPE WITH A LARGE
LEADER PENUMBRA AND MINOR MAGNETIC COMPLEXITY. NO NEW GROUPS
WERE NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE
MODERATE WITH AN X-CLASS FLARE VERY LIKELY DURING THE FORECAST
PERIOD FROM REGION 4201. THE REGION IS ALSO MOVING INTO THE
PRIME LOCATION FOR A SATELLITE PROTON EVENT SHOULD A LARGE
FLARE OCCUR.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 04/2100Z TO 05/2100Z:
THE GEOMAGNETIC FIELD WAS QUIET FOR THE FIRST HALF OF THE
PERIOD BUT BECAME UNSETTLED TOWARDS THE END OF THE PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE FIELD SHOULD INCREASE
GRADUALLY THROUGH ACTIVE LEVELS FOR THE NEXT THREE DAYS. A
CORONAL HOLE INDUCED DISTURBANCE IS FORECAST ON THE 7TH AND IS
EXPECTED TO LAST FOR 48 HOURS.

III. EVENT PROBABILITIES 06 JUN-08 JUN

CLASS M 95/95/95
CLASS X 30/30/30
PROTON 15/20/20
PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 JUN 167
PREDICTED 06 JUN-08 JUN 170/172/175
90 DAY MEAN 05 JUN 125

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 JUN 003/007
ESTIMATED AFR/AP 05 JUN 010/015
PREDICTED AFR/AP 06 JUN-08 JUN 015/015-020/020-025/025

SOLTERWARN

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