

HFUS 3 BOU 042200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 155

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 04 JUN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100
TO 04/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 4201
(S09E03) CONTINUES TO DOMINATE THE DISK IN BOTH APPEARANCE AND
ACTIVITY. IT HAS PRODUCED TWO M-CLASS XRAY EVENTS DURING THE
PERIOD ALONG WITH MANY C-CLASS FLARES. THE FIRST EVENT WAS
OBSERVED AT 0228Z MAXIMUM, AN M1/IB WITH MINOR DISCRETE
FREQUENCY RADIO BURSTS ASSOCIATED WITH IT. THE SECOND EVENT AT
1957Z WAS ALMOST IDENTICAL TO THE FIRST, AN M1/IB WITH MINOR
RADIO RESPONSE. REGION 4201 HAS GROWN SIGNIFICANTLY OVER NIGHT
(NOW HAS AN AREA OF 870 MILLIONTHS), AND DISPLAYS A STRONGER
MAGNETIC GRADIENT. ARCH FILAMENTS ARE VISIBLE IN THE REGION'S
CENTRAL PORTION ALONG WITH SEVERAL ACTIVE NEUTRAL LINE
FILAMENTS. THE MAGNETIC DELTA CONFIGURATIONS WITHIN THE
REGION'S LARGE CENTRAL PENUMBRA HAVE REMAINED INTACT AND APPEAR
STRONGER TODAY. NEW REGION 4204 (S03E81) HAS ROTATED OVER THE
EAST LIMB AS A LARGE D-TYPE GROUP, AND ALTHOUGH QUIET TODAY,
APPEARS TO POSSESS THE POTENTIAL FOR ACTIVITY. THE REMAINING
DISK REGIONS HAVE SHOWN LITTLE CHANGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN
MODERATE WITH M-CLASS ACTIVITY LIKELY FROM REGION 4201 AND TO A
LESSER EXTENT 4204. THE POTENTIAL FOR X-CLASS FLARES FROM
REGION 4201 IS INCREASING.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z:
THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED
DURING THE PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE FIELD IS EXPECTED TO
REMAIN AT UNSETTLED LEVELS UNTIL THE END OF THE DAY ON THE 6TH,
WHEN ACTIVE LEVELS ARE FORECAST DUE TO THE FIELD'S RESPONSE TO
A CORONAL HOLE.

III. EVENT PROBABILITIES 05 JUN-07 JUN

CLASS M	80/80/80
CLASS X	10/15/15
PROTON	01/05/05
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	04 JUN	145
PREDICTED	05 JUN-07 JUN	150/153/155
90 DAY MEAN	04 JUN	124

V. GEOMAGNETIC A INDICES

OBSERVED	AFR/AP 03 JUN	007/009
ESTIMATED	AFR/AP 04 JUN	006/015
PREDICTED	AFR/AP 05 JUN-07 JUN	010/015-008/015-020/020

SOLTERWARN

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