

FUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 145

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 25 MAY 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/2100
TO 25/2100Z: SOLAR ACTIVITY HAS BEEN LOW TO MODERATE. THE ONLY
SIGNIFICANT EVENT WAS AN M2 WITH X-RAY MAXIMUM AT 0955Z. ATHENS
(WITH ONLY BRIEF OBSERVATIONS) REPORTED A LIMB FLARE AND EJECTA
NEAR SE09 - AFTER X-RAY MAXIMUM. THIS WOULD MARK THE RETURN OF
OLD REGION 4165. HOWEVER, NO FURTHER ACTIVITY HAS BEEN REPORTED
IN THIS VICINITY. OTHER LOW LEVEL CLASS C FLARES OCCURRED IN
REGIONS 4183 (N18W29) AND 4187 (S17E13). A REJUVENATION OF
SUNSPOT GROWTH IS OCCURRING IN REGION 4187 WITH ARCH FILAMENTS
CURRENTLY IN EXISTENCE. REGIONS 4193 (S07W01) AND 4194 (N17E68)
WERE ADDED TODAY. MODERATE GROWTH IS OCCURRING IN REGION 4193.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW TO MODERATE WITH A SLIGHT CHANCE FOR A CLASS M FLARE,
PRIMARILY FROM REGION 4187.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 24/2100Z TO 25/2100Z:
THE GEOMAGNETIC STORM WHICH BEGAN 24/1600Z ENDED NEAR 0500Z.
THE FIELD HAS BEEN QUIET TO UNSETTLED SINCE THE END OF THE
STORM.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
EXPECTED TO BECOME ACTIVE ON THE 26TH AND REMAIN SO FOR THE
FORECAST PERIOD. THE CONTRIBUTING CORONAL HOLE FOR THIS
INCREASED FIELD ACTIVITY IS CENTERED AT N30. BECAUSE OF THIS
HIGHER LATITUDE, THE STRENGTH OF THE ASSOCIATED HIGH SPEED
STREAM REACHING THE EARTH IS UNCERTAIN. ALSO, A FILAMENT WHICH
DISAPPEARED ON 23 MAY IS EXPECTED TO INCREASE THE LEVEL OF
ACTIVITY ON 27 MAY.

III. EVENT PROBABILITIES 26 MAY-28 MAY

CLASS M	20/25/25
CLASS X	01/01/01
PROTON	01/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	25 MAY	135
PREDICTED	26 MAY-28 MAY	135/133/130
90 DAY MEAN	25 MAY	125

V. GEOMAGNETIC A INDICES

OBSERVED	AFR/AP	24 MAY	058/075
ESTIMATED	AFR/AP	25 MAY	014/020
PREDICTED	AFR/AP	26 MAY-28 MAY	018/025-028/020-015/020

SOLTERWARN

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