

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 248

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 04 SEP 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100
TO 04/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4567 (S06W69)
PRODUCED SEVERAL SMALL B-LEVEL X-RAY EVENTS WITH ASSOCIATED
SUB-FLARES. IT CONTINUED ITS DECAY IN WHITE-LIGHT SIZE AND SPOT
NUMBER. IT WAS A DK1 CLASSIFICATION AND REMAINED A BETA-TYPE.
NEW REGION 4574 (S12W31) WAS A GROWING BETA-TYPE OF 3 SPOTS AND
C40 CLASSIFICATION IN WHITE-LIGHT.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
VERY LOW. REGIONS 4567 AND 4574 COMBINE TO PROVIDE ONLY A 5 PER
CENT CHANCE OF M-LEVEL X-RAY EVENTS. RETURNING REGIONS 4561
(N06, CAR-344) AND 4562 (N12, CAR-336) PRODUCED NO EVENTS LAST
ROTATION TO SUPPORT FORECASTING SIGNIFICANT ACTIVITY THIS TIME
AROUND.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z:
GEOMAGNETIC ACTIVITY WAS AT ACTIVE TO MAJOR STORM LEVELS. A
SUDDEN STORM COMMENT AT 04/0746Z RAISED THE THEN ACTIVE
LEVEL QUICKLY TO MINOR STORM LEVELS AT ALL LATITUDES AND UP TO
MAJOR LEVELS AT HIGH LATITUDES BY 04/0900Z. MID-LATITUDE MAJOR
STORM LEVELS WERE REPORTED AT 04/1500Z. MID-LATITUDE LEVELS
DECREASED TO MINOR LEVELS AT 04/1930Z AND FINALLY BACK DOWN TO
ACTIVE LEVELS BY END-OF-PERIOD. MAJOR STORM LEVELS CONTINUED AT
HIGH LATITUDES. THIS DISTURBANCE WAS ATTRIBUTED TO DISAPPEARING
FILAMENTS FROM 30 AUG THRU 1 SEP.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS
EXPECTED TO BE AT MAJOR STORM TO ACTIVE LEVELS. THE CURRENT
STORM LEVEL AT HIGH LATITUDES IS EXPECTED TO CONTINUE THROUGH
THE FIRST DAY (5 SEP) WITH SLOW DECREASE TO MINOR LEVELS THE
SECOND (6 SEP). MINOR LEVELS ARE EXPECTED AT MID-LATITUDES
DURING NIGHT-TIME PERIODS OF THE FIRST AND POSSIBLY SECOND DAYS
(5-6 SEP). A DECREASE TO ACTIVE LEVELS IS EXPECTED FOR THE
THIRD DAY (7 SEP). THIS DISTURBANCE IS THE CONTINUATION OF THE
CONSEQUENT STORM CAUSED BY THE DISAPPEARING FILAMENTS FROM 30
AUG THROUGH 1 SEP AND MORE SMALL DISAPPEARING FILAMENTS FROM 2
THROUGH 4 SEP.

III. EVENT PROBABILITIES 05 SEP-07 SEP

CLASS M 05/05/05
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 SEP 090
PREDICTED 05 SEP-07 SEP 089/088/087
90 DAY MEAN 04 SEP 090

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 SEP 012/018
ESTIMATED AFR/AP 04 SEP 042/055
PREDICTED AFR/AP 05 SEP-07 SEP 035/035-030/025-020/025

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