

FUS 3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 265

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 22 SEP 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/2100 TO 22/2100Z: THE SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. REGION 4324 (S19E75) PRODUCED A ZERO NORMAL AND SEVERAL SUB-FLARES BEGINNING AFTER 22/1500UT. ACTIVE SURGES AND PROMINENCES OUT TO .07 SOLAR RADIUS HAVE BEEN OBSERVED FROM THIS REGION WHICH HAS INCREASED THIRTYFOLD IN AREA IN THE LAST 24 HOURS. REGION 4317 (S13W83) HAS PRODUCED A ONE NORMAL AND SEVERAL OTHER SUB-FLARES. REGION 4319 (S08E07) PRODUCED A SUB-NORMAL FLARE WITH 2 ASSOCIATED C1 XRAY EVENTS AS IT CONTINUED TO DECAY. NO NEW REGIONS WERE ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: THE SOLAR ACTIVITY IS EXPECTED TO BE AT A LOW LEVEL. REGION 4324 IS EXPECTED TO CONTINUE TO INCREASE FLARE AND EVENT ACTIVITIES. THE ACCUMULATIVE ACTIVITIES OF REGION 4319 AND 4323(S16E42) SHOULD MORE THAN COMPENSATE FOR THE LOSS OF ACTIVITY FROM REGION 4317 AS IT ROTATES OVER THE WEST LIMB.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 21/2100Z TO 22/2100Z: THE GEOMAGNETIC ACTIVITY HAS BEEN AT UNSETTLED TO ACTIVE LEVELS FOR THE FIRST 18 HOURS WITH MINOR STORM LEVELS OBSERVED AT HIGH LATITUDE SITES DURING THE NIGHTTIME HOURS. THE ACTIVITY DECREASED TO UNSETTLED LEVELS AT ALL LATITUDES DURING THE LAST 6 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT UNSETTLED TO QUIET LEVELS DURING THE FIRST 2 DAYS. BRIEF ACTIVE LEVELS ARE EXPECTED AT HIGH LATITUDE SITES DURING THE NIGHTTIME HOURS. THE GEOMAGNETIC ACTIVITY IS EXPECTED TO INCREASE TO ACTIVE/MINOR STORM LEVELS ON THE THIRD DAY (25 SEP). THIS INCREASED ACTIVITY IS EXPECTED IN RESPONSE TO A SMALL CORONAL HOLE AT THE CENTRAL MERIDIAN ON THE 21ST OF SEPTEMBER.

III. EVENT PROBABILITIES 23 SEP-25 SEP

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 SEP 105

PREDICTED 23 SEP-25 SEP 107/109/110

90 DAY MEAN 22 SEP 121

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 SEP 009/015

ESTIMATED AFR/AP 22 SEP 015/015

PREDICTED AFR/AP 23 SEP-25 SEP 010/010-010/010-020/020

SOLTERWARN

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