

29 OCT 78

HEUS 1 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 302

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 29 OCTOBER 1978

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOUR PERIOD.
REGION 1370 (N22W20) HAS DISPLAYED AN ARCH FILAMENT SYSTEM
DURING THE PAST 12 HOURS. IT HAS PRODUCED 2 SUBFLARES THE
FIRST OF WHICH GENERATED C CLASS X-RAYS AT 1319Z. THE CONTINUED
INTERACTION BETWEEN THIS REGION AND 1365 (N17W16) HAS BECOME
MORE EVIDENT AND HAS THE POTENTIAL OF PRODUCING M CLASS X-RAYS.
NEW REGIONS 1373 (S09E48) AND 1374 (S19E67) PRESENTLY DISPLAY
SCATTERED PLAGE WITH A SUBFLARE BEING PRODUCED BY RGN 1373 AT
1537Z. SURGING HAS BEEN OBSERVED AT SE15 AND NW15 DURING MOST
OF THIS UT DAY. ALL OTHER DISK AND LIMB FEATURES APPEAR QUIET AND
STABLE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW WITH THE POSSIBILITY
OF M-CLASS X-RAY EVENTS FROM THE 1365/1370 COMPLEX.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED WITH A SHORT
MAGNETIC DISTURBANCE PRODUCING A K VALUE OF FIVE AT 1730Z.
THE GEOMAGNETIC FIELD RECOVERED TO NORMAL BACKGROUND VALUES
WITHIN 30 MINUTES. IT IS EXPECTED TO REMAIN UNSETTLED
DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 30 OCT - 01 NOV

CLASS M 50/50/50

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 OCT 152

PREDICTED 30 OCT - 01 NOV 152/150/150

90-DAY MEAN 29 OCT 144

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 28 OCT 13

ESTIMATED AFR/AP 29 OCT 12/16

PREDICTED AFR/AP 30 OCT - 1 NOV 10/14 - 10/18 - 10/15

SOLTERWARN

BT

HFUS 1 80U 292200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 302

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 29 OCTOBER 1979

IA. SOLAR ACTIVITY WAS LOW UNTIL AN M1/SB FLARE AT 1931Z
OCCURRED IN REGION 2088 (S10E64). THIS REGION HAS ONLY A
SIMPLE AND AGING LARGE SUNSPOT. REGION 2085 (N14W29) HAS
SHOWN SIGNIFICANT GROWTH TO A SMALL CLASS D SPOT GROUP WITH
BRIGHT PLAGE. REGION 2084 (N18E43) REMAINS A LARGE CLASS E
GROUP BUT IS STABLE AND INACTIVE. REGION 2090 (N13E69) HAS
ROTATED INTO VIEW SINCE YESTERDAY AND HAS GROWN FROM CLASS C
TO CLASS D DURING THE DAY. SURGES AT NE LIMB INDICATE AN
ADDITIONAL REGION MAY APPEAR TOMORROW.

IB. SOLAR ACTIVITY IS EXPECTED TO BECOME MODERATE WITH
INCREASING FLARE ACTIVITY IN REGIONS 2085 AND 2090.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO QUIET FOR THE
PAST 24 HOURS. QUIET CONDITIONS WILL PREVAIL FOR THE NEXT
THREE DAYS.

III. EVENT PROBABILITIES 30 OCTOBER - 01 NOVEMBER:

CLASS M 70/70/70

CLASS X 05/05/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 OCT 214

PREDICTED 30 OCT - 01 NOV 216/218/220

20-DAY MEAN 29 OCT 198

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 28 OCT 10

ESTIMATED AFR/AP 29 OCT 08/12

PREDICTED AFR/AP 30 OCT - 01 NOV 09/15 06/12 05/10

SOLTERWARN

BT