

HFUS 1 BOU 112200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER CO

SDF NUMBER 315

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 11 NOV 1978

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. REGION 1385 (N19W19) WITH AN E-TYPE SPOT CONFIGURATION HAS PRODUCED SEVERAL C-CLASS SUBFLARES DURING THE PAST 24 HOURS. SPOT GROUP DECAY HAS BEEN OBSERVED IN THIS REGION. REGION 1382 (S12W51) CONTAINS AN ARCH FILAMENT SYSTEM AND HAS PRODUCED 2 SUBFLARES. IT IS CLASSIFIED WITH AN F-TYPE SPOT CONFIGURATION. A DARK SURGE ON THE DISK HAS BEEN REPORTED IN THE NW PART OF REGION 1382. REGION 1394 (N24E34) IS PRESENTLY CLASSIFIED WITH A C-TYPE SPOT CONFIGURATION WITH A STRONG ARCH FILAMENT SYSTEM IN ITS CENTRAL AREA. GROWTH HAS BEEN OBSERVED IN THIS REGION DURING THE PAST 24 HOURS. NEW REGION 1395 (N31W48) HAS BEEN REPORTED WITH A SMALL A-TYPE SPOT. NEW REGION 1396 (S19E48) PRESENTLY DISPLAYS 2 SPOTS IN A B-TYPE CONFIGURATION. SURGING CONTINUES AT SW25 AS REGION 1374 CONTINUES ITS WEST LIMB TRANSIT. ALL OTHER DISK AND LIMB FEATURES ARE REPORTED TO BE QUIET AND STABLE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. REGIONS 1385, 1382 AND 1394 ARE POSSIBLE PRODUCERS OF M-CLASS X-RAY EVENTS.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED AND IS EXPECTED TO CONTINUE TO BE UNSETLED FOR THE FORECAST PERIOD. A SMALL PROTON EVENT HAS BEEN IN PROGRESS SINCE 2130Z /10 NOV PRODUCING A MAXIMUM 10 MEV FLUX OF 20 PROTONS/CM²/SEC/STER AT 1730Z /11 NOV.

III. EVENT PROBABILITIES 12 NOV - 14 NOV

CALSS M 65 / 70 / 75

CLASS X 15 / 15 / 15

PROTON 15 / 15 / 15

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 NOV 166

PREDICTED 12-14 NOV 164 / 161 / 161

90-DAY MEAN 11 NOV 152

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 10 NOV 09

ESTIMATED AFR/AP 11 NOV 07/12

PREDICTED AFR/AP 12-14 NOV 12/30 - 09/15 - 09/14

SOLTERWARN

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SDF NUMBER 315

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 11 NOV 1979

IA. SOLAR ACTIVITY REMAINED HIGH DURING THE PAST 24 HOURS. A SERIES OF CLASS "M" X-RAY BURSTS CHARACTERIZED THE ACTIVITY LEVEL. THE LARGE, DOMINATE DISK FEATURES HAVE SHOWN LITTLE CHANGE. REGION 2100 (S22W75) IS NEARING WEST LIMB PASSAGE BUT ITS APPEARANCE WOULD SUGGEST THAT THE POTENTIAL FOR THIS REGION TO PRODUCE SIGNIFICANT ACTIVITY IS UNDIMINISHED. REGION 2099 (S15W34) MAY BE DEACYING SLIGHTLY; HOWEVER, THE SIZE AND COMPLEXITY OF 2099 MAKES THIS DECAY INCONSEQUENTIAL. REGION 2106 (S16E03) RETAINS ITS DELTA CONFIGURATION AND SOME GROWTH IN THE SPOT AREA MAY BE OCCURRING. REGION 2110 (N31E19) IS ALSO SHOWING SLOW GROWTH IN SPOT AREA. THE LARGEST OF THE M EVENTS DURING THE PAST 24 HOURS WAS AN M3 ASSOCIATED WITH A SUBBRILLIANT FLARE FROM REGION 2112 (N12E33). REGION 2112 REMAINS A MEDIUM SIZE "D" GROUP. THE OTHER DISK CHANGES HAVE BEEN SMALL.

IB. SOLAR ACTIVITY SHOULD REMAIN HIGH. THE POTENTIAL OF 2106 AND 2099 IS SUFFICIENT TO MAINTAIN THE HIGH LEVEL.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETLED. UNSETLED TO ACTIVE CONDITIONS SHOULD CONTINUE UNTIL LATE TOMORROW WHEN ACTIVE TO MINOR STORM LEVELS ARE EXPECTED.

III. EVENT PROBABILITIES 12 - 14 NOV

CLASS M 95/95/95

CLASS X 50/50/50

PROTON 30/40/40

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 NOV 340

PREDICTED 12-14 NOV 330/325/315

90-DAY MEAN 11 NOV 215

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 10 NOV 04

ESTIMATED AFR/AP 11 NOV 13/12

PREDICTED AFR/AP 12-14 NOV 22/18 18/18 13/13

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