

HFUS 3 BOU 110530

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 101A

JOINT USAF/NOAA SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 11 APRIL 1978

IA. SOLAR ACTIVITY REMAINS MODERATE. MOST REGIONS REMAIN UNCHANGED
THE PAST EIGHT HOURS WITH 1057 (N21W52) AND 1070 (N16E53) BEING
MOST ACTIVE. A ONE-NORMAL CLASS C-9 FLARE FROM REGION 1057 AT
11/0414Z WAS THE MOST SIGNIFICANT EVENT.

IB. SOLAR ACTIVITY SHOULD REMAIN MODERATE TO HIGH.

II. THE GEOMAGNETIC FIELD HAS BEEN AT MAJOR STORM LEVELS THIS
PERIOD. THIS DISTURBANCE IS THE RESULT OF FLARE ACTIVITY OVER THE
PAST THREE DAYS. THE DISTURBANCE SHOULD REMAIN AT MINOR TO MAJOR
STORM LEVELS THRU THE REST OF THIS ZULU DAY.

III. EVENT PROBABILITIES 11 APRIL - 13 APRIL

CLASS M 95/95/95

CLASS X 40/40/40

PROTON 40/40/40

FCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 APRIL 155

PREDICTED 11-13 APRIL 156/156/156

90-DAY MEAN 10 APRIL 135

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 09 APRIL 06

ESTIMATED AFR/AP 10 APRIL 17/19

PREDICTED AFR/AP 11-13 APRIL 50/70 - 25/25 - 18/20

SOLTERWARN

BT

HFUS 3 BOU 111500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 101-B

JOINT USAF/NOAA SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1500Z 11 APR 1978

IA. SOLAR ACTIVITY HAS BEEN HIGH. REGION 1057 (N21W57) PRODUCED A LARGE IMPORTANCE 2B FLARE NEAR 11/1340Z. THE X-RAY EMISSION WITH THIS FLARE REACHED X-2 CRITERIA AND THE 10 CM RADIO NOISE REACHED 1400 FLUX UNITS. SUDDEN IONOSPHERIC DISTURBANCE AND TYPE II SWEEP FREQUENCY BURST WERE ALSO OBSERVED. ANOTHER FLARE OCCURRED IN REGION 1070 (N16E50) NEAR 11/1440Z BUT ITS X-RAY EMISSION WAS MASKED BY EMISSION FROM THE 2B WHICH IS STILL AT GREATER THAN X-1 CRITERIA.

IB. SOLAR ACTIVITY WILL BE MODERATE TO HIGH FOR THE NEXT 24 HOURS.

II. THE 2B FLARE AT 11/1340Z IS EXPECTED TO PRECIPITATE HIGH ENERGY PARTICLES DETECTABLE NEAR EARTH BY 11/1700Z. RESULTING GEOMAGNETIC ACTIVITY FROM THIS FLARE IS EXPECTED TO COMMENCE BY 13/1400Z. DURING THE PAST 12 HOURS, THE GEOMAGNETIC FIELD HAS BEEN AT MINOR TO MAJOR STORM LEVELS. ACTIVE TO OCCASIONAL MINOR STORM CONDITIONS ARE EXPECTED TO CONTINUE UNTIL THE FLARE INDUCED STORM STARTS.

III. EVENT PROBABILITIES 11 - 13 APRIL

CLASS M 95/95/95

CLASS X 40/40/40

PROTON 90/40/40

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 APR 155

PREDICTED 11 - 13 APR 156/156/156

90-DAY MEAN 10 APR 135

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 09 APR 06

ESTIMATED AFR/AP 10 APR 17/19

PREDICTED AFR/AP 11 - 13 APR 50/70 - 25/25 - 50/50

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HFUS 1 BOU 112200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 101

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

IA. SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH. REGION 1057 (N19W62) PRODUCED A 2B FLARE AT 11/1340 U.T. SHORT WAVE FADES, TYPE II, TYPE IV AND COMPLEX 10 CM BURST (1400 F.U.) ACCCOMPANIED THIS FLARE. HOLLOWMAN NOTED THAT SEGMENTS OF THE FLARE WERE STILL VISIBLE AT 1700Z. THE X-RAY TRACE IS STILL RECORDING AT HIGH CLASS C LEVEL. REGION 1057 WILL BE ON THE VISIBLE DISK FOR ANOTHER 2 AND ONE HALF DAYS AND ADDITIONAL ENERGETIC ACTIVITY CAN BE EXPECTED FROM THIS REGION. REGION 1070 (N16E40) ALONG WITH 1073 (N17E53) HAS BECOME AN AREA OF STRESS BY VIRTUE OF THEIR RELATIVE POSITIONS. ADDITIONAL ENERGETIC ACTIVITY IS LIKELY FROM THIS LOCALE.

IB. SOLAR ACTIVITY WILL REMAIN MODERATE TO HIGH.

II. GREATER THAN 10 MEV PARTICLES WERE DETECTED AT SATELLITE LEVELS NEAR 11/1530Z. PARTICLE LEVELS ARE FLUCTUATING AT PRESENT TIME. THE GEOMAGNETIC FIELD WAS AT MAJOR STORM LEVELS IN NIGHTTIME SECTORS DURING THE PAST 24 HOURS. GENERALLY UNSETTLED TO ACTIVE CONDITIONS CAN BE EXPECTED UNTIL 13 APRIL WHEN THE FLARE FROM 11/1340Z IS EXPECTED TO INDUCE MAJOR STORM CONDITIONS. A POLAR CAP ABSORPTION EVENT IS IN PROGRESS MAXIMUM ABSORPTION HAS BEEN 3.2 DB.

III. EVENT PROBABILITIES 12-14 APRIL

CLASS M 95/95/95

CLASS X 40/40/40

PROTON 40/40/40

PCAF - IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 APRIL 180

PREDICTED 12-14 APRIL 156/156/156

90-DAY MEAN 11 APRIL 137

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 10 APRIL 32

ESTIMATED AFR/AP 11 APRIL 35/50

PREDICTED AFR/AP 12-14 APRIL 25/50 - 50/40 - 30/30

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