

HFUS 3 BOU 280600

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 118A

JOINT USAF/NOAA SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 28 APRIL 1978

IA. SOLAR ACTIVITY HAS BEEN LOW. REGION 1092 (N27E41) HAD A SN FLARE
(C-8 XRAY) AT 0012Z. THE REST OF THE DISK LIMB HAS BEEN QUIET.

IB. SOLAR ACTIVITY SHOULD BE MODERATE.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE. CONDITIONS
SHOULD BE UNSETTLED FOR THE REST OF TODAY.

III. EVENT PROBABILITIES 28 - 30 APRIL

CLASS M 90/90/90

CLASS X 40/40/40

PROTON 15/15/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 APR 170

PREDICTED 28 - 30 APR 172/174/178

90-DAY MEAN 27 APR 145

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 26 APR 19

ESTIMATED AFR/AP 27 APR 11/16

PREDICTED AFR/AP 28 - 30 APR 12/14 - 25/28 - 25/30

SOLTERWARN

BT

HFUS 3 BOU 281500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 118B

JOINT USAF/NOAA SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1500Z 28 APRIL 1978

IA. A MAJOR SOLAR FLARE BEGAN AT 28/1308Z IN REGION 1092 (N22E41).
THE EVENT REACHED X-4 AT 1335Z AND WAS OPTICALLY A 4 BRIGHT FLARE.
THIS EVENT WAS ACCOMPANIED BY A 24,000 FLUX UNIT BURST AT 10CM, HAD
PARALLEL RIBBONS, 20 PERCENT UMBRAL COVERAGE, AND STRONG TYPE II
AND TYPE IV SWEEP. THE EVENT IS STILL IN PROGRESS AT THIS TIME.
OBSERVATORY REPORTS INDICATE SIGNIFICANT GROWTH HAS OCCURRED IN 1092.
A STRONG DELTA IS STILL PRESENT.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN AT A MODERATE TO HIGH LEVEL
WITH MOST OF THE ACTIVITY COMING FROM 1092. ENERGETIC EVENTS REMAIN
POSSIBLE, BUT SOME TIME SHOULD ELAPSE BEFORE THE NEXT X-CLASS EVENT
IS EXPECTED.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED OVER THE PAST
24 HOURS. THE GEOMAGNETIC FIELD IS EXPECTED TO BECOME DISTURBED TO
MINOR STORM LEVELS STARTING AROUND 30/2100Z, AS A RESULT OF THE
ACTIVITY IN 1092. A SMALL PCA EVENT IS EXPECTED TO START AROUND
29/0200Z.

III. EVENT PROBABILITIES 28 - 30 APRIL

CLASS M 90/90/90

CLASS X 40/40/40

PROTON 15/15/20

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 APR 170

PREDICTED 28 - 30 APR 172/174/178

90-DAY MEAN 27 APR 145

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 26 APR 19

ESTIMATED AFR/AP 27 APR 11/16

PREDICTED AFR/AP 28 - 30 APR 12/14 - 25/28 - 25/30

SOLTERWARN

BT

HFUS 1 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 118

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 28 APRIL 1978

IA. SOLAR ACTIVITY WAS AT A HIGH LEVEL THE PAST 24 HOURS WITH A MAJOR FLARE FROM REGION 1092 (N24E30) AT 28/1308Z, WHICH REACHED A MAXIMUM AT 1335Z OF X-4. OPTICALLY THE FLARE WAS REPORTED AS A 4 BRIGHT WITH DISK LOOPS, PARALLEL RIBBONS AND UMBRAL COVERAGE. THE RADIO FLUX REACHED 24,000 F.U. AT 10 CM, THE LARGEST EVER OBSERVED AT OTTAWA. DELTAS WERE STILL VISIBLE IN BOTH THE LEADER AND TRAILER AREAS. GROWTH CONTINUES. ALL OTHER REGIONS WERE RELATIVELY QUIET WITH MINOR ACTIVITY IN REGIONS 1083 (N14W80) AND 1086 (N21W78).

IB. A MODERATE LEVEL OF SOLAR ACTIVITY IS EXPECTED FROM REGION 1092 THRU THE FORECAST PERIOD. INFREQUENT ENERGETIC EVENTS SHOULD OCCUR AT A RATE OF ONE EVERY OTHER DAY. REGION 1092 SHOULD BE MONITORED FOR INCREASED DEVELOPMENT AND A FURTHER INCREASE IN COMPLEXITY.

II. GENERALLY UNSETTLED GEOMAGNETIC CONDITIONS HAVE BEEN OBSERVED THE PAST 24 HOURS. A SLIGHT INCREASE IN ACTIVITY IS EXPECTED THRU THE NEXT 24 HOURS. A MINOR GEOMAGNETIC STORM IS EXPECTED TO BEGIN AT 30/2100Z. LOW ENERGY PARTICLES HAVE BEEN DETECTED AT GEO-STATIONARY ALTITUDES BEGINNING AT 28/1930Z, AND ABSORPTION HAS BEEN OBSERVED ON THE THULE 30 MHZ RIOMETER BUT HAS NOT YET REACHED EVENT THRESHOLDS.

III. EVENT PROBABILITIES 29 APR - 01 MAY

CLASS M 95/95/95

CLASS X 50/50/50

PROTON 15/15/20

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 APR 197

PREDICTED 29 APR - 01 MAY 180/182/184

90-DAY MEAN 28 APR 146

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 APR 14

ESTIMATED AFR/AP 28 APR 13/20

PREDICTED AFR/AP 29 APR - 01 MAY 20/20 - 30/30 - 40/40

SOLTERWARN

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