

HFUS 3 BOU 120530

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 102A

JOINT USAF/NOAA SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 12 APRIL 1978

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE. VISUAL PATROL HAS
BEEN LIMITED BY WEATHER AND MAINTENANCE BUT X-RAY LEVELS REFLECT
ONLY MINOR EVENTS.

IB. SOLAR ACTIVITY SHOULD REMAIN MODERATE.

II. THE GEOMAGNETIC FIELD WAS AT MINOR STORM LEVELS 12/00-03Z BUT
HAS BEEN UNSETTLED SINCE. THE FIELD IS EXPECTED TO BE GENERALLY
ACTIVE THRU THE NIGHT WITH MINOR STORM CONDITIONS POSSIBLE DURING
SUBSTORM ACTIVITY. THE GREATER THAN 10 MEV PROTON EVENT AND THE
POLAR CAP ABSORPTION EVENT CONTINUE

III. EVENT PROBABILITIES 12 APRIL - 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 35/48

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

SOLTERWARN

BT

HFUS 3 BOU 121500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 102-B

JOINT USAF/NOAA SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1500Z 12 APR 1978

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 8 HOURS.
SEVERAL CLASS C AND ONE CLASS M-2 XRAY BURST WERE OBSERVED. THE
M-2 X-RAY BURST WAS ASSOCIATED WITH A IB FLARE FROM REGION 1057
(N19W70). REGION 1057 MAY BE DECAYING SLOWLY AS IT APPROACHES
WEST LIMB BUT APPARENTLY RETAINS THE POTENTIAL FOR ENERGETIC
ACTIVITY. REGION 1062 (S27W45) PRODUCED AT LEAST ONE SUBFLARE AND
MAY NOW BE REACHING THE POINT WHERE IT CAN PRODUCE SUSTAINED ENERGETIC
FLARES. THE REST OF THE DISK REGIONS ARE LITTLE CHANGED.

IB. SOLAR ACTIVITY WILL REMAIN MODERATE TO HIGH.

II. THE GEOMAGNETIC FIELD WAS AT MINOR STORM LEVELS EARLY TODAY BUT
HAS SUBSIDED TO ACTIVE CONDITIONS. ACTIVE TO OCCASIONAL MINOR STORM
CONDITIONS ARE EXPECTED UNTIL 13 APRIL WHEN A MAJOR STORM SHOULD
COMMENCE. THE PCA IS FLUCTUATING IN INTENSITY AS IS THE PROTON
EVENT. CURRENT ABSORPTION LEVELS ARE JUST BELOW EVENT CRITERIA
AT .8 DB. THE PROTON EMISSION IS AT 10 PARTICLES/CM2/SEC/STER AT
ENERGIES GREATER THAN 10 MEV.

III. EVENT PROBABILITIES 12 - 14 APR

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 APR 180

PREDICTED 12 - 14 APR 156/156/156

90-DAY MEAN 11 APR 137

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 10 APR 32

ESTIMATED AFR/AP 11 APR 35/48

PREDICTED AFR/AP 12 - 14 APR 25/25 - 50/25 - 30/30

SOLTERWARN

BT

HFUS 1 BOU 122315

C O R R E C T E D C O P Y

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 102

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 12 APRIL 1978

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE DURING THE PAST 24 HOURS. AN M-2/1B AT 12/0648Z FROM REGION 1057 (N20W75) WAS THE MOST SIGNIFICANT EVENT DURING THIS PERIOD. REGION 1057 RETAINS ITS DELTA MAGNETIC CONFIGURATION AND ITS OPTICAL CHARACTERISTICS WOULD INDICATE THAT THIS REGION IS STILL CAPABLE OF ENERGETIC ACTIVITY. REGION 1070 (N15E24) MAGNETIC ANALYSIS WOULD TEND TO SUGGEST THAT THE LEADER AND TRAILER ARE SPREADING APART. THIS GIVES THE IMPRESSION THAT THE EXTREME TRAILER OF 1070 IS PART OF 1073. MAGNETIC DATA INDICATES TO THE CONTRARY. REGION 1062 (S20W50) CONTINUES TO DEVELOP SLOWLY.

IB. SOLAR ACTIVITY WILL REMAIN AT A MODERATE LEVEL.

II. THE GEOMAGNETIC FIELD HAS CHANGED FROM MAJOR STORM LEVELS EARLY TODAY TO QUIET CONDITIONS AT THE CURRENT TIME. A MAJOR STORM IS EXPECTED TO COMMENCE ON 13 APRIL. THE PCA EVENT HAS ENDED WITH THE MAXIMUM ABSORPTION OF 3.8 DB BEING RECORDED AT 111630Z. THE PARTICLES AT 10 MEV HAVE ALSO DECLINED BELOW EVENT THRESHOLDS. OFFICIALLY, THE THRESHOLDS FOR BOTH EVENTS HAVE NOT BEEN REACHED SINCE 121400 U.T. AND SHOULD BE CONSIDERED AS THE END TIMES FOR BOTH EVENTS.

III. EVENT PROBABILITIES 13 APRIL - 15 APRIL

CLASS M 95/95/95

CLASS X 40/40/40

PROTON 40/40/40

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 APRIL 155

PREDICTED 13-15 APRIL 152/149/146

90-DAY MEAN 12 APRIL 137

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 11 APRIL 45

ESTIMATED AFR/AP 12 APRIL 23/28

PREDICTED AFR/AP 13-15 APRIL 50/23 - 30/18 - 20/15

SOLTERWARN

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