

HFUS 1 BOU 030600

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 184A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 3 JULY 1974

IA. WEATHER CONDITIONS HAVE HINDERED OBSERVATORIES DURING THE PAST SIX HOURS BUT SATELLITE AND RADIO DATA WOULD SUGGEST THAT RGN 433 (S13E07) IS CONTINUING ITS FLARE PRODUCTION THAT WAS SO PROLIFIC DURING THE PAST 24 HOURS. THE MOST SIGNIFICANT EVENT WAS A CLASS M8 XRAY EVENT AT 030320 U.T. THAT WAS ASSOCIATED WITH A 2B FLARE. A 1B FLARE AT 030206 U.T. WAS ACCCOMPANIED BY AN M2 XRAY EVENT, SHORTWAVE FADES UP TO 18 MHZ AND A SMALL (19 F.U.) 10 CM BURST. POOR OBS AT MANILA REVEALED LITTLE CHANGE IN REGION 433 OTHER THAN THE FACT THAT NUMEROUS POINT BRIGHTENINGS CONTINUE IN THE LEADING PLAGE AREAS. RGN 435 (S10W38) IS GROWING IN WHITE LIGHT, THE H-ALPHA PLAGE IS AT INT 2-3 AND IS QUIET.

IB. SOLAR ACTIVITY SHOULD CONTINUE HIGH FOR THE DURATION OF THIS FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD IS UNSETTLED. UNSETTLED TO BRIEFLY ACTIVE CONDITIONS SHOULD PERSIST FOR THE NEXT 3 DAYS.

III. NO CHANGE.

IV. NO CHANGE.

V. NO CHANGE.

SOLTERWARN

SPAN

BT

HFUS 1 BOU 031400

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 184B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1400Z 03 JULY 1974

IA. A MAJOR EVENT WAS GENERATED BY REGION 433 (S13E02) IN THE PAST EIGHT HOURS. A MULTIPLE MAXIMA ONE-BRIGHT FLARE WAS OBSERVED TO PEAK AT 0838Z. AT THIS TIME VELA REPORTED THE X-RAY LEVEL TO REACH THE X-8 CATEGORY. RADIO BURSTS OF 740 F.U. AT 2695 MHZ, AND 3100 F.U. AT 4995 MHZ WERE ASSOCIATED. PROTONS ARE EXPECTED FROM THIS FLARE, WITH THE ENHANCEMENT BEGINNING AT 03/1600Z APPROXIMATELY. SINCE THIS EVENT, THE REGION HAS BEEN RELATIVELY QUIET.

IB. SOLAR ACTIVITY WILL CONTINUE AT THIS SAME LEVEL FOR THE NEXT 3 DAYS.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED THUS FAR TODAY. A FLARE-INDUCED DISTURBANCE IS EXPECTED TO BEGIN ON 04 JULY, AND BRING ACTIVE TO MINOR STORM LEVELS BY 05 JULY.

III. EVENT PROBABILITIES 03 JUL - 05 JUL

CLASS M 95/95/95

CLASS X 50/50/50

PROTON 20/30/35

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 JUL 112

PREDICTED 03 JUL - 05 JUL 115/118/120

90-DAY MEAN 02 JUL 90

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 01 JUL 10

ESTIMATED AFR/AP 02 JUL 10/18

PREDICTED AFR/AP 03 JUL - 05 JUL 11/12 - 17/20 - 32/45

SOLTERWARN

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HFUS BOU 032200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO.

SDF NUMBER 184

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 03 JULY 1974

IA. SOLAR ACTIVITY HAS BEEN VERY HIGH DURING THE LAST 24 HOURS WITH SEVERAL ENERGETIC FLARES FROM REGION 433 (S14W03). LARGER EVENTS INCLUDED; AT 02/2153Z, AN X-RAY CLASS M1 EVENT (NO FLARE OBSERVED); AT 02/2314Z, A 0N, X-RAY CLASS M3 FLARE WITH A 140 FLUX UNIT BURST AT 2695 MHZ; AT 03/0216Z, A 1B, X-RAY CLASS M2 FLARE; AT 03/0316Z, A 2B, X-RAY CLASS M8 FLARE WITH AN 87 FU BURST AT 2695 MHZ; AND AT 03/0838Z, A 1B, X-RAY CLASS X8 FLARE WITH A 740 FU BURST AT 2695 MHZ. THIS LAST FLARE WAS THE APPARENT SOURCE OF A NEAR-EARTH PROTON ENHANCEMENT WHICH BEGAN NEAR 03/1600Z. AS OF 03/2100Z, THE LARGEST INCREASE IN PROTON FLUXES HAS BEEN FOR PARTICLES OF LESS THAN 10 MEV, BUT A SLIGHT INCREASE IN HIGHER ENERGY PARTICLES HAS ALSO BEEN OBSERVED. THE 30 MHZ RIOMETER AT THULE HAS REACHED .8 DB ABSORBTION AS OF 2100Z.

ALTHOUGH REGION 433 HAS NOT PRODUCED ANY ENERGETIC EVENTS SINCE 0838Z, THE POTENTIAL FOR ADDITIONAL EVENTS HAS NOT DIMINISHED. PROPER MOTION OF THE LARGE SPOT IN THE EASTERN END OF THE LARGE DELTA HAS INCREASED THE MAGNETIC GRADIENTS DURING THE LAST 24 HOURS. OFF-BAND VIEWING SUGGEST SOME UMBRAL DARKENING AND INCREASE IN AREA WITHIN THE DELTA. REGION 435 (S10W49) CONTINUES SLOW GROWTH AND PRODUCED A FEW SUBFLARES, BUT REMAINS MAGNETICALLY SIMPLE.

IB. PROTON FLUXES SHOULD CONTINUE TO INCREASE FOR THE NEXT SEVERAL HOURS, REACHING MINIMAL EVENT LEVEL EARLY ON 04 JULY. AN INCREASE IN POLAR CAP ABORBTION TO NEAR 3 DB IS ALSO EXPECTED. ADDITIONAL ENERGETIC EVENTS, INCLUDING POSSIBLE PROTON EVENTS, ARE EXPECTED THROUGH THE FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD HAS BECOME QUIET DURING THE LATTER PORTION OF THIS ZULU DAY. HOWEVER, LOW ENERGY PARTICLES FROM THE 0838Z FLARE ARE EXPECTED TO ARRIVE LATE ON 04 JULY AND SHOULD PRODUCE A MINOR GEOMAGNETIC STORM.

III. EVENT PROBABILITIES 04 - 06 JULY

CLASS M 97/97/97

CLASS X 60/60/60

PROTON 70/60/60

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 JULY 117

PREDICTED 04 - 06 JULY 118/120/118

90-DAY MEAN 03 JULY 90

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 02 JULY 12

ESTIMATED AFR/AP 03 JULY 07/10

PREDICTED AFR/AP 04 - 06 JULY 17/21 - 32/45 - 28/39

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