

HFUS 3 BOU 220530

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 326A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 22 NOVEMBER 1977

IA. SOLAR ACTIVITY REMAINS VERY LOW. REGION 939 (N24W37) EXHIBITS
OCCASIONAL BRIGHTNESS FLUCTUATIONS IN ITS SLOW DECAY. MINOR SURGES
HAVE BEEN REPORTED NEAR NE25.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. QUIET TO UNSETLED
CONDITIONS ARE EXPECTED FOR THE BALANCE OF THIS ZULU DAY.

III. EVENT PROBABILITIES 22 NOVEMBER - 24 NOVEMBER

CLASS M 05/05/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 NOVEMBER 95

PREDICTED 22-24 NOVEMBER 94/92/92

90-DAY MEAN 21 NOVEMBER 97

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 20 NOVEMBER 06

ESTIMATED AFR/AP 21 NOVEMBER 03/03

PREDICTED AFR/AP 22-24 NOVEMBER 10/12 - 15/20 - 12/15

SOLTERWARN

BT

HFUS 3 BOU 221500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 326-B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1500Z 22 NOV 1977

IA. SOLAR ACTIVITY HAS BEEN HIGH SINCE OUR 22/0600Z REPORT. A
X-1 FLARE AT 22/0940Z WITH A MAX TIME OF 1010Z OCCURRED WITH
PROTON EVENT AT ~~101~~ MEV STARTING AT 1140Z. SWF'S WERE REPORTED
TO LAST FOR 90 MIN WITH FADES TO 30MHZ. THE FLARE WHICH WAS SEEN
OPTICALLY ONLY AFTER X-RAY MAX WAS IN REGION 939 (N2SW43) WHICH
WAS DECAYING.

IB. SOLAR ACTIVITY SHOULD BE MODERATE. FURTHER ENERGETIC FLARES
FROM REGION 939 ARE PROBABLE.

II. POLAR CAP ABSORPTION IS AT A TWILIGHT LEVEL OF .2DB. A
NIGHTIME PCA EVENT IS POSSIBLE. THE GEOMAGNETIC FIELD HAS BEEN
QUIET THE PAST EIGHT HOURS. GENERALLY QUIET TO UNSETLED CONDITION
ARE EXPECTED UNTIL LATE ON THE 24TH WHEN A FLARE INDUCED DISTURBANCE
IS EXPECTED TO BEGIN.

III. EVENT PROBABILITIES 22 - 24 NOV

CLASS M 50/50/25

CLASS X 15/15/10

PROTON 30/30/20

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 NOV 95

PREDICTED 22 - 24 NOV 96/96/94

90-DAY MEAN 21 NOV 97

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 20 NOV 06

ESTIMATED AFR/AP 21 NOV 03/03

PREDICTED AFR/AP 22 - 24 NOV 08/10 - 12/15 - 18/20

SOLTERWARN

BT

HFUS 1 BOU 222200
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 326
JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 22 NOV 1977

IA. SOLAR ACTIVITY WAS LOW UNTIL 22/0930Z WHEN THE START OF AN X-1 X-RAY FLARE WAS OBSERVED. THE EVENT HAD AN MAX TIME OF 1010Z AND WAS OBSERVED AS A 2N OPTICAL EVENT SOME 30 MIN AFTER X-RAY MAX. THE FLARE OCCURRED IN REGION 939 (N23W46) WHICH PRODUCED A PROTON EVENT AT GREATER THAN 10 MEV, WHICH BEGAN AT 22/1130Z AND IS STILL IN PROGRESS. NO OPTICAL OR ENERGETIC ACTIVITY HAS BEEN OBSERVED SINCE.

IB. SOLAR ACTIVITY SHOULD BE LOW TO MODERATE. REGION 939 IS NOT CHARACTERIZED BY THOSE PARAMETERS ASSOCIATED WITH REGIONS WHICH PRODUCE HIGHLY ENERGETIC EVENTS. HOWEVER, CLASS M X-RAY EVENTS SHOULD NOT BE RULED OUT.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. QUIET TO UNSETLED CONDITIONS ARE EXPECTED THE FIRST 36-48 HOURS OF THE PERIOD. ACTIVITY SHOULD INCREASE ON 25 NOV WHEN A SOLAR FLARE INDUCED GEOMAGNETIC DISTURBANCE IS EXPECTED. POLAR CAP ABSORPTION HAS BEEN OBSERVED SINCE 1200Z. ABSORPTION HAS REACHED .7 DB AND SHOULD CONTINUE THRU THE NIGHT.

III. EVENT PROBABILITIES 23 - 25 NOV.
CLASS M 50/25/25
CLASS X 25/10/10
PROTON 30/20/10
PCAF RED

IV. OTTAWA 10.7 CM FLUX
OBSERVED 22 NOV 92
PREDICTED 23 - 25 NOV 91/90/89
90-DAY MEAN 22 NOV 97

V. GEOMAGNETIC A INDICES
OBSERVED FREDERICKSBURG 21 NOV 03
ESTIMATED AFR/AP 22 NOV 04/04
PREDICTED AFR/AP 23 - 25 NOV 10/10 - 12/15 - 22/25
SOLTERWARN
BT