

HFUS 1 BOU 230550

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 083A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 23 MARCH 1976

IA. SOLAR ACTIVITY HAS BEEN VERY LOW DURING THE PAST EIGHT HOURS.
REGION 688 (N04W52) SHOWED SOME GROWTH IN ITS CENTRAL PORTION BUT
ACTIVITY HAS BEEN LIMITED TO A FEW SMALL CLASS C SUBFLARES.

IB. SOLAR ACTIVITY WILL CONTINUE AT PRESENT LEVEL. CLASS C FLARES
AND AN OCCASIONAL CLASS M FLARE FROM REGION 688 CAN BE EXPECTED.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE PAST EIGHT HOURS.
IT IS EXPECTED THAT THE FIELD WILL REMAIN QUIET DURING THE NEXT 24
HOURS.

III. EVENT PROBABILITIES 23 MARCH - 25 MARCH

CLASS M 50/50/50

CLASS X 02/02/02

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 MARCH 84

PREDICTED 23-25 MARCH 85/82/80

90-DAY MEAN 22 MARCH 73

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 21 MARCH 04

ESTIMATED AFR/AP 22 MARCH 03/03

PREDICTED AFR/AP 23-25 MARCH 06/10 - 15/22 - 25/30

SOLTERWARN

BT

HFUS 1 BOU 231500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 083B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1500Z 23 MARCH 1976

IA. A MAJOR SOLAR EVENT OCCURRED AT 0840Z. NO OPTICAL OBSERVATIONS ARE AVAILABLE. A GREAT RADIO BURST WITH U-SHAPE AND 1300 FU PEAK WAS ACCOMPANIED BY AN XI X-RAY BURST OF LONG DURATION (STILL NOT RETURNED TO BACKGROUND AT THIS TIME). A RADIO NOISE SOURCE WAS REPORTED AT NE LIMB AT 0530Z. LOOP PROMINENCES TYPICAL OF POST-FLARE ACTIVITY WERE REPORTED AT SE18 AT 1110Z. IF THIS FLARE OCCURRED FROM BEYOND EAST LIMB NO PARTICLES WOULD BE EXPECTED. BUT WITHOUT OPTICAL REPORTS WE MUST ASSUME THE EVENT COULD HAVE ORIGINATED IN REGION 688 (N04W56). IF SO, PROTONS CAUSING POLAR CAP ABSORPTION ARE PREDICTED TO ARRIVE ABOUT 2000Z TODAY.

IB. SOLAR ACTIVITY MAY INCREASE SHARPLY WHEN EAST LIMB REGION(S) ROTATE INTO VIEW.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 12 HOURS. QUIET CONDITIONS MAY GIVE WAY TO UNSETTLED TO ACTIVE CONDITIONS DURING 24 MARCH.

III. EVENT PROBABILITIES 23-25 MARCH

CLASS M 50/50/50

CLASS X 10/10/10

PROTON ~~60/40/30~~

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 MARCH 84

PREDICTED 23-25 MARCH 90/90/90

90-DAY MEAN 22 MARCH 73

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 21 MARCH 04

ESTIMATED AFR/AP 22 MARCH 03/03

PREDICTED AFR/AP 23-25 MARCH 06/10 - 15/22 - 25/30

SOLTERWARN

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*Decision of AF Capt. Smith and
Lt. Jean*

*NORA forecaster McIntosh
accepted in view of press of
time to issue forecast.*

HFUS 1 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 083

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 23 MARCH 1976

IA. A MAJOR SOLAR FLARE OCCURRED AT 0840Z TODAY AT A TIME WHEN WEATHER PREVENTED OPTICAL OBSERVATIONS AND, THEREFORE, THE SOURCE LOCATION IS UNCERTAIN. SATELLITE X-RAY DETECTORS RECORDED A LONG-LIVED CLASS XI EVENT. RADIO TELESCOPES RECORDED AN INTENSE U-BURST WITH TYPE IV BURST. RADIOHELIOGRAPHS IN AUSTRALIA AND FRANCE LOCATE THE BURST NEAR THE EQUATOR AT THE EAST LIMB. WESTERN HEMISPHERE OPTICAL OBSERVATORIES REPORTED BRIGHT LOOP PROMINENCES AFTER 1100Z AT S03-10E90. EAST-WEST SCANS OF THE SUN AT 10 CM SHOW AN INTENSE RADIO SOURCE AT EAST LIMB. THE LARGE SUNSPOT GROUP ON THE VISIBLE DISK, REGION 688, HAS CONTINUED TO DECLINE IN AREA AND SPOT COUNT AND HAS PRODUCED INFREQUENT SMALL SUBFLARES WITH LITTLE X-RAY FLUX. REGION 688 IS NOW LOCATED AT N05W62.

IB. HIGH SOLAR ACTIVITY MAY OCCUR THROUGHOUT THIS FORECAST PERIOD FROM THE REGION PRESENTLY AT THE EAST LIMB. UNTIL THE REGION BECOMES FULLY VISIBLE IT IS IMPOSSIBLE TO GIVE HIGH CONFIDENCE TO A FORECAST.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS. CONDITIONS ARE EXPECTED TO BECOME UNSETTLED TOMORROW THEN ACTIVE BY THE END OF THE DAY AS AN INTERPLANETARY SECTOR BOUNDARY PASSES THE EARTH. THIS RECURRENT MINOR STORM IS EXPECTED TO CONTINUE ABOUT FOUR DAYS. IT IS UNLIKELY THAT FLARE ACTIVITY WILL MODIFY MAGNETIC ACTIVITY UNTIL AFTER THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 24 MARCH - 26 MARCH

CLASS M 70/70/70

CLASS X 25/25/25

PROTON 10/10/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 MARCH 88

PREDICTED 24-26 MARCH 98/97/96

90-DAY MEAN 23 MARCH 73

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 22 MARCH 02

ESTIMATED AFR/AP 23 MARCH 05/05

PREDICTED AFR/AP 24-26 MARCH 15/22 - 25/30 - 25/30

SOLTERWARN

BT