

HFUS BOU

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 103A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 0600 Z 13 APRIL | 1974

I.A. Solar activity has been moderate during the past 8 hours. Region 375 (513 W28) has produced several small class M flares. The other disk regions are quiet.

I.B. Solar activity will continue at a moderate level with a few class M flares from region 375.

II. The geomagnetic field is quiet and is expected to remain quiet during the next 24 hours.

III. EVENT PROBABILITIES no change

CLASS M

CLASS X

PROTON

PCAF

IV. OTTAWA 10.7 CM FLUX no change

OBSERVED

PREDICTED

90-DAY MEAN

V. GEOMAGNETIC A INDICES no change

OBSERVED FREDERICKSBURG

ESTIMATED $A_{FR/AP}$

PREDICTED $A_{FR/AP}$

NOTE: A recent comparison between two years of Fredericksburg and Planetary Magnetic indices has shown that A_p appears higher than $A_{FREDERICKSBURG}$. Therefore, both indices will be included in future forecasts. Only extrapolated A_p values will be given since the computation and publication of the actual observed A_p values require approximately three months.

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HFUS 1 BOU 131400
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 103B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1400Z 13 APRIL 1974

IA. SOLAR ACTIVITY HAS INCREASED TO A HIGH LEVEL DURING THE LAST
8 HOURS WITH FREQUENT ENERGETIC FLARES FROM REGION 375(S13W34).
THE LARGEST FLARE, A ONE BRIGHT AT 0756Z PRODUCED A SMALL X1
X-RAY EVENT AS MEASURED BY VELA. SINCE 13/00Z, THERE HAVE
BEEN AT LEAST 5 CLASS M X-RAY EVENTS AND SEVERAL IMPORTANCE
3 SHORT WAVE FADES. THE LARGEST RADIO BURST OCCURED AT 0525Z
WITH APPROXIMATELY 100 FLUX UNITS AT 2695 MHZ. REGION 375, THE
SOURCE OF ALL THE ABOVE ACTIVITY, CONTINUES MAGNETICALLY COMPLEX
AND APPEARS CAPABLE OF ADDITIONAL ENERGETIC ACTIVITY. REGIONS
377(S05W66) AND 379(S15W11) HAVE PRODUCED A COUPLE SUBFLARES, BUT
APPEAR TO BE DECAYING.

IB. SOLAR ACTIVITY SHOULD CONTINUE MODERATE TO HIGH WITH A GOOD
CHANCE AT ANOTHER CLASS X EVENT DURING THE PERIOD. THE REGION IS
NOW IN A FAVORABLE POSITION TO PRODUCE A PROTON EVENT.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED,
AND SIMILAR CONDITIONS SHOULD CONTINUE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 13 APR - 15 APR

CLASS M 95/95/90

CLASS X 30/30/25

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 APR 107

PREDICTED 13 APR - 15 APR 105/105/103

90-DAY MEAN 12 APR 81

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 11 APR 18

ESTIMATED AFR/AP 12 APR 03/04

PREDICTED AFR/AP 13 APR - 15 APR 10/11 - 05/06 - 08/09

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HFUS BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 103

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 13 APRIL 1974

IA. SOLAR ACTIVITY HAS INCREASED TO A HIGH LEVEL WITH FREQUENT ENERGETIC FLARES FROM REGION 375 (S12W37). DURING THE LAST 24 HOURS, THE REGION HAS PRODUCED AN X1 X-RAY EVENT, ASSOCIATED WITH A ONE BRIGHT FLARE AT 13/0756Z, AND AT LEAST 9 M-CLASS X-RAY EVENTS, INCLUDING AN M7 EVENT ASSOCIATED WITH A 0B FLARE AT 13/1051Z.

SEVERAL FLARES HAVE BEEN ACCCOMPANIED BY IMPORTANCE 3 SHORT WAVE FADES, BUT RADIO BURSTS HAVE BEEN GENERALLY SMALL WITH ONE BURST OF APPROXIMATELY 100 FLUX UNITS AT 2695 MHZ ASSOCIATED WITH A ONE BRIGHT, GREATER THAN M3 FLARE AT 13/0525Z. REGION 375 MAY HAVE LOST ITS DELTA CONFIGURATION AND MAGNETOGRAMS SHOW THE ISOLATED POLE HAS WEAKENED, BUT THE NEUTRAL LINE REMAINS VERY COMPLEX AND APPEARS TO BE CHANGING CONTINUOUSLY. SOME SPOT DEVELOPMENT HAS OCCURRED IN THEG TRAILER PORTION, BUT THE PLAGE AND ACTIVITY IS IN THE LEADER AND INTERMEDIATE PORTIONS. REGIONS 377 (S04W69) AND 379 (S13W19) PRODUCED A COUPLE SUBFLARES EARLY IN THE ZULU DAY BUT APPEAR RELATIVELY STABLE NOW.

IB. SOLAR ACTIVITY SHOULD CONTINUE MODERATE TO HIGH WITH A GOOD CHANCE OF ANOTHER CLASS X EVENT DURING THE PERIOD FROM REGION 375. THIS REGION IS NOW IN A FAVORABLE POSITION TO PRODUCE A PROTON EVENT AND THE REGION APPEARS QUITE CABABLE OF PRODUCING SUCH AN EVENT.

II. THE GEOMAGNETIC FIELD IS NOW QUIET, AND QUIET TO SLIGHTLY UNSETTLED, CONDITIONS SHOULD CONTINUE FOR ANOTHER 48 HOURS. HOWEVER, A RECURRENT DISTURBANCE SHOULD RESULT IN ACTIVE CONDITIONS ON 16 APRIL WITH MINOR STORM CONDITIONS LIKELY ON THE FOLLOWING TWO DAYS.

III. EVENT PROBABILITIES 14 APRIL - 16 APRIL

CLASS M 95/90/92

CLASS X 30/25/25

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 APRIL 102

PREDICTED 14 APRIL - 16 APRIL 100/98/96

90-DAY MEAN 13 APRIL 81

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 12 APRIL 02

ESTIMATED AFR/AP 13 APRIL 05/06

PREDICTED AFR/AP 14 APRIL - 16 APRIL 05/06 - 08/09 - 20/24

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