

HFUS 1 BOU 010600

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 182A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 01 JULY 1974

IA. SOLAR ACTIVITY HAS BEEN VERY LOW DURING THE PAST SIX HOURS;
HOWEVER, RGN 433 (S13E40) PRODUCED AN IMPORTANCE 1B FLARE AT 302223
UT THAT REACHED MAJOR X-RAY LEVELS (X1) AND WAS ACCOMPANIED BY A
423 F.U. BURST AT 10 CM AND SIGNIFICANT SHORT WAVE FADES. RGN 433
HAS SHOWN LITTLE CHANGE SINCE THIS LARGE EVENT AND CONTINUES TO
PRODUCE AN OCCASIONAL NON-ENERGETIC FLARE. RGN 435 (S10W06) CON-
TINUES TO GROW IN BOTH WHITE LIGHT AND H-ALPHA BUT IS PRODUCING VERY
LITTLE IN THE WAY OF FLARE ACTIVITY. THE REST OF THE DISK IS UN-
CHANGED.

IB. ADDITIONAL ENERGETIC ACTIVITY CAN BE EXPECTED FROM RGN 433 AND
PERHAPS FROM 435 ALSO IF IT CONTINUES TO DEVELOP.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED AND UNSETTLED
TO ACTIVE CONDITIONS SHOULD PERSIST THROUGHOUT THIS FORECAST PERIOD.

III. NO CHANGE.

IV. NO CHANGE.

V. NO CHANGE.

SOLTERWARN

SPAN

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HFUS 1 BOU 011400

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 182B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1400Z 01 JULY 1974

IA. MANY SUBFLARES - MOSTLY OF THE C CLASSIFICATION - HAVE BEEN
REPORTED FROM AR 433 AND AR 435 IN THE PAST 8 HOURS. THE MOST
INTENSE (C-9 AT 1034Z) WAS ACCOMPANIED BY TYPE III BURSTS AND
DECAMETRIC BURSTS (68 FU AT 2700 MHZ). OTHER REGIONS ARE STABLE.

IB. CONTINUED HIGH LEVEL OF ACTIVITY WITH AR 433 MOST LIKELY TO
PRODUCE M FLARES ON EACH OF THE NEXT 3 DAYS AND POSSIBLY AT LEAST
ONE X FLARE. NO PROTONS EXPECTED AT GROUND LEVEL DUE TO LOCATION
IN EASTERN HEMISPHERE.

II. GEOMAGNETIC FIELD IS SLIGHTLY DISTURBED AND EXPECTED TO REMAIN
SLIGHTLY DISTURBED.

III. EVENT PROBABILITIES 02 JULY - 04 JULY

CLASS M 90/90/90

CLASS X 25/35/40

PROTON 05/10/10

PCAF YELLOW

IV. NO CHANGE

V. NO CHANGE

SOLTERWARN

SPAN

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HFUS BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 182

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 01 JUL 1974

IA. SOLAR ACTIVITY HAS BEEN HIGH DURING THE LAST 24 HOURS. REGION 433 (S13E26) HAS PRODUCED NUMEROUS FLARES THROUGH THE PERIOD, INCLUDING 1B, X-RAY CLASS X1 FLARE AT 30/2247Z, ACCOMPANIED BY A 423 FLUX UNIT BURST AT 2695 MHZ; A 0B, X-RAY CLASS M4 FLARE AT 01/1558Z ACCOMPANIED BY A 36 FLUX UNIT BURST AT 2695 MHZ; AND A 1N, X-RAY CLASS M1 FLARE AT 01/1829Z. SHORT WAVE FADES ACCOMPANIED ALL THESE EVENTS. X-RAY LEVELS CONTINUE AT A HIGH AND FLUCTUATING LEVEL. THE REGION CONTINUES TO GROW IN WHITE LIGHT AND NOW CONTAINS OVER 100 SPOTS IN AN F-TYPE SPOT GROUP. LEADER AND FOLLOWER POLARITY SPOTS ARE ALIGNED IN SEVERAL, NEARLY EAST-WEST ROWS. A LARGE NUMBER OF MIXED POLARITY SPOTS ARE CONTAINED WITHIN A HUGE PENUMBRA IN THE MIDDLE OF THE REGION, RESULTING IN A LARGE, COMPLEX DELTA CONFIGURATION WHICH APPEARS CAPABLE OF ADDITIONAL HIGHLY ENERGETIC EVENTS. AN ARCH FILAMENT SYSTEM IN THE LEADING PORTION SUGGESTS CONTINUED GROWTH. REGION 435 (S09W20) SHOWS CONTINUED GROWTH, ESPECIALLY IN THE TRAILING PORTION. HOWEVER, THE REGION IS NOT MAGNETICALLY COMPLEX AND AS YET DOES NOT APPEAR CAPABLE OF PRODUCING ENERGETIC EVENTS.

IB. SOLAR ACTIVITY SHOULD CONTINUE HIGH WITH ONE OR TWO CLASS X EVENTS EXPECTED DURING THE FORECAST PERIOD FROM REGION 433. A SECTOR BOUNDARY PASSAGE IS EXPECTED NEAR THE MIDDLE OF THE FORECAST PERIOD. AFTER THIS TIME, THE ACTIVE REGION WILL BE WITHIN THE SAME SECTOR STRUCTURE AS THE EARTH, AND THE PROBABILITY OF A PROTON EVENT WILL INCREASE SIGNIFICANTLY.

II. THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY UNSETTLED DURING THE LAST 24 HOURS. QUIET CONDITIONS ARE FORECAST THROUGH THE NEXT 3 DAYS.

III. EVENT PROBABILITIES 02 JUL - 04 JUL

CLASS M 90/90/90

CLASS X 40/40/40

PROTON 10/10/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 JUL 104

PREDICTED 02 JUL-04 JUL 105/108/110

90-DAY MEAN 01 JUL 89

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 30 JUN 16

ESTIMATED AFR/AP 01 JUL 09/14

PREDICTED AFR/AP 02 JUL-04 JUL 06/07 - 05/06 - 05/06

SOLTERWARN

SPAN

BT