

HFUS 1 BOU 110500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 284A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 0500Z 11 OCTOBER 1974

IA. AN X2 (0B) FLARE OCCURRED NEAR 110330Z. IT WAS ACCOMPANIED BY  
LARGE (GREATER THAN 500 FLUX UNITS) CENTIMETRIC BURSTS AND SHORT  
WAVE FADEOUTS. IT APPARENTLY WAS IN REGION 505 (N11W02). A C8 (0N)  
FLARE OCCURRED AT 110131Z IN REGION 503 (N08E10).

IB. NO CHANGE

II. NO CHANGE

III. EVENT PROBABILITIES NO CHANGE

IV. OTTAWA 10.7 CM FLUX NO CHANGE

V. GEOMAGNETIC A INDICES NO CHANGE

SOLTERWARN

BT

HFUS BOU 111430

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 284B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1430Z 11 OCT 1974

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 10 HOURS. THE MOST ENERGETIC EVENTS WERE A CLASS M1 SUB-BRILLIANT FLARE IN REGION 503 (N08E04) AT 11/0836Z AND A CLASS M3 SUB-BRILLIANT FLARE IN REGION 505 (N11W08) AT 11/1031Z. NUMEROUS CLASS C SUBFLARES ALSO HAVE OCCURRED IN REGIONS 503 AND 505. BOTH OF THESE REGIONS WHICH ARE CONNECTED MAGNETICALLY, HAVE SHOWN RECENT STRUCTURAL CHANGES. DELTA CONFIGURATIONS STILL ARE PRESENT IN REGION 503 BUT PROBABLY NOT IN REGION 505. REGION 501 (S17W36) HAS GROWN SLIGHTLY BUT RETAINS ITS SIMPLE MAGNETIC STRUCTURE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH THROUGH THE FORECAST PERIOD. FREQUENT CLASS C SUBFLARES, OCCASIONAL CLASS M FLARES, AND ONE OR TWO CLASS X EVENTS ARE LIKELY TO OCCUR IN THE COMPLEX OF REGIONS 503 AND 505 DURING THE NEXT THREE DAYS.

II. THE GEOMAGNETIC FIELD HAS REMAINED QUIET DURING THE PAST 10 HOURS, AND THE ANTICIPATED MINOR STORM HAS NOT BEGUN. NEVERTHELESS, THIS DISTURBANCE IS EXPECTED TO BEGIN DURING THE NEXT 12-24 HOURS.

III. EVENT PROBABILITIES 11 - 13 OCT

CLASS M 80/80/80

CLASS X 30/30/30

PROTON 25/30/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 OCT 132

PREDICTED 11 - 13 OCT 140/135/130

90-DAY MEAN 10 OCT 89

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 09 OCT 28

ESTIMATED AFR/AP 10 OCT 10/11

PREDICTED AFR/AP 11 - 13 OCT 17/20 - 32/45 - 35/50

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HFUS BOU 112200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 284

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 11 OCT 1974

IA. SOLAR ACTIVITY ROSE TO A GENERALLY HIGH LEVEL DURING THE PAST 24 HOURS. REGIONS 503 (N08E01) AND 505 (N10W08) HAVE PRODUCED NUMEROUS SUBFLARES AND SEVERAL SIGNIFICANT ENERGETIC FLARES. THE MOST ENERGETIC EVENT WAS A CLASS X2 (VELA) SUB-BRILLIANT FLARE THAT OCCURRED IN REGION 505 AT 11/0336Z. A RADIO BURST OF 470 FLUX UNITS ABOVE BACKGROUND AT 2695 MHZ ACCOMPANIED THIS EVENT. AT 11/1426Z AN IMPORTANCE ONE-NORMAL CLASS M3 FLARE BEGAN IN REGION 503. AT 1434, AN IMPORTANCE ONE-BRILLIANT CLASS M7 (GOES) FLARE BEGAN IN REGION 505. THE MAXIMA OF THESE TWO FLARES OCCURRED AT 1430Z AND 1449Z RESPECTIVELY. A RADIO BURST OF 514 FLUX UNITS AT 2695 MHZ ACCOMPANIED THE MAXIMUM OF THE SECOND FLARE. TYPE III DEKAMETRIC BURSTS ACCOMPANIED THESE TWO FLARES. IN ADDITION, REGIONS 503 AND 505 HAVE PRODUCED THREE OTHER CLASS M FLARES DURING THE PAST 24 HOURS. IT SEEMS LIKELY THAT REGIONS 503 AND 505 ARE INTERACTING SIGNIFICANTLY DURING FLARE PRODUCTION. REGION 503 REMAINS MAGNETICALLY COMPLEX, AND AT LEAST TWO DELTA CONFIGURATIONS ARE LOCATED IN THE TRAILING SECTION. REGION 505 CONTAINS ONLY A WEAK DELTA CONFIGURATION, BUT GRADIENTS NORTH OF THE MAIN LEADING SPOT REMAIN STRONG. OTHER REGIONS ARE RELATIVELY STABLE. NO PROTON ENHANCEMENTS HAVE ACCOMPANIED THE RECENT FLARE ACTIVITY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH DURING THE FORECAST PERIOD. THE COMPLEX OF REGIONS 503 AND 505 IS EXPECTED TO PRODUCE FREQUENT CLASS C EVENTS, OCCASIONAL CLASS M EVENTS, AND ONE OR TWO MAJOR CLASS X FLARES DURING THE NEXT THREE DAYS. A PROTON EVENT ACCOMPANIED BY POLAR CAP ABSORPTION MAY ACCOMPANY A MAJOR EVENT.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED DURING THE PAST 24 HOURS, AND THE ANTICIPATED RECURRENT MINOR STORM HAS NOT YET BEGUN. THIS DISTURBANCE IS EXPECTED TO BEGIN DURING THE NEXT 12-24 HOURS.

III. EVENT PROBABILITIES 12 - 14 OCT

CLASS M 90/90/90

CLASS X 40/40/30

PROTON 25/30/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 OCT 144

PREDICTED 12-14 OCT 138/132/128

90-DAY MEAN 11 OCT 90

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 10 OCT 09

ESTIMATED AFR/AP 11 OCT 11/12

PREDICTED AFR/AP 12-14 OCT 29/40 - 35/50 - 31/45

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