

HFUS 1 BOU 210500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 232A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 0500Z 21 AUG 75

IA. SOLAR ACTIVITY HAS REMAINED LOW THE PAST 6 HOURS. ALL  
REGIONS APPEAR STABLE AND QUIET. REGION 626 (N28W69) HAS SHOWN  
SOME FLUCTUATION BUT REMAINS QUIET.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. OCCASIONAL SMALL  
C-CLASS FLARES MAY BE EXPECTED FROM REGION 626.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO SLIGHTLY ACTIVE.  
THESE CONDITIONS ARE EXPECTED TO PREVAIL FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 21 AUGUST - 23 AUGUST

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 AUG 75

PREDICTED 21 AUG - 23 AUG 76/76/77

90-DAY MEAN 20 AUG 78

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 19 AUG 03

ESTIMATED AFR/AP 20 AUG 08/08

PREDICTED AFR/AP 21 AUG - 23 AUG 20/25 - 20/25 - 14/15

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HFUS 1 BOU 211430  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO  
SDF NUMBER 233B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1430Z 21 AUGUST 1975

IA. SOLAR ACTIVITY HAS INCREASED SOMEWHAT DURING THE PAST NINE HOURS. REGION 626 (N28W75) HAS DEVELOPED SLIGHTLY AND HAS BEGUN TO PRODUCE MINOR ENERGETIC ACTIVITY. THE MOST SIGNIFICANT RECENT EVENT WAS A CLASS M1EVENT AT 21/0846Z. AN ASSOCIATED SUB-BRILLIANT FLARE IN REGION 626 HAD MAXIMA AT 21/0838Z, 0844Z, AND 0855Z. AN APPARENT SYMPATHETIC SUB-BRILLIANT FLARE OCCURRED IN REGION 622 (S06W74) AT 0838Z. REGION 622 HAS DEVELOPED AT LEAST ONE SPOT AND CONTAINS ENHANCED PLAGE. OTHER REGIONS ARE RELATIVELY UNIMPRESSIVE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW DURING THE NEXT 36 HOURS. REGIONS 622 AND 626 PROBABLY WILL PRODUCE SPORADIC MINOR FLARES BEFORE PASSING OVER THE WEST LIMB. THE PROBABILITY FOR CLASS M EVENTS HAS INCREASED DUE TO THE RECENT DEVELOPMENT IN REGIONS 622 AND 626.

II. THE GEOMAGNETIC FIELD WAS DISTURBED TO MINOR STORM INTENSITY WITH A K-INDEX OF SIX AT BOULDER DURING THE INTERVAL 21/0300-0600Z. UNSETTLED CONDITIONS OCCURRED AFTER 0600Z. UNSETTLED TO ACTIVE CONDITIONS ARE LIKELY THROUGH THE REMAINDER OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 21 - 23 AUGUST

CLASS M 25/30/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 AUG 75

PREDICTED 21 - 23 AUG 76/76/77

90-DAY MEAN 20 AUG 78

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 19 AUG 03

ESTIMATED AFR/AP 20 AUG 08/08

PREDICTED AFR/AP 21 - 23 AUG 20/25 - 20/25 - 14/15

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SOLQUIET MAGALERT 21/22

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HFUS 1 BOU 212200  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO  
SDF NUMBER 233

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 21 AUGUST 1975

IA. SOLAR ACTIVITY HAS INCREASED TO A HIGH LEVEL DURING THE PAST 24 HOURS, PRIMARILY BECAUSE OF RAPID DEVELOPMENT IN REGION 626 (N28W79). THIS REGION, APPARENTLY OF NEW-SOLAR-CYCLE MAGNETIC ORIENTATION, HAS PRODUCED SPORADIC ENERGETIC FLARES. THE MOST SIGNIFICANT OF THESE EVENTS OCCURRED AS FOLLOWS: 21/0844Z, SUB-BRILLIANT, CLASS M1; 1431Z, UNKNOWN OPTICAL CLASSIFICATION, CLASS M1; 1522Z, ONE-BRILLIANT, CLASS X1; AND 1954Z, SUB-BRILLIANT, CLASS M2. SIGNIFICANT IONOSPHERIC DISTURBANCES ACCOMPANIED THESE EVENTS, ESPECIALLY THE CLASS X1 FLARE. IN ADDITION, A WEAK GEOMAGNETIC CROCHET, MODERATE TYPE II, III, AND IV DEKAMETRIC BURSTS, AND A COMPLEX MICROWAVE BURST ACCOMPANIED THE CLASS X1 EVENT. AN ENHANCEMENT OF 130 FLUX UNITS ABOVE BACKGROUND AT 2800 MHZ OCCURRED DURING THE CLASS X1 FLARE. A VERY SLIGHT ENHANCEMENT OF PROTON COUNTING RATES AT 6-38 MEV AT 21/1800Z MAY HAVE BEEN RELATED TO THE CLASS X1 EVENT, BUT NO POLAR CAP ABSORPTION HAS BEEN REPORTED. REGION 622 (S04W81) ALSO HAS RE-DEVELOPED AND NOW CONTAINS SMALL SPOTS ACCOMPANIED BY ENHANCED PLAGE. DUE TO THEIR PROXIMITY TO THE LIMB, RELIABLE STRUCTURE EVALUATION OF REGIONS 622 AND 626 IS ALMOST IMPOSSIBLE. OTHER REGIONS ARE RELATIVELY UNIMPRESSIVE.

IB. A GENERALLY MODERATE LEVEL OF SOLAR ACTIVITY IS LIKELY DURING THE THREE-DAY FORECAST PERIOD, DURING WHICH BOTH REGIONS 622 AND 626 WILL BE ROTATED GRADUALLY BEHIND THE WEST LIMB. ENERGETIC LIMB EVENTS ARE LIKELY IN REGION 626. DUE TO THE LACK OF STRUCTURAL INFORMATION, THE EVOLUTION OF REGION 626 IS DIFFICULT TO FORECAST. THERE IS A SLIGHT CHANCE OF A PARTICLE EVENT NEAR EARTH IF REGION 626 CONTINUES TO DEVELOP RAPIDLY.

II. THE GEOMAGNETIC FIELD WAS BRIEFLY DISTURBED TO MINOR STORM INTENSITY DURING THE INTERVAL 21/0300-0600Z. UNSETTLED TO ACTIVE CONDITIONS HAVE OCCURRED DURING THE REMAINDER OF THE PAST 24 HOURS AND ARE EXPECTED TO CONTINUE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 22-24 AUGUST

CLASS M	70/70/20
CLASS X	25/25/10
PROTON	05/05/05
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	21 AUG 78
PREDICTED	22-24 AUG 78/77/76
90-DAY MEAN	21 AUG 79

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG	20 AUG 10
ESTIMATED AFR/AP	21 AUG 17/23
PREDICTED AFR/AP	22-24 AUG 20/25 - 14/15 - 12/15

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