

HFUS 1 BOU 180500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 261A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0500Z 18 SEPT 1974

IA. SOLAR ACTIVITY CONTINUES AT LOW LEVELS, WITH OCCASIONAL SUB-
FLARES BEING PRODUCED BY REGIONS 487 (N09W39) AND 488 (S10W40).
NO SIGNIFICANT CHANGES ARE EVIDENT ON THE DISK.

IB. CONTINUED SUBFLARE PRODUCTION FROM REGION 487 IS EXPECTED. THE
POSSIBILITY OF AN OCCASIONAL ENERGETIC FLARE FROM THIS REGION
CANNOT BE DISCOUNTED.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. ACTIVE CONDITIONS DUE TO
A RECURRENT STRUCTURE ARE EXPECTED TO DOMINATE THE FORECAST PERIOD.

III. EVENT PROBABILITIES NO CHANGE

IV. OTTAWA 10.7 CM FLUX NO CHANGE

V. GEOMAGNETIC A INDICES NO CHANGE

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HFUS 1 BOU 181430

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 261B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1430Z 18 SEPT 1974

IA. SOLAR ACTIVITY DURING THE PAST 16 HOURS HAS BEEN MODERATE.
SEVEN C-CLASS SUBFLARES WERE REPORTED IN REGIONS 487 (N09W44)
AND 488 (S10W46) DURING THE PERIOD. AT APPROXIMATELY 1135Z DATA
FROM GOES SATELLITE INDICATED AN M1 X-RAY EVENT IN PROGRESS.
MCMATH OBSERVATORY REPORTED A POSSIBLE 2N OPTICAL EVENT IN PROGRESS
AT THIS TIME IN REGION 487. RECENT REPORTS INDICATE THERE IS
NO LONGER A DELTA CONFIGURATION IN REGION 487, THEREFORE THE
REGION MAY HAVE COMPLETED A SIGNIFICANT STEP IN ITS DECLINE.
REGION 492 (S12W60) IS REPORTED TO BE GROWING IN ALL PARAMETERS,
BUT IS CURRENTLY QUIET.

IB. SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY LOW THROUGH THE
FORECAST PERIOD. OCCASIONAL SUBFLARES WILL BE OBSERVED BUT THE
POTENTIAL FOR ENERGETIC ACTIVITY IS NOW DIMINISHING.

II. THE GEOMAGNETIC FIELD HAS BEEN VERY QUIET DURING THE PAST
16 HOURS. THE FIELD IS EXPECTED TO BECOME MILDLY ACTIVE ON THE
19TH OF SEPTEMBER.

III. EVENT PROBABILITIES 18 - 20 SEPT

CLASS M 60/50/40

CLASS X 25/20/15

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 SEPT 99

PREDICTED 18 - 20 SEPT 97/95/93

90-DAY MEAN 17 SEPT 88

V. GEOMAGNETIC A' INDICES

OBSERVED FREDERICKSBURG 16 SEPT 52

ESTIMATED AFR/AP 17 SEPT 4/5

PREDICTED AFR/AP 18 - 20 SEPT 5/6 - 18/21 - 18/21

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HFUS BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 261

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

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. EARLY IN THE PERIOD REGIONS 487 (N10W47) AND 488 (S10W53) PRODUCED A NUMBER OF PAIRS OF SMALL C-CLASS SYMPATHETIC FLARES. AT ABOUT 1100Z REGION 487 BECAME ENHANCED IN H-ALPHA. AT LEAST THREE OPTICAL PEAKS WERE OBSERVED OVER THE NEXT HOUR. ONE OBSERVATORY REPORTED THE FLARE EVENTUALLY REACHED 2N OPTICAL CLASSIFICATION. THIS SERIES OF OPTICAL FLARES WAS ACCCOMPANIED BY A SLOWLY RISING LONG X-RAY EVENT OBSERVED IN GOES SATELLITE DATA. X-RAY VALUES BARELY REACHED M1 LEVELS, WITH A MAXIMUM AT 1131Z. THIS EVENT WAS FOLLOWED BY NUMEROUS REPORTS OF IMPORTANCE 3 SWEEP FREQUENCY CONTINUUM FROM 24 TO 48 MHZ. AT APPROXIMATELY 1430Z A SECOND PROTRACTED EVENT OF THIS KIND BEGAN. THIS SECOND EVENT WAS EVENTUALLY CLASSED AS A 1N OPTICALLY. THE LONG X-RAYS FROM THIS EVENT REACHED A BROAD PEAK AT ABOUT 1654Z, AGAIN AT M1 LEVELS. SEVERAL OBSERVATORIES HAVE REPORTED THAT REGION 487'S MAGNETIC FIELDS HAVE SIMPLIFIED CONSIDERABLY SINCE YESTERDAY. REGIONS 487 AND 488 STILL APPEAR TO BE INTIMATELY RELATED TO ONE ANOTHER.

IB. SOLAR ACTIVITY IS EXPECTED TO DIMINISH DUE TO THE SIMPLIFICATION OF REGION 487. THE RELATIONSHIP WITH REGION 488 MAKES IT VERY DIFFICULT TO ASSESS THE OVERALL ENERGETIC POTENTIAL OF THE COMPLEX, BUT IT IS NOW INCREASINGLY UNLIKELY THAT THE COMPLEX CAN EVEN PRODUCE ANOTHER M-CLASS FLARE.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR MOST OF THE PAST 24 HOURS. K-VALUES OF 4 WERE OBSERVED FROM 1430Z TO ABOUT 1800Z. THE FIELD IS LIKELY TO BECOME ACTIVE EARLY ON THE 19TH OF SEPTEMBER AND REMAIN GENERALLY ACTIVE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 19 SEPT - 21 SEPT

CLASS M 50/40/30

CLASS X 20/15/15

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 SEPT 102 ESTIMATED

PREDICTED 19 SEPT - 21 SEPT 99/99/97

90-DAY MEAN 18 SEPT 89

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 17 SEPT 04

ESTIMATED AFR/AP 18 SEPT 10/14

PREDICTED AFR/AP 19 SEPT - 21 SEPT 25/33 - 20/24 - 20/24

SOLTERWARN

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