

HFUS 1 BOU 091230'  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLORADO  
SDF NUMBER 180A  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1300Z 29 JUNE 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
28/1200Z TO 29/1200Z:

REGIONS 3180 (S15E28) AND 3170 (N15W53) CONTINUE ACTIVE.  
REGION 3180 PRODUCED AN M5/1B AT 0045Z (MAX) AND 3170 PRODUCED  
AN M1/1B AT 0427Z (MAX). NEITHER EVENT WAS PARTICULARLY  
RADIO RESPONSIVE AND NO SIGNIFICANT GEOPHYSICAL REACTIONS WERE  
REPORTED. REGION 3180 HAS NOT CHANGED MUCH DURING THE PAST  
24 HOURS WHILE 3170 HAS STARTED A SLOW DECAY. BOTH REGIONS  
CONTINUE TO HAVE POINT BRIGHTENINGS AND PLAGE FLUCTUATIONS  
WHICH ATTEST TO THEIR DYNAMIC POTENTIAL.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD CONTINUE MODERATE WITH 1 OR 2 M EVENTS  
OCCURRING EVERY 24 HOURS FOR THE NEXT SEVERAL DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS QUIET TO UNSETTLED UNTIL 0610Z  
WHEN A 5.1 GAMMA SUDDEN COMMENCEMENT WAS OBSERVED. THIS STORM  
SHOULD RENDER DISTURBED CONDITIONS OF ACTIVE TO MINOR STORM  
LEVELS FOR THE NEXT 24 HOURS.

III. EVENT PROBABILITIES: 30 JUN - 02 JUL

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 10/10/15

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 28 JUN 191

ESTIMATED 29 JUN 190

PREDICTED 30 JUN-02 JUL (190/192/189)

90 DAY MEAN 29 JUN 193

V. GEOMAGNETIC A INDICES

OBSERVED AFR 27 JUN NO DATA AP 28 JUN 12

ESTIMATED AFR 28 JUN 13 AFR/AP 29 JUN 25/25

PREDICTED AFR/AP 09 JUN-02 JUL 20/20 16/20 12/15

SOLTERWARN

BT

HFUS 3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 180B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 29 JUN 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/1200Z TO 29/2100Z:

SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 9 HOURS. THE LARGEST EVENT WAS A SLOW RISE AND FALL C4 X-RAY EVENT FROM REGION 3178 (N19W01) OBSERVED BY PIC BEAR, CALIFORNIA. TWO NEW REGIONS WERE REPORTED TODAY. THEY ARE 3183 (S06E07), A C-TYPE GROUP WHICH GREW RAPIDLY, AND 3184 (N19E10), AN A-TYPE SPOT. MAGNETOGRAMS FROM KITT PEAK AND MT. WILSON INDICATE A WEAK DELTA CONFIGURATION HAS FORMED IN REGION 3180 (S15E21) AND 3178 IS NOW OF BETA-GAMMA MAGNETIC CLASSIFICATION.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE AT MODERATE LEVELS WITH REGIONS 3180, 3170, AND 3178 PROVIDING THE BEST PROBABILITIES FOR SIGNIFICANT FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS FOR THE PAST 9 HOURS. HOWEVER, THE DISTURBANCE APPEARS TO BE SUBSIDING RAPIDLY. UNSETTLED TO OCCASIONALLY ACTIVE CONDITIONS ARE EXPECTED THROUGHOUT THE NEXT TWO DAYS DECREASING TO UNSETTLED CONDITIONS BY THE THIRD DAY.

III. EVENT PROBABILITIES 30 JUN - 02 JUL

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 10/10/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 JUN 183

PREDICTED 30 JUN - 02 JUL 180/180/175

90-DAY MEAN 9 JUN 193

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 JUN 12/12

ESTIMATED AFR/AP 29 JUN 32/39

PREDICTED AFR/AP 30 JUN - 02 JUL 20/20 - 16/20 - 12/15

SOLTERWARN

BT