

HFUS 1 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 150

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 29 MAY 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.  
REGION 2470 (S19W48) HAS PRODUCED NEARLY ALL THE SIGNIFICANT  
ACTIVITY IN THE LAST 26 HOURS. SHORTLY AFTER YESTERDAY'S X1/2B  
FLARE, AN M6/2B WAS OBSERVED JUST WEST OF THE LARGE LEADER  
SPOT AT 28/2344Z MAXIMUM. THIS FLARE WHICH OCCURRED NEAR THE  
TIGHT GRADIENT DELTA CONFIGURATION HAD MINOR RADIO RESPONSE WITH  
63 FLUX UNITS OBSERVED AT 2695 MHZ. AN M1/SN; AGAIN FROM THIS  
SAME REGION; OCCURRED AT 29/0518Z WITH 110 FLUX UNITS OBSERVED AT  
2695 MHZ. REGIONS 2469 (S12W53) AND 2476 (N10W24) HAVE BEEN  
THE ONLY OTHER FLARE PRODUCERS THIS ZULU DAY, WITH C-CLASS SUB-  
FLARES OBSERVED. NEW REGIONS 2486 (N12E71) AND 2487 (S13E77)  
APPEARED AT THE EAST LIMB AS SIMPLE ALPHA GROUPS.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT MODERATE LEVELS  
THROUGH THE FORECAST PERIOD. REGION 2470 REMAINS THE MOST PRO-  
BABLE REGION TO PRODUCE M-CLASS AND ISOLATED X-CLASS EVENTS.  
ITS INTERACTION WITH REGION 2469 CONTINUES AS DOES THE INSTABILITY  
WEST OF THE LEADER DISPLAYED BY AN ACTIVE DARK FILAMENT. REGION  
2478 (S12E14) HAS SHOWN SLOW GROWTH ALONG WITH CLOCKWISE SPOT  
ROTATION ABOUT ITS LARGE LEADER SPOT AND RETAINS ITS BETA-GAMMA  
DELTA CONFIGURATION. M-CLASS EVENTS ARE EXPECTED FROM THIS REGION  
IN THE NEXT FEW DAYS. REGION 2476 HAS A WEAK DELTA  
CONFIGURATION IN ITS LEADER, BUT LARGE FLARES FROM THIS AREA ARE  
UNLIKELY.

II. THE GEOMAGNETIC FIELD WAS QUIET THROUGH MOST OF THE ZULU  
DAY UNTIL 1832Z WHEN A WEAK SUDDEN COMMENCEMENT OF 18 GAMMAS WAS  
OBSERVED AT BOULDER. UNSETTLED TO OCCASIONALLY ACTIVE CONDITIONS  
ARE EXPECTED TO CONTINUE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 30 MAY - 01 JUNE

CLASS M 85/80/80

CLASS X 15/15/10

PROTON 15/15/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 MAY 245

PREDICTED 30 MAY - 01 JUNE 240/235/230

90-DAY MEAN 29 MAY 201

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 28 MAY 05

ESTIMATED AFR/AP 29 MAY 07/09

PREDICTED AFR/AP 30 MAY - 01 JUNE 14/18 18/25 12/15

SOLTERWARN

BT