

HFUS 3 BOU 171400

FROM SPACE ENVIRONMENT SERVICES CENTERAO BOULDER, COLORADO  
SDF NUMBER 352A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1200UT 17 DECEMBER 1980

IA. SOLAR ACTIVITY HAS CONTINUED MODERATE DURING THE PAST 24 HOURS. REGION 2841 (N14E13) BEGAN THE PERIOD WITH AN M5/2B MAXIMUM AT 161154 UT). THIS FLARE WAS ACCOMPANIED BY IMPORTANCE 2 SHORTWAVE FADES TO 15 MHZ, BUT ONLY INSIGNIFICANT CENTIMETER WAVELENGTH RADIO BURSTS. WITHIN A FEW HOURS REGION 2840 (N07E06) PRODUCED AN M4/SB MAXIMUM AT 1439 UT) AND REGION 2839 (S18W05) PRODUCED AN M1/SB MAXIMUM AT 1439 UT). IN ADDITION TO THIS, TEN C-CLASS SUBFLARES WERE NOTED, MOSTLY FROM REGIONS 2840 AND 2841. DECLINING REGION 2826 (N13W62) PRODUCED A COUPLE OF THE SUBFLARES. A SLIGHT INCREASE IN THE COMPLEXITY OF REGIONS 2840/2841 COMPLEX HAS BEEN NOTED. THE REGIONS DO APPEAR TO HAVE MOVED CLOSER TOGETHER. HOWEVER, SPOT STRENGTHS AND GRADIENTS IN THE COMPLEX ARE NOT INORDINATELY HIGH. THE COMPLEX, BEING A REGULAR PRODUCER OF SMALL TO MEDIUM SIZED M-CLASS BURSTS IN RECENT DAYS IS THOUGHT TO BE REVEALING ITS TRUE FLARE CAPACITY AND IS NOT LIKELY TO PRODUCE A MAJOR FLARE IF IT CONTINUES TO WASTE ITS ENERGY. REGION 2839 IS GROWING AND BECOMING ACTIVE. THIS REGION, WHILE STILL SMALL, SHOULD BE RESPONSIBLE FOR OCCASIONAL SMALL M-CLASS FLARES. REGION 2826 IS CLEARLY WEAKENING AND COULD VERY WELL REACH WEST LIMB WITHOUT PRODUCING MORE THAN A FEW C-CLASS SUBFLARES. OTHER REGIONS ON THE DISK CURRENTLY APPEAR TO BE STABLE OR DECLINING.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT MODERATE LEVELS WITH A CHANCE OF BRIEF PERIODS OF HIGH ACTIVITY. THE NUMERICAL FORECAST REFLECTS THE BELIEF THAT THE REGIONS 2840/2841 COMPLEX WILL SOON BEGIN TO RELAX.

II. THE GEOMAGNETIC FIELD BEGAN THE PERIOD ACTIVE AND HAS SUBSEQUENTLY QUIETED. THE FIELD WAS UNSETTLED, FOR THE MOST PART, DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE MILDLY UNSETTLED DURING THE NEXT 72 HOURS.

III. EVENT PROBABILITIES: 18 DECEMBER - 20 DECEMBER 1980

CLASS M 90/90/80

CLASS X 20/20/15

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 16 DEC 282

ESTIMATED 17 DEC 275

PREDICTED 18-20 DEC 270/268/256

90 DAY MEAN 17 DEC 208

V. GEOMAGNETIC A INDICES

OBSERVED AFR 15 DEC 09 AP 16 DEC 14

ESTIMATED AFR 16 DEC 15 AFR/AP 17 DEC 09/09

PREDICTED AFR/AP 18-20 DEC 10/10 10/10 09/10

SOLTERWAR N

BT

HFUS 1 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 352B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 17 DEC 1980

IA. SOLAR ACTIVITY HAS CONTINUED MODERATE DURING THE PAST 24 HOURS. REGION 2841 (N14E13) BEGAN THE PERIOD WITH AN M5/2B MAXIMUM AT 161154 UT). THIS FLARE WAS ACCOMPANIED BY IMPORTANCE 2 SHORTWAVE FADES TO 15 MHZ, BUT ONLY INSIGNIFICANT CENTIMETER WAVELENGTH RADIO BURSTS. WITHIN A FEW HOURS REGION 2840 (N17E06) PRODUCED AN M4/SB MAXIMUM AT 1455 UT) AND REGION 2839 (S10W05) PRODUCED AN M1/SB MAXIMUM AT 1439 UT). IN ADDITION TO THIS, TEN C-CLASS SUBFLARES WERE NOTED, MOSTLY FROM REGIONS 2840 AND 2841. DECLINING REGION 2826 (N13W62) PRODUCED A COURSE OF THE SUBFLARES. A SLIGHT INCREASE IN THE COMPLEXITY OF REGIONS 2840/2841 COMPLEX HAS BEEN NOTED. THE REGIONS DO APPEAR TO HAVE MOVED CLOSER TOGETHER. HOWEVER, SPOT STRENGTHS AND GRADIENTS IN THE COMPLEX ARE NOT INORDINATELY HIGH. THE COMPLEX, BEING A REGULAR PRODUCER OF SMALL TO MEDIUM SIZED M-CLASS BURSTS IN RECENT DAYS IS THOUGHT TO BE REVEALING ITS TRUE FLARE CAPACITY AND IS NOT LIKELY TO PRODUCE A MAJOR FLARE IF IT CONTINUES TO WASTE ITS ENERGY. REGION 2839 IS GROWING AND BECOMING ACTIVE. THIS REGION, WHILE STILL SMALL, SHOULD BE RESPONSIBLE FOR OCCASIONAL SMALL M-CLASS FLARES. REGION 2826 IS CLEARLY WEAKENING AND COULD VERY WELL REACH WEST LIMB WITHOUT PRODUCING MORE THAN A FEW C-CLASS SUBFLARES. OTHER REGIONS ON THE DISK CURRENTLY APPEAR TO BE STABLE OR DECLINING.

ADDITIONS TO 1200Z: REGIONS 2840, AND 2841 APPEAR TO BE DECLINING IN WHITE LIGHT, AND GRADIENTS HAVE DIMINISHED. REGION 2849 (S07E73) HAS MOVED ONTO THE DISK.

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II. THE GEOMAGNETIC FIELD BEGAN THE PERIOD ACTIVE AND HAS SUBSEQUENTLY QUIETED. THE FIELD WAS QUIET, FOR THE MOST PART, DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE MILDLY UNSETTLED DURING THE NEXT 72 HOURS.

III. EVENT PROBABILITIES: 18 DECEMBER - 20 DECEMBER

CLASS M 90/90/80

CLASS X 20/20/15

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 17 DEC 263

PREDICTED 18-20 DEC 255/247/239

90 DAY MEAN 17 DEC 210

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 DEC 18/14

ESTIMATED AFR/AP 17 DEC 03/08

PREDICTED AFR/AP 18-20 DEC 10/10 10/10 09/10

SOLTERWARN

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