

HFUS 1 BOU 161300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 016A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 16 JAN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
15/1200Z TO 16/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST  
24 HOURS. REGIONS 3549 (S10E05) AND 3550(N02W08) CONTINUE TO  
PRODUCE SUBFLARES ALTHOUGH 3550 IS THE ONLY REGION TO BE  
RECENTLY ASSOCIATED WITH C-CLASS XRAY ACTIVITY. REGIONS 3549  
AND 3550 ARE BOTH STILL GROWING IN WHITE LIGHT ESPECIALLY IN  
THEIR LEADER GROUPS. 3549 IS EXHIBITING SOME SPOT ROTATION AND  
HAS RETAINED ITS MAGNETIC COMPLEXITY BUT 3550 IS REPORTED TO BE  
A SIMPLE BIPOLE TODAY. NEW REGION 3554(S15W08) IS EMERGING  
RAPIDLY JUST WEST OF 3549. MINOR SURGING HAS BEEN OBSERVED ON  
THE EAST LIMB AT NE03 AND SE25.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
REMAIN LOW BUT WITH AN INCREASING PROBABILITY OF SIGNIFICANT  
ACTIVITY FROM EITHER REGION 3549 OR 3550.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED FOR THE PAST 24 HOURS. THE FIELD IS EXPECTED TO  
REMAIN UNSETTLED TO OCCASIONALLY ACTIVE FOR THE NEXT THREE DAYS  
ON THE BASIS OF AN APPARENT RESTRUCTURING OF LARGE-SCALE  
SOUTHERN HELIOMAGNETIC FIELDS WHICH WAS ACCOMPANIED BY  
FILAMENT ERUPTIONS BETWEEN JANUARY 13-15.

III. EVENT PROBABILITIES 17 JAN-19 JAN

CLASS M 30/35/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 JAN 141

ESTIMATED 16 JAN 145

PREDICTED 17 JAN-19 JAN 150/155/160

90 DAY MEAN 15 JAN 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 JAN 003 AP 15 JAN 012

ESTIMATED AFR 15 JAN 012 AFR/AP 16 JAN 012/012

PREDICTED AFR/AP 17 JAN-19 JAN 012/012-015/015-010/010

SOLTERWARN

BT

HXUS BOU 161300

PREDM 03017 03518 04019

PREDX 00117 00118 00119

PREDP 00117 00118 00119

PCAFT 00117

TENCM 15017 15518 16019

AFRED 01217 01518 01019

AFAPF 01217 01518 01019

KKK 33333 32223 34332

BT

HFUS 3 BOU 162200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 016B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 16 JAN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
16/1200Z TO 16/2100Z: SOLAR ACTIVITY HAS CONTINUED AT A LOW  
LEVEL THIS PERIOD. REGIONS 3549 (S10E01) AND 3550 (N02W13) HAVE  
BOTH PRODUCED FOUR SUB-FLARES THIS PERIOD. THE LARGEST EVENT  
WAS A C2/SN FROM 3550 AT 16/2026UT. REGIONS 3549 AND 3550  
CONTINUE AS THE LARGEST AND MOST COMPLEX GROUPS ON THE VISIBLE  
DISK. NEW REGIONS TODAY ARE 3555 (N26W11), 3556 (N07E46) AND  
3557 (N05E77) ALL SIMPLE GROUPS AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
CONTINUE AT A LOW LEVEL UNTILL THE MIDDLE OF THE FORECAST  
PERIOD WHEN REGIONS 3549 AND 3550, IF GROWTH CONTINUES, SHOULD  
BE CAPABLE OF A ISOLATED M-CLASS EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN AT ACTIVE TO UNSETTLED LEVELS DURING THIS PERIOD. THE  
FIELD IS EXPECTED TO REMAIN UNSETTLED TO OCCASIONALLY ACTIVE  
FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 17 JAN-19 JAN

CLASS M 30/35/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 JAN 152

PREDICTED 17 JAN-19 JAN 165/175/180

90 DAY MEAN 16 JAN 200

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 JAN 015/012

ESTIMATED AFR/AP 16 JAN 012/012

PREDICTED AFR/AP 17 JAN-19 JAN 012/012-015/015-010/010

SOLTERWARN

BT

HXUS BOU 162200

PREDM 03017 03518 04019

PREDX 00117 00118 00119

PREDP 00117 00118 00119

PCAFT 00117

TENCM 16517 17518 18019

AFRED 01217 01518 01019

AFAPF 01217 01518 01019

BT