

HFUS 1 BOU 15 1400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 015A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 15 JANUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

14/1200UT TO 15/1200UT:

SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. HOWEVER, A C7/1B FLARE FROM REGION 2895 (N12W09) WHICH MAXED AT 2104 UT WAS ACCOMPANIED BY STRONG METER WAVELENGTH RADIO BURSTS. TYPE III-V SWEEPS, STRONG TYPE IV, WEAK TYPE II AND A BURST OF 4000 FLUX UNITS AT 245 MHZ WERE OBSERVED. THE REGION ITSELF IS SIMPLE IN WHITE LIGHT AND H ALPHA. WITH THE EXCEPTION OF 2894 (N05-E43) AND 2899 (S21E69) NEAR THE EAST LIMB, ALL REGIONS ON THE DISK ARE PRIMARILY QUIET AND STABLE OR DECLINING. REGION 2894 IS SHOWING SLOW GROWTH AND 2899 IS SEEN TO BE A LARGE H SPOT WHICH MAY BE OF INTEREST AS IT ROTATES INTO VIEW.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW UNLESS LONGITUDES WHICH WERE ACTIVE LAST ROTATION RETURN WITH SIGNIFICANT FLARE POTENTIAL.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED FOR THE PAST 24 HOURS. A GEOMAGNETIC DISTURBANCE MAY RESULT FROM THE RADIO-RICH FLARE NEAR CENTER DISK ON 14 JANUARY. ACTIVE GEOMAGNETIC CONDITIONS ARE EXPECTED TO PREVAIL ON 17 JANUARY AND EXTEND INTO THE NEXT DAY.

III. EVENT PROBABILITIES: 16 JANUARY - 18 JANUARY

CLASS M 05/05/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 14 JANUARY 159

ESTIMATED 15 JANUARY 160

PREDICTED 16-18 JANUARY 164/168/175

90 DAY MEAN 14 JANUARY 211

V. GEOMAGNETIC A INDICES

OBSERVED AFR 13 JANUARY 06 AP 14 JANUARY 08

ESTIMATED AFR 14 JANUARY 08 AFR/AP 15 JANUARY 08/10

PREDICTED AFR/AP 16-18 JANUARY 07/10 15/18 12/15

SOLTERWARN

BT

NNNNBZ CVZDZEVZGVZIZLVZOUU

KBOU

HFUS 3 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 015B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200 UT 15 JANUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200UT TO 15/2200UT-

SOLAR ACTIVITY HAS CONTINUED LOW DURING THIS PERIOD. REGION 2891 (S22E02) PRODUCED A C2/1N AT 1525UT. REGION 2880 (N09W34) PRODUCED A C4/1N AT 1709UT. ONLY ONE NEW REGION TODAY - 2900 (N17W78), THE RETURN OF OLD 2850 WHICH PRODUCED ONLY THREE SUB-FLARES LAST ROTATION.

IB. SOLAR ACTIVITY FORECAST - SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST - THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY UNSETTLED. ACTIVE GEOMAGNETIC CONDITIONS ARE EXPECTED ON 17 JAN AND MAY EXTEND INTO THE NEXT DAY.

III. EVENT PROBABILITIES 16-18 JAN

CLASS M 05/05/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 JAN 155

PREDICTED 16-18 JAN 158/160/162

90-DAY MEAN 15 JAN 210

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 JAN 06/08

ESTIMATED AFR/AP 15 JAN 08/08

PREDICTED AFR/AP 16-18 JAN 07/10 - 15/18 - 12/15

SOLTERWAR N

BT