

HFUS 1 BOU 191300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 353A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 19 DEC 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/1200Z TO 19/1200Z: SOLAR ACTIVITY HAS BEEN LOW. THE DISK IS EXHIBITING MOSTLY MINOR AND SIMPLE REGIONS. REGION 3516 (N13E64) HAS ROTATED INTO VIEW AND ALSO APPEARS NON-THREATENING WITH ONLY A CLASS H SPOT VISIBLE. 3516 MAY BE PRECEDED BY A SMALL A TYPE SPOTGROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW THROUGH AT LEAST MID 21 DECEMBER. AFTER THAT TIME AN ACTIVE RETURN OF PREVIOUSLY ACTIVE LONGITUDES IS POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED SINCE 18/1800UT. PRIOR TO THAT TIME, STRONG SUBSTORMS HAD THE FIELD AT ACTIVE LEVELS. THE SOURCE OF THE ACTIVE CONDITIONS IS UNKNOWN. UNSETTLED CONDITIONS SHOULD PREVAIL FOR THE NEXT TWO DAYS. ON 22 DECEMBER ACTIVE CONDITIONS SHOULD BE EXPERIENCED FROM ONE OR TWO SOURCES.

FIRST, A SMALL CORONAL HOLE IS LOCATED AT N22W25 AND SECOND, A MODERATE SIZE FILAMENT LAST SEEN AT S17E08 ON 17/1800UT ERUPTED PRIOR TO 18/1630UT. WITH BOTH NORTHERN AND SOUTHERN HEMISPHERES OF THE ECLIPTIC HARBORING POTENTIAL DISTURBANCES, THE EARTH'S FIELD SHOULD NOT ESCAPE IMPACT.

III. EVENT PROBABILITIES 20 DEC-22 DEC

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 DEC 142

ESTIMATED 19 DEC 138

PREDICTED 20 DEC-22 DEC 138/142/145

90 DAY MEAN 18 DEC 218

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 DEC 006 AP 18 DEC 016

ESTIMATED AFR 18 DEC 018 AFR/AP 19 DEC 011/011

PREDICTED AFR/AP 20 DEC-22 DEC 010/010-010/012-018/015

SOLTERWARN

BT

N22E ?

HXUS FOU 191300

PREDM 01520 01521 01522

PREDX 00120 00121 00122

PREDP 00120 00121 00122

PCAFT 00120

TENCM 13820 14221 14522

AFRED 01020 01021 01822

AFAPF 01020 01221 01522

KKK 32232 32222 33232

BT

HFUS 3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 353B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 19 DEC 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z TO 19/2100Z: SOLAR ACTIVITY REMAINS LOW. NO EVENTS HAVE OCCURRED DURING THIS REPORT PERIOD. ALL VISIBLE REGIONS ARE SIMPLE, STABLE OR DECLINING. REGION 3519(N11E52) WAS NUMBERED TODAY. IT IS A B CLASS GROUP OF 10 MILLIONTHS AREA.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY WILL REMAIN LOW. NO INCREASE IN ACTIVITY IS LIKELY UNLESS SIGNIFICANT NEW REGIONS ARISE, OR ROTATE ONTO THE SOLAR DISK. RETURNING REGIONS WITH FLARE POTENTIAL ARE NOT EXPECTED BEFORE 21 DECEMBER.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED AND DECLINING DURING THE PERIOD. IT IS EXPECTED TO REMAIN AT LOW UNSETTLED LEVELS UNTIL 22 DECEMBER. A CORONAL HOLE, AND A FILAMENT DISAPPEARANCE MAY CAUSE ACTIVE LEVELS TO BE ACHIEVED AT THAT TIME.

III. EVENT PROBABILITIES 20 DEC-22 DEC

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 DEC 134

PREDICTED 20 DEC-22 DEC 138/142/145

90 DAY MEAN 19 DEC 217

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 DEC 016/016

ESTIMATED AFR/AP 19 DEC 008/011

PREDICTED AFR/AP 20 DEC-22 DEC 010/010-010/012-018/015

SOLTERWARN

BT

HXUS BOU 192200

PREDM 01520 01521 01522

PREDX 00120 00121 00122

PREDP 00120 00121 00122

PCAFT 00120

TFCNM 13020 14221 14522

AFRED 01020 01021 01822

AFAPF 01020 01221 01522

BT