

HFUS 1 BOU 311300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 365A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 31 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 30/1200Z TO 31/1200Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PERIOD. REGION 4033 (S13W50) CONTINUED AS THE SUN'S MOST DYNAMIC GROUP, BUT DISPLAYED SIGNIFICANT SPOT DECAY ALONG WITH A WEAKENING OF ITS MAGNETIC DELTA CONFIGURATION AND ASSOCIATED MAGNETIC GRADIENT. THIS REGION HAS PRODUCED TWO C8/1B FLARES (SIX HOURS APART AT 30/1811Z AND 31/0019Z) WITH MINOR DISCRETE FREQUENCY RADIO RESPONSE, BUT HAS FAILED TO PRODUCE ANY SIGNIFICANT ACTIVITY IN THE PAST 11 HOURS. REGIONS 4041 (N06F35) AND 4042 (S18W51), BOTH SIMPLE BI-POLAR SPOT GROUPS, HAVE ACCOUNTED FOR THE REMAINDER OF THE MINOR FLARE ACTIVITY OBSERVED DURING THE 24 HOUR PERIOD. THE LINES HAVE BEEN GENERALLY QUIET, EXCEPT FOR A SMALL ACTIVE PROMINENCE LOCATED AT SF08.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW, HOWEVER, REGION 4033'S HISTORY OF FLARE PRODUCTION INDICATES A MODERATE SIZED EVENT IS POSSIBLE DURING ITS CONTINUED DECAY PHASE. RETURNING PREVIOUSLY ACTIVE REGIONS ON THE 2ND AND 3RD (4021, S16, CAR 131 AND 4022, N10, CAR 115) COULD CAUSE A GRADUAL INCREASE IN THE SOLAR RADIO FLUX (10.7CM) AND ACTIVITY DURING THAT TIME.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED DURING THE PERIOD. ACTIVE CONDITIONS ARE EXPECTED TO BEGIN EARLY ON THE 1ST FOLLOWED BY UNSETLED TO OCCASIONALLY ACTIVE LEVELS FOR THE REMAINDER OF THE PERIOD. NOTE---NOTE--- THE FREDERICKSBURG A VALUE WAS NOT AVAILABLE FOR THE 29TH OF DEC. IT WILL PROBABLY BE INCLUDED IN TODAY'S 2230Z FORECAST.

III. EVENT PROBABILITIES 01 JAN-03 JAN

CLASS M 50/30/30

CLASS X 05/01/31

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 17.7 CM FLUX

OBSERVED 30 DEC 147

FESTIMATED 31 DEC 142

PREDICTED 01 JAN-03 JAN 137/135/145

92 DAY MEAN 30 DEC 176

V. GEOMAGNETIC A INDICES

OBSERVED AFR 29 DEC 000 AP 30 DEC 013

FESTIMATED AFR 30 DEC 012 AFR/AP 31 DEC 008/015

PREDICTED AFR/AP 01 JAN-03 JAN 013/020-015/010-010/015

SOLARFLAREWARN

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HFUS 3 BOU 312200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 365P

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 31 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 31/1200Z TO 31/2100Z: SOLAR ACTIVITY HAS BEEN LOW. REGION 4033 (S14W56) IS LOSING ITS DELTA CONFIGURATION AND ALTHOUGH MODERATE MAGNETIC GRADIENTS REMAIN, THIS REGION CONTINUES ITS SIMPLIFICATION. REGION 4039 (S17W26) MAY BE STARTING A DECAY PHASE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE GENERALLY LOW FOR THE FORECAST PERIOD WITH INFREQUENT CLASS M DECAY PHASE FLARES EXPECTED FROM REGION 4033. PREVIOUSLY ACTIVE LONGITUDES ARE EXPECTED TO RETURN TO THE EAST LIMB DURING THE FORECAST PERIOD WHICH COULD ELEVATE ACTIVITY LEVELS SLIGHTLY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED. ACTIVE LEVELS ARE FORECAST TO OCCUR ON 01 JAN. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS SHOULD BE EXPERIENCED ON 02-03 JAN. NOTE: THE AFR VALUE FOR 29 DEC WAS 16.

III. EVENT PROBABILITIES 31 JAN-03 JAN

CLASS M 50/30/30

CLASS X 05/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 31 DEC 139

PREDICTED 31 JAN-03 JAN 137/135/145

90 DAY MEAN 31 DEC 173

V. GEOMAGNETIC AP INDICES

OBSERVED AFR/AP 30 DEC 013/013

PREDICTED AFR/AP 31 DEC 009/010

PREDICTED AFR/AP 31 JAN-03 JAN 018/015-019/016-010/015

SOLTERWARN

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