

HFUS 1 BOU 291300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 363A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 29 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
28/1200Z TO 29/1200Z: SOLAR ACTIVITY HAS BEEN HIGH. REGION 4033
(S12W21) PRODUCED AN IMPULSIVE X1/2B AT 2040Z. THE FLARE
OCCURRED IN THE TRAILER PORTION NEAR THE DELTA CONFIGURATION.
UMBRAI COVERAGE WAS REPORTED. MODERATE SHORT WAVE FADE THROUGH
18 MHZ; STRONG DISCRETE FREQUENCY RADIO BURSTS (370 FU AT 2695
MHZ); AND A TYPE II DEKAMETRIC BURST OCCURRED WITH THIS FLARE.
THE FLARE DID NOT CHANGE THE PLAGE OR MAGNETIC STRUCTURE OF
REGION 4033. REGION 4032 (N08W78) PRODUCED A M4/SN AT 1551Z.
REGION 4042 (S19W22) WAS ADDED YESTERDAY.

IP. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
MODERATE WITH REGION 4033 PRODUCING OCCASIONAL ENERGETIC
FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE. VARIABLE UNSETTLED TO ACTIVE FIELD CONDITIONS ARE
EXPECTED FOR THE FORECAST PERIOD. THE CALCULATED PCA EVENT WAS
ENDED AT 23/2300Z AND THE SATELLITE PROTON EVENT ENDED NEAR
29/0430Z.

III. EVENT PROBABILITIES 30 DEC-01 JAN

CLASS M	75/75/60
CLASS X	10/10/05
PROTON	10/10/05
PCAF	YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED	28 DEC	162
ESTIMATED	29 DEC	152
PREDICTED	30 DEC-01 JAN	145/140/135
90 DAY MEAN	28 DEC	178

V. GEOMAGNETIC A INDICES

OBSERVED AFR	27 DEC	015	AF 28 DEC	021
ESTIMATED AFR	28 DEC	015	AFR/AT 29 DEC	016/013
PREDICTED AFR/AP	30 DEC-01 JAN	010/010-012/020-015/020		

SOLTERWARN

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HFUS 3 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 363E

JOINT USAF/NCAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 29 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
29/1200Z TO 29/2100Z:

ACTIVITY HAS BEEN LOW SINCE 1200Z BUT THE POTENTIAL REMAINS.
DISK CHANGES THIS PERIOD INCLUDE FURTHER EXPANSION AND
FRAGMENTATION OF REGION 4033 (S13W29) AND FURTHER DEVELOPMENT
OF REGION 4042 (19W30). REGION 4036 (N19W00) BECAME SPOT-
LESS WHILE REGION 4038 ROTATED OVER THE WEST LIMB.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD BE AT MODERATE-LEVELS FOR THE NEXT 24
HOURS. REGION 4033 IS EXPECTED TO CONTINUE PRODUCTION OF
OCCASIONAL ENERGETIC FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. UNSETTLED CONDI-
TIONS SHOULD PERSIST FOR ANOTHER 24 HOURS. OFFICIAL END TIMES
FOR THE PARTICLE EVENT ARE AS FOLLOWS: CALCULATED PCA 282300Z
AND 10 MEV PROTONS 290430Z.

III. EVENT PROBABILITIES: 30 DEC 1982 - 01 JAN 1983

CLASS M 75/75/60

CLASS X 10/10/05

PROTON 10/10/05

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 29 DEC 152

PREDICTED 30 DEC-01 JAN 145/140/135

90 DAY MEAN 29 DEC 177

V. GEOMAGNETIC Δ INDICES

OBSERVED AFR/AP 28 DEC 16/21

ESTIMATED AFR/AP 29 DEC 15/18

PREDICTED AFR/AP 30 DEC-01 JAN 10/10 12/20 15/20

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