

HFUS 1 BOU 011300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 305A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 01 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
31/1200Z TO 01/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING
THE PAST 24 HOURS. AN M1 X-RAY EVENT MAXING ON 01 NOV/0344Z WAS
ASSOCIATED WITH A LIMB EVENT AT SW11 NEAR THE LOCATION OF
DEPARTED REGION 3955. AN ERUPTIVE PROMINENCE SEEN OUT TO .3
RADII BEGAN AT 0330Z AND WAS FOLLOWED BY A BRIGHT SURGE OUT TO
.2 RADII. POST-FLARE LOOPS BEGAN AT 0427Z AND ENDED AT 0729Z. A
MODERATE INTENSITY TYPE II SWEEP AND POSSIBLE TYPE IV RADIO
SIGNATURES ACCOMPANIED THE EVENT. SURGING CONTINUES FROM THIS
PORTION OF THE SOUTHWEST LIMB. ON THE DISK, REGION 3966
(N06W31) IS THE MOST SIGNIFICANT GROUP. NEW LEADER POLARITY
SPOTS ARE EMERGING SOUTH OF THE MAIN TRAILER SPOT AND A DELTA
MAGNETIC CONFIGURATON COULD DEVELOP. REGION 3961 (S07W59) IS
SIMPLIFYING AND 3960 (N10W64) IS UNDERGOING DECAY. FOLLOWER
SPOTS TO NEW REGION 3970 (N21E68) HAVE COME OVER THE EAST LIMB.
THIS REGION IS THE RETURN OF OLD REGION 3938 WHICH WAS MILDLY
ERUPTIVE LAST ROTATION. A NEW H-TYPE SPOT HAS BEEN OBSERVED
NEAR NE09 WHICH IS BEING ACCOMPANIED BY MINOR SURGING AT NE05
AND NE10.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW. IF DEVELOPMENT CONTINUES IN REGION 3966, ISOLATED M-CLASS
EVENTS MAY BE POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN AT STORM LEVELS DURING THE PAST 24 HOURS. AN APPARENT
SUDDEN COMMENCEMENT OCCURRED 31 OCT/1339Z WHICH WAS FOLLOWED BY
MAGNETIC ACTIVITY RANGING FROM UNSETTLED THROUGH MAJOR STORM
CONDITIONS. THE ISEE-3 SPACECRAFT, WHICH IS ONCE AGAIN BEYOND
THE EARTH'S MAGNETOSPHERE, IS SHOWING HIGH-SPEED, LOW-DENSITY
SOLAR WIND WHICH IS INDICATIVE OF A CORONAL HOLE OF NEGATIVE
POLARITY. UNSETTLED TO ACTIVE GEOMAGNETIC CONDITIONS ARE
EXPECTED TO CONTINUE THROUGHOUT THE FORECAST PERIOD. LOOKING
AHEAD, THERE IS A GOOD POSSIBILITY OF INCREASED ACTIVITY ON 6
NOVEMBER IN RESPONSE TO TODAY'S ENERGETIC LIMB EVENT.

III. EVENT PROBABILITIES 02 NOV-04 NOV

CLASS M 20/20/20
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 31 OCT 168
ESTIMATED 01 NOV 160
PREDICTED 02 NOV-04 NOV 155/142/130
90 DAY MEAN 31 OCT 167

V. GEOMAGNETIC A INDICES

OBSERVED AFR 30 OCT 025 AP 31 OCT 024
ESTIMATED AFR 31 OCT 025 AFR/AP 01 NOV 025/025
PREDICTED AFR/AP 02 NOV-04 NOV 015/020-015/020-020/020

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