

HFUS 1 BOU 031300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 307A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 03 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
02/1200Z TO 03/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST
24 HOURS. THE LARGEST EVENT WAS A SLOW-RISE C6 X-RAY EVENT
MAXING AT 0929Z. THE SOURCE OF THIS EVENT HAS NOT YET BEEN
IDENTIFIED BUT IS PROBABLY REGION 3961 (S08W90). GROWTH AND
ACTIVE SURGING HAVE BEEN OBSERVED IN 3961 AS IT CROSSES THE
WEST LIMB. REGION 3966 (N05W61) HAS PRODUCED SEVERAL MODERATE
C-CLASS FLARES BUT IT IS CLEARLY DECAYING IN WHITE LIGHT.
REGION 3969 (S12W46) IS GROWING AND CONTAINS AN INTENSE ARCH
FILAMENT SYSTEM. THE COMPLEX OF REGIONS NEAR THE NORTHEAST LIMB
HAVE BEEN QUIESCENT EXCEPT FOR AN ACTIVE DARK FILAMENT AND
OCCASIONAL BRIGHT POINTS AND PLAGE FLUCTUATIONS IN REGION 3970
(N22E40). SURGING NEAR NE04 MAY INDICATE THAT ONE MORE GROUP
MAY JOIN THIS CONGLOMERATION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW. ONCE 3966 CLEARS THE WEST LIMB NO SIGNIFICANT ACTIVITY IS
LIKELY UNLESS CONSIDERABLE DEVELOPMENT OCCURS IN REGIONS
PRESENTLY NEAR THE NORTHEAST LIMB. NONE OF THE REGIONS DUE TO
RETURN DURING THE NEXT THREE DAYS HAVE BEEN NOTEWORTHY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN AT ACTIVE TO MINOR STORM LEVELS FOR THE PAST 24 HOURS.
ISEE-E SPACECRAFT DATA INDICATES THAT THE SOLAR WIND IMPACTING
THE EARTH HAS BEEN FAIRLY STEADY OF ABOVE-AVERAGE VELOCITY
(APPROXIMATELY 500 KM/S) AND NEAR-NORMAL DENSITY (5 CM⁻³). THE
INTERPLANETARY MAGNETIC FIELD HAS BEEN MODERATELY SOUTHWARD AND
FROM A POSITIVE-POLARITY SECTOR WHICH IS IN CONTRAST TO THE
NEGATIVE POLARITY WIND ON 01 NOVEMBER. THE SOLAR WIND IS
EXPECTED TO SWITCH BACK TO A NEGATIVE-POLARITY SIGNATURE WITHIN
THE NEXT 12 HOURS IN ASSOCIATION WITH A HIGH-SPEED STREAM FROM
A CORONAL HOLE THAT CROSSED CENTRAL MERIDIAN 31 OCTOBER. ACTIVE
TO OCCASIONAL MINOR STORM GEOMAGNETIC CONDITIONS SHOULD THEN
PREVAIL FOR THE FOLLOWING THREE DAYS. IN ADDITION, DISTURBED
SOLAR WIND FROM AN ENERGETIC WEST-LIMB EVENT ON 01 NOVEMBER
COULD ARRIVE DURING THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 04 NOV-06 NOV

CLASS M 10/10/10
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 NOV 157
ESTIMATED 03 NOV 150
PREDICTED 04 NOV-06 NOV 140/130/130
90 DAY MEAN 02 NOV 167

V. GEOMAGNETIC A INDICES

OBSERVED AFR 01 NOV 028 AP 02 NOV 030
ESTIMATED AFR 02 NOV 028 AFR/AP 03 NOV 025/035
PREDICTED AFR/AP 04 NOV-06 NOV 025/025-025/015-025/015

SOLTERWARN

BT

HFUS 3 BOU 032200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 307B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 03 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
03/1200Z TO 03/2100Z: SOLAR ACTIVITY CONTINUED LOW DURING THIS
PERIOD. REGION 3974 (N05E54) IS THE MOST MAGNETICALLY COMPLEX
GROUP ON THE VISIBLE DISK AND IS A "BETA GAMMA", HOWEVER IT'S
SIZE IS ONLY 20 MILLIONTHS. REGION 3966 (N05W65) CONTINUES TO
DECAY AND IS NOW A SIMPLE "D" TYPE BETA GROUP. THE REST OF THE
REGIONS HAVE SHOWN LITTLE CHANGE THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE LOW DURING THE FORECAST PERIOD. REGION 3974 MAY
INCREASE IN SIZE ENOUGH NEAR THE END OF THE FORECAST PERIOD TO
PRODUCE "M" CLASS EVENTS HOWEVER THIS APPEARS UNLIKELY AT THIS
TIME.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS
ACTIVE UNTIL 1500 WHEN THE FIELD BECAME UNSETTLED THEN QUIET.
THE EFFECTS OF THE SMALL CORONAL HOLE ARE NOT EXPECTED TO
INFLUENCE THE FIELD UNTIL LATE ON 05 OR EARLY 06 NOV. THEREFORE
THE FIELD IS EXPECTED TO BE UNSETTLED UNTIL 05 NOV WHEN
UNSETTLED TO ACTIVE CONDITIONS ARE FORECAST. THE CORONAL HOLE
AND A SMALL SSB SHOULD CAUSE ACTIVE CONDITIONS, WITH A FEW
PERIODS AT MINOR STORM, ON 06 NOV.

III. EVENT PROBABILITIES 04 NOV-06 NOV

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 NOV 150

PREDICTED 04 NOV-06 NOV 140/130/130

90 DAY MEAN 03 NOV 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 02 NOV 025/030

ESTIMATED AFR/AP 03 NOV 018/022

PREDICTED AFR/AP 04 NOV-06 NOV 012/015-015/015-025/025

SOLTERWARN

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