

HFUS 1 BOU 021300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 306A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 02 NOV 1982

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/1200Z TO 02/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. REGION 3966 (N05W46) HAS PROVIDED THE MOST FLARE ACTIVITY INCLUDING SEVERAL C-CLASS X-RAY EVENTS, BUT IT IS REPORTED TO BE SLOWLY DECLINING IN WHITE LIGHT, H-ALPHA, AND MAGNETIC COMPLEXITY. THIS GROUP HAS APPARENTLY LOST THE DELTA MAGNETIC CONFIGURATION THAT IT POSSESSED YESTERDAY. REGION 3961 (S08W74) IS ALSO SIMPLIFYING ALTHOUGH IT HAS EXHIBITED MINOR FLARE ACTIVITY, ARCH FILAMENTS, AND AN ACTIVE DARK FILAMENT. THE CLUSTER OF NEW REGIONS ON THE NORTHEAST LIMB HAVE NOT YET ROTATED FAR ENOUGH ONTO THE DISK FOR ACCURATE ANALYSIS. HOWEVER, REGION 3970 (N22E54) HAS PRODUCED SEVERAL SUBFLARES AND IS CLOSELY ASSOCIATED WITH REGION 3973 (N24E67). REGION 3974 (N05E71) IS THE RETURN OF OLD REGION 3944 WHICH WAS QUIET LAST ROTATION. LIMB SURGING AND AN IMPRESSIVE DARK SURGE ON THE DISK HAVE ACCCOMPANIED THE LIMB TRANSIT OF THIS C-TYPE GROUP.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. REGION 3966 COULD PRODUCE A SIGNIFICANT FLARE BEFORE EXITING, BUT THAT POSSIBILITY SEEMS LESS LIKELY AT THIS TIME. THE REGIONS ON THE NORTHEAST LIMB ARE INTERESTING BUT DO NOT YET APPEAR THREATENING.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS FLUCTUATED FROM NEAR-QUIET TO MINOR STORM LEVELS DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE MOSTLY UNSETLED WITH OCCASIONAL PERIODS AT ACTIVE LEVELS FOR THE NEXT TWO DAYS IN RESPONSE TO HIGH-SPEED SOLAR WIND EMANATING FROM A LOW-LATITUDE SOUTHERN CORONAL HOLE. GENERALLY ACTIVE CONDITIONS COULD COMMENCE ON THE LAST DAY OWING TO THE ENERGETIC WEST LIMB FLARE ON 01 NOV.

III. EVENT PROBABILITIES 03 NOV-05 NOV

CLASS M 20/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 NOV 162

ESTIMATED 02 NOV 155

PREDICTED 03 NOV-05 NOV 145/135/130

90 DAY MEAN 01 NOV 167

V. GEOMAGNETIC A INDICES

OBSERVED AFR 31 OCT 030 AP 01 NOV 030

ESTIMATED AFR 01 NOV 030 AFR/AP 02 NOV 015/020

PREDICTED AFR/AP 03 NOV-05 NOV 015/020-015/020-019/015

SOLTERWARN

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RUN BEDIT FILE RRTX TO EDIT
HNSPUNBEM002R00FOR TAPE
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 306B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 02 NOV 1982.

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
02/1200Z TO 02/2100Z: SOLAR ACTIVITY HAS CONTINUED LOW DURING
THIS PERIOD. THE LARGEST EVENTS RECORDED WERE A C5/SF FROM
REGION 3966 (N06W51) AT 1728UT AND A C5/1N 3961 (S08W82) AT
1624UT. REGION 3966 HAS DECAYED IN BOTH SIZE AND MAGNETIC
COMPLEXITY. THE REGIONS IN THE NORTHEAST HAVE CHANGED LITTLE
THIS PERIOD AND ONLY MINOR POINT BRIGHTENINGS ARE BEING
OBSERVED. NEW REGION TODAY IS A SIMPLE "B" TYPE NUMBERED 3975
(S09W06).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE LOW DURING THIS FORECAST PERIOD. REGIONS 3966 AND 3961
MAY PRODUCE A ISOLATED "M" EVENT HOWEVER THIS IS VERY UNLIKELY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN AT MINOR STORM LEVELS, "K" OF 5 OBSERVED AT BOULDER 1200
TO 1500UT AND 1500 TO 1800UT, DURING THIS PERIOD. THE FIELD IS
EXPECTED TO BE AT ACTIVE LEVELS WITH PERIODS AT MINOR STORM
LEVELS DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 03 NOV-05 NOV

CLASS M 20/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 NOV 157

PREDICTED 03 NOV-05 NOV 145/135/130

90 DAY MEAN 02 NOV 167

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 NOV 028/030

ESTIMATED AFR/AP 02 NOV 028/030

PREDICTED AFR/AP 03 NOV-05 NOV 015/020-015/020-019/015

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