

HFUS 1 BOU 271300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 270A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 27 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
26/1200Z TO 27/1200Z: SOLAR ACTIVITY WAS BEEN MODERATE DURING
THE PAST 24 HOURS. REGION 3917 (N15E19) PRODUCED AN M1/1B FLARE
AT 26/2326Z MAXIMUM WHICH WAS ACCOMPANIED BY MINOR RADIO NOISE
ACROSS THE CENTIMETRIC SPECTRUM. THIS REGION AND ITS NEIGHBOR,
3922 (N14E36), ARE EXHIBITING RAPID GROWTH, INCREASINGLY
COMPLEX MAGNETIC CHARACTERISTICS, AND THE TWO REGIONS MAY BE
INTERACTING. REGION 3919 (S12E18) IS A SOMEWHAT PECULIAR BUT
APPARENTLY SIMPLE REGION CONSISTING OF MANY SMALL SPOTS
THREADED BY A FILAMENT WHICH DISAPPEARED AT APPROXIMATELY
26/1930Z AND THEN HAS PARTIALLY REFORMED. THIS REGION HAS A
PROPENSITY FOR C-CLASS SUBFLARES. SURGING HAS BEEN OBSERVED AT
NW15 NEAR THE LOCATION OF DEPARTING REGION 3908 (N16W93), AND
AT NE14 NEAR THE LOCATION OF RETURNING REGION 3886 WHICH
PRODUCED SEVERAL M-CLASS EVENTS LAST ROTATION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW TO MODERATE. REGIONS 3917 AND 3922 ARE CAPABLE OF ISOLATED
M-CLASS EVENTS. ADDITIONAL DEVELOPMENT IN REGION 3919 AND THE
POSSIBILITY OF AN ACTIVE RETURN OF OLD REGION 3886 INDICATE A
RISE IN THE EXPECTED 10 CM BACKGROUND FLUX AND THE PROBABILITY
OF SIGNIFICANT FLARES OVER THE NEXT THREE DAYS.

IF. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN AT MAJOR STORM LEVELS FOR THE PAST 24 HOURS. THE STORM
BEGAN GRADUALLY NEAR 0900Z ON 26 SEPTEMBER BUT HAS BEEN
QUIETING DOWN SINCE 0300Z TODAY. DURING THE HEIGHT OF THE
STORM, ISEE-3 SPACECRAFT DATA INDICATED THAT THE SOLAR WIND
DISTURBANCE WAS OF MODERATE VELOCITY (550 KM/SEC),
ABOVE-AVERAGE DENSITY (10 CM⁻³), AND WITH A STRONGLY SOUTHWARD
INTERPLANETARY FIELD OF APPROXIMATELY 15 GAMMAS. THE
GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT GENERALLY ACTIVE
LEVELS FOR THE REMAINDER OF TODAY AND TOMORROW, BUT WILL TREND
TOWARD UNSETTLED CONDITIONS BY THE END OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 28 SEP-30 SEP

CLASS M 25/35/45
CLASS X 01/01/05
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	26 SEP	186
ESTIMATED	27 SEP	203
PREDICTED	28 SEP-30 SEP	206/210/210
90 DAY MEAN	26 SEP	163

V. GEOMAGNETIC A INDICES

OBSERVED AFR	25 SEP	011	AP 26 SEP	056
ESTIMATED AFR	26 SEP	040	AFR/AP 27 SEP	030/040
PREDICTED AFR/AP	28 SEP-30 SEP	018/025-015/025-015/020		

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HFUS 3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 270B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 27 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
27/1200Z TO 27/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS
PERIOD WITH ONLY SMALL C-CLASS EVENTS BEING OBSERVED THE
LARGEST WAS A C2/SB FROM REGION 3922 (N15E39) AT 1613UT, MINOR
RADIO ACROSS THE CENTIMETRIC SPECTRUM. REGIONS 3922 AND 3917
(N16E15) HAVE BEEN GENERALLY STABLE THIS PERIOD WITH ONLY MINOR
POINT BRIGHTENINGS BEING OBSERVED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW TO MODERATE. REGIONS 3917 AND 3922 ARE CAPABLE OF ISOLATED
M-CLASS EVENTS. WITH THE RETURN OF OLD REGION 3886 THE 10CM
FLUX AND THE PROBABILITY OF SIGNIFICANT FLARES IS EXPECTED TO
RISE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE THIS PERIOD. THE GEOMAGNETIC FIELD IS EXPECTED TO
REMAIN AT GENERALLY ACTIVE CONDITIONS DURING THIS FORECAST
PERIOD.

III. EVENT PROBABILITIES 28 SEP-30 SEP

CLASS M 25/35/45

CLASS X 01/01/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 SEP 191

PREDICTED 28 SEP-30 SEP 206/210/210

90 DAY MEAN 27 SEP 163

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 SEP 052/056

ESTIMATED AFR/AP 27 SEP 036/040

PREDICTED AFR/AP 28 SEP-30 SEP 018/025-015/025-015/020

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