

HFUS 1 BOU 191300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 262A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 19 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/1200Z TO 19/1200Z: SOLAR ACTIVITY HAS BEEN LOW. ONLY OCCASIONAL SUBFLARES ARE OCCURRING. ASSOCIATED X-RAY BURSTS HAVE BEEN MINOR, USUALLY BELOW THE CLASS C THRESHOLD. NO SIGNIFICANT GROWTH CHANGES HAVE OCCURRED IN ANY OF THE SIX SUNSPOT REGIONS ON THE DISK. NO ACTIVITY HAS BEEN REPORTED ON THE EAST LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. THE ISSE-3 SPACECRAFT INDICATES THE EARTH IS ENCOUNTERING A PARTIAL INFLUENCE OF THE LARGE CORONAL HOLE IN THE NORTHERN HEMISPHERE OF THE SUN. GENERALLY ACTIVE CONDITIONS ARE EXPECTED THROUGH THE 21ST WITH THE FIELD THEN BECOMING UNSETTLED.

III. EVENT PROBABILITIES 20 SEP-22 SEP

CLASS M 15/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 SEP 142

ESTIMATED 19 SEP 138

PREDICTED 20 SEP-22 SEP 136/133/130

90 DAY MEAN 18 SEP 163

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 SEP 007 AP 18 SEP 025

ESTIMATED AFR 18 SEP 023 AFR/AP 19 SEP 017/020

PREDICTED AFR/AP 20 SEP-22 SEP 015/020-015/015-012/010

SOLTERWARN

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HFUS 3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 262B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 19 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
19/1200Z TO 19/2100Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 9
HOURS. HOWEVER, REGION 3907 (S11E01) PRODUCED A SPECTACULAR,
LONG-LIVED C9/2B PARALLEL RIBBON FLARE MAXING AT 1546Z. THE
EVENT BEGAN WITH THE ACTIVATION AT 1149Z OF A LARGE FILAMENT
WHICH WRAPPED AROUND THE REGION TO THE EAST AND EXITED SOUTH
AND WEST SPANNING MORE THAN 20 DEGREES IN LENGTH. THE FLARE
BEGAN AT 1419Z IN THE MID-SECTION OF THE ERUPTING FILAMENT AND
THEN EXTENDED ALONG ITS ENTIRE LENGTH. AT MAXIMUM, THE FLARE
WAS OPTICALLY 2B ALTHOUGH IT LATER SPREAD INTO A 3N
CLASSIFICATION. EJECTA WAS SEEN MOVING WEST FROM THE FLARE,
CAUSING A SUBFLARE IN ADJACENT REGION 3905 (S16W25). RADIO
SIGNATURES WERE CONFINED TO MINOR BURSTS AT DISCRETE
FREQUENCIES BUT INCLUDING 140 FU AT 10 CM. THE FLARE
EFFECTIVELY ENDED NEAR 1800Z AND THE FILAMENT IS REFORMING.
REGION 3907 HAS SHOWN SLIGHT GROWTH IN WHITE-LIGHT BUT REMAINS
A MAGNETICALLY-SIMPLE D-TYPE GROUP. SIGNIFICANT GROWTH HAS
OCCURRED IN REGIONS 3908 (N19E08) AND 3910 (N15E23). BOTH
REGIONS HAVE DEVELOPED IN THEIR TRAILER SECTIONS AND PENUMBRA
MERGING IN 3908 IS LEADING TO A POSSIBLE DELTA CONFIGURATION IN
ITS MIDSECTION. TWO NEW REGIONS EMERGED ON THE DISK TODAY. THEY
ARE 3912 (S10E24) AND 3913 (S08E34), BOTH SMALL B-TYPE GROUPS.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE DURING THE PAST 9 HOURS. ISEE-3 SPACECRAFT DATA
SHOW SOLAR WIND SPEEDS EXCEEDING 600 KM/S AND DENSITIES OF
APPROXIMATELY 6 CM⁻³ FROM A NEGATIVE POLARITY SECTOR. THE
NORTH/SOUTH COMPONENT OF THE INTERPLANETARY FIELD CONTINUES TO
FLUCTUATE WITH OCCASIONAL PERIODS STRONGLY SOUTHWARD. ACTIVE
CONDITIONS ARE EXPECTED TO PERSIST UNTIL LATE ON 21 SEPTEMBER
WHEN A MINOR STORM SHOULD COMMENCE IN RESPONSE TO TODAY'S
FLARE.

III. EVENT PROBABILITIES 20 SEP-22 SEP

CLASS M	15/10/10
CLASS X	01/01/01
PROTON	01/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	19 SEP	137
PREDICTED	20 SEP-22 SEP	136/133/130
90 DAY MEAN	19 SEP	162

V. GEOMAGNETIC A INDICES

OBSERVED	AFR/AP 18 SEP	020/025
ESTIMATED	AFR/AP 19 SEP	018/030
PREDICTED	AFR/AP 20 SEP-22 SEP	015/020-020/025-035/035

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