

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

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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 PENUMBRAL 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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