

HFUS 1 BOU 051300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 248A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 05 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 04/1200Z TO 05/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. C-CLASS X-RAY SUBFLARES HAVE BEEN OBSERVED IN REGIONS 3886 (N14E20) AND 3887 (N06W69), BUT THE LARGEST EVENT WAS A C8 MAXING AT 1014Z ASSOCIATED WITH LOOPS ON THE SOUTHEAST LIMB. A LARGE H-TYPE SPOT GROUP, THE RETURN OF OLD REGION 3856, IS ROTATING INTO VIEW AT SE13. OBSERVATORY REPORTS FOR REGION 3886 AND NEIGHBORING REGION 3885 ARE CONFLICTING IN THEIR ASSESSMENT OF THE MAGNETIC COMPLEXITY OF THESE ACTIVE CENTERS. HOWEVER, BOTH REGIONS ARE GROWING AND BECOMING INCREASINGLY INTERESTING. REGION 3883 (S21W21) IS SHOWING SLIGHT GROWTH IN ITS CENTER AND HAS CONTINUED TO PRODUCE FREQUENT SUBFLARES. SURGING ON THE WEST LIMB (NW03) IS ASSOCIATED WITH REGION 3887 WHICH HAS MAINTAINED A PATTERN OF STEADY GROWTH SINCE ITS EMERGENCE ON THE DISK ON 01 SEPTEMBER. NEW REGION 3894 (N16E70) IS AN A-TYPE SPOT OF FOLLOWER POLARITY WHICH IS PROBABLY THE RETURNING REMNANT OF OLD REGION 3864.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. SIGNIFICANT FLARES ARE LIKELY FROM REGION 3886 AND ARE POSSIBLE FROM REGIONS 3885, 3883, AND THE RETURNING REGION NOW CROSSING THE SOUTHEAST LIME.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO OCCASIONAL MINOR STORM LEVELS FOR THE PAST 24 HOURS. GEOMAGNETIC ACTIVITY IS EXPECTED TO TREND TOWARD UNSETTLED CONDITIONS FOR THE NEXT 24 HOURS, INCREASING ABRUPTLY TO GENERAL MINOR STORM LEVELS LATE ON 06 SEPTEMBER AS THE RESULT OF A MAJOR FLARE EARLY ON 04 SEPTEMBER. THIS FLARE PRODUCED A PROTON ENHANCEMENT AT THE EARTH BEGINNING AT APPROXIMATELY 04/1300Z. PROTON FLUXES AT GREATER THAN 10 MEV ENERGIES ARE HOVERING NEAR THE EVENT THRESHOLD (10 P/CM²/SEC/STER) AT FORECAST TIME. A SMALL PROTON EVENT IS EXPECTED TO BEGIN ON 06 SEPTEMBER WITH THE ARRIVAL OF FLARE-DISTURBED SOLAR WIND.

III. EVENT PROBABILITIES 06 SEP-08 SEP

CLASS M 60/60/60

CLASS X 10/10/10

PROTON 10/10/10

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 SEP 188

ESTIMATED 05 SEP 185

PREDICTED 06 SEP-08 SEP 193/193/190

92 DAY MEAN 04 SEP 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR 03 SEP 023 AP 04 SEP 031

ESTIMATED AFR 04 SEP 028 AF_a/AP 05 SEP 025/035

PREDICTED AFR/AP 06 SEP-08 SEP 319/035-040/040-030/030

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HFUS 3 BCU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 248B

JOINT USAF/NCAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 5 SEPTEMBER 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 05/1200Z
TO 05/2100Z:

SOLAR ACTIVITY CONTINUES AT A LOW LEVEL. WITH THE EXCEPTION OF
SOME MINOR GROWTH, THE DISK REGIONS ARE UNCHANGED. THE NEW
REGION IN THE SOUTHEAST IS NUMBER 3895 (S09E74) AND IS DESCRIBED
AS A LARGE LEADER WITH A SMALL SATELLITE. REGION 3896 (S09E11)
WAS ALSO BORN ON THE DISK DURING THIS PERIOD AND ITS A SMALL
A TYPE GROUP.

IB. SOLAR ACTIVITY FORECAST:

THE LEVEL OF ACTIVITY IS UNLIKELY TO CHANGE WITH C CLASS FLARES
DOMINATING AND M CLASS FLARES POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. ACTIVE CONDITIONS SHOULD
CONTINUE UNTIL LATE ON 6 SEP WHEN THE FLARE EFFECTS FROM THE M6
ON 4 SEPT IS EXPECTED TO IMPACT THE FIELD. PROTON ENHANCEMENTS ARE
EXPECTED TO EXCEED EVENT THRESHOLDS AT THE TIME OF THE STORM.

III. EVENT PROBABILITIES 06-08 SEPT

CLASS M 60/60/60

CLASS X 10/10/10

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 SEPT 177

PREDICTED 06-08 SEPT 180/182/182

90-DAY MEAN 05 SEP 170

V. GEOMAGNETIC A. INDICES

OBSERVED AFR/AP 04 SEP 28/31

ESTIMATED AFR/AP 05 SEP 27/35

PREDICTED AFR/AP 06-08 SEPT 19/35 - 40/40 - 30/30

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