

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 (N14E23) 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 LIMB.

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

07 DAY MEAN 04 SEP 173

V. GEOMAGNETIC A INDICES

OBSERVED AFR 03 SEP 023 AP 04 SEP 031

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

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

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HFUS 3 PCU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 248P

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 IS 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 SEPT 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 SEPT 28/31

ESTIMATED AFR/AP 05 SEPT 27/35

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

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