

HFUS 1 BOU 171300

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 260A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1300Z 17 SEPT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 17/1200Z:

SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS WITH REGION 3329 (N19W10) PRODUCING AN M1/SB FLARE ON SEPT 16/1344Z. FREQUENT SUBFLARE ACTIVITY HAS BEEN OBSERVED IN 3329, REGION 3332 (N15W15), AND THE AREA OF INTERACTION BETWEEN THEM. A VERY BRIGHT ACTIVE SURGE OF MAXIMUM EXTENT .09 SOLAR RADIUS OCCURRED NEAR 0600Z FROM DEPARTING REGION 3317 (N09W97). REGION 3344 (N10E63) HAS EXPERIENCED RAPID GROWTH IN WHITE LIGHT AND IS NOW AN F-TYPE GROUP. NEW REGION 3347 (S09E76) JUST ROUNDING THE EAST LIMBE APPEARS TO BE A COMPACT D-TYPE BIPOLAR GROUP. NONE OF THE REGIONS NOW ON THE VISIBLE DISK ARE MAGNETICALLY COMPLEX.

IB. SOLAR ACTIVITY FORECAST:

WITH THE DEPARTURE OF 3317, SOLAR ACTIVITY IS EXPECTED TO BE LOW BUT WITH THE POSSIBILITY OF ISOLATED M-CLASS FLARES FROM 3332, 3329, AND 3344.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETLED FOR THE PAST 24 HOURS. THESE CONDITIONS ARE EXPECTED TO PERSIST THROUGH TOMORROW WITH ACTIVE CONDITIONS COMMENCING ON 19 SEPT DUE TO POSSIBLE EFFECTS FROM SOLAR FLARES AND IMPLIED CORONAL TRANSIENTS.

III. EVENT PROBABILITIES 18-20 SEPT

CLASS M 40/30/30

CLASS X 05/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 SEPT 225

ESTIMATED 17 SEPT 225

PREDICTED 18-20 SEPT 220/220/220

90-DAY MEAN 16 SEPT 206

V. GEOMAGNETIC A INDICES

OBSERVED AFR 15 SEPT 10 AP 16 SEPT 11

ESTIMATED AFR 16 SEPT 07 AFR/AP 17 SEPT 07/10

PREDICTED AFR/AP 18/20 SEPT 10/10 - 20/20 - 15/18

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3 BOU 172200  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO.  
SDF NUMBER 260B  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 17 SEPT 1981  
I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z  
TO 17/2100Z:  
SOLAR ACTIVITY HAS BEEN LOW. A SLOW RISE/SLOW DECAY C3/SN FLARE  
IN THE COMPLEX OF 3329/3332 (N 19W 17) AND (N 15W 21) RESPECTIVELY IS  
THE MOST IMPRESSIVE ACTIVITY OF THE PAST 10 HOURS. THE INTERACTION  
BETWEEN THESE TWO REGIONS CONTINUES AND THE ARCH FILAMENTS ARE STILL  
PRESENT. REGION 3347 (S08E70) MAY NOT BE FULLY ON THE DISK YET AS  
PLAGE APPEARS TO TRAIL TO THE LIMB. ALL OF THE VISIBLE REGIONS  
REMAIN MAGNETICALLY SIMPLE AS BETA TYPES OR LESS.  
I.B. SOLAR ACTIVITY SHOULD CONTINUE LOW BUT ISOLATED "M" LEVEL  
ACTIVITY WILL REMAIN A POSSIBILITY.  
II. GEOPHYSICAL SUMMARY AND FORECAST:  
THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETLED. QUIET TO  
UNSETLED CONDITIONS SHOULD CONTINUE THROUGH 18 SEP WITH ACTIVE  
CONDITIONS LIKELY ON 19 AND 20 SEP.  
III. EVENT PROBABILITIES 18-20 SEP  
CLASS M 40/30/30  
CLASS X 05/01/05  
PROTON 05/01/05  
PCAF GREEN  
IV. OTTAWA 10.7 CM FLUX  
OBSERVED 17 SEP 219  
PREDICTED 18-20 SEP 220/220/220  
90-DAY MEAN 17 SEP 207  
V. GEOMAGNETIC A. INDICES  
OBSERVED AFR/AP 16 SEPT 06/11  
ESTIMATED AFR/AP 17 SEP 08/10  
PREDICTED AFR/AP 18-20 SEP 10/10 - 20/20 - 15/18  
SOLTERWARN  
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