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HFUS 1 BOU 301300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 334A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 30 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/1200Z TO 30/1200Z: SOLAR ACTIVITY ROSE TO A MODERATE LEVEL WITH THE OCCURRENCE OF AN M2/BRIGHT SURGE AT 1645Z FROM BEYOND THE EAST LIMB AT N13. THE EVENT WAS FOLLOWED BY A LOOP PROMINENCE SYSTEM WHICH EXTENDED ALONG THE LIMB N01-N12 AND WHICH ROSE TO 0.16 SOLAR RADIUS ABOVE THE LIMB. THE SOURCE OF THE EVENT IS PROBABLY THE RETURN OF REGIONS 3451/3454. A SINGLE SUNSPOT (REGION 3487) AT N06E86 MARKS THIS RETURN. NO SIGNIFICANT RADIO BURSTS WERE RECORDED WITH THIS EVENT. THE LARGEST EVENT OTHERWISE WAS A C9/SB FLARE AT 1930Z IN REGION 3477(S11E12). THIS REGION DOMINATES THE SOLAR DISK WITH ITS EXTENDED CLASS F SPOT GROUP WITH HIGH SPOT COUNT AND ONLY MODERATE AREA. MINOR GROWTH CONTINUES IN THE TRAILING PORTION OF THE REGION WHERE THE MAGNETIC FIELDS ARE MOST COMPLEX. GROWTH HAS NEARLY CEASED IN REGION 3478 (N18W40) WHICH HAS ATTAINED A CLASS E SPOT GROUP WITH AN AREA EQUAL TO REGION 3477. REGION 3484 (N16W04) HAS DEVELOPED RAPIDLY TODAY TO A SMALL CLASS D SPOT GROUP. A SMALL SPOT GROUP HAS EMERGED AT S19E63 (REGION 3486). A C9 X-RAY EVENT AT 1143Z WAS UNOBSERVED OPTICALLY AS WEATHER CONTINUES TO SEVERELY LIMIT SOLAR ANALYSIS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH RETURNING REGIONS ADDING AS MUCH CLASS M FLARE POTENTIAL AS REGIONS 3477 AND 3478. THE LOOP PROMINENCES NEAR REGION 3487 SUGGEST SOME POTENTIAL FOR CLASS X AND PROTON EMISSIONS. SOLAR BACKGROUND EMISSIONS ARE EXPECTED TO CONTINUE A RAPID RISE FOR AT LEAST ANOTHER DAY AS REGIO GROWTH ADDS TO THE EFFECT OF RETURNING REGIONS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN VERY QUIET FOR THE PAST 24 HOURS. NO SIGNIFICANT INCREASE IN ACTIVITY IS EXPECTED FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 01 DEC-03 DEC

CLASS M 70/70/70

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 NOV 226

ESTIMATED 30 NOV 238

PREDICTED 01 DEC-03 DEC 250/258/255

90 DAY MEAN 29 NOV 217

V. GEOMAGNETIC A INDICES

OBSERVED AFR 28 NOV 005 AP 29 NOV 005

ESTIMATED AFR 29 NOV 005 AFR/AP 30 NOV 004/007

PREDICTED AFR/AP 01 DEC-03 DEC 006/012-007/012-012/015

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HFUS 3 BOU 302200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 334B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 0200Z 30 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
30/1200Z TO 30/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE
PAST 9 HOURS. THE LARGEST FLARE OBSERVED DURING THAT PERIOD WAS
A C5/1N FROM REGION 3477 (S11E05). SEVEN OTHER SMALL (C1 AND
C2'S) C-CLASS SUBFLARES WERE REPORTED FROM REGIONS CURRENTLY
VISIBLE ON THE DISK. REGIONS 3488 (N14E12) AND 3489 (S04E56)
WERE NUMBERED SINCE THE 1200Z MESSAGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW TO MODERATE. MAGNETIC MEASUREMENTS MADE AT BOULDER WITH
POOR SEEING INDICATE POSSIBLE SIMPLIFICATION IN BOTH REGION
3477 AND 3478 (N13W46). CONSEQUENTLY, X-RAY EVENT PROBABILITIES
COULD START TO FALL, PENDING DEVELOPMENTS AT THE EAST LIMB.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN VERY QUIET DURING THE PAST 9 HOURS. NO SIGNIFICANT
INCREASE IN ACTIVITY IS EXPECTED FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 01 DEC-03 DEC

CLASS M 70/70/70

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 NOV 238

PREDICTED 01 DEC-03 DEC 250/258/255

90 DAY MEAN 30 NOV 217

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 29 NOV 004/005

ESTIMATED AFR/AP 30 NOV 002/005

PREDICTED AFR/AP 01 DEC-03 DEC 006/012-007/012-012/015

SOLTERWARN

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