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HFUS 1 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 301

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 28 OCTOBER 1978

IA. SOLAR ACTIVITY WAS MODERATE DURING THE PAST 24 HOUR PERIOD.
REGION 1365 (N18W02) HAD AN M3/2B FLARE WITH MINOR RADIO BURSTS
AT 1555Z. IT IS APPARENTLY MAGNETICALLY COMPLEX WITH STRONG
NEUTRAL LINE KINKS AND BETA GAMMA CONFIGURATION. REGION 1365
CONTINUES TO HAVE BRIGHT POINTS AND PLAGE FLUCTUATIONS. REGION
1364 (S18W41) ALSO HAD BRIGHT POINTS AND PLAGE FLUCTUATIONS
DURING THE PERIOD. REGION 1355 (N26W57) HAD A C2/SUBFAINT FLARE
AND PLAGE FLUCTUATIONS.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE OVER THE NEXT 24
HOURS. REGIONS 1355, 1364, AND 1365 ARE CAPABLE OF PRODUCING
MODERATELY ENERGETIC FLARES. REGION 1365 IN PARTICULAR SHOULD
BE MONITORED FOR ENERGETIC EVENTS AND FURTHER DEVELOPMENT.

II. THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO UNSETTLED LEVELS.
THE INFLUENCE OF THE CORONAL HOLE PASSAGE ON THE FIELD IS
DIMINISHING AND THE GEOMAGNETIC FIELD ACTIVITY SHOULD CONTINUE
TO DECLINE. UNSETTLED CONDITIONS SHOULD GENERALLY PREVAIL OVER
THE NEXT 24-48 HOURS.

III. EVENT PROBABILITIES 29 OCTOBER - 31 OCTOBER

CLASS M 50/60/70

CLASS X 10/20/30

PROTON 10/20/30

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 OCTOBER 154

PREDICTED 29-31 OCTOBER 154/153/155

90-DAY MEAN 28 OCTOBER 144

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 OCTOBER 19

ESTIMATED AFR/AP 28 OCTOBER 14/18

PREDICTED AFR/AP 29-31 OCTOBER 10/18 - 08/14 - 10/24

SOLTERWARN

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HFUS 1 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 301

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 28 OCTOBER 1979

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. ACTIVITY HAS CONSISTED OF A VERY LIMITED NUMBER OF SMALL C-CLASS FLARES AND SUB FLARES. A PAIR OF C2 CLASS X-RAY FLARES OCCURRED AT 0056Z MAXIMUM AND 1835Z MAXIMUM BUT HAD NO OPTICAL CORRELATION. REGIONS 2078 (S18W23) AND 2085 (N14W14) PRODUCED SMALL SUBFLARES. REGION 2084 (N19E58) HAS BEEN DISAPPOINTING SINCE ITS APPEARANCE ON THE LIMB, DISPLAYING A BETA GAMMA MAGNETIC COMPLEXITY BUT PRODUCING LITTLE MORE THAN BRIGHT POINTS AND PLAGE FLUCTUATIONS. NEW REGION 2087 (N35W10) EMERGED ON THE DISK AS A SMALL A TYPE GROUP. WHILE REGION 2088 (S11E79) AND 2089 (N27E71) HAVE COME OVER EAST LIMB.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW EVEN THOUGH THERE IS THE POSSIBILITY OF AN ISOLATED M-CLASS EVENT FROM EITHER REGION 2084 OR THE 2078/2074 COMPLEX. THE SMALL H-TYPE SPOT OF 2074 APPEARS TO BE INTRUDING INTO THE TRAILING PORTION OF 2078 CAUSING A TIGHT GRADIENT. BRIGHT SURGES HAVE BEEN REPORTED ON BOTH THE NORTHEAST AND SOUTHEAST LIMBS POSSIBLY INDICATING THE RETURN OF THE ACTIVE LONGITUDES OF LAST ROTATION.

II. THE GEOMAGNETIC FIELD WAS PREDOMINATELY UNSETTLED THROUGH THE FIRST HALF OF THE PERIOD WITH ACTIVE CONDITIONS RECORDED UP TO 2200Z. THE FIELD WILL REMAIN SLIGHTLY ACTIVE THROUGH THE NEXT 12 HOURS FOLLOWED BY UNSETTLED CONDITIONS DURING THE REMAINDER OF THE PERIOD.

III. EVENT PROBABILITIES 29 OCTOBER - 31 OCTOBER

CLASS M 40/40/60

CLASS X 05/05/10

PROTON 01/01/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 OCT 214

PREDICTED 29-31 OCT 216/218/220

90-DAY MEAN 28 OCT 197

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 OCT 04

ESTIMATED AFR/AP 28 OCT 14/16

PREDICTED AFR/AP 29-31 OCT 10/12 08/10 10/12

SOLTERWARN

BT