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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 292A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1300Z 19 OCT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
18/1200Z TO 19/1200Z:

SOLAR ACTIVITY WAS LOW DURING THIS PERIOD. THE LARGEST EVENT WAS
A C8/2B FLARE FROM REGION 3406 (S08E14) AT 19/0323Z. THERE HAS
NOT BEEN TOO MUCH CHANGE IN THE SUN DURING THE PAST 24 HOURS.
REGION 3403 (S11W09) STILL DOMINATES THE CENTER OF THE SOLAR DISK.
THE REGION CURRENTLY POSSESSES 1800 MILLIONTHS SPOT AREA AND A
BETA DELTA MAGNETIC CONFIGURATION. REGION 3390 (S17W70) HAS
CONTINUED TO DETERIORATE AS IT APPROACHES THE WEST LIMB.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. THE SUN HAS PRODUCED
SEVERAL DOZEN FLARES THE LAST 3 DAYS, BUT NONE OF THESE ARE AS
LARGE AS THE TYPE FLARE THE SUN IS CAPABLE OF PRODUCING - IN
PARTICULAR, REGION 3403 IS STILL VERY LIKELY TO PRODUCE AN X-CLASS
EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS QUIET UNTIL 18/1800Z BUT HAS BEEN UNSETTLED
TO ACTIVE SINCE THEN. THERE IS A CHANCE OF SOME MINOR RECURRENT
ACTIVITY ON 22 OR 23 OCT. OTHERWISE, UNSETTLED CONDITIONS SHOULD
BE THE RULE FOR THE NEXT 72 HOURS.

III. EVENT PROBABILITIES; 20 - 22 OCT

CLASS M 90/90/90

CLASS X 30/20/20

PROTON 30/20/20

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 18 OCT 305

ESTIMATED 19 OCT 300

PREDICTED 20-22 OCT 285/275/260

90 DAY MEAN 18 OCT 223

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 OCT 13 AP 18 OCT 13

ESTIMATED AFR 18 OCT 04 AFR/AP 19 OCT 15/15

PREDICTED AFR/AP 20-22 OCT 10/12 10/12 10/12

SOLTERWARN

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HFUS 3 80U 192200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 292R

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 19 OCTOBER 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z
TO 19/2100Z: SOLAR ACTIVITY HAS BEEN LOW. VERY LITTLE REAL
TIME DATA HAVE BEEN RECEIVED. REGION 3390 (S17W74) CONTINUES
A SLOW DECAY WITH LITTLE FLARE ACTIVITY. REGION 3402 (S19W60)
HAS CONTINUED TO GROW NOW BEING A MODERATE SIZE CLASS E GROUP
BUT STILL BASICALLY BIPOLAR. REGION 3403 (S10W14) HAS DECAYED
SLIGHTLY BUT THERE ARE INDICATIONS OF INCREASING SHEAR ALONG
THE LONG NEUTRAL LINE THROUGH THIS REGION. REGION 3397 HAS
BEEN COMBINED WITH 3390.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE AT
GENERALLY MODERATE LEVELS. THE FORECAST FOR CLASS X FLARES IS
SHOWN TO BE SLOWLY DECREASING DUE MAINLY TO THE DECAY IN AND
IMMINENT WEST LIMB TRANSIT OF 3390. HOWEVER, THE PROBABILITY
OF A MAJOR FLARE FROM 3403 REMAINS DUE TO RECENT MAGNETIC
FIELD CHANGES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD
HAS BEEN UNSETTLED SINCE THE DISTURBANCE EARLIER TODAY.
UNSETTLED CONDITIONS ARE EXPECTED TO CONTINUE FOR THE NEXT
THREE DAYS.

III. EVENT PROBABILITIES 20 OCTOBER - 22 OCTOBER

CLASS M 90/80/80

CLASS X 30/20/20

PROTON 30/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 OCTOBER 281

PREDICTED 20-22 OCTOBER 270/260/255

90-DAY MEAN 19 OCTOBER 224

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 OCTOBER 05/07

ESTIMATED AFR/AP 19 OCTOBER 16/18

PREDICTED AFR/AP 20-22 OCTOBER 10/12 - 10/12 - 10/12

SOLTERWARN

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