

HFUS 3 BOU 071300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 281A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 07 OCT 1980

IA. SOLAR ACTIVITY IS BEGINNING TO INCREASE. THE APPEARANCE OF A LARGE REGION (10 DEG N-S) ON THE SOUTHEAST LIMB DURING THE PAST 12 HOURS HAS ALREADY BEEN THE SOURCE OF AN M1 XRAY BURST WITH A B FLARE. THIS REGION, NUMBERED 2725 (S07E89), IS LOCATED IN THE VICINITY WHERE OLD REGION 2672 SHOULD RETURN. LITTLE ELSE IS KNOWN ABOUT THIS REGION'S CHARACTER OR STRUCTURE AT THIS TIME BUT IT IS BELIEVED TO HAVE PORTIONS STILL BEHIND THE LIMB. REGION 2717 (N15E52) REMAINS LARGE AND IMPRESSIVE IN ITS OPTICAL CHARACTERISTICS BUT HAS PRODUCED ONLY FOUR SMALL FLARES DURING THE PAST 24 HOURS. THE REST OF THE DISK REGIONS APPEAR SIMPLE, STABLE AND UNIMPRESSIVE.

IB. SOLAR ACTIVITY SHOULD BE NEAR MODERATE LEVELS DURING THE COMING 24 HOURS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED SO FAR THIS ZULU DAY. A LARGE CORONAL HOLE CENTERED NEAR S18W16 COULD BE REFLECTED IN THE GEOMAGNETIC FIELD BY LATE ON THE 8TH OR EARLY ON THE 9TH OF OCTOBER.

III. EVENT PROBABILITIES: 08 - 10 OCT

CLASS M 60/70/80

CLASS X 05/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 06 OCT 189

ESTIMATED 07 OCT 195

PREDICTED 08 - 10 OCT 200/204/208

90 DAY MEAN 06 OCT 182

V. GEOMAGNETIC A INDICES

OBSERVED AFR 05 OCT 19 AP 06 OCT 15

ESTIMATED AFR 06 OCT 16 AFR/AP 07 OCT 12/12

PREDICTED AFR/AP 08 - 10 OCT 12/10-16/17-18/17

SOLTERWARN

BT

HFUS 1 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO
SOF NUMBER 281B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 07 OCTOBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS.
FOUR M1 X-RAY EVENTS HAVE OCCURRED, TWO FROM REGION 2717
(N15E50) AND TWO FROM 2725 (S10E76). THE LARGEST EVENTS
WERE AN M1/1B FROM 2725 MAXING AT 0930 UT, AND AN M1/1B FROM
2717 MAXING AT 1432 UT. MINOR RADIO BURSTS HAVE BEEN RECORDED
THROUGHOUT THE DAY. REGION 2717 HAS DEVELOPED INTO A VERY
COMPLEX REGION OF BETA-GAMMA-DELTA MAGNETIC CONFIGURATION.
TWO NEW REGIONS HAVE BEEN NUMBERED NEAR 2725. THEY ARE
2726 (S14E72), A D-TYPE GROUP, AND 2727 (S12E62), A B-TYPE
GROUP. A LARGE DARK FILAMENT EXTENDING FROM S10 TO S30
NEAR HELIO LONGITUDE W40 ON OCTOBER 6/1422 UT DISAPPEARED
BEFORE 1746 UT TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE TO BE MODERATE
WITH INCREASING PROBABILITY OF X-CLASS EVENTS FROM 2717
AND THE SOUTHEAST 2725/2726 COMPLEX.

II. THE GEOMAGNETIC FIELD HAS BEEN MOSTLY UNSETTLED FOR THE
PAST 24 HOURS. THE FIELD IS EXPECTED TO REMAIN UNSETTLED WITH
SOME QUIET PERIODS TOMORROW INCREASING TO NEARLY ACTIVE
CONDITIONS ON THE FOLLOWING TWO DAYS IN RESPONSE TO A LARGE
SOUTHERN CORONAL HOLE.

III. EVENT PROBABILITIES 08 OCTOBER - 10 OCTOBER

CLASS M 70/30/90

CLASS X 10/15/20

PROTON 05/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 OCTOBER 204

PREDICTED 08-10 OCTOBER 210/215/218

90-DAY MEAN 07 OCTOBER 183

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 OCTOBER 16/15

ESTIMATED AFR/AP 07 OCTOBER 10/12

PREDICTED AFR/AP 08-10 OCTOBER 12/10 - 16/17 - 18/17

SOLTERWARN

BT