

HFXUS 1 BOU 161300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 075A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 16 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 16/1200Z: SOLAR ACTIVITY WAS MODERATE DUE TO A M1/1B EVENT FROM REGION 3644 (N09E12) AT 15/2338UT. THIS EVENT WAS ACCCOMPANIED BY MINOR RADIO BURSTS AND TYPE II/IV SWEEPS. REGION 3644 HAS APPARENTLY STABILIZED THIS PERIOD. NEW REGION 3649 (N14E31) HAS PRODUCED SEVERAL SMALL C-CLASS EVENTS. REGION 3643 (S06E10) HAS ALMOST DOUBLED IN SIZE DURING THE PAST 24 HOURS AND CONTAINS A DELTA MAGNETIC CONFIGURATION. RAPID GROWTH IN REGION 3649 IS ALSO BEING OBSERVED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TRENDING TOWARDS MODERATE DURING THE FORECAST PERIOD AS REGION 3643 CONTINUES TO DEVELOP. REGION 3644 MAY AGAIN PRODUCE AN ISOLATED M-CLASS EVENT IF RAPID CHANGE BEGINS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY QUIET THIS PERIOD. THE FIELD IS EXPECTED TO CONTINUE QUIET TO SLIGHTLY UNSETTLED UNTIL LATE ON 16 MARCH WHEN THE EFFECTS OF A EQUATORIAL CORONAL HOLE ARE EXPECTED TO INCREASE THE FIELD TO ACTIVE LEVELS. SHORT PERIODS AT MINOR STORM LEVEL MAY OCCUR 18 TO 19 MARCH.

III. EVENT PROBABILITIES 17 MAR-19 MAR

CLASS M 30/50/60

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 MAR 211

ESTIMATED 16 MAR 225

PREDICTED 17 MAR-19 MAR 218/218/210

90 DAY MEAN 15 MAR 194

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 MAR 008 AP 15 MAR 007

ESTIMATED AFR 15 MAR 004 AFR/AP 16 MAR 007/007

PREDICTED AFR/AP 17 MAR-19 MAR 014/016-018/016-020/020

SOLTERWARN

BT

HFXUS BOU 161300

PREDM 03017 05018 06019

PREDX 00117 00118 00119

PREDP 00117 00118 00119

PCAF 00117

TENCM 21817 21818 21019

AFRED 01417 01818 02019

AFAPP 01617 01618 02019

KKK 11233 32333 34433

BT

HFUS 3 BOU 162200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 075B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 16 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 16/2100Z: SOLAR ACTIVITY DURING THE LAST NINE HOURS HAS BEEN LOW WITH ONLY LOW LEVEL CLASS C AND SUBFLARES OCCURRING. STRONG SUNSPOT GROWTH HAS CONTINUED IN REGIONS 3643 (S06E06) AND 3649 (N14E25). NEW FLUX IS EMERGING SOUTH OF THE LEADER OF 3644 (N08E11) AND MAY HAVE TRIGGERED THE M1 FLARE WHICH OCCURRED AT 15/2338Z. A SMALL H SPOT, REGION 3650 (N18E73), HAS ROTATED ON TO THE DISK.

IB. SOLAR ACTIVITY FORECAST: WITH THE CONTINUED SUNSPOT AND MAGNETIC COMPLEXITY GROWTH IN REGIONS 3643, 3644, AND 3649, THE SOLAR ACTIVITY IS EXPECTED TO BECOME MODERATE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET. WITH THE IMMINENT ARRIVAL OF THE CORONAL HOLE RELATED HIGH SPEED STREAM, THE FIELD IS EXPECTED TO BECOME ACTIVE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 17 MAR-19 MAR

CLASS M 50/60/70

CLASS X 05/05/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 MAR 230

PREDICTED 17 MAR-19 MAR 235/238/238

90 DAY MEAN 16 MAR 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 MAR 005/007

ESTIMATED AFR/AP 16 MAR 004/007

PREDICTED AFR/AP 17 MAR-19 MAR 014/016-018/016-020/025

SOLTERWARN

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HXUS BOU 162200
PREDM 05017 06018 07019
PREDX 00517 00518 01019
PREDP 00517 00518 00519
PCAFT 00117
TENCM 23517 23818 23819
AFRED 01417 01818 02019
AFAPP 01617 01618 02519
BT