

HFUS 1 BOU 201300
 FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
 SDF NUMBER 110A
 JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
 ISSUED 1300Z 20 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
 19/1200Z TO 20/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING
 THE PAST 24 HOURS. REGION 3696 (S18W38) DEVELOPED A STRONG
 POSITIVE-POLARITY SPOT WITHIN ITS LEADER PENUMBRA (A DELTA
 CONFIGURATION) AND THEN PRODUCED AN M2/1B PARALLEL RIBBON FLARE
 MAXING ON 19 APRIL AT 1812 UT. THIS EVENT HAD A MODERATE RADIO
 SIGNATURE INCLUDING A BURST OF 260 FLUX UNITS AT 2695 MHZ AND
 CAUSED A SHORT WAVE FADE TO 15 MHZ. NO HIGH-ENERGY PROTONS
 HAVE BEEN DETECTED AT 1 AU FROM THIS EVENT. RECENT OBSERVATORY
 REPORTS INDICATE THAT 3696 HAS SINCE STABILIZED AND NO LONGER
 APPEARS THREATENING. INSTEAD, ATTENTION IS FOCUSED ON THE
 NORTHEAST LIMB WHERE AS MANY AS 5 SEPARATE REGIONS MAY BE
 PACKED INTO AN AREA EXTENDING FROM N02 TO N20 AND WITHIN 30
 DEGREES OF THE LIMB. PORTIONS OF THIS AREA ARE FLUCTUATING AND
 SUBFLARES HAVE BEEN ATTRIBUTED TO 3702 (N12E67) AND 3701
 (N06E63). REGION 3703 (N18E62) IS REPORTED TO BE GROWING AND
 HAS AN ARCH FILAMENT SYSTEM. HOWEVER, THE ARRIVAL OF THESE
 REGIONS HAS NOT SIGNIFICANTLY INCREASED THE LEVEL OF THE 10.7
 CM INTEGRATED SOLAR FLUX. A NEW REGION IS DEVELOPING NEAR
 N22E30. ALL OTHER REGIONS ARE STABLE AND THE LIMBS ARE REPORTED
 TO BE QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
 LOW BUT WITH THE POSSIBILITY OF A REPEAT PERFORMANCE OF M-CLASS
 ACTIVITY FROM REGION 3696.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
 BEEN UNSETTLED TO ACTIVE FOR THE PAST 24 HOURS. SOLAR WIND
 DATA FROM THE ISEE-3 SPACECRAFT INDICATES FLUCTUATING
 INTERPLANETARY CONDITIONS TENDING TOWARD HIGH SPEEDS AND LOW
 DENSITIES FROM A POSITIVE POLARITY SECTOR. THIS IS CONSISTENT
 WITH AN EARLY ARRIVAL OF A HIGH-SPEED STREAM FROM AN EQUATORIAL
 CORONAL HOLE. THIS STREAM IS EXPECTED TO INFLUENCE THE
 GEOMAGNETIC FIELD FOR THE NEXT THREE DAYS RESULTING IN
 UNSETTLED TO MOSTLY ACTIVE CONDITIONS PEAKING ON 22 APRIL.

III. EVENT PROBABILITIES 21 APR-23 APR

CLASS M	30/30/30
CLASS X	01/01/01
PROTON	01/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	19 APR	144
ESTIMATED	20 APR	145
PREDICTED	21 APR-23 APR	151/153/155
90 DAY MEAN	19 APR	202

V. GEOMAGNETIC A INDICES

OBSERVED AFR	18 APR	013	AP 19 APR	011
ESTIMATED AFR	19 APR	013	AFR/AP 20 APR	015/020
PREDICTED AFR/AP	21 APR-23 APR	015/012-018/017-012/012		

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HXUS BOU 201300
 PREDM 03021 03022 03023
 PREDX 00121 00122 00123
 PREDP 00121 00122 00123
 PCAFT 00121
 TENCN 15121 15322 15523
 AFRED 01521 01822 01223
 AFAPF 01221 01722 01223
 KKK 33333 32223 34332
 BT

HFUS 3 BOU 202200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 110B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 20 APR 1982
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
20/1200Z TO 20/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS
PERIOD. REGION 3703 (N18E55) IS REPORTED TO CONTAIN AN STRONG
ARCH FILAMENT SYSTEM. NEW REGION 3704 (N23E24) IS A SIMPLE
A-TYPE GROUP. ALL OTHER REGIONS ARE REPORTED AS STABLE OR
LITTLE CHANGED.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE AT A LOW LEVEL DURING THIS FORECAST.
II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE TO UNSETTLED THIS PERIOD. THE FIELD IS EXPECTED TO
BE ACTIVE UNTIL LATE ON 22 APRIL WHEN UNSETTLED CONDITIONS ARE
EXPECTED TO RETURN.
III. EVENT PROBABILITIES 21 APR-23 APR
CLASS M 30/30/30
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN
IV. OTTAWA 10.7 CM FLUX
OBSERVED 20 APR 143
PREDICTED 21 APR-23 APR 151/153/155
90 DAY MEAN 20 APR 202
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 19 APR 008/011
ESTIMATED AFR/AP 20 APR 018/020
PREDICTED AFR/AP 21 APR-23 APR 015/012-018/017-012/012
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HXUS BOU 202200
PREDM 03021 03022 03023
PREDX 00121 00122 00123
PREDP 00121 00122 00123
PCAFT 00121
TENCM 15121 15322 15523
AFRED 01521 01822 01223
AFAPF 01221 01722 01223
BT