

HFUS 1 BOU 051315

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 125A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY,
ISSUED 1200UT 05 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
04/1200UT TO 05/1200UT:

SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. THE
LARGEST X-RAY BURST HAS BEEN A C5 AT 05/1047Z, NO OPTICAL
REPORT RECEIVED. REGIONS 3079 (N07W03) AND 3080 (N16E01) ARE
MAGNETICALLY COMPLEX AND CAPABLE OF PRODUCING ENERGETIC FLARES.
ALL REGIONS IN THE NE QUADRANT SHOW SIGNS OF INSTABILITY: BRIGHT
POINTS, PLAGE FLUCTUATIONS, AND, ACTIVE FILAMENTS. X-RAY BURSTS
HAVE BEEN OCCURRING IN CLUSTERS INDICATING PROBABLE CONTINU-
ATION OF SYMPATHETIC FLARES. SPOTS HAVE CROSSED EAST LIMB AT NE12,
NE06, AND SE04. LEARMONT REPORTED A SPRAY AT NE05 BEGINNING AT
0205Z.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE BASED ON THE GENERAL
INSTABILITY EXHIBITED BY THE REGIONS IN THE NE QUADRANT.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET. QUIET CONDITIONS ARE
EXPECTED TO CONTINUE THROUGH THE FIRST HALF OF THE FORECAST
PERIOD WITH A TREND TOWARD INCREASING UNSETLEDNESS THE LATTER
HALF OF THE PERIOD.

III. EVENT PROBABILITIES: 06-08 MAY

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 04 MAY 218

ESTIMATED 05 MAY 228

PREDICTED 06-08 MAY 240/250/255

90 DAY MEAN 04 MAY 211

V. GEOMAGNETIC A INDICES

OBSERVED AFR 03 MAY 06 AP 04 MAY 10

ESTIMATED AFR 04 MAY 05 AFR/AP 05 MAY 04/08

PREDICTED AFR/AP 06-08 MAY 06/07 08/10 10/15

SOLTERWARN

BT

HFUS

3-POU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER: 125B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 05 MAY 1981

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
05/1200UT TO 05/2200UT:

AN X1/3B FLARE FROM REGION 3080 (N 17W 07) AT 05/1409UT (MAX)
HAS BEEN THE HIGHLIGHT OF THE DAY. THIS EVENT WAS ACCCOMPANIED
BY FIXED FREQUENCY BURST FROM 606 MHZ TO 15400 MHZ AND SHORT-
WAVE FADES UP TO 22 MHZ. REGION 3080 HAS BEEN RELATIVELY QUIET
SINCE THAT TIME BUT STILL APPEARS TO BE A THREAT. THE DELTA
CONFIGURATION REMAINS AND THE OVERALL STRUCTURE OF THE REGION
WAS NOT DIMINISHED BY THE FLARE. REGION 3079 (N 07W 10) IS NOT
MUCH CHANGED SINCE YESTERDAY. HOWEVER, ITS MAGNETIC ALIGN-
MENT SEEMS TO BE A SIMPLE BETA. OLD RETURNING REGIONS 3035 AND
3038 APPEAR TO BE ON THE DISK AND ARE NUMBERED 3098 (N 13E 68) AND
3099 (N 08E 74) RESPECTIVELY.

I B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT ITS PRESENT LEVEL.
REGIONS 3080 AND 3079 ARE LIKELY TO PRODUCE ADDITIONAL "M"
CLASS ACTIVITY WITH ISOLATED "X" CLASS ACTIVITY POSSIBLE.

I I. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET. QUIET TO UNSETLED CON-
DITIONS ARE EXPECTED TO PERSIST UNTIL 7 MAY WHEN THE
SHOCK OF TODAYS X1/3B FLARE SHOULD IMPACT THE NEAR EARTH
ENVIRONMENT. ACTIVE CONDITIONS SHOULD OCCUR FOR ABOUT 24 HOURS
AFTER THAT TIME.

III. EVENT PROBABILITIES: 06 MAY - 08 MAY

CLASS M 80/80/80

CLASS X 20/20/20

PROTON 10/10/15

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 05 MAY 233

PREDICTED 06-08 MAY 240/250/255

90 DAY MEAN 05 MAY 211

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 04 MAY 04/10

ESTIMATED AFR/AP 05 MAY 05/09

PREDICTED AFR/AP 06-08 MAY 06/07 15/15 15/15

SOLTERWARN

BT