

HFUS 1 BOU 271300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 117A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 27 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/1200Z TO 27/1200Z: SOLAR ACTIVITY WAS AT LOW LEVELS DURING THE LAST 24 HOURS. THE FIVE REGIONS IN THE COMPLEX IN THE NORTHWEST ALL APPEAR TO BE SIMPLIFYING NOW, ALTHOUGH THERE REMAINS A COMPLEX NEUTRAL LINE IN THE REGION 3702/3707 AREA (N12W36). REGIONS IN THE OTHER THREE QUADRANTS OF THE SUN ARE SIMPLE AND HAVE BEEN QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT LOW LEVELS. WE EXPECT SOLAR INDICES TO DECLINE GRADUALLY OVER THE NEXT FEW DAYS AS THE NORTHWEST COMPLEX CONTINUES TO DECAY AS IT APPROACHES THE WEST LIMB. HOWEVER, IT IS SURPRISING THAT THIS GROUP OF REGIONS HAS NOT PRODUCED ANY MAJOR FLARES OVER THE LAST FEW DAYS, AND THERE REMAINS A SLIGHT CHANCE OF A LARGE FLARE DURING THE NEXT 48 HOURS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS QUIET UNTIL 27/0600Z, WHEN ACTIVE CONDITIONS WERE EXPERIENCED BRIEFLY (K-INDEX OF FOUR). THE FIELD IS EXPECTED TO BE AT ACTIVE LEVELS ON 28-29 APR IN RESPONSE TO THE EFFECTS OF A FILAMENT THAT DISAPPEARED ON 25 APR. TWENTY-SEVEN DAY RECURRENCE ALSO SUGGESTS THE RETURN OF ACTIVITY ON THESE DAYS.

III. EVENT PROBABILITIES 28 APR-30 APR

CLASS M 40/40/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 APR 176

ESTIMATED 27 APR 170

PREDICTED 28 APR-30 APR 165/160/155

90 DAY MEAN 26 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR 25 APR 037 AP 26 APR 010

ESTIMATED AFR 26 APR 005 AFR/AP 27 APR 011/014

PREDICTED AFR/AP 28 APR-30 APR 020/022-020/015-010/012

SOLTERWARN

BT

HXUS BOU 271300

PREDM 04028 04029 03030

PREDX 00128 00129 00130

PREDP 00128 00129 00130

PCAFT 00128

TENCM 16528 16029 15530

AFRED 02028 02029 01030

AFAPF 02228 01529 01230

KKK 22234 54333 33332

BT

HFUS 3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 117B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 27 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/1200Z TO 27/2100Z: SOLAR ACTIVITY HAS CONTINUED AT LOW LEVELS. NO SIGNIFICANT CHANGES HAVE BEEN REPORTED OR OBSERVED IN THE COMPLEX OF REGIONS IN THE NORTHWEST QUADRANT. A SMALL NEW REGION HAS BEEN OBSERVED AT S18E60 AND HAS BEEN NUMBERED 3714.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE AT GENERALLY LOW LEVELS WITH A POSSIBILITY OF AN ISOLATED CLASS M FLARE BEING OBSERVED. NO SIGNIFICANT REGIONS ARE EXPECTED TO RETURN TO THE EAST LIMB DURING THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. THE SOURCE OF THIS DISTURBANCE IS UNKNOWN AND ISEE DATA ARE NOT PROVIDING A DEFINITIVE DIAGNOSTIC. THE GEOMAGNETIC FIELD IS EXPECTED TO CONTINUE ACTIVE THROUGH THE FORECAST PERIOD DUE FIRST TO FILAMENTS WHICH ERUPTED SEVERAL DAYS AGO FOLLOWED CLOSELY BY A CORONAL HOLE RELATED DISTURBANCE.

III. EVENT PROBABILITIES 28 APR-30 APR

CLASS M 40/40/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 APR 165

PREDICTED 28 APR-30 APR 160/155/150

90 DAY MEAN 27 APR 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 APR 008/010

ESTIMATED AFR/AP 27 APR 019/023

PREDICTED AFR/AP 28 APR-30 APR 020/022-020/015-019/018

SOLTERWARN

BT

HXUS BOU 272200

PREDM 04028 04029 03030

PREDX 00128 00129 00130

PREDP 00128 00129 00130

PCAFT 00128

TENCM 16028 15529 15030

AFRED 02028 02029 01930

AFAPF 02228 01529 01830

BT