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HFUS 1 BOU 170600

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 107A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 17 APRIL 1974

IA. FLARE PRODUCTION HAS SLOWED SOMEWHAT IN THE PAST 8 HOURS, WITH ONLY FOUR SUBFLARES REPORTED DURING THAT PERIOD. REGIONS 379 (S13W63) AND 375 (S12W83) REMAIN QUITE COMPLEX. THE LARGE HEDGEROW PROMINENCE IN THE NW MAY BE DUMPING MATERIAL INTO THE LEADING PORTIONS OF REGION 383 (S08W83).

IB. CONTINUED GROWTH OF REGIONS 379 AND 383, COUPLED WITH THEIR MAGNETIC COMPLEXITY, INFLUX OF PROMINENCE MATERIAL, AND LIMB PROXIMITY, INDICATE A DEFINITE THREAT OF A PROTON EVENT. FREQUENT CLASS C, OCCASIONAL CLASS M, AND SPORADIC CLASS X EVENTS ARE ANTICIPATED.

II. THE GEOMAGNETIC FIELD REMAINS QUIET. A MINOR RECURRENT STORM IS STILL EXPECTED 17 APRIL, ALTHOUGH THIS SECTOR STRUCTURE MAY HAVE BEEN DISRUPTED BY THE PRESENCE OF THE UNUSUALLY COMPLEX DISK FEATURES.

III. EVENT PROBABILITIES 17 - 19 APRIL

CLASS M 90/90/90

CLASS X 30/30/30

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 APRIL 115

PREDICTED 17 - 19 APRIL 105/98/93

90-DAY MEAN 16 APRIL 82

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 15 APRIL 02

ESTIMATED AFR/AP 16 APRIL 02/03

PREDICTED AFR/AP 17 - 19 APRIL 29/40-30/42-25/33

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HFUS 1 BOU 171400

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 107B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1400Z 17 APRIL 1974

IA. SOLAR ACTIVITY APPEARS TO HAVE DECREASED SOMEWHAT WITH ONLY 4 SUBFLARES OBSERVED DURING THE LAST 8 HOURS, ALTHOUGH POOR WEATHER AT THE SOLAR OBSERVATORIES PREVENTED CONTINUOUS COVERAGE. VELA INDICATED M1 X RAY EVENTS AT 0604Z AND 1103Z, BUT THERE WERE NO OBSERVED OPTICAL FLARES AT THESE TIMES. REGIONS 375/383(S10W88) ARE BEGINNING LIMB TRANSIT AND HAVE PRODUCED CONTINUOUS SURGES, AN APPARENTLY NON-ENERGETIC EPL BETWEEN 0848Z - 0925Z, AND A SUBNORMAL FLARE AT 0854Z. LIMB PROXIMITY PREVENTS DETAILED ANALYSIS, BUT THE ACTIVITY SUGGESTS THAT THIS REGION RETAINS ITS ENERGETIC POTENTIAL. REGION 379 (S13W68) STILL CONTAINS A BRIGHT PLAGE AND PRODUCED 2 SUBFLARES SINCE 06Z. THERE IS SOME INDICATION SPOT DECAY HAS BEGUN, BUT THE REGION REMAINS COMPLEX AND COULD PRODUCE ADDITIONAL ENERGETIC ACTIVITY. REGION 384 (S12W25) CONTAINS A B TYPE SPOT GROUP AND PRODUCED A SUBFLARE AT 0854Z, BUT DOES NOT APPEAR TO BE COMPLEX ENOUGH TO PRODUCE ENERGETIC ACTIVITY.

IB. SOLAR ACTIVITY SHOULD CONTINUE AT A MODERATE LEVEL WITH ENERGETIC ACTIVITY LIKELY TODAY FROM REGIONS 375/383 AND THROUGH THE PERIOD FROM REGION 379. THE THREAT OF A PROTON EVENT REMAINS MODERATE.

II. THE GEOMAGNETIC FIELD CONTINUES QUIET. APPARENTLY THE RECURRENT STORM EXPECTED TODAY HAS BEEN DELAYED, PERHAPS DUE TO THE PRESENCE OF THE ACTIVE REGIONS ON THE DISK. THIS RECURRENT STORM SHOULD BEGIN SOMETIME LATE TODAY OR TOMORROW WITH MINOR STORM CONDITIONS LIKELY THROUGH THE LATTER PORTION OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 17 APRIL - 19 APRIL

CLASS M 90/90/90

CLASS X 30/30/30

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 APRIL 115

PREDICTED 17 APRIL - 19 APRIL 105/98/93

90-DAY MEAN 16 APRIL 82

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 15 APRIL 02

OBSERVED AFR 16 APRIL 02

PREDICTED AFR/AP 17 APRIL - 19 APRIL 14/15 - 35/51 - 30/42

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HFUS BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 107

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 17 APRIL 1974

IA. SOLAR ACTIVITY HAS DECREASED IN THE LAST 24 HOURS WITH OCCASIONAL SUBFLARES, MOSTLY FROM REGIONS 375 (S13W90) AND 379 (S13W72). VELA OBSERVED M1 X-RAY EVENTS AT 17/0604Z AND 17/1103Z. THESE DID NOT CORRESPOND TO OBSERVED OPTICAL EVENTS, BUT WEATHER AT THE SOLAR OBSERVATORIES PREVENTED CONTINUOUS K OBSERVATIONS DURING THIS TIME PERIOD. THE 375/383 COMPLEX HAS PRODUCED CONTINUOUS SURGES AND NUMEROUS BSLS, THE LARGEST OF WHICH REACHED .15 RADII AT 17/1820Z. REGION 379 RETAINS A DELTA CONFIGURATION BUT APPEARS TO HAVE MATURED WITH LITTLE IF ANY NEW SPOT GROWTH. ACTIVITY HAS DECREASED FROM THIS REGION WITH THE LARGEST FLARE, A 0N, REACHING X-RAY CLASS C8 AT 17/1858Z. REGION 384 (S13W28) CONTAINS AN ARCH FILAMENT SYSTEM, HAS SHOWN SOME SLOW GROWTH, PRODUCED A SUBFLARE AT 17/0900Z, BUT APPEARS TO HAVE A SIMPLE MAGNETIC STRUCTURE. SEVERAL MODERATELY-STRONG TYPE III RADIO BURSTS AT DEKAMETRIC WAVELENGTHS HAVE BEEN OBSERVED SINCE 17/1800Z.

IB. REGIONS 375/385 AND 379 STILL RETAIN THE POTENTIAL FOR ENERGETIC EVENTS. THE DECREASE IN EVENT PROBABILITIES IS DUE TO THE ROTATION OF THE ACTIVE REGIONS OVER THE WEST LIMB, REGIONS 375/383 STARTING THEIR LIMB PASSAGE TODAY AND REGION 379 EXPECTED TO DEPART 19 APRIL. THE THREAT OF A PROTON EVENT REMAINS MODERATE THROUGH THE PERIOD.

II. THE GEOMAGNETIC FIELD CONTINUES QUIET. THE GEOMAGNETIC STORM ORIGINALLY EXPECTED TODAY SHOULD BEGIN IN THE NEAR FUTURE WITH MINOR STORM CONDITIONS LIKELY THROUGH MOST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 18 APRIL - 20 APRIL

CLASS M 85/80/30

CLASS X 25/20/05

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 APRIL 101

PREDICTED 18 APRIL - 20 APRIL 95/90/85

90-DAY MEAN 17 APRIL 82

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 16 APRIL 02

ESTIMATED AFR/AP 17 APRIL 03/04

PREDICTED AFR/AP 18 APRIL - 20 APRIL 35/51 - 30/42 - 30/42

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