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04/14 22:00

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HFUS3 BOU 142200

GEO MAGNETIC A INDICES

OBSERVED AFR/AP 13 APR 011/013

ESTIMATED AFR/AP 14 APR 008/010

PREDICTED AFR/AP 15 APR-17 APR 012/014-012/014-015/016

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04/14 22:00

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HFUS3 BOU 142200 COR

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 104

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 14 APR 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/2100Z TO 14/2100Z: SOLAR ACTIVITY WAS LOW. REGION 4790 (S31W26) WAS STILL EVOLVING WESTWARD WITH ITS LEADER POLARITY AND THE WHITE-LIGHT PARAMETERS REMAINED GENERALLY UNCHANGED. REGION 4787'S (S33S28) TRAILER GROUP (IMMEDIATELY SOUTH-SOUTHEAST OF THE MAIN SPOT OF 4790) RECOVERED SOME OF ITS AREA AND SPOT INTEGRITY. THIS OCCURRED AFTER THE MAIN, LARGE SPOT OF 4790 MOVED ACROSS THE TOP OF 4787'S TRAILER GROUP. NO SIGNIFICANT FLARE ACTIVITY ACCCOMPANIED THIS TRANSIENT, IN SPITE OF THE VERY TEMPORARY DELTA AND GAMMA CONDITIONS AS THE TRANSITION WAS IN PROGRESS. THE TWO REGIONS ARE AGAIN RELATIVELY SIMPLE BETA-TYPES ALTHOUGH REGION 4790 IS SLIGHTLY BEHIND AND ABOVE REGION 4787 WITH BOTH REGIONS IN CLOSE PROXIMITY. THE THREE DAY HISTORY CONTINUES TO SHOW A SLOW DECAY OR DECREASE OF X-RAY BACKGROUND ENHANCEMENT. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. THE REGION 4790 AND REGION 4787 COMPLEX CONTINUES TO PROVIDE A SLIGHT CHANCE OF MODERATE ACTIVITY. BOTH STILL ALSO PROVIDE A VERY SLIGHT CHANCE OF A PROTON FLARE BUT MAJOR ACTIVITY PROBABILITIES ARE DECREASING DUE TO BOTH THE CONTINUOUSLY DECREASING BACKGROUND LEVELS AND ALSO THE LESSENING PERSONAL HISTORY OF FLARES FOR THESE REGIONS. THE POTENTIAL DELTA AND/OR GAMMA AREA IMMEDIATELY SOUTH OF REGION 4790'S LARGE, MAIN SPOT REMAINS THE MOST LIKELY LOCATION FOR ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 13/2100Z TO 14/2100Z: THE GEOMAGNETIC FIELD WAS UNSETTLED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED THE FIRST AND SECOND DAYS (15-16 APR) INCREASING TO ACTIVE LEVELS THE LAST DAY (17 APR) AS THE REGION 4787 SECTOR FAVORABLY CONNECTS TO OUR FIELD.

III. EVENT PROBABILITIES 15 APR-17 APR

CLASS M 20/20/20

CLASS X 02/02/02

PROTON 02/02/02

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 APR 098

PREDICTED 15 APR-17 APR 096/094/091

90 DAY MEAN 14 APR 075

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 APR 011/013

ESTIMATED AFR/AP 14 APR 008/010

PREDICTED AFR/AP 15 APR-17 APR 012/014-012/014-015/016

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