AP03

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Classification of pre-monsoon arc shaped precipitation systems in Bangladesh

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Arc shaped precipitation systems are classified to know their seasonal and regional variation in Bangladesh. In this study six-year (2000-2006) radar data are used from the Bangladesh Meteorological Department. Arc shaped precipitation systems are classified as symmetric type precipitation systems (STPS), asymmetric type precipitation systems (ATPS), combination of symmetric and asymmetric type precipitation systems (CSATPS) and unclassified type precipitation systems (UTPS). The occurrence frequency of STPS, ATPS, CSATPS and UTPS is found 23%, 43%, 21% and 13%, respectively. Seasonal analysis showed that ATPS (STPS) is dominated in the pre-monsoon (monsoon) period. Regional analysis of arc shaped precipitation systems indicate that at the mature stage of their life cycle, STPS, ATPS, and CSATPS is dominated in southwest (northwest), northeast (southeast) and northwest (northwest) quadrants during pre-monsoon (monsoon) period. The maximum occurrence frequency of UTPS is found in the northeast and southwest quadrant during pre-monsoon and in the southwest quadrant during the monsoon season.