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# Different Sources of 10-30-day Intraseasonal Variations of Autumn Snow over Western and Eastern Tibetan Plateau

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Using the latest daily MODIS satellite snow cover data, the present study reveals distinctly different sources of 10-30-day intraseasonal snow cover variations over the western and eastern Tibetan Plateau (TP) during September-December. The intraseasonal snow variation over the western TP is related to a mid-latitude wave train associated with the Arctic Oscillation and that over the eastern TP is related to a subtropical wave train triggered by the North Atlantic Oscillation. The Rossby wave train in both cases leads to anomalous water vapor convergence and ascending motion, which contributes to snow accumulation and positive snow cover anomalies. For the western TP snow events, the moisture comes from the Caspian Sea. During the eastern TP snow events, the moisture originates from the Bay of Bengal.