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## Analysis of the relationship of multiple tropopause events with cut-off low systems and the jet stream

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Previous studies have pointed out a possible association between the frequency of multiple Tropopauses (MT) events and the occurrence of cut-off low systems. Moreover it seems clear that the maximum of multiple tropopauses are close to the jet stream regions. Here we present an exploratory study of both hypotheses, based in radiosonde data from the Integrated Global Radiosonde Archive (IGRA) and daily data of cut-off low systems and the jet stream. Statistics clearly show four zones of maximum MT occurrences in the Northern Hemisphere (NH) and two zones in the Southern Hemisphere. In the case of the NH, the four zones are clearly coincident with the identified zones of maximum cyclogenesis.