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The basic structural features of the Madden-Julian oscillation (MJO) in the lower and upper troposphere of the tropical zone are demonstrated. The problems associated with determining the main mechanisms of its formation are identified. Various approaches to the MJO quantification are considered. Using 850 and 200 hPa zonal wind speed from the ERA5 reanalysis datasets, as well as NCEP/NOAA satellite-derived data on outgoing longwave radiation, the main disadvantages and advantages are shown for one of the possible quantitative criteria of the MJO (RMM index). The results of the study are supposed to be operationally used in the NEACC's subseasonal meteorological forecasts.

Keywords: Madden-Julian Oscillation, RMM index, subseasonal forecast

Fig. 3. Ref. 36.