Trends in the study of tropical weather systems. Recent advances in the study of low altitude weather systems. The mean state of the tropical atmosphere. The major producing systems in the tropics, tropical cyclones, tornadoes, monsoon depressions, easterly waves, thunderstorms, synoptic disturbances in the tropics. The disturbance line of West Africa. Inter-tropical convergence zone (ITCZ). Designation of tropical storm development regions. Models of prediction in the tropics – the single and multi-level models.