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On essential distinction of the regional effects of the Indian monsoon and El El Niño before and after seventies

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A combined analysis of the planetary atmospheric pressure field at the sea level and near-surface air temperature anomaly for 1950-2006 monitored a sharp change of the background hydrometeorological characteristics worldwide. As a background we considered the above named parameters averaged over periods of 20-25 years. It was revealed a large-scale atmosphere pressure structural reconstruction which took place in the middle of last century seventies. In particular, the pressure has grown up over northern part of the Indian Ocean and in the planetary convection site whereas it decreased at eastern area of Pacific Ocean. The noted phenomenon was accompanied by appearing of the respected anomalies in the fields of all other principal thermodynamic parameters of ocean-atmosphere system. The disturbance of hydro-meteorological background of Indo-Pacific area actually concerned the characteristics of Indian monsoon and influenced an intensity and frequency of El Niño. Also it forced a change the consequence of interplay between these two climatic factors. It turned out that a newly formed environmental background has the same sign of anomalies as the El-Niño effect produces. In tern, it was expressed in the higher intensity of latter (1982-83, 1997-98) in comparison with the earlier period. Concurrently, the El Niño forced anomaly of latitudinal air transfer through the Northern Indian Ocean reversed. In result, a power rating of the summer monsoon drag effect should strengthen in the modern climatic epoch (after 70-ties) while circulation pattern during the north-eastern monsoon would be subjected to retardation. There is no doubt that such a change in the interrelation between monsoon and El Niño takes a reflection in the South-Asian climatic regime of cloudiness, precipitation, near surface air temperature and other parameters of the

regional environment. These changes of hydrometeorological conditions seem to be reflected as well in regime of the regional inland seas such as Red, Black, Mediterranean, Kaspian etc. The work has been supported by the Russian Foundation of Basic Research, grants 06-05-64634, 07-05-00024