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### Anomalies in the coastal zone of Asia-Pacific as a result of changes in global climate regime at the turn of 20-21 centuries

Multiple scale climatic anomalies in the Asia Pacific coastal zone, their features and linkages with climate variability in key regions of continental Asia, Pacific, Indian and Southern Oceans are studied by using statistical analyses of observation data. We use oceanographic and meteorological *in situ* data, monthly mean time series of SST, surface net heat flux (Q), atmospheric pressure (SLP), air temperature (SAT), precipitation, precipitable water content (PWC) from meteorological NCEP reanalyses (1948-2015). Three multidecadal climatic regimes were revealed for the whole area studied by using cluster analyses via Principal Components of Q and PWC in Asia of temperate latitudes, tropical and extratropical regions of the Pacific and Indian Oceans. The climate regime change in 70s of the 20th century in this area is confirmed by this method. It is also found that the climate regime is significantly changed at the end of the 20th century. Characteristic features of recent climate regime after 1996-1998 are SLP increase in the central extratropic area of Indian, North and South Pacific Oceans being prevailing in boreal winter. It is accompanying SLP increase and precipitation, decrease in South Siberia and Mongolia prevailing in boreal summer. Inversed SLP, PWC and precipitation anomaly associated with increase of cyclone activity and extreme events in the land-ocean marginal zones and coastal areas including Southern Ocean, eastern Arctic, eastern Indian, western and eastern Pacific margins

### Biography

Vladimir Ponomarev has completed his PhD from Pacific Oceanological Institute (POI FEB RAS) and Post-doctoral studies from the same institute. He is the Head Scientist of POI. He has published more than 50 papers in reputed journals.

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