Abstract submitted to the USA. - PRC Monsoon Workshop at Hangzhou, in May 31 to June 4, 1993

Interannual variability of large-scale moisture transport, divergence and monsoon rainfall anomaly. over East Asia

Tetsuzo Yasunari and Akiyo Yatagai Institute of Geoscience, University of Tsukuba Tsukuba, Ibaraki 305, Japan

Interseasonal and interannual variability of large-scale moisture transport and divergence associated with the Asian summer monsoon are essential components for understanding the dynamics of the variability of the monsoon heat source & sink, circulation, and water balance over this region.

The monthly anomalous fields of these elements are investigated by utilizing the 10 years (1981 to 1990).data sets of the atmospheric wind and moisture fields from ECMWF objective analysis The anomalous patterns of monsoon rainfall over East Asia are also examined relevant to these anomalous fields by using the monthly surface rainfall data from China, Korea and Japan..

Some preliminary results suggest that the summer rainfall anomalies over East Asia are basically closely related to the anomalous moisture transport field over the southwest monsoon region, but that over the western peripheriy of the subtropical high over the north Pacific, or otherwise, the interaction of these two fields seem to be essential for the anomalous divergence field and rainfall anomaly over East Asia. Further results will be discussed in the meeting.