## JMA's reviews of climatological conditions in the world and Eastern Asia - spring and summer 2005 -

## **MAM 2005**

At 3-month mean 500-hPa height, positive anomalies were observed over high latitude regions. In the mid-latitudes, the negative anomalies were observed over the Far East region, the eastern north Pacific and from eastern North America to the Atlantic. Positive height anomalies were observed over Europe, central Asia and Tibetan Plateau. The score of the first EOF component of seasonal mean 500hPa height variation became negative value. Zonal mean wind was stronger than normal around the center of the sub-tropical jet. The sub-tropical Jet over the Middle East and north India had been shifted southward since the latter half of April.

## JJA 2005

In the equatorial Pacific, the area of positive SST anomalies exceeding  $+0.5^{\circ}$ C which had been found from  $155^{\circ}$  E to  $155^{\circ}$  W since last spring (Mar.-May, 2004), shrank and was restricted from  $160^{\circ}$  E to  $180^{\circ}$  in summer 2005.

Convective activities were enhanced around the northern part of Philippines, and from the Caribbean Sea to the North Atlantic Ocean, while they were suppressed around the Bay of Bengal and the Southern part of India. During the period from the first half of July to the first half of August, the convective active phase of MJO propagated eastward from the Indian Ocean to the western North Pacific. Asian summer monsoon activities were near normal over Southeast Asia and India during summer 2005. The most active convection area of the Asian monsoon was located in the east of its normal position.

At 200hPa field, cyclonic circulation anomalies were observed over the area from the Arabian Sea to the western Pacific Ocean. Anti-cyclonic circulation anomalies were observed around the North Atlantic Ocean. At 850hPa, cyclonic circulation anomalies were observed around the Gulf of Mexico, and anti-cyclonic circulation anomaly was observed around the western North Pacific. Equatorial zonal winds over the western and central Pacific were easterly anomalies during the season.