

**CURRENT STATUS OF THE ACCURACY OF GMS CLOUD  
MOTION WINDS AND WATER VAPOR MOTION WINDS**

The purpose of this document is to present the status of the GMS Cloud Motion Winds (CMWs) and Water Vapor Motion Winds (WVMWs). Vector and speed differences of CMWs and WVMWs are shown in this document.

## **Current Status of the accuracy of GMS Cloud Motion Winds and Water Vapor Motion Winds**

Monthly mean differences between Cloud Motion Winds (CMWs) or Water Vapor Motion Winds (WVMWs) and rawinsonde winds are calculated in accordance with the method specified at CGMS-X in the international comparison of CMWs. Vector differences of CMWs for the period between June 1995 and April 2000 are shown in Fig.1, and speed differences are shown in Fig.2. Vector and speed differences of WVMWs for the same period are shown in Fig.3.

1. Low-level CMWs

The root mean square (RMS) vector differences are smaller than 5.2m/s and the mean absolute values of speed differences are smaller than 2.6m/s

2. High-level CMWs

RMS vector differences are smaller than 10.0m/s and the mean absolute values of speed differences are smaller than 6.0m/s.

3. WVMWs

RMS vector differences are smaller than 10.2m/s and the mean absolute values of speed differences are smaller than 6.0m/s.

COMPARISON OF SATELLITE WINDS WITH RADIOSONDE WINDS AREA : 50 N - 50 S

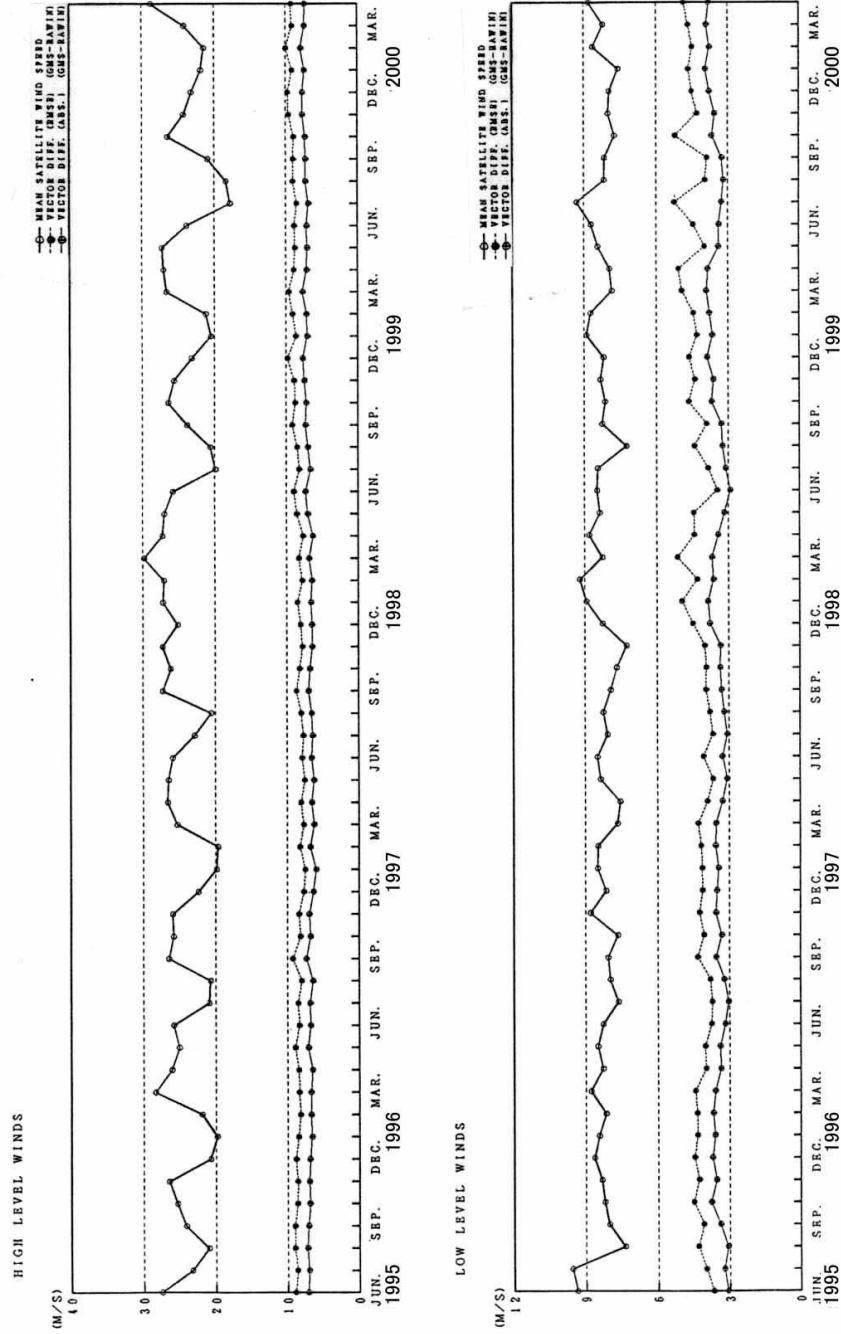


Figure 1. Monthly-mean vector differences between CMWs and rawinsonde winds.

COMPARISON OF SATELLITE WINDS WITH RADIOSONDE WINDS AREA : 50 N - 50 S

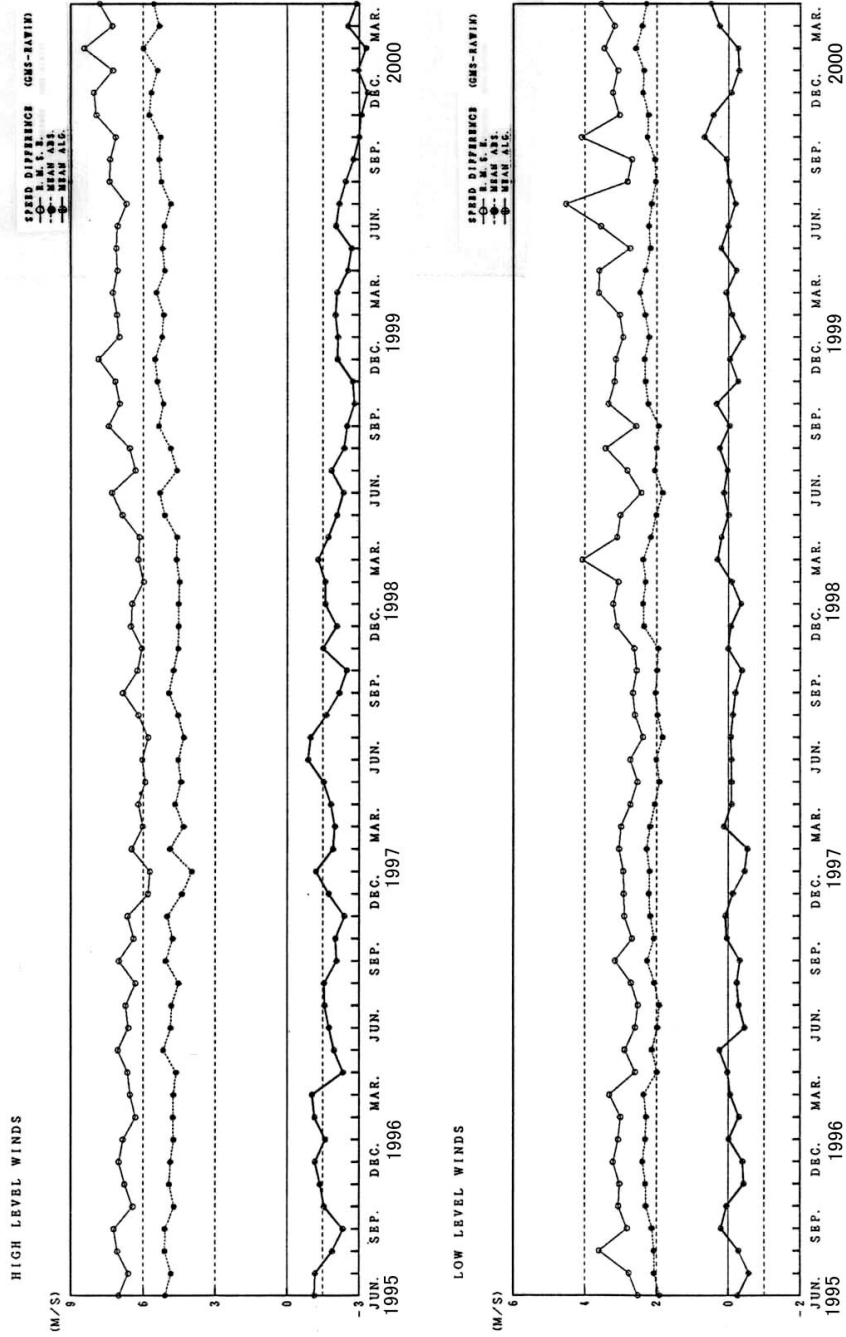


Figure 2. Monthly-mean speed differences between CMWs and rawinsonde winds.

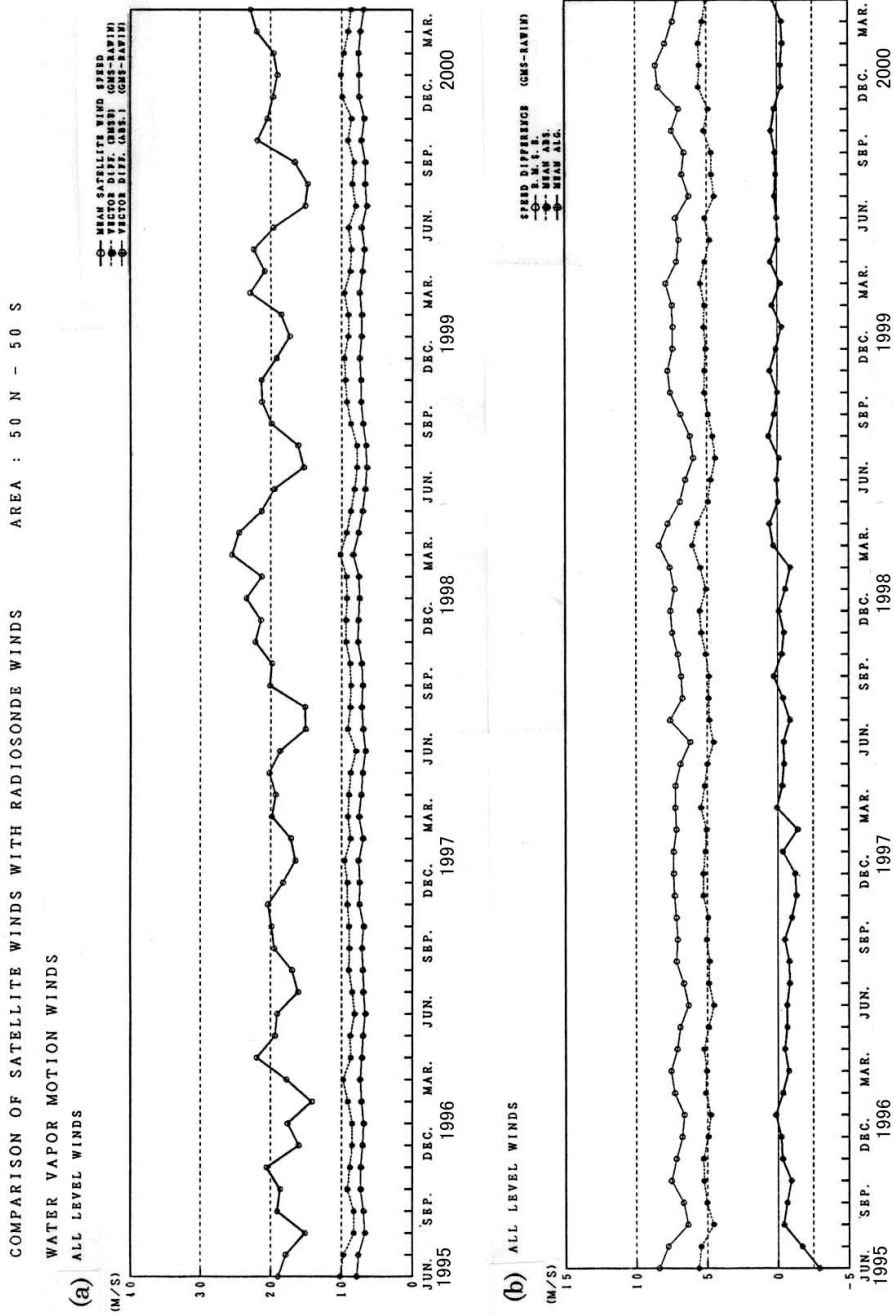


Figure 3. Monthly means of (a) vector differences and (b) speed differences between WVMWs and rawinsonde winds.