

V. 日米試験観測による成果

V. RESULTS OF US-JAPAN VLBI TEST OBSERVATION

A precision Very Long Baseline Interferometer, called K-3 system, had been developed since 1979 according to the five-year plan in the Radio Research Laboratories. The system is designed so as to be compatible with the Mark III system of the USA for the purpose of conducting US-Japan joint experiments.

The K-3 system, consisting of hardware and software, was almost completed at the end of September, 1983, and various tests for the system integration have been made as the final phase. In order to check the overall system performance of the K-3 and its compatibility with the Mark III system, the first VLBI test observation on the trans-pacific baseline was performed on November 5, 1983, in close co-operation with NASA.

This observation succeeded in getting good fringes which showed the good performances of the K-3 system and which allowed to calculate the baseline between Japan and USA directly with an accuracy of several decimeters.