第 I 部 総 論

I. GENERAL CONSIDERATIONS

In the first part, description of general considerations on VLBI are given, which consists of two main remarks, one, chapter I-1. "VLBI situation of the world", and the other, chapter I-2. "Principle of VLBI".

In the former chapter, emphasis are rather placed on introducing present status of VLBI applications to geodesy and astrometry. The description includes ARIES, PPME, ALSEP, some radio castronomic topics, developments of observational method, those of data processing and improvements of VLBI system and so on. Some topics are also introduced, to which the recent international scientific conference has referred.

As to the second chapter, I-2., some fundamental equations concerning VLBI observables are given. These equations lead us to make computer processing easier. The relations are clarified how the one kind of VLBI data concerns the others. Besides, some descriptions show, definition of VLBI, mathematical investigation of values measured by VLBI techniques, fringe-stopping, accuracy in VLBI measurement, and observations of geostationary satellite and celestial radio sources.