Proceedings of the 13$^{\text{th}}$ Working Meeting on European VLBI for Geodesy and Astrometry

Viechtach/Wettzell, February 12-13, 1999

Preface

The 13$^{\text{th}}$ Working Meeting on European VLBI for Geodesy and Astrometry took place near the Fundamental Station of Wettzell in the town of Viechtach in the Bavarian Forest, Germany, on February 12-13, 1999. These proceedings contain contributions about many aspects of Very Long Baseline Interferometry (VLBI) from experts in this field working as operators at radiotelescope sites, developers, data analysts, researchers and scientists in various parts of the world.

The proceedings are structured in the following manner:

- **International VLBI Service**
  The results of the initial meeting of the directing board of the International VLBI Service (IVS) had been presented at the workshop. We expect that IVS will play an important role for the geodetic and astrometric VLBI activities in the future.

- **Reports from Stations**
  This chapter illustrates the various activities at the observatories at Wettzell, TIGO, Effelsberg, Medicina, Noto, Matera, Madrid, Yebes, Onsala, Ny Alesund, Kashima, Tsukuba, stations involved in the Key Stone Project and the current status of the Bonn correlator. Special concern is given to the observations of the reference point of the radiotelescopes and its tie to a local survey network. Monitoring of local motions of the reference point of the radiotelescopes is believed to help to eliminate systematic errors and to improve accuracy.

- **Analysis and Modelling**
  Various analysis strategies, results of analysis of VLBI observations and their interpretation are presented. Several contributions touch topics of general relativity, methods of constructing reference systems, signal propagation in the atmosphere, variations of Earth orientation, ocean loading effects, crustal dynamics. Comparisons of VLBI with GPS techniques have also been used to evaluate the consistency of techniques. Methods for investigation of source structure of radio objects which are observed in geodetic observation programmes are considered in some articles.

- **New Developments and Ideas**
  A technique which is not continuously improved will become obsolete very easily. Therefore the next steps in VLBI developments concern the compatibility of different data formats, new recording systems, electronic VLBI in near real-time and in general more automatization of the processing of VLBI-data. Project of new generation of water-vapour radiometer is considered. In the future the determination of Earth rotation parameters by laser gyroscopes may be feasible as well as as the determination of the orbits of transmitters of satellites by the means of VLBI phase-referencing techniques as completion to existing orbit determinations based on satellite techniques.

Wolfgang Schlüter and Hayo Hase — Wettzell, March 4, 1999

Citation Instruction

Electronic Version

The full text electronic version of these proceedings is available on the WWW under the address

> `http://fw1.wettzell.ifag.de/euro13`

The electronic version is identical to the printed version from March 18, 1999.

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