

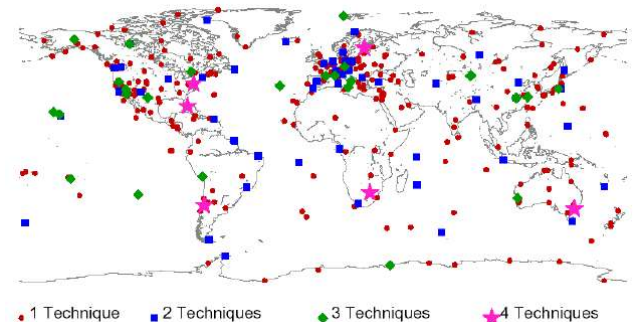
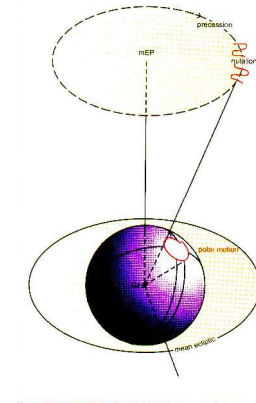
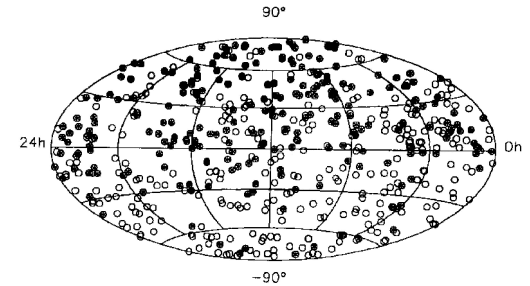


IVS View on GGOS: Contributions and Expectations

Dirk Behrend and Wolfgang Schlüter
GGOS Retreat
February 20, 2007
Oxnard, CA, U.S.A.

Role of IVS in GGOS

- ◆ Contributes unique strength of VLBI technique
 - ★ CRF products (quasar positions)
 - ★ Complete set of EOP parameter; uniquely UT1-UTC and nutation; provides link CRF <--> TRF
 - ★ TRF products (station positions, velocities, scale, baseline lengths)
 - ★ Tropospheric and ionospheric parameters
 - ★ other geodynamical and astronomical parameters (e.g., Love numbers, relativistic parameters)
 - ★ Support for satellite tracking



Role of IVS outside of GGOS

- ◆ Collaboration with related groups:
 - ★ radio astronomy: IAU, EVN, NRAO (VLBA)
 - ★ FAGS
 - ★ networking: Internet2
- ◆ Independent technology developments:
 - ★ antennas, feeds
 - ★ data recording and storage (Mark 5, K5)

IVS' Expectations from GGOS

- ◆ Frame for geodetic activities
- ◆ Common goals for the future
- ◆ Stimulation of new ideas
- ◆ Motivation for service developments
- ◆ Setting standards
- ◆ Interface to user community and society
- ◆ Support for request of funds



Added Value

- ◆ Product improvement by means of combination
- ◆ Synergy between the services
- ◆ Coordination of collaboration with other services, disciplines etc.
- ◆ Increased visibility to society



Next Generation VLBI System

— VLBI2010 —

- ◆ Perspective for future already developed in view of GGOS
 - ★ Improve precision/accuracy
 - ★ Improve network
 - ★ Improve latency
 - ★ Possible continuous observing
 - ★ Near real time products

GGOS2020 Strategy

- ◆ Independence of services strongly required to secure further technique development (preventing stagnation)
- ◆ Stress unique contributions (e.g., DUT1)
- ◆ good reference document; several repetitions and writing styles though (to be ironed out)
- ◆ long document:
 - ★ abridged version (?)
 - ★ margin notes (for reader guidance)
- ◆ consistency and compliancy tests
 - ★ e.g., central bureaus of services check for service-specific correctness



GGOS2020 Strategy

- ◆ Should network size and distribution (9.4.1) be stated in strategy document?
- ◆ functions of coordination bureaus not completely clear; e.g., how does ‘Network Bureau’ interface with services on design questions?
- ◆ VLBI network size given incorrectly in 10.3.1

GGOS2020 Strategy

— Minor Technical Comments —

- ◆ full author list for VLBI2010 vision paper (not A. Niell & eight others)
- ◆ CRF to be added to Table 1, p. 22
- ◆ p. 99: change “belonging to IVS” to “coordinated by IVS”
- ◆ Spell out service name correctly



GGOS Portal

- ◆ Common entry to individual services' sites
- ◆ Portal itself to concentrate on combined products
- ◆ Common layout not really required



Critical Points

- ◆ Services are dependent on “voluntary” contributions from supporting agencies (based on response to Call for Participation)
- ◆ Dependence on good will of major players
- ◆ Structure and operation of services could change