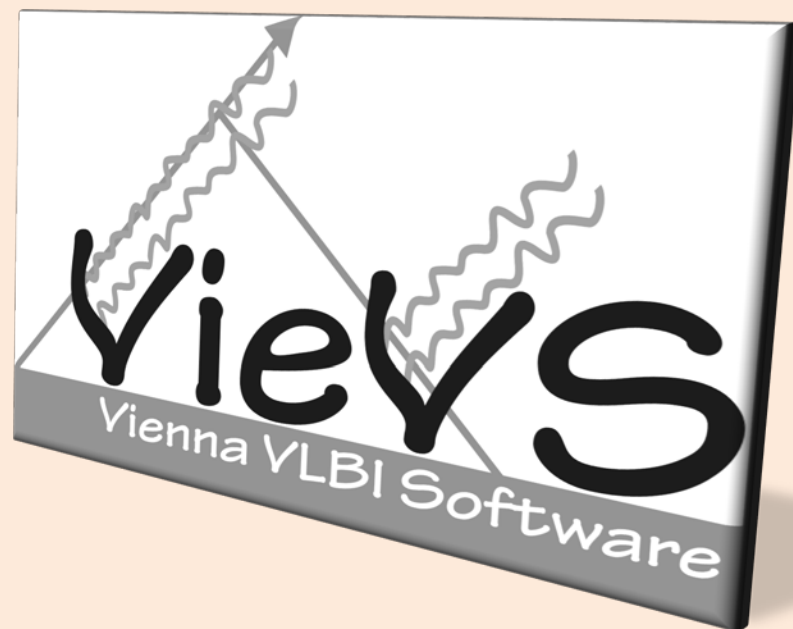


Planned future development of VieVS

Johannes Böhm



NetCDF

- Preparatory work done by Matthias and Johannes Falkner
- Rigorous implementation will be tricky but possible since we have a clear separation into `vie_init`, `vie_mod`, and `vie_lsm`

Group delay ambiguities

- Rate solution or simple solution
- less critical for VGOS

Phase solution

- Between close telescopes (sibling telescopes)
- Lucia

Local ties

- Local ties for the coordinates of sibling telescopes as well as troposphere and clock
- This also applies for twin telescopes (at the moment, twin telescopes in simulations are treated as the same telescope)
- Partly done by Younghee, Lucia, Kamil but still needs to be added to operational version

Filter solution

- "Kalman filter light", based on scan-wise update
- Square root information filter

Scheduling

- Mixing legacy and VGOS telescopes
- Improve the scheduling of twin (sibling) telescopes (Caroline?)
- Scheduling w.r.t. source structure (UTAS)
- Scheduling observations to satellites, to be added to operational version

Observations to satellites

- Implement more rigorously in the operational version of VieVS
- Partly done by Younghee, Lucia, ..

Troposphere

- Ray-traced delays for all VLBI observations and refined troposphere delay models

Source structure

- Correct observations for source structure
- UTAS

Other comments

- If you find bugs or have other suggestions, please report them so that we can implement them; then you don't have to fix them with the new release again
- If you develop new modules for VieVS (or contribute significantly) then you will be co-author in the next VieVS papers/posters