

IVS Analysis Workshop 2018

Update on c5++



CHALMERS
UNIVERSITY OF TECHNOLOGY

Thomas Hobiger,
Grzegorz Klopotek,
Periklis Diamantidis,
Rüdiger Haas

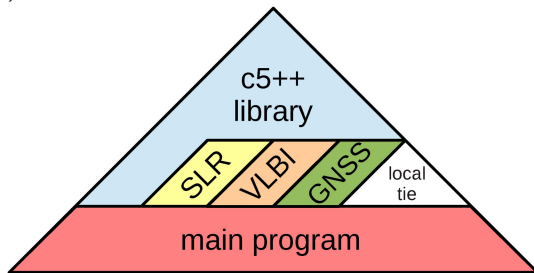
Department of Space, Earth and Environment
Onsala Space Observatory Division
Space Geodesy and Geodynamics Group

June 8, 2018

Space-geodetic data analysis with c5++

c5++ analysis software

- Fully controllable with external scripts & suitable for an automatic analysis
- IERS Conventions (2010) & ITRF2014
- Supports **S**olution (Software/Technique) **I**Ndependent **E**Xchange (SINEX) format



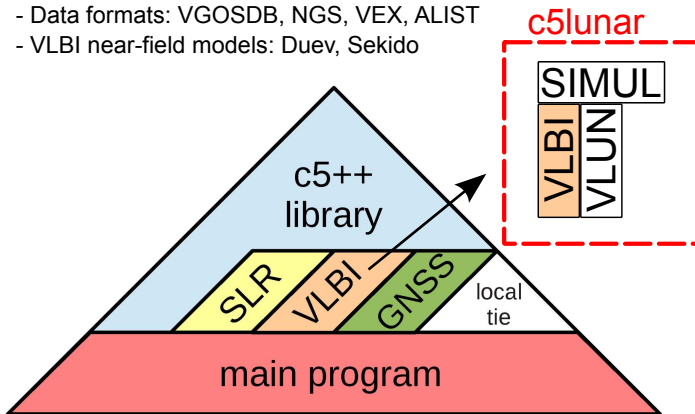
Hobiger and Otsubo, (2014), *Journal of Geodesy*.

Extension of the VLBI module for new observing concepts

c5lunar

Extension of c5++ by the members of
the geodetic VLBI team at OSO (T. Hobiger, G. Klopotek)

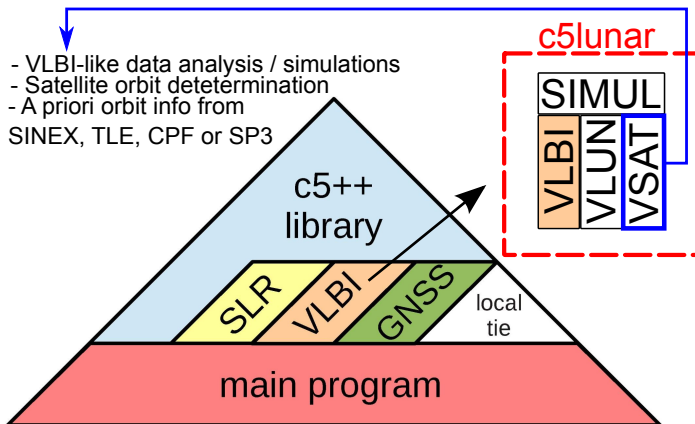
- Data formats: VGOSDB, NGS, VEX, ALIST
- VLBI near-field models: Duev, Sekido



Extension of the VLBI module for new observing concepts

c5lunar

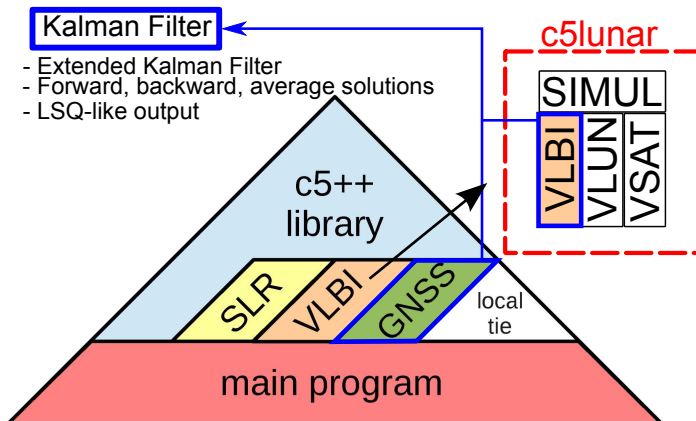
Extension of c5++ by the members of the geodetic VLBI team at OSO + T. Otsubo (Hitotsubashi University)



Extension of the VLBI module for new observing concepts

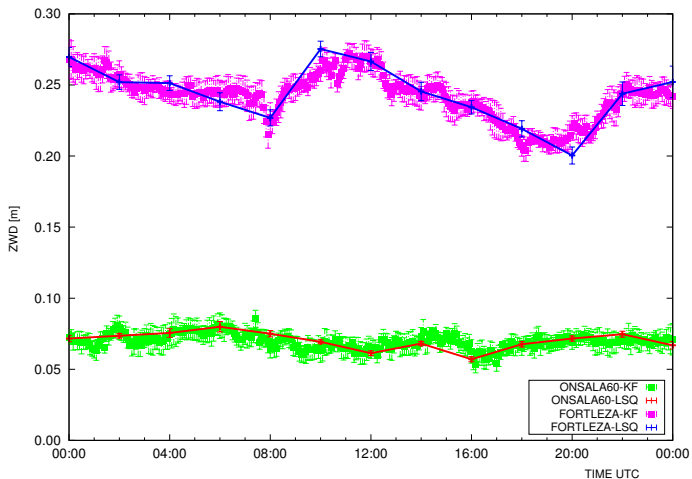
c5lunar

Extension of c5++ by the members of
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c5++: ZWDs from KF for VLBI

1st day of CONT17



c5++ - Future work

c5lunar

- General housekeeping (code clean up + performance issues)
- VGOSDB for VGOS observations
- Kalman Filter for VLUN and VSAT
- GNSS module:
 - Further development of the code
 - Simulation module for GNSS
 - GNSS orbit determination
- Bring all the new features to the official version of c5++

Thank you for your attention!

grzegorz.klopotek@chalmers.se