

Data Analysis Working Group
(DA-WG)

2015-2016 report

Pasha Ponomarenko

University of Saskatchewan, Canada

Routine tasks performed

- Several RST bug fixes and improvements initiated mostly by Kevin Sterne. For more detail, see <https://github.com/vtsuperdarn/VTRST3.5/commits/develop>
- Cross-range normalisation problem in the data simulator (Pasha)

Main task – FITACF3.0

fitacf.2.6 – Re-factored FITACF2.5 (improved code transparency and functionality); generates the same results as FITACF2.5

fitacf.2.7 – FITACF2.6 with implemented Tasks #1, #2, and #3 which produce more realistic error estimates.

fitacf.3.0 – Fully re-written package that follows good coding practices and implements optimal processing algorithms. Exhaustively tested against simulated data but requires more independent testing against real data. For more detail, see our presentation this afternoon.

Future

- The strategic goal is to optimise/refactor RST itself, but it would require much more effort. Currently, DA-WG is a three-men operation that includes Keith Kotyk, Kevin Sterne and me, with Evan Thomas joining the club recently. The first step is to draw a functional (block) diagram, which seems to be a formidable but doable task.