

Recommended procedure for implementing new algorithms:

1. A request for implementing a new or improved algorithm has to be submitted by its developers to the DA-WG and has to contain following materials:
 - a. concise description of the algorithm explaining why it
 - i. is beneficial to the quality of the already existing data products or/and
 - ii. provides new important geophysical information.
 - b. comprehensively commented computer code
 - c. sufficient evidence that the proposed changes achieve the declared objectives.
2. The evidence should be based on statistical tests of simulated and/or real data covering realistic ranges of
 - a. signal parameters (e.g. velocity, spectral width, SNR etc);
 - b. geophysical/propagation conditions;
 - c. radar operation modes.
3. Upon receiving a request for changes, the WG seeks for a peer reviewer from within or outside of the SuperDARN community who is willing to evaluate the proposed changes. To avoid unnecessary delays and conflicts of interest, the reviewers are asked to interact directly with the authors with respect to any additional information and testing.
4. Based on the reviewer evaluation, the WG decide upon implementation of the proposed changes. If the decision is positive, the WG chair seeks a formal approval from the PI committee and takes all necessary measures to incorporate the changes in the analysis software, with maximum involvement of the author(s) in the follow-up testing.
5. A basis for any negative decision should be explained in detail to the author(s) by the WG chair/vice-chair.
6. The authors of significant changes to the analysis software should be encouraged to publish their findings in *Radio Science* or any other relevant journal. Depending on their contribution to the project, the reviewers should be either acknowledged or included as co-authors.
7. Decisions on implementing minor changes/corrections should be made in due course by the chair and/or vice-chair, and these changes should be implemented without further delays.

Supplementary test tools and materials provided by the DA-WG:

1. Realistic data simulator allowing for known average input parameters and their statistics (implemented and tested by AJ, should be available upon request).
2. Ray-tracing procedure (already available on-line from VT)
3. Test datasets for different locations, operational modes and geophysical conditions (to be assembled).