

Tips and Tricks

This page basically lists a couple of useful information to create good schedules

General tips

- If you have troubles reading anything in the GUI simply change the window size.
- Save your station network if you use it several times.
- By clicking *Load SCHED parameters* you will always load the last used scheduling parameters.
- ⚠ Always write log files. This makes it easier to understand current results and the Matlab Command Windows stays clean.
- You do not need to display the sky coverage via the checkbox in the GUI. This plot is also saved in your output directory.
- ⚠ Always make sure you use the newest catalog files.
- ⚠ Use the mutli scheduling tool!
- Simulate your results. A high number of observations does not generally mean the schedule is better!
- optimization conditions can help avoid single baseline scans.
- use the iterative approach for optimization conditons
- ⚠ Always create and use a new source file unless you have a good reason not to do. This should be checked in the GUI all the times.
- If something is not working or you have a question write us an email.
- ⚠ If you use the multi scheduling tool, use parallel processing.

Good parameters

- The weight factors in the *param.txt* file are the most important factors to create a good schedule
- Trying different weight factors via the multi scheduling tool is very easy.
- As a start use the following factors:
 - for a regional network like the Austral stations try
 - PARA.WEIGHT_NUMBER_OF_OBS 0.2
 - PARA.WEIGHT_SKY_COVERAGE 0.2
 - PARA.WEIGHT_SCAN_END_TIME 0.6
 - for a global network try:
 - PARA.WEIGHT_NUMBER_OF_OBS 0.4
 - PARA.WEIGHT_SKY_COVERAGE 0.2
 - PARA.WEIGHT_SCAN_END_TIME 0.4
 - only the relative ratio between the weight factors is important!
(PARA.WEIGHT_NUMBER_OF_OBS 1, PARA.WEIGHT_SKY_COVERAGE 2, PARA.WEIGHT_SCAN_END_TIME 4 will give the same result as PARA.WEIGHT_NUMBER_OF_OBS 10, PARA.WEIGHT_SKY_COVERAGE 20, PARA.WEIGHT_SCAN_END_TIME 40)
- If you have a global network use subnetting
- If you have a regional network do not use subnetting
- the minimum station number should be always 2, except you have good reasons

- use the optimization conditions to avoid single baseline scans
- Use PARA.FILLINMODE 1 unless you have a good reason to use 2 or 12. Using 0 is never a good idea.
- Usually around 100 sources should be enough to create a schedule.
- Check your Matlab Command Window (or body.txt) if you have any *0-scan subnets*. If this happens you do not have enough sources. Try to run the schedule again with a lower minimum flux density or reduce the PARA.MIN_SRCRP value (it is maybe better to reduce the PARA.MIN_SRCRP value)
- It might help to reduce the PARA.MAXSLEWTIME a bit, but it is generally better to simply increase the PARA.WEIGHT_SCAN_END_TIME instead
- All other parameters are not very critical. Only make sure that you do not have to high conditions for this parameters. (like a PARA.MAX_WAIT of 10 would yield to a problem, or a PARA.MAXSLEWTIME 10... it is generally better to use high numbers here and not to constrain anything here)
- Check if you have any *0-scan subnet* in your Matlab Command Window or in your body.txt.

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