



AHELP for CIAO 3.4

simul-ann-2

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Synopsis

A simulated annealing search, with all parameters varied at each step.

Syntax

```
simul-ann-2 [nloop] [tchn] [nsamp] [iseed] [tiny]
```

Description

The SIMUL-ANN-2 method is a simulated annealing method, analogous to SIMUL-ANN-1 in every way except that at each randomization, all the parameters are varied, not just one.

Note that the default temperature cycle change factor, and the number of temperature cycles, correspond to more and faster changes of temperature than SIMUL-ANN-1. This is because of the increased mobility within parameter space, since all values are changed with each randomization.

Parameters

name	type	def	min	max
nloop	integer	1024	64	16384
tchn	real	0.95	0.1	0.9999
nsamp	integer	512	32	8192
iseed	integer	14391	-1.e+20	1.e+20
tiny	real	1.e-12	1.e-20	1.e-6

Detailed Parameter Descriptions

Parameter=nloop (integer default=1024 min=64 max=16384)

Maximum number of temperatures.

Parameter=tchn (real default=0.95 min=0.1 max=0.9999)

Factor for temperature reduction.

Parameter=nsamp (integer default=512 min=32 max=8192)

Number of movements at each temperature.

Parameter=iseed (integer default=14391 min=-1.e+20 max=1.e+20)

Seed for random number generator.

Parameter=tiny (real default=1.e-12 min=1.e-20 max=1.e-6)

Smallest temperature allowed.

Bugs

See the [Sherpa bug pages](#) online for an up-to-date listing of known bugs.

See Also

sherpa

[get_method](#), [expr](#), [grid](#), [grid-powell](#), [levenberg-marquardt](#), [method](#), [monte-lm](#), [monte-powell](#),
[montecarlo](#), [powell](#), [sigma-rejection](#), [simplex](#), [simul-ann-1](#), [simul-pow-1](#), [simul-pow-2](#), [usermethod](#)

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URL:
<http://cxc.harvard.edu/ciao3.4/simul-ann-2.html>
Last modified: December 2006