



AHELP for CIAO 3.4

simul-pow-2

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Synopsis

A combination of SIMUL-ANN-2 with POWELL.

Syntax

```
simul-pow-2 [nloop] [tchn] [nanne] [nsamp] [iseed] [tiny]
```

Description

This method packages together SIMUL-ANN-2 and the POWELL routine; at the end of each of the cooling sequences, or annealing cycles, the POWELL method is invoked. The rate of cooling in each anneal loop may be much faster than in simulated annealing alone. Probably one of the best choices where one `best' answer is to be found, but at the expense of a lot of computer time.

Note that the parameters of SIMUL-POW-2 are those of SIMUL-POW-2 itself (which have the same meaning as in routine SIMUL-ANN-2), plus those of POWELL.

Parameters

name	type	def	min	max
nloop	integer	256	16	4096
tchn	real	0.95	0.1	0.9999
nanne	integer	16	1	256
nsamp	integer	128	16	1024
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=256 min=16 max=4096)

Maximum number of temperatures.

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

Factor for temperature reduction.

Parameter=nanne (integer default=16 min=1 max=256)

Number of anneals.

Parameter=nsamp (integer default=128 min=16 max=1024)

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-ann-2](#), [simul-pow-1](#), [usermethod](#)

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URL:
<http://cxc.harvard.edu/ciao3.4/simul-pow-2.html>
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