



 AHELP for CIAO 3.4

grid-powell

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Synopsis

A grid search utilizing the Powell method at each grid point.

Description

The GRID-POWELL method samples the parameter space bounded by the lower and upper limits for each thawed parameter. At each grid point, the POWELL optimization method is used to determine the local fit-statistic minimum. The smallest of all observed minima is then adopted as the global fit-statistic minimum. The advantage of GRID-POWELL is that it can provide a thorough sampling of parameter space. This is good for situations where the best-fit parameter values are not easily guessed a priori, and where there is a high probability that false minima would be found if one-shot techniques such as POWELL are used instead. Its disadvantage are that it can be very slow.

Note that GRID-POWELL is similar in nature to MONTE-POWELL; in the latter method, the initial parameter value guesses in each cycle are chosen randomly, rather than being determined from a grid.

The GRID-POWELL method parameters are a superset of those for the GRID and POWELL methods. (See the descriptions of these methods.)

Bugs

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

See Also

sherpa

[get_method_expr](#), [grid](#), [levenberg-marquardt_method](#), [monte_lm](#), [monte-powell](#), [montecarlo](#), [powell](#), [sigma-rejection](#), [simplex](#), [simul-ann-1](#), [simul-ann-2](#), [simul-pow-1](#), [simul-pow-2](#), [usermethod](#)

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<http://cxc.harvard.edu/ciao3.4/grid-powell.html>
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