Subject: step size in constrained_min?

Posted by rdh on Wed, 27 Oct 2010 19:18:13 GMT

All -

Does anyone know what determines the step size used in constrained_min? I'm attempting to use it to minimize a single function, and although the variable bounds are wide (~100), it doesn't seem to want to vary any variable by more than +/-0.000001. What am I doing wrong?

Here's a snippet:

```
; reformat scale (bounds) for this optimization function
prec = MACHAR()
ftol = sqrt(prec.EPS)*2.^downsample
intial_guess = [3.3, 10.5, 35.4, 61.23, 78.435]
bounds = [-0.01, 10.0 , 5.25 , 50.2, 10.52, 100.5, 52.3, 142.36,
61.2 , 155.03]
func_bounds = [-1.0e30,1.0e30]    ;unbounded (also tried loosely
bounding)
CONSTRAINED_MIN, initial_guess, bounds, func_bounds, 0, 'my_func',
inform, $ NSTOP=5,  REPORT=new_dir + 'IDL_constr_min.txt', TITLE='BHC
Spline Pts',  $ EPSTOP=ftol
```

Thanks,
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