


```

2015-02-18T12:47:55: radius .....: 0.1
2015-02-18T12:47:55: width .....: 0.05
2015-02-18T12:47:55: max_iter .....: 50
2015-02-18T12:47:55: num_avg .....: 3
2015-02-18T12:47:55: chatter .....: 2
2015-02-18T12:47:55: clobber .....: yes
2015-02-18T12:47:55: debug .....: no
2015-02-18T12:47:55: mode .....: ql
2015-02-18T12:47:55:
2015-02-18T12:47:55: +=====+
2015-02-18T12:47:55: | Models |
2015-02-18T12:47:55: +=====+
2015-02-18T12:47:55: +-----+
2015-02-18T12:47:55: | Background model |
2015-02-18T12:47:55: +-----+
2015-02-18T12:47:55: === GModels ===
2015-02-18T12:47:55: Number of models .....: 1
2015-02-18T12:47:55: Number of parameters .....: 3
2015-02-18T12:47:55: === GCTAModelRadialAcceptance ===
2015-02-18T12:47:55: Name .....: Background
2015-02-18T12:47:55: Instruments .....: CTA
2015-02-18T12:47:55: Instrument scale factors ...: unity
2015-02-18T12:47:55: Observation identifiers ...: all
2015-02-18T12:47:55: Model type .....: "Gaussian" * "FileFunction" * "Constant"
2015-02-18T12:47:55: Number of parameters .....: 3
2015-02-18T12:47:55: Number of radial par's ....: 1
2015-02-18T12:47:55: Sigma .....: 3 +/- 0 [7.71728e-08,infty[ deg2 (free,scale=1,gradient)
2015-02-18T12:47:55: Number of spectral par's ...: 1
2015-02-18T12:47:55: Normalization .....: 1 +/- 0 [0,1000] (free,scale=1,gradient)
2015-02-18T12:47:55: Number of temporal par's ...: 1
2015-02-18T12:47:55: Constant .....: 1 (relative value) (fixed,scale=1,gradient)
2015-02-18T12:47:55:
2015-02-18T12:47:55: +-----+
2015-02-18T12:47:55: | Full model |
2015-02-18T12:47:55: +-----+
2015-02-18T12:47:55: === GModels ===
2015-02-18T12:47:55: Number of models .....: 2
2015-02-18T12:47:55: Number of parameters .....: 9
2015-02-18T12:47:55: === GCTAModelRadialAcceptance ===
2015-02-18T12:47:55: Name .....: Background
2015-02-18T12:47:55: Instruments .....: CTA
2015-02-18T12:47:55: Instrument scale factors ...: unity
2015-02-18T12:47:55: Observation identifiers ...: all
2015-02-18T12:47:55: Model type .....: "Gaussian" * "FileFunction" * "Constant"
2015-02-18T12:47:55: Number of parameters .....: 3
2015-02-18T12:47:55: Number of radial par's ....: 1
2015-02-18T12:47:55: Sigma .....: 3 +/- 0 [7.71728e-08,infty[ deg2 (free,scale=1,gradient)
2015-02-18T12:47:55: Number of spectral par's ...: 1
2015-02-18T12:47:55: Normalization .....: 1 +/- 0 [0,1000] (free,scale=1,gradient)
2015-02-18T12:47:55: Number of temporal par's ...: 1
2015-02-18T12:47:55: Constant .....: 1 (relative value) (fixed,scale=1,gradient)
2015-02-18T12:47:55: === GModelSky ===
2015-02-18T12:47:55: Name .....: Test
2015-02-18T12:47:55: Instruments .....: all
2015-02-18T12:47:55: Instrument scale factors ...: unity
2015-02-18T12:47:55: Observation identifiers ...: all
2015-02-18T12:47:55: Model type .....: PointSource
2015-02-18T12:47:55: Model components .....: "SkyDirFunction" * "PowerLaw" * "Constant"
2015-02-18T12:47:55: Number of parameters .....: 6
2015-02-18T12:47:55: Number of spatial par's ....: 2
2015-02-18T12:47:55: RA .....: 266.405 deg (fixed,scale=1)
2015-02-18T12:47:55: DEC .....: -28.9362 deg (fixed,scale=1)
2015-02-18T12:47:55: Number of spectral par's ...: 3
2015-02-18T12:47:55: Prefactor .....: 5.7e-16 +/- 0 [0,infty[ ph/cm2/s/MeV (free,scale=5.7e-16,gradient)
2015-02-18T12:47:55: Index .....: -2.48 [10,-10] (fixed,scale=-2.48,gradient)
2015-02-18T12:47:55: PivotEnergy .....: 300000 MeV (fixed,scale=300000,gradient)
2015-02-18T12:47:55: Number of temporal par's ...: 1

```

```

2015-02-18T12:47:55: Constant .....: 1 (relative value) (fixed,scale=1,gradient)
2015-02-18T12:47:55:
2015-02-18T12:47:55: +=====+
2015-02-18T12:47:55: | Sensitivity determination |
2015-02-18T12:47:55: +=====+
2015-02-18T12:47:55:
2015-02-18T12:47:55: +-----+
2015-02-18T12:47:55: | Energies: 15.8489 GeV - 25.1189 GeV |
2015-02-18T12:47:55: +-----+
2015-02-18T12:55:52:

```

Repeating this run on a Linux box indeed shows a high memory usage. This should be fixed. A possible reason could be a large background rate and a correspondingly large memory allocation.

```

top - 09:24:25 up 341 days, 17:16, 36 users, load average: 61.13, 61.17, 62.34
Tasks: 826 total, 16 running, 808 sleeping, 2 stopped, 0 zombie
Cpu(s): 50.5%us, 10.4%sy, 15.2%ni, 23.9%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Mem: 264666568k total, 135996520k used, 128670048k free, 560004k buffers
Swap: 37110108k total, 803460k used, 36306648k free, 88785936k cached

USER      PID    PR   VIRT   NI   SHR  RES S   TIME+  %CPU  %MEM  COMMAND
knodlsed  1032   20  33.1g   0   15m  26g R   7:36.23 91.7  10.3  python
jenkins   13279  20  32.0g   0   8908 442m S   1562:28 0.3  0.2  java
knodlsed  22311  39  9665m   19  8164 4.2g R   97807:01 611.0  1.7  python
knodlsed  30369  20  3023m   0   8140 128m R   5179:38 1565.9  0.0  python
root      6903   39  2970m   19  1568 2.1g S   23:15.35 0.0  0.8  yum-updatesd
knodlsed  24282  39  2959m   19  8168 166m R   12958:04 193.9  0.1  python
knodlsed  11687  20  2778m   0   8140  84m R   11327:01 81.8  0.0  python
knodlsed  30299  20  2755m   0   8260 1.5g R   7722:53 95.6  0.6  python
knodlsed  25660  20  2621m   0   8260 595m R   8806:12 83.8  0.2  python
knodlsed  30489  20  2576m   0   8260 929m R   7620:29 96.0  0.4  python
knodlsed  25054  20  2523m   0   8140  89m R   9844:28 85.8  0.0  python
knodlsed  25812  20  2495m   0   8260 549m R   8853:29 99.6  0.2  python
knodlsed  3750   20  2479m   0   8172 960m R   2656:08 82.2  0.4  python
knodlsed  17702  20  2287m   0   8132 231m T   0:57.94 0.0  0.1  python
knodlsed  10622  39  2214m   19  8220 808m R   361:38.62 43.1  0.3  python

```

History

#1 - 02/19/2015 05:45 PM - Knödlseder Jürgen

- File `cssens` added
- File `show_sensitivity.py` added
- Status changed from *New* to *Feedback*
- % Done changed from 0 to 100

The problem was due to a wrong internal scaling of the source flux, related to an interface change a couple of time ago. Since the script is not really tested regularly this escaped my attention.

Attached a modified script that fixes the problem. The modifications have also been merged into the actual devel branch.

As bonus, attached is also a Python script that allows plotting of the result file. The script needs matplotlib installed.

#2 - 04/10/2015 10:52 PM - Knödlseder Jürgen

- Status changed from *Feedback* to *Closed*

Files

memory.png	105 KB	02/19/2015	Knödseder Jürgen
cssens	26.6 KB	02/19/2015	Knödseder Jürgen
show_sensitivity.py	2.97 KB	02/19/2015	Knödseder Jürgen