

ctools - Bug #1700

cterror queries for an output file at the end of the computation

02/19/2016 05:34 PM - Mayer Michael

<b>Status:</b>	Closed	<b>Start date:</b>	02/19/2016
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>	Knödseder Jürgen	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	1.1.0		
<b>Description</b>			
When running cterror with the flag debug=yes, I get the following output.			
<pre>2016-02-19T16:29:05: +=====+ 2016-02-19T16:29:05:   Compute error for source "Crab" parameter "Prefactor"   2016-02-19T16:29:05: +=====+ 2016-02-19T16:29:05: Confidence level .....: 68% 2016-02-19T16:29:05: Log-likelihood difference ..: 0.494473 2016-02-19T16:29:05: Initial factor range .....: [1.8536, 21.8576] 2016-02-19T16:29:11: Lower parameter factor ....: 10.9497 2016-02-19T16:29:16: Upper parameter factor ....: 12.8348 2016-02-19T16:29:16: Error from curvature .....: 1.0002e-16 ph/cm2/s/MeV 2016-02-19T16:29:16: Error from profile .....: 9.42573e-17 ph/cm2/s/MeV 2016-02-19T16:29:16: Negative profile error ....: 9.05944e-17 ph/cm2/s/MeV 2016-02-19T16:29:16: Positive profile error ....: 9.79201e-17 ph/cm2/s/MeV 2016-02-19T16:29:16: 2016-02-19T16:29:16: +=====+ 2016-02-19T16:29:16:   Compute error for source "Crab" parameter "Index"   2016-02-19T16:29:16: +=====+ 2016-02-19T16:29:16: Confidence level .....: 68% 2016-02-19T16:29:16: Log-likelihood difference ..: 0.494473 2016-02-19T16:29:16: Initial factor range .....: [2.02477, 3.06928] 2016-02-19T16:29:20: Lower parameter factor ....: 2.49909 2016-02-19T16:29:23: Upper parameter factor ....: 2.59599 2016-02-19T16:29:23: Error from curvature .....: 0.0522255 2016-02-19T16:29:23: Error from profile .....: 0.0484514 2016-02-19T16:29:23: Negative profile error ....: 0.0479414 2016-02-19T16:29:23: Positive profile error ....: 0.0489614 2016-02-19T16:29:23: 2016-02-19T16:29:23: +=====+ 2016-02-19T16:29:23:   Save results   2016-02-19T16:29:23: +=====+ Output model XML file [result.xml]</pre>			
In two ways this is confusing for the user:			
<ol style="list-style-type: none"><li>1. Providing the output file usually happens at the beginning of the script execution. I therefore suggest to query for the outfile already in cterror::get_parameters (and not in cterror::save).</li><li>2. cterror in fact saves the source model. However, the user could expect that asymmetric errors are written in the model XML file, too (which is not the case). It might be more difficult to implement that asymmetric errors get written? We would need to think about names for these attributes "error_neg" and "error_pos" could be an option?</li></ol>			

History

#1 - 02/22/2016 10:11 PM - Knödseder Jürgen

- Status changed from New to Closed
- Assigned To set to Knödseder Jürgen
- Target version set to 1.1.0

- % Done changed from 0 to 100

Corrected and merged into devel.

For asymmetric errors, there exists already an issue in GammaLib, see #1478.