

QGIS Application - Feature request #19858

QgsProcessingParameterNumber needs support for "data defined" parameter values

2018-09-17 04:06 AM - Olivier Dalang

<b>Status:</b>	Closed	
<b>Priority:</b>	Normal	
<b>Assignee:</b>		
<b>Category:</b>	Processing/Modeller	
<b>Pull Request or Patch supplied:</b>	No	<b>Resolution:</b> fixed/implemented
<b>Easy fix?:</b>	No	<b>Copied to github as #:</b> 27682
<b>Description</b>		
<p>Hi,</p> <p>QgsProcessingParameterNumber doesn't seem to evaluate fields in processing models.</p> <p><b>Steps to reproduce</b></p> <ol style="list-style-type: none"><li>1. Create a new model with an input vector layer</li><li>2. Add the "Set M Value" algorithm</li><li>3. Use an expression referring an attribute of the input layer.</li><li>4. Run</li></ol> <p>All points will have M Value to 0, as the expression doesn't evaluate correctly.</p> <p><b>Notes</b></p> <ul style="list-style-type: none"><li>- expressions are evaluated, as if you use "3+4" as expression, the M value is set to 7.</li><li>- it works as expected outside of the processing modeler both by choosing the field or by setting an expression.</li></ul> <p><b>Logs (in a processing model)</b></p> <p>Running Set M value [1/1] Input Parameters: { INPUT: 'PointM?crs=EPSG:3460&amp;field=fid:long&amp;field=date%2Ftime:string(255)&amp;field=lat:double&amp;field=long:double&amp;field=hPa:integer&amp;field=cat:integer&amp;field=kts:integer&amp;uid={92a59f27-e18c-482a-a549-f934d0b735b0}', M_VALUE: [cat], OUTPUT: 'memory:' }</p> <p><b>Logs (by running the algorithm directly)</b></p> <p>Algorithm 'Set M value' starting... Input parameters: { 'INPUT' : 'C:/Users/Olivier/temp/tracks.gpkg layername=test-EPSG3460', 'M_VALUE' : QgsProperty.fromExpression("'cat'"), 'OUTPUT' : 'memory:' }</p> <p>Note the difference in the M_VALUE parameter, not sure why I get [cat] there, while my expression is "cat".</p> <p>I also tried some workarounds, like using attribute( \$currentfeature, 'cat' ) instead of cat, but then, the MVALUE is None in the log.</p>		

## History

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### #1 - 2018-09-18 05:12 AM - Nyal Dawson

- Subject changed from *QgsProcessingParameterNumber doesn't evaluate fields in expressions when in processing models* to *QgsProcessingParameterNumber needs support for "data defined" parameter values*
- Tracker changed from *Bug report* to *Feature request*

This isn't technically a bug, rather it's a feature request.

When you enter an expression for a number parameter in modeler, it's evaluated ONCE before the algorithm is run, and the evaluated value is used for the entire execution of that child algorithm.

What you need here is the ability to set the "data defined" expression for the m value parameter. That's currently not possible, and requires porting of the `QgsProcessingParameterNumber` widget wrapper to the newer c++ `QgsAbstractProcessingParameterWidgetWrapper` class. That's targeted for 3.6 (it's not possible to do for 3.4 since we're in feature freeze).

### #2 - 2018-09-18 12:20 PM - Olivier Dalang

I see, I got confused, as from the UI, it looks like the expression based input in the modeler is equivalent to the data defined override when running the algorithms normally.

### #3 - 2018-09-21 03:20 AM - Nyal Dawson

- Status changed from *Open* to *In Progress*

Ok, fixed in <https://github.com/qgis/QGIS/pull/7972>

### #4 - 2018-09-22 01:54 AM - Nyal Dawson

- Resolution set to *fixed/implemented*
- Status changed from *In Progress* to *Closed*