# QGIS Application - Bug report #7960
# diagrams - pie chart _ color mapping

2013-05-31 07:31 AM - robert kalasek

| | | | |
|---|---|---|---|
| **Status:** | Closed | | |
| **Priority:** | Normal | | |
| **Assignee:** | Matthias Kuhn | | |
| **Category:** | | | |
| **Affected QGIS version:** | master | **Regression?:** | No |
| **Operating System:** | win and osx | **Easy fix?:** | No |
| **Pull Request or Patch supplied:** | No | **Resolution:** | |
| **Crashes QGIS or corrupts data:** | No | **Copied to github as #:** | 16819 |

**Description**

v 1.8.x and 1.9.x returns different results when doing simple pie charts out of 4 fields - sized by an explicite sum-field.
1.9. color assignment seems to be somehow arbitrary, while 1.8. returns correct values.

attached files demonstrate:
demo_LProp_v*.jpg ... layer properties settings of both versions
demo_v*.jpg ... results
in v1.9 with an "identfy_result"
this result demostrates that the val for tramway = 4 (all others = 0)
and color for tramway should be yellow - according to layer properties settings.

... after removing the last class "SBAHN" each symbol with just one of the remainig 3 field-values <> 0 changes its color to red - which is the last entry in the "Assigned attributes" list (see demo_v1_9___3_classes.jpg)

it seems that there is a problem with features where
- just one value <> 0
- all values = 0

best regards robert

## Associated revisions

**Revision 8c840e99 - 2013-06-07 09:17 AM - Matthias Kuhn**

[diagrams] Diagram fixes and UI improvements (Fix #7960) * Use correct color for pie chart if only one value is >0 * Show default text in scaling text box

## History

**#1 - 2013-06-06 11:52 PM - Angus Carr**

I have also experienced this bug. In my case, the size of the pie chart can be fixed or data driven. If the class is 100% of the total (e.g. 55,0,0,0,0), then the complete circle is colored with no radial lines, and the circle is colored the last color, not the class color.

I don't have access to a compiler to build QGIS right now, so I can only post a suggestion.

I looked through the source, and suspect the problem to be in this function:
http://qgis.org/api/qgspiediagram_8cpp_source.html#l00085
void QgsPieDiagram::renderDiagram(...)

```
00134     // if only 1 value is > 0, draw a circle
```

```
00135     if ( valCount == 1 )
00136     {
00137       p->drawEllipse( baseX, baseY, w, h );
00138     }
```

It seems like the circle is drawn multiple times (My guess) and the last one is the one that is visible.

In these lines, the list of values and the colors are put in a pair of lists:

```
00100   for ( ; catIt != s.categoryIndices.constEnd(); ++catIt )
00101   {
00102     currentVal = att[*catIt].toDouble();
00103     values.push_back( currentVal );
00104     valSum += currentVal;
00105     if ( currentVal ) valCount++;
00106   }
```

There is an attempt to only keep the relevant figures, but a double 0 is not going to be equal to boolean False. I would add a check inside the inner loop where the ellipse is drawn - like the following - if there is only one value and the current value is less that 1/16th of a degree, then we can assume it is 0.

Starting on Line 00134:

```
// if only 1 value is > 0, draw a circle
if ( valCount == 1 )
{
  if (currentAngle < 1) p->drawEllipse( baseX, baseY, w, h );
}
```

**#2 - 2013-06-07 12:07 AM - Matthias Kuhn**

*- Assignee set to Matthias Kuhn*

**#3 - 2013-06-07 12:19 AM - Matthias Kuhn**

*- Status changed from Open to Closed*

Fixed in changeset commit:"8c840e99574ec3ce2cce45a0bc51bc87d88e3b8a".

**#4 - 2013-06-07 12:36 AM - Matthias Kuhn**

Thank you for reporting this bug

@Angus Carr:
FYI
but a double 0 is not going to be equal to boolean False

It does actually equal

#### #5 - 2013-06-07 07:45 PM - Angus Carr

Thanks for fixing it. I tested the nightly build (-302 in osgeo4w) and it works correctly.
Cheers,
Angus.

### Files

| | | | |
|---|---|---|---|
| demo.rar | 928 KB | 2013-05-31 | robert kalasek |