
Subject: Painter small text quality

Posted by [koldo](#) on Tue, 23 Apr 2013 10:37:43 GMT

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Hello all

I would like to improve text quality using Painter for small texts.

In the image it is the same screen with Draw and Painter. The small texts in the X axis (Jan, Feb, Mar, ...) look better with Draw.

This is the code for both:

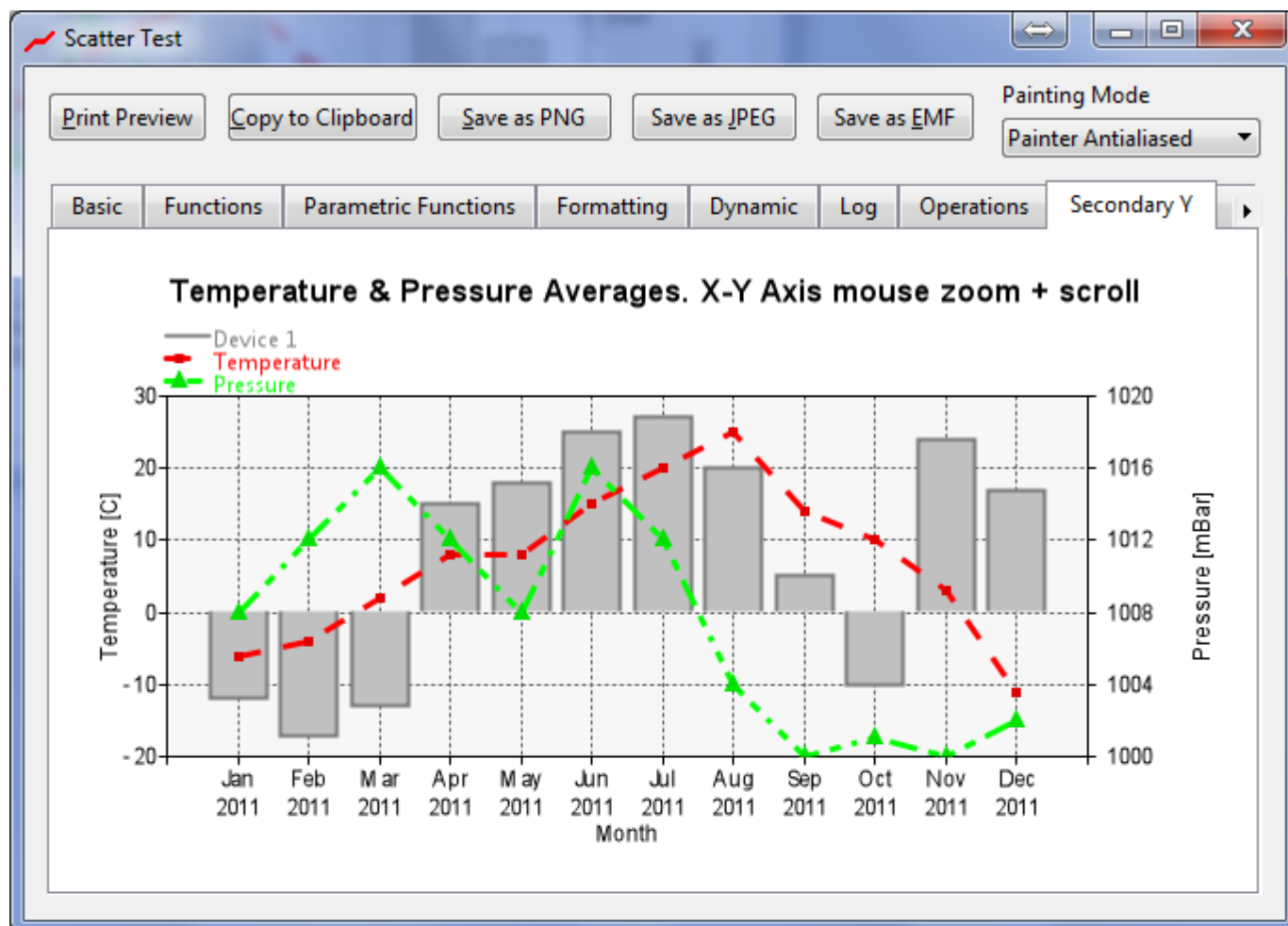
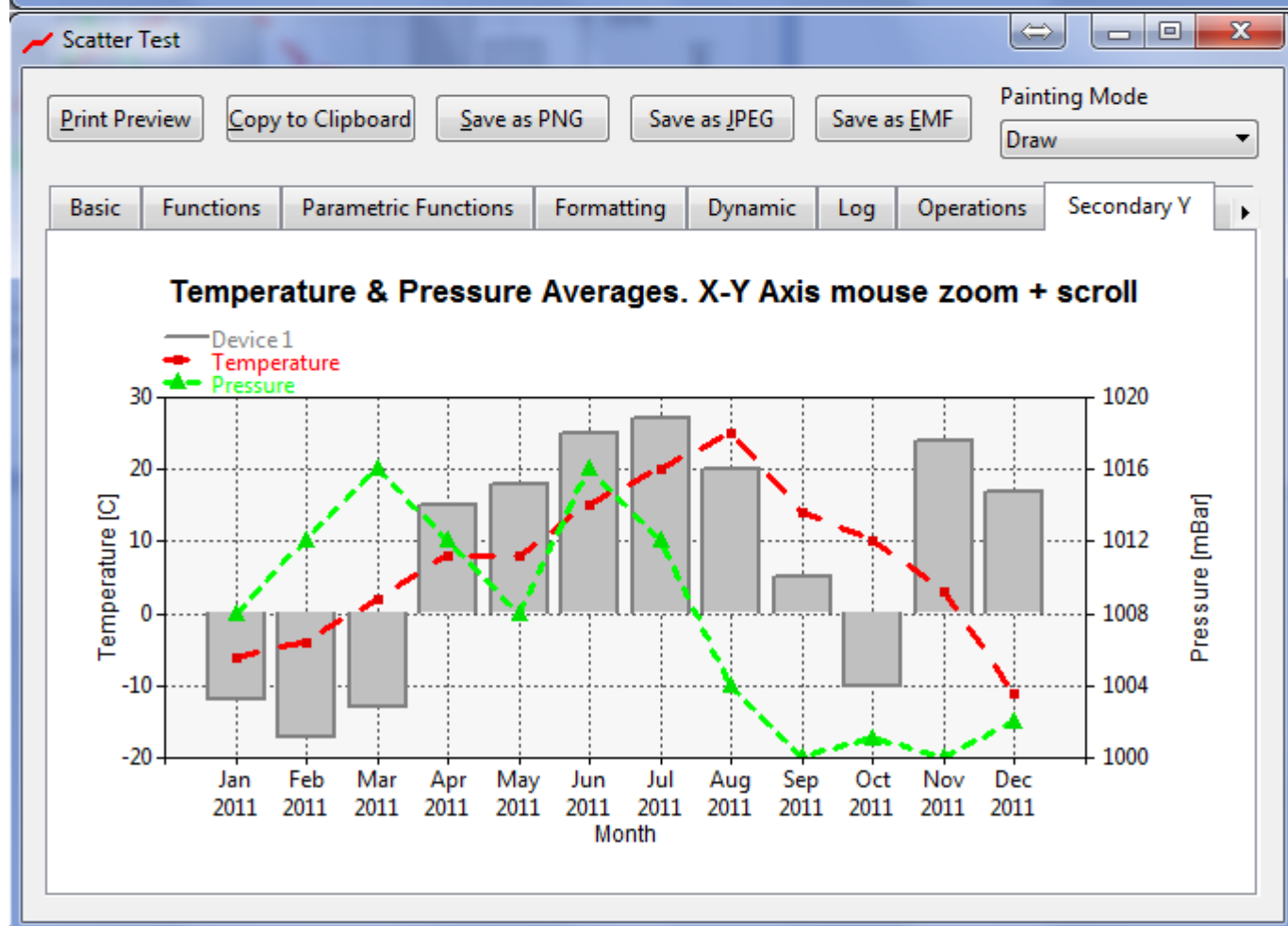
```
void DrawText(Draw &w, double x, double y, int angle, const String &text, Font font, Color color) {  
    w.DrawText(fround(x), fround(y), angle, text, font, color);  
}
```

```
void DrawText(Painter &w, double x, double y, int angle, const String &text, Font font, Color color)  
{  
    w.Begin();  
    w.Translate(x, y).Rotate(-angle*M_PI/1800.);  
    w.Text(0, 0, text, font).Fill(color);  
    w.End();  
}
```

Do you know how to improve the quality?

File Attachments

1) [Painter.png](#), downloaded 1139 times



Subject: Re: Painter small text quality
Posted by [dolik.rce](#) on Tue, 23 Apr 2013 17:01:28 GMT
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Hi Koldo,

Small fonts always look ugly when they're anti-aliased. I'd suggest to round the values for the painter variant as well, it can make a huge difference:

This preview was generated using this code:

```
void TextTest(Painter& sw) {
    sw.DrawText(10,100, "Hello world! // DrawText()", Roman(12), Black());
    for(int i=0; i<=5; ++i)
        sw.Text(10+0.2*i, 120+i*20, Format("Hello world! // Text() shifted %2vf pixel left",i*0.2),
        Roman(12))
        .Fill(Black());
    for(int i=0; i<=5; ++i)
        sw.Text(300, 120+i*20.2, Format("Hello world! // Text() shifted %2vf pixel down",i*0.2),
        Roman(12))
        .Fill(Black());
}
```

Also, your pictures seem like there are errors in the letter spacing. Not sure where that comes from, I couldn't reproduce it on my system... I think you can safely use DrawText() everywhere, or do some compromise, e.g.

```
void DrawText(Painter &w, double x, double y, int angle, const String
&text, Font font, Color color) {
    if(font.GetHeight()>15) {
        w.Begin();
        w.Translate(x, y).Rotate(-angle*M_PI/1800.);
        w.Text(0, 0, text, font).Fill(color);
        w.End();
    } else
        w.DrawText(fround(x), fround(y), angle, text, font, color);
}
```

Best regards,
Honza

EDIT: Corrected image and code

File Attachments

1) [text.png](#), downloaded 1089 times

Hello world! // DrawText()

Hello world! // Text() shifted 0 pixel left

Hello world! // Text() shifted 0.2 pixel left

Hello world! // Text() shifted 0.4 pixel left

Hello world! // Text() shifted 0.6 pixel left

Hello world! // Text() shifted 0.8 pixel left

Hello world! // Text() shifted 1 pixel left

Hello world! // Text() shifted 0 pixel down

Hello world! // Text() shifted 0.2 pixel down

Hello world! // Text() shifted 0.4 pixel down

Hello world! // Text() shifted 0.6 pixel down

Hello world! // Text() shifted 0.8 pixel down

Hello world! // Text() shifted 1 pixel down

Subject: Re: Painter small text quality
Posted by [koldo](#) on Wed, 24 Apr 2013 07:01:21 GMT
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Hello Honza

I like your proposal. Using it I get this:

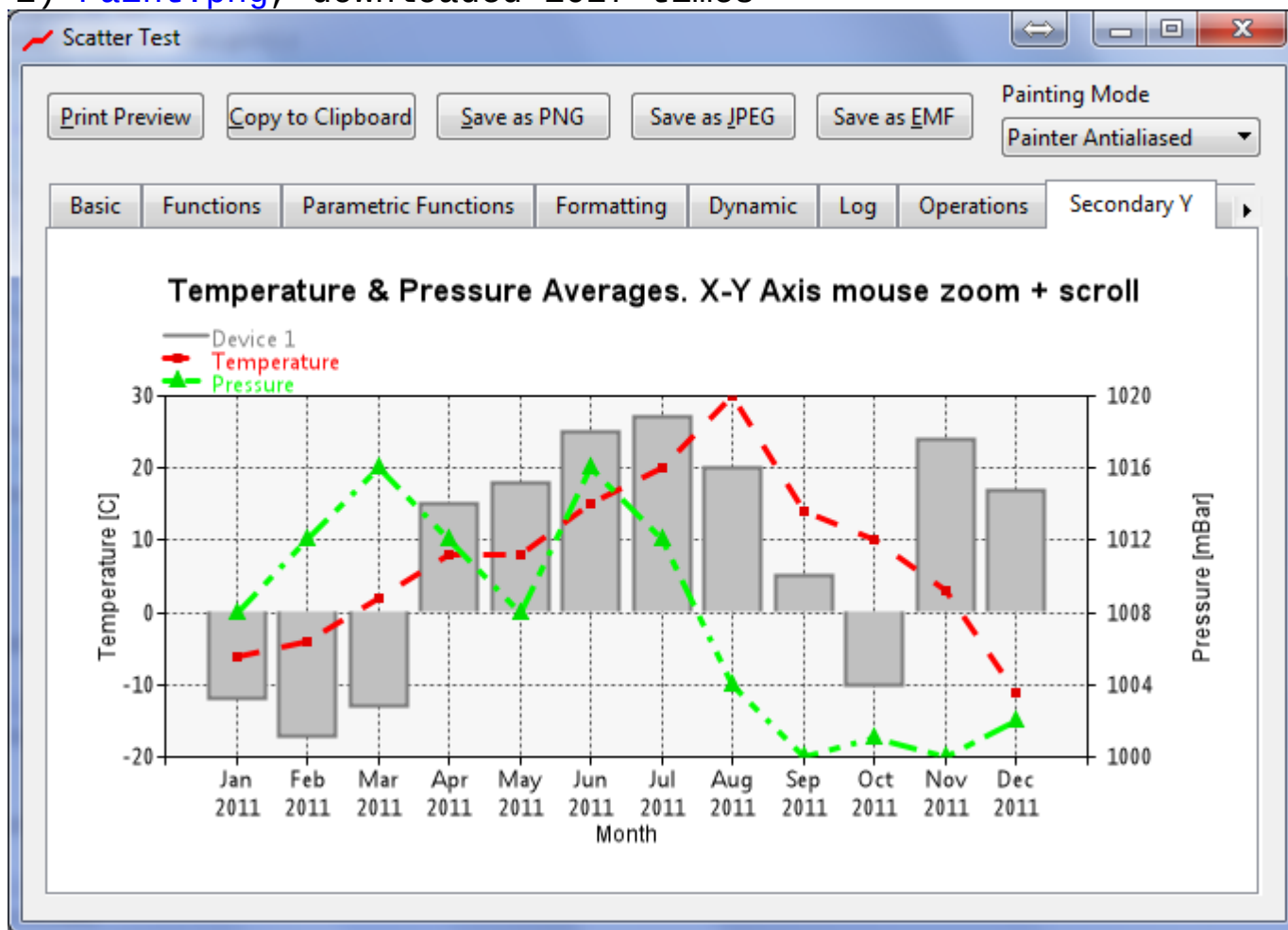
The letter spacing is solved although the look remains worse than the original Draw.

Initially I shifted the texts some tenths of pixel but now the results IMHO are not significantly improved.

I think that if it is not possible to improve this in the next future I will paint the texts using Draw over the graphs drawn with Painter.

File Attachments

1) [Paint.png](#), downloaded 1027 times



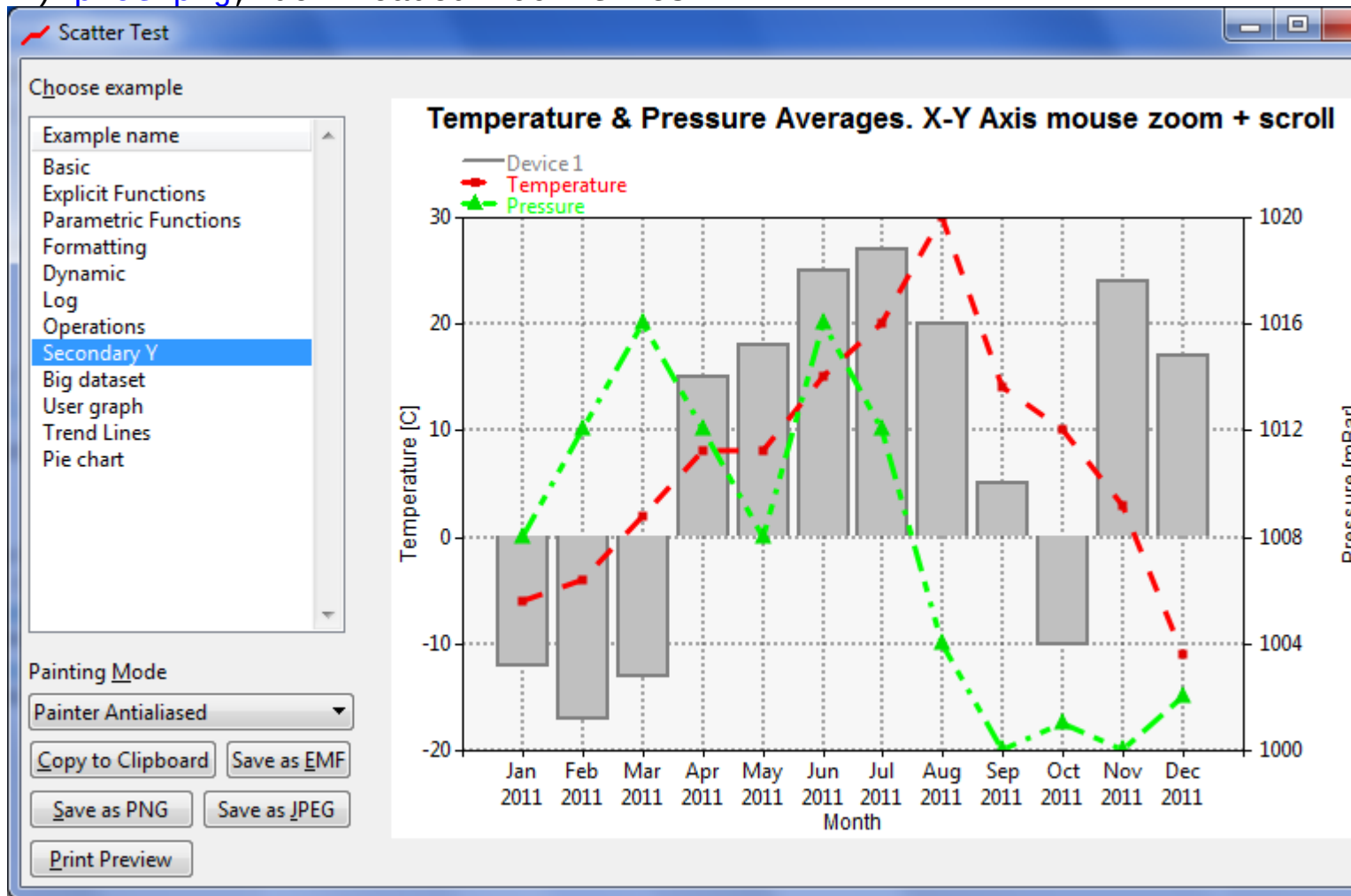
Subject: Re: Painter small text quality
Posted by [koldo](#) on Tue, 21 May 2013 10:19:47 GMT
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Hello all

Problem solved. Now all ScatterCtrl texts are drawn using Draw even using Painter to plot. For ScatterDraw all is drawn using Painter.

File Attachments

1) [plot.png](#), downloaded 1002 times



Subject: Re: Painter small text quality
Posted by [BioBytes](#) on Wed, 22 May 2013 19:33:53 GMT
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Hello Koldo,

Great job

Regards
Biobytes
