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Tables used by tests

The following 4 tables are used for testing purposes.

Table #1

Nr	Period	Min	Acceptable	Target	Exceptional	Actual	Comment
1	Start	0	50	70	90	39	initial measure
2	FY03-Q1	0	35	75	95	55	
3	FY03-Q2	0	35	75	95	36	
4	FY03-Q3	0	40	80	100	62	
5	FY03-Q4	0	40	80	100	72	
6	FY04-Q1	0	40	80	100	68	

Table #2

This table is the same as the 1st except that the data is row oriented instead of column oriented.

Nr	1	2	3	5	5	6
Period	Start	FY03-Q1	FY03-Q2	FY03-Q3	FY03-Q4	FY04-Q1
Min	0	0	0	0	0	0
Acceptable	50	35	35	40	40	40
Target	70	75	75	80	80	80
Exceptional	90	95	95	100	100	100
Actual	39	55	36	62	72	68
Comment	initial measure					

Table #3

This table is used for showing `scatter` graphs.

A	B	C	D	E
1	3	6	33	2
1.4	6	22	2	4
1.8	2	5		6
2.5	4	3		8
4	7	6	43	10
5	13	44	25	12
7	8	1	4	14
6	35	3	8	16
8	2	22	4	18
9	7	6	13	20

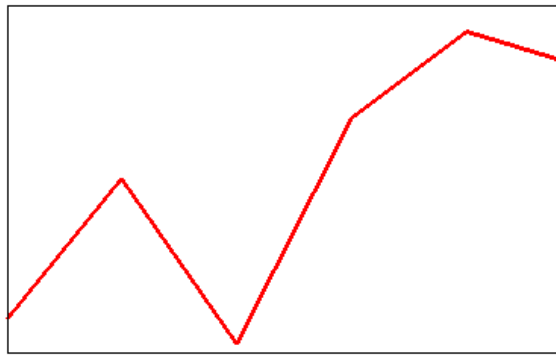
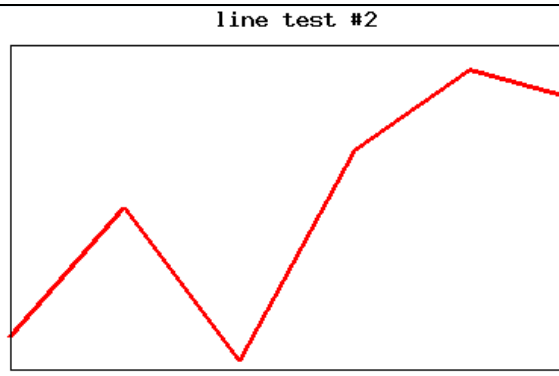
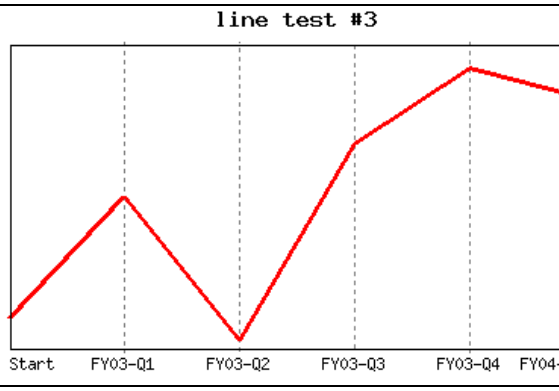
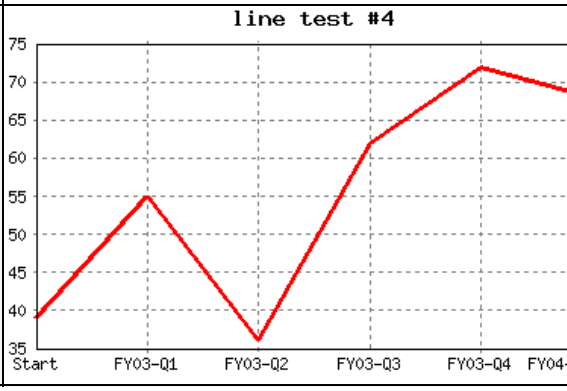
Table #4

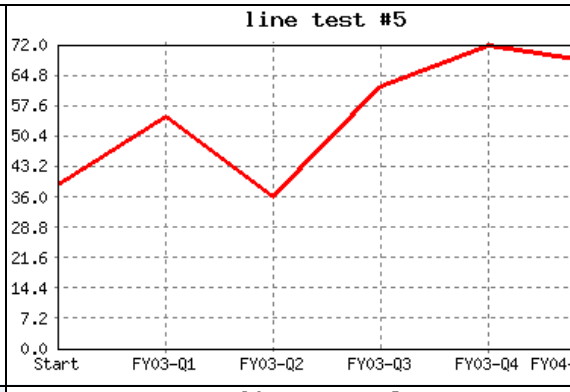
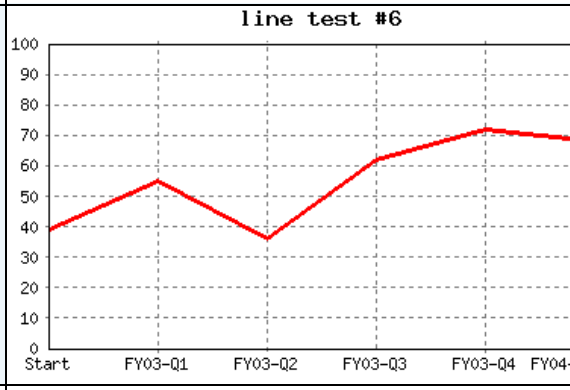
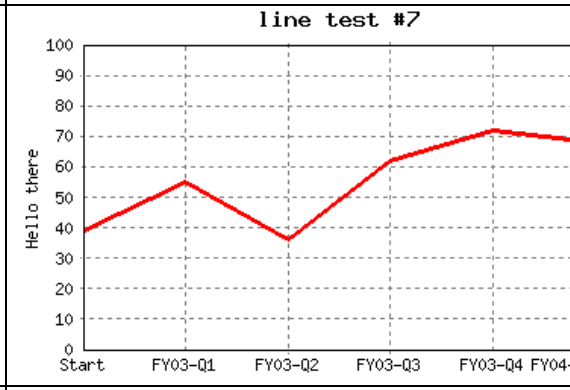
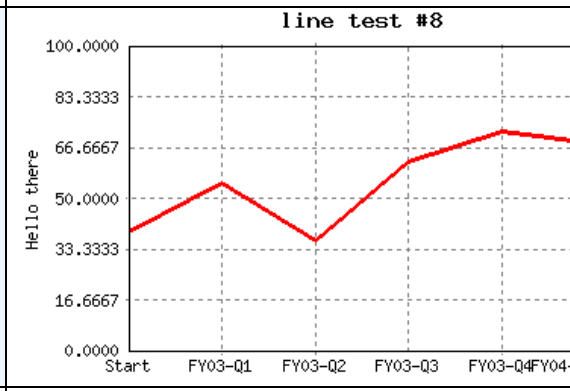
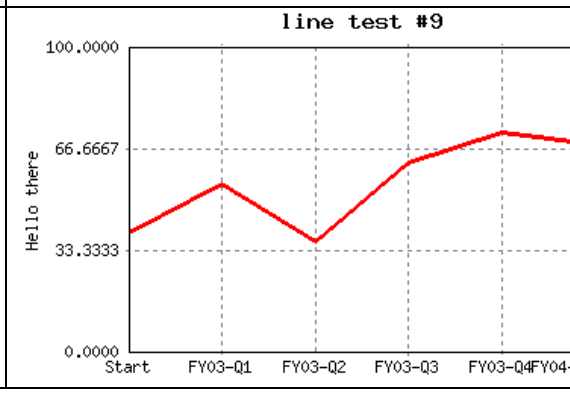
This table is used for various legend placement tests as well as logarithmic data.

	line 1	line 2	line 3	line 4	sparse 1	sparse 2	semilog line
1990	0	0	0	0	0		0.2
1991	0	0	0	0		35	1
1992	2	12	22	32	35.5		5
1993	3	20	20	33	38	35.2	25
1994	3	20	19.5	33	38.1		125
1995	39	38	37	36		35.8	625
1996	40	40	40	40	38.1		3125
1997	40	41	42	43		35	15625

General tests

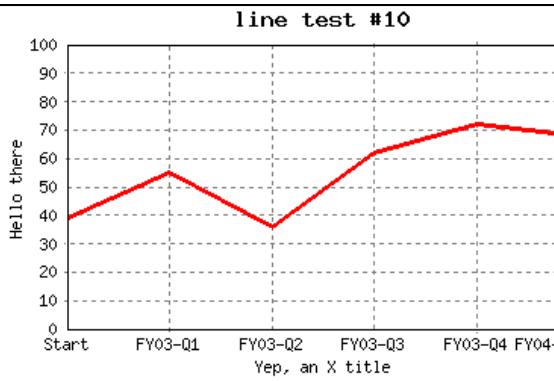
line tests

Simple single line. No other markings at all `%CHART{data="R2:C7..R7:C7" name="line_1" table="table1" type="line" ygrid="off"}%`	
Simple single line, add title. `%CHART{data="R2:C7..R7:C7" name="line_2" table="table1" title="line test #2" type="line" ygrid="off"}%`	
Add X axis to above `%CHART{data="R2:C7..R7:C7" name="line_3" table="table1" title="line test #3" type="line" xaxis="R2:C2..R7:C2" ygrid="off"}%`	
Add Y axis to above `%CHART{data="R2:C7..R7:C7" name="line_4" table="table1" title="line test #4" type="line" xaxis="R2:C2..R7:C2" yaxis="on"}%`	

Add `ymin` = 0 to above `%CHART{data="R2:C7..R7:C7" name="line_5" table="table1" title="line test #5" type="line" xaxis="R2:C2..R7:C2" yaxis="on" ymin="0"}%`	
Add `ymax` = 100 to above `%CHART{data="R2:C7..R7:C7" name="line_6" table="table1" title="line test #6" type="line" xaxis="R2:C2..R7:C2" yaxis="on" ymax="100" ymin="0"}%`	
Add `ylabel` "Hello there" to above `%CHART{data="R2:C7..R7:C7" name="line_7" table="table1" title="line test #7" type="line" xaxis="R2:C2..R7:C2" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%`	
Add `numygrids="5"` above `%CHART{data="R2:C7..R7:C7" name="line_8" numygrids="5" table="table1" title="line test #8" type="line" xaxis="R2:C2..R7:C2" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%`	
Change `numygrids="2"` above `%CHART{data="R2:C7..R7:C7" name="line_9" numygrids="2" table="table1" title="line test #9" type="line" xaxis="R2:C2..R7:C2" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%`	

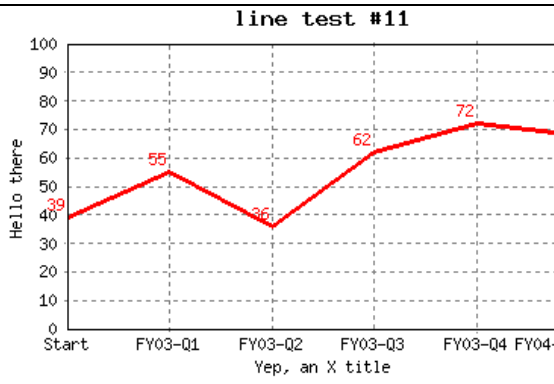
Remove `numygrids` from above and add `xlabel` "Yep, an X title" to above

```
%CHART{data="R2:C7..R7:C7" name="line_10"
table="table1" title="line test #10"
type="line" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



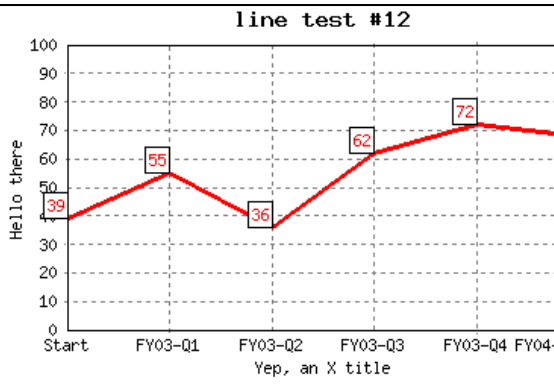
Add `datalabel` = `on` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="on"
name="line_11" table="table1" title="line test
#11" type="line" xaxis="R2:C2..R7:C2"
xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



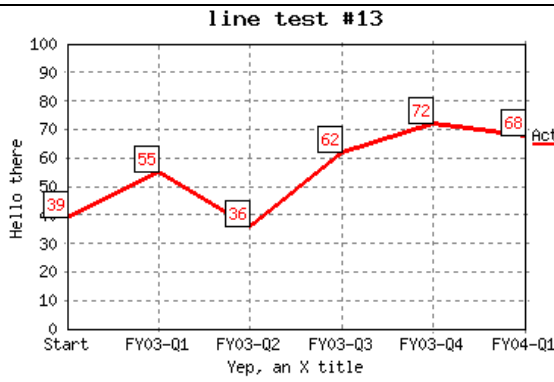
Add `datalabel` = `box` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="box"
name="line_12" table="table1" title="line test
#12" type="line" xaxis="R2:C2..R7:C2"
xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



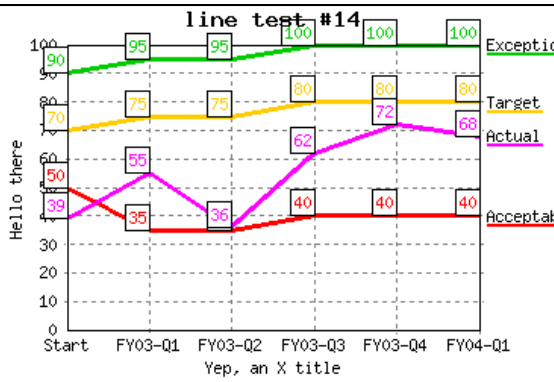
Add `legend` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="box"
legend="R1:C7..R1:C7" name="line_13"
table="table1" title="line test #13"
type="line" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



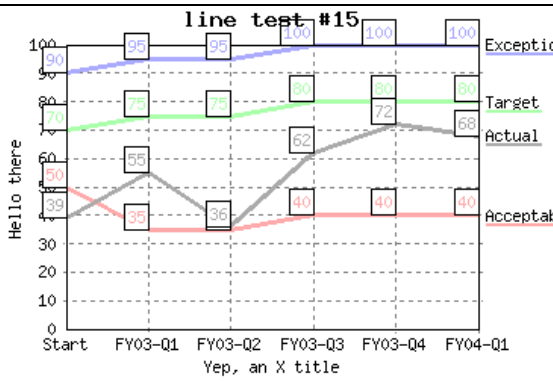
Add additional data lines to above and update `legend`

```
%CHART{data="R2:C4..R7:C7" datalabel="box"
legend="R1:C4..R1:C7" name="line_14"
table="table1" title="line test #14"
type="line" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



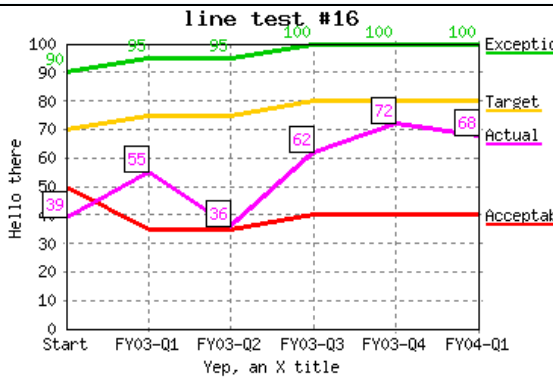
Specify different colors to above. Now are lite red, lite green, lite blue, gray instead of defaults

```
%CHART{colors="#ffAAAA,#AAffAA,#AAAAff,#AAAAAA"
data="R2:C4..R7:C7" datalabel="box"
legend="R1:C4..R1:C7" name="line_15"
table="table1" title="line test #15"
type="line" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



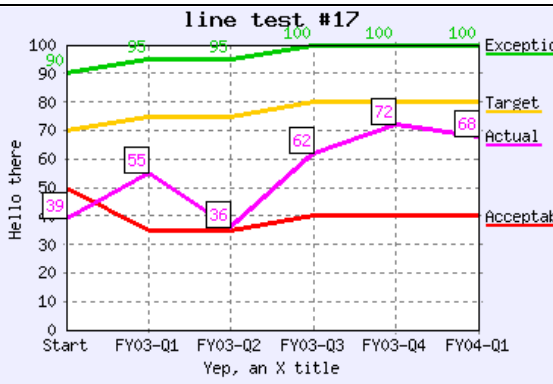
Restore default colors and change `datalabel` such that only the last line has values in boxes and the 2nd to last has values (no box) to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="line_16"
table="table1" title="line test #16"
type="line" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



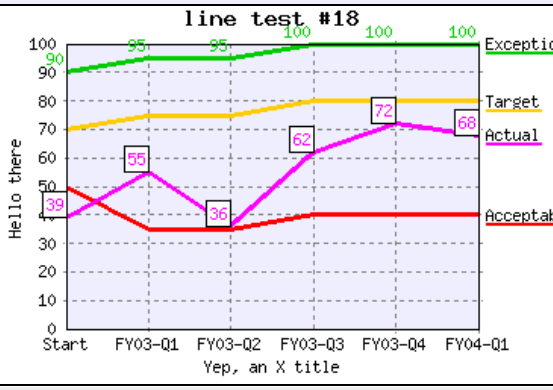
Same as above except specify `bgcolor="#EEEEEE"`

=%CHART{bgcolor="#EEEEFF" data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="line_17" table="table1" title="line test #17" type="line" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%



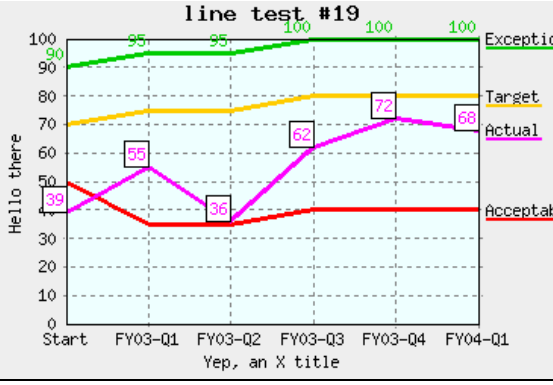
Change `bgcolor="#FFFFFF #EEEEEE"`

=%CHART{bgcolor="#FFFFFF #EEEEFF" data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="line_18" table="table1" title="line test #18" type="line" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%



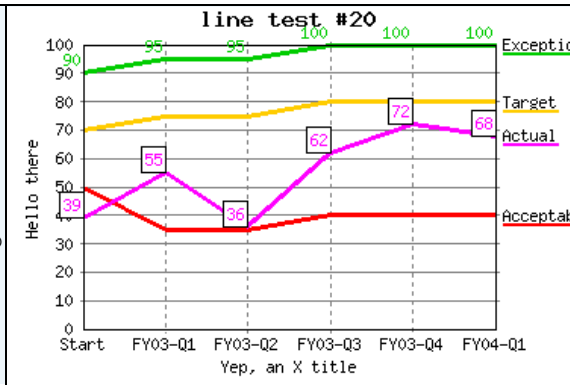
Change `bgcolor="#EEEEEE #EEFFEE"`

=%CHART{bgcolor="#EEEEEE #EEFFFF" data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="line_19" table="table1" title="line test #19" type="line" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%



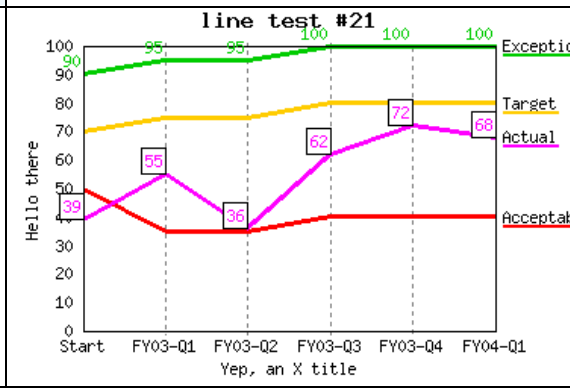
Restore `bgcolor` and change `ygrid` = `on` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="line_20"
table="table1" title="line test #20"
type="line" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ygrid="on" ylabel="Hello
there" ymax="100" ymin="0"}%
```



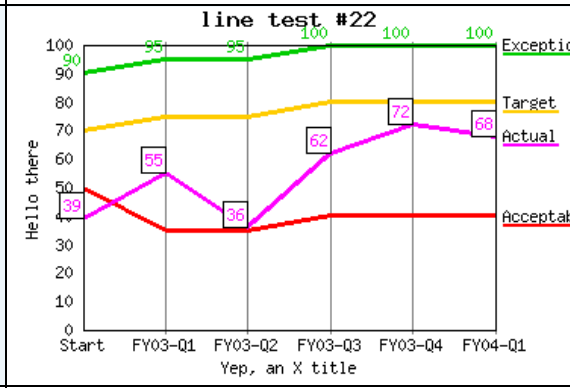
Change `ygrid` = `off` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="line_21"
table="table1" title="line test #21"
type="line" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



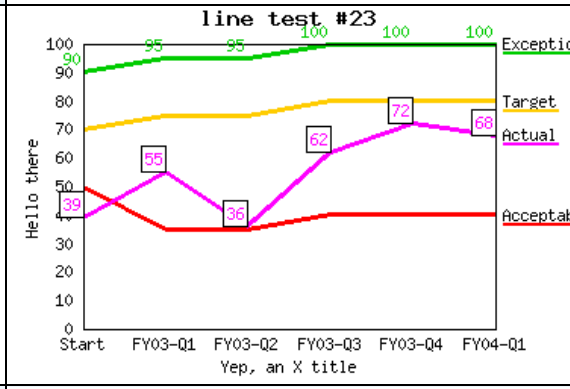
Change `xgrid` = `on` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="line_22"
table="table1" title="line test #22"
type="line" xaxis="R2:C2..R7:C2" xgrid="on"
xlabel="Yep, an X title" yaxis="on"
ygrid="off" ylabel="Hello there" ymax="100"
ymin="0"}%
```



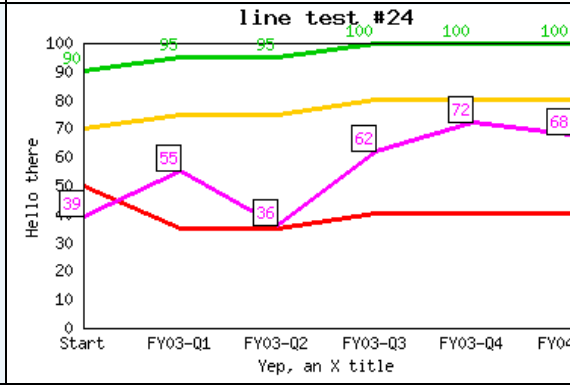
Change `xgrid` = `off` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="line_23"
table="table1" title="line test #23"
type="line" xaxis="R2:C2..R7:C2" xgrid="off"
xlabel="Yep, an X title" yaxis="on"
ygrid="off" ylabel="Hello there" ymax="100"
ymin="0"}%
```



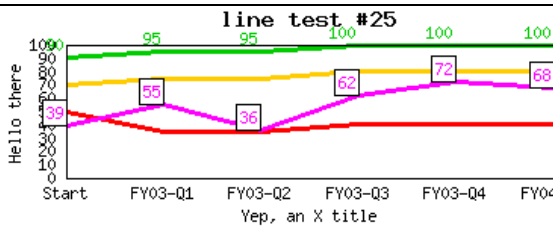
Change `width` = `450`

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="line_24"
table="table1" title="line test #24"
type="line" width="450" xaxis="R2:C2..R7:C2"
xgrid="off" xlabel="Yep, an X title" yaxis="on"
ygrid="off" ylabel="Hello there" ymax="100"
ymin="0"}%
```



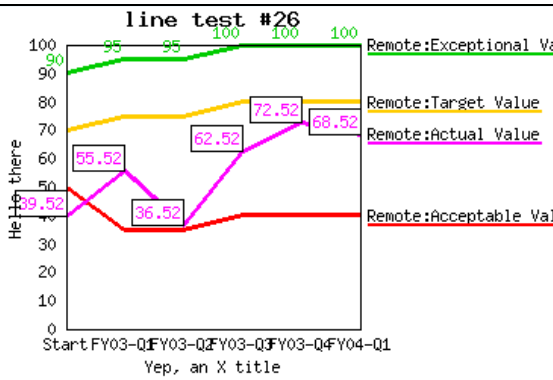
Change `height` = `150`

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" height="150" legend="R1:C4..R1:C7"
name="line_25" table="table1" title="line test
#25" type="line" width="450"
xaxis="R2:C2..R7:C2" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



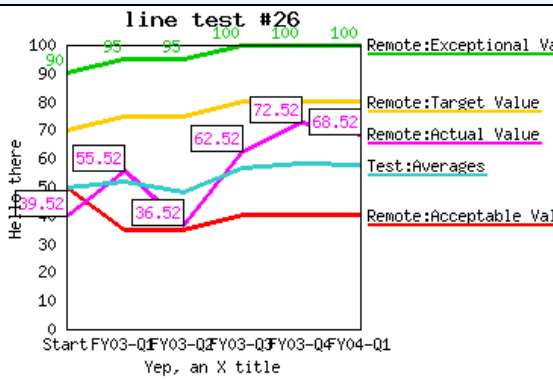
Default width/height. Get data from ChartPluginTestsRemote. Specify `table="2"` on new `topic` = `ChartPluginTestsRemote`. Actual values should show up incremented by 0.52 since data is from a different topic page and the 0.02 denotes the data is from the 2nd table. Legend should show up with `Remote` since the data on the remote page was set up to include `Remote` in the legends

```
%CHART{data="R4:C2..R7:C7" datalabel="off off
on box" legend="R4:C1..R7:C1" name="line_26"
table="2" title="line test #26"
topic="ChartPluginTestsRemote" type="line"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



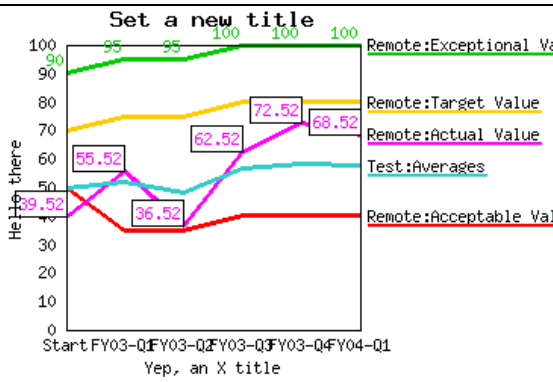
Same as above except add an additional data set (**averages**) that is calculated by %CALC%. Also shows that since only 4 default line colors are specified, the 5th line reuses the 1st default line color.

```
%CHART{data="R4:C2..R8:C7" datalabel="off off
on box" legend="R4:C1..R8:C1" name="line_27"
table="2" title="line test #26"
topic="ChartPluginTestsRemote" type="line"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



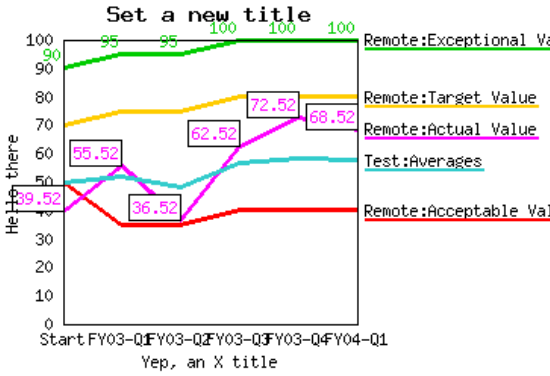
Set `title` = "Set a new title" to above

```
%CHART{data="R4:C2..R8:C7" datalabel="off off
on box" legend="R4:C1..R8:C1" name="line_28"
table="2" title="Set a new title"
topic="ChartPluginTestsRemote" type="line"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```

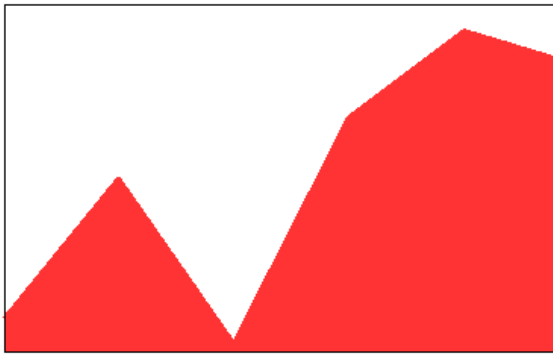
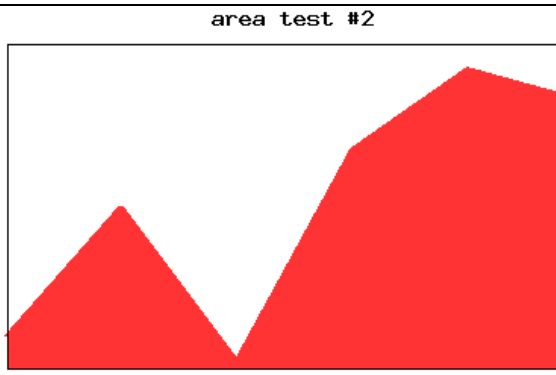
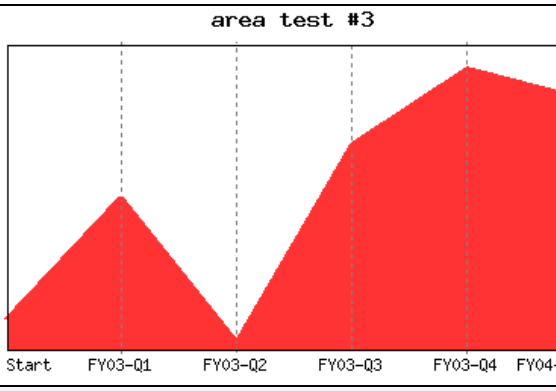


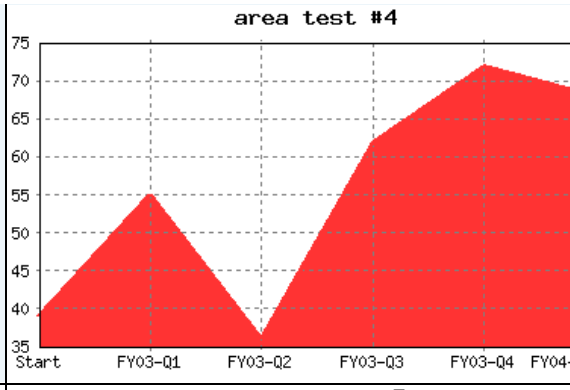
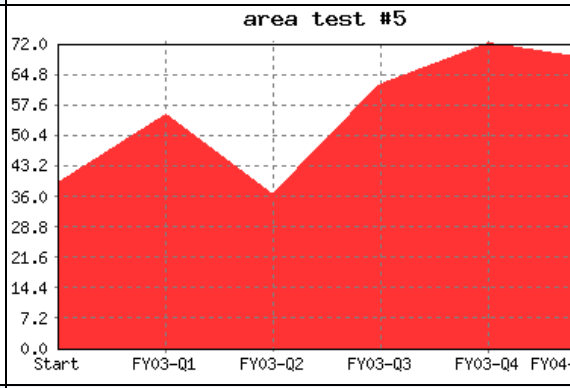
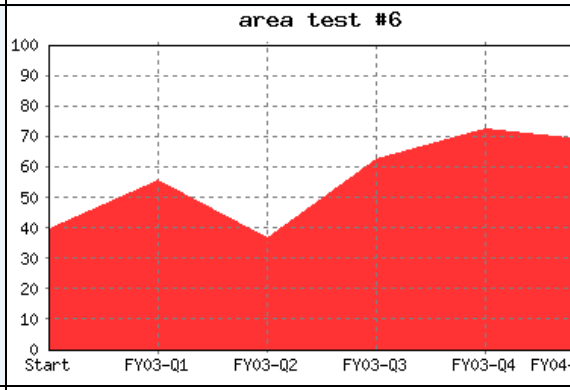
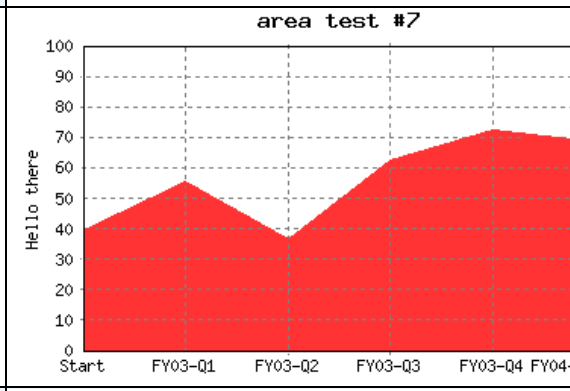
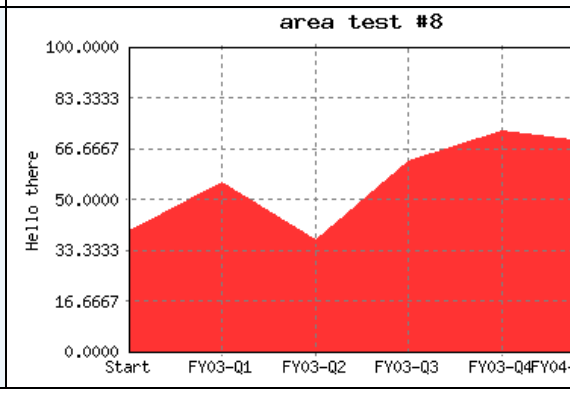
Same as above except add the `alt` tag = `This is the alt tag`

```
%CHART{alt="This is the alt tag"
data="R4:C2..R8:C7" datalabel="off off on box"
legend="R4:C1..R8:C1" name="line_29" table="2"
title="Set a new title"
topic="ChartPluginTestsRemote" type="line"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
```

`an X title" yaxis="on" ygrid="off" ylabel="Hello there" ymax="100" ymin="0"}%`	

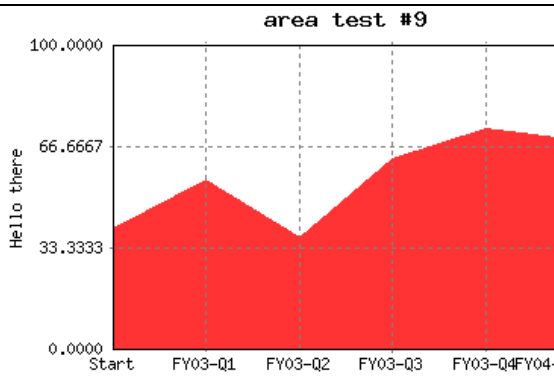
area tests

Simple single area. No other markings at all `%CHART{data="R2:C7..R7:C7" name="area_1" table="table1" type="area" ygrid="off"}%`	
Simple single area, add title. `%CHART{data="R2:C7..R7:C7" name="area_2" table="table1" title="area test #2" type="area" ygrid="off"}%`	
Add X axis to above `%CHART{data="R2:C7..R7:C7" name="area_3" table="table1" title="area test #3" type="area" xaxis="R2:C2..R7:C2" ygrid="off"}%`	
Add Y axis to above `%CHART{data="R2:C7..R7:C7" name="area_4" table="table1" title="area test #4" type="area" xaxis="R2:C2..R7:C2" yaxis="on"}%`	

	
Add `ymin` = 0 to above `%CHART{data="R2:C7..R7:C7" name="area_5" table="table1" title="area test #5" type="area" xaxis="R2:C2..R7:C2" yaxis="on" ymin="0"}%`	
Add `ymax` = 100 to above `%CHART{data="R2:C7..R7:C7" name="area_6" table="table1" title="area test #6" type="area" xaxis="R2:C2..R7:C2" yaxis="on" ymax="100" ymin="0"}%`	
Add `ylabel` "Hello there" to above `%CHART{data="R2:C7..R7:C7" name="area_7" table="table1" title="area test #7" type="area" xaxis="R2:C2..R7:C2" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%`	
Add `numygrids="5"` above `%CHART{data="R2:C7..R7:C7" name="area_8" numygrids="5" table="table1" title="area test #8" type="area" xaxis="R2:C2..R7:C2" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%`	

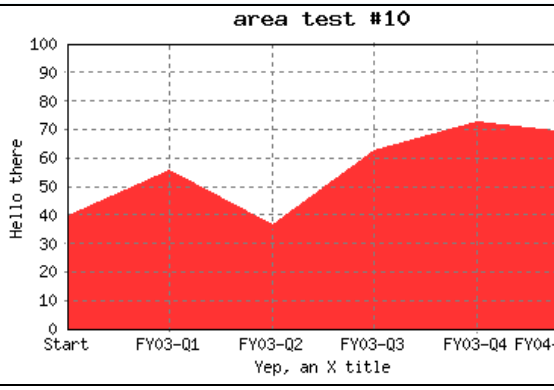
Change `numygrids="2"` above

```
%CHART{data="R2:C7..R7:C7" name="area_9"
numygrids="2" table="table1" title="area test
#9" type="area" xaxis="R2:C2..R7:C2" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



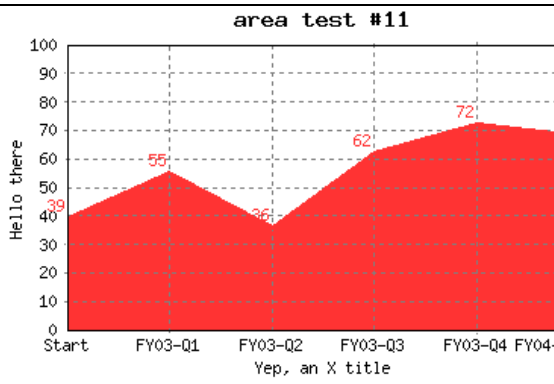
Remove `numygrids` from above and add `xlabel` "Yep, an X title" to above

```
%CHART{data="R2:C7..R7:C7" name="area_10"
table="table1" title="area test #10"
type="area" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



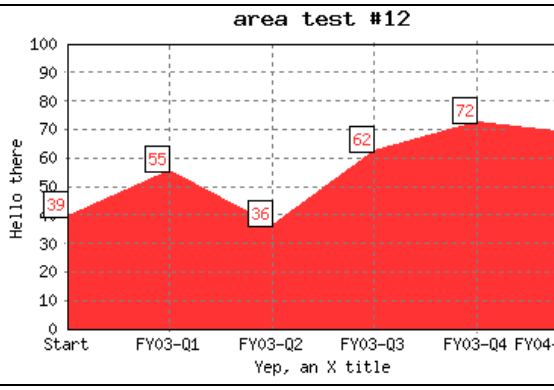
Add `datalabel` = `on` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="on"
name="area_11" table="table1" title="area test
#11" type="area" xaxis="R2:C2..R7:C2"
xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



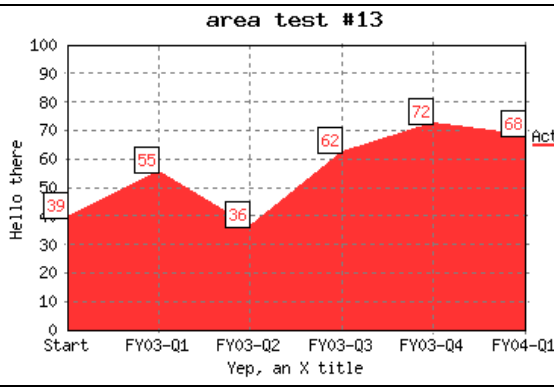
Add `datalabel` = `box` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="box"
name="area_12" table="table1" title="area test
#12" type="area" xaxis="R2:C2..R7:C2"
xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



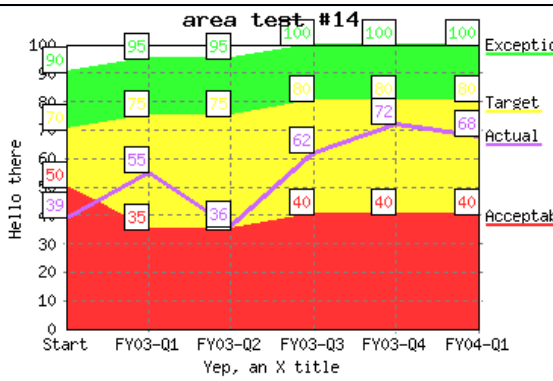
Add `legend` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="box"
legend="R1:C7..R1:C7" name="area_13"
table="table1" title="area test #13"
type="area" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



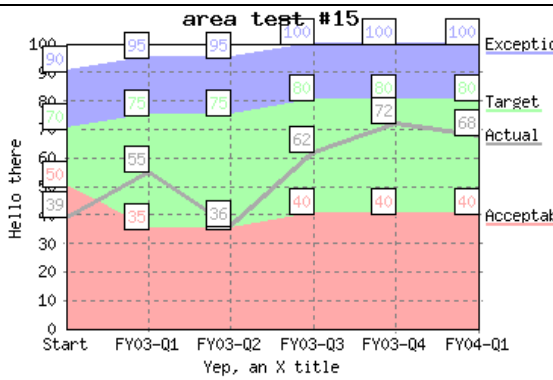
Add additional data areas to above and update `legend`

```
%CHART{data="R2:C4..R7:C7" datalabel="box"
legend="R1:C4..R1:C7" name="area_14"
table="table1" title="area test #14"
type="area" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



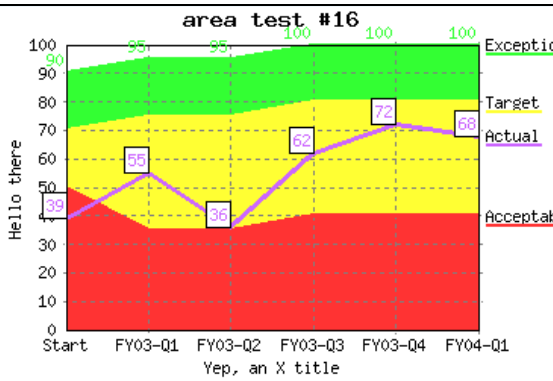
Specify different colors to above. Now are lite red, lite green, lite blue, gray instead of defaults

```
%CHART{colors="#ffAAAA,#AAffAA,#AAAAff,#AAAAAA"
data="R2:C4..R7:C7" datalabel="box"
legend="R1:C4..R1:C7" name="area_15"
table="table1" title="area test #15"
type="area" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



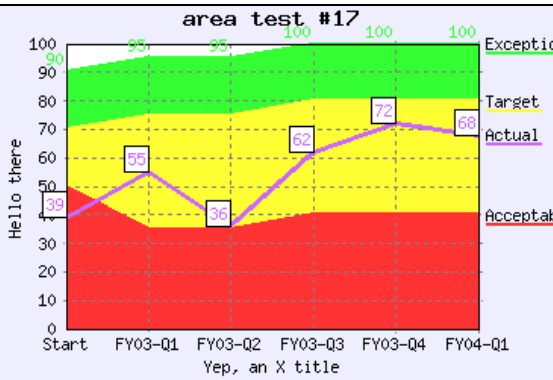
Restore default colors and change `datalabel` such that only the last area has values in boxes and the 2nd to last has values (no box) to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="area_16"
table="table1" title="area test #16"
type="area" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ylabel="Hello there"
ymax="100" ymin="0"}%
```



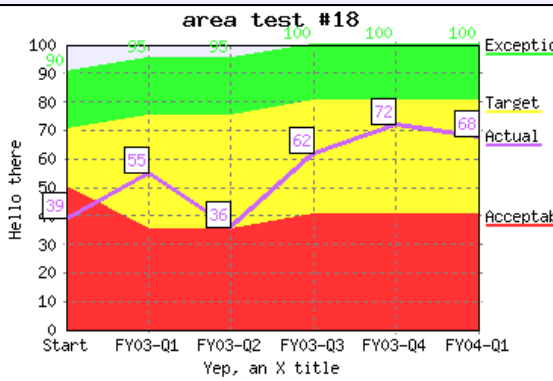
Same as above except specify `bgcolor="#EEEEEE"`

```
=%CHART{bgcolor="#EEEEFF" data="R2:C4..R7:C7"
datalabel="off off on box" legend="R1:C4..R1:C7" name="area_17"
table="table1" title="area test #17" type="area"
xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



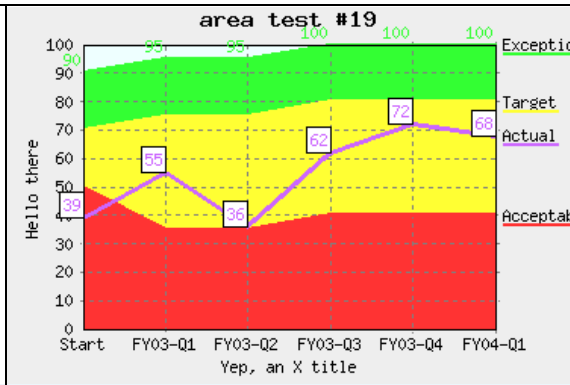
Change `bgcolor="#FFFFFF #EEEEEE"`

```
=%CHART{bgcolor="#FFFFFF #EEEEFF" data="R2:C4..R7:C7"
datalabel="off off on box" legend="R1:C4..R1:C7" name="area_18"
table="table1" title="area test #18" type="area"
xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



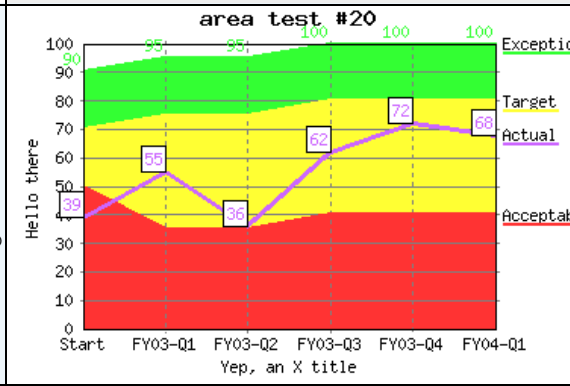
Change `bgcolor="#EEEEEE #EEFFEE"`

=%CHART{bgcolor="#EEEEEE #EEFFFF" data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="area_19" table="table1" title="area test #19" type="area" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%



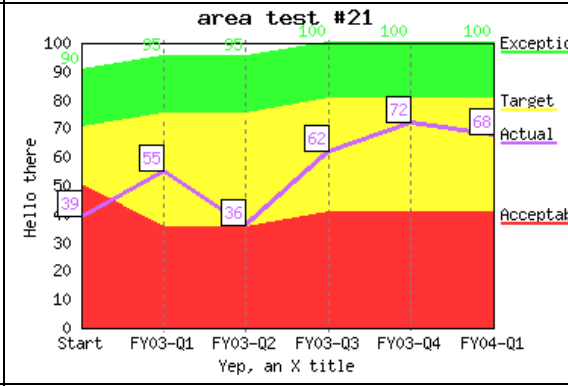
Restore `bgcolor` and change `ygrid` = `on` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="area_20"
table="table1" title="area test #20"
type="area" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ygrid="on" ylabel="Hello
there" ymax="100" ymin="0"}%
```



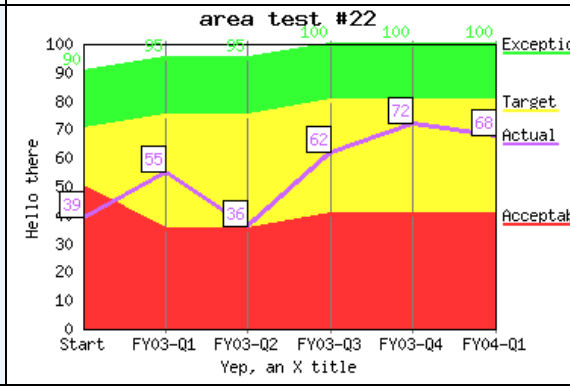
Change `ygrid` = `off` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="area_21"
table="table1" title="area test #21"
type="area" xaxis="R2:C2..R7:C2" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



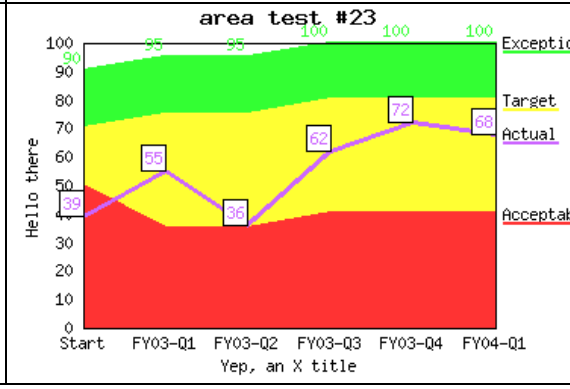
Change `xgrid` = `on` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="area_22"
table="table1" title="area test #22"
type="area" xaxis="R2:C2..R7:C2" xgrid="on"
xlabel="Yep, an X title" yaxis="on"
ygrid="off" ylabel="Hello there" ymax="100"
ymin="0"}%
```



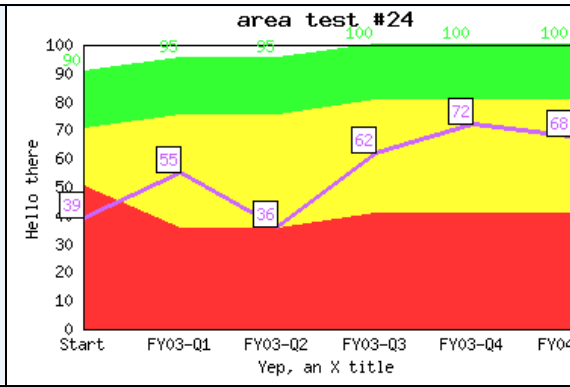
Change `xgrid` = `off` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="area_23"
table="table1" title="area test #23"
type="area" xaxis="R2:C2..R7:C2" xgrid="off"
xlabel="Yep, an X title" yaxis="on"
ygrid="off" ylabel="Hello there" ymax="100"
ymin="0"}%
```



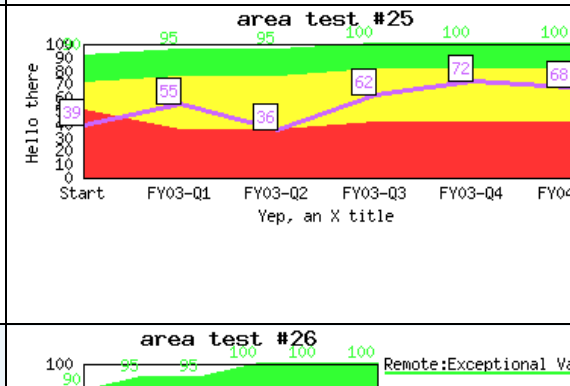
Change `width` = `450`

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="area_24"
table="table1" title="area test #24"
type="area" width="450" xaxis="R2:C2..R7:C7"
xgrid="off" xlabel="Yep, an X title" yaxis="on"
ygrid="off" ylabel="Hello there" ymax="100"
ymin="0"}%
```



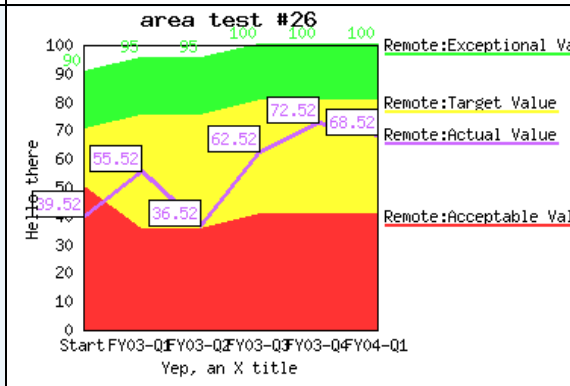
Change `height` = `150`

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" height="150" legend="R1:C4..R1:C7"
name="area_25" table="table1" title="area test
#25" type="area" width="450"
xaxis="R2:C2..R7:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



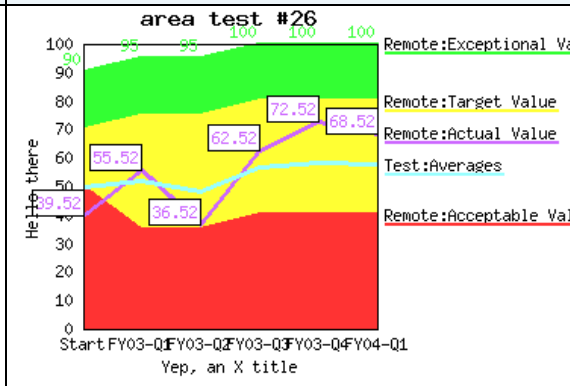
Default width/height. Get data from ChartPluginTestsRemote. Specify `table="2"` on new `topic` = `ChartPluginTestsRemote`. Actual values should show up incremented by 0.52 since data is from a different topic page and the 0.02 denotes the data is from the 2nd table. Legend should show up with `Remote` since the data on the remote page was set up to include `Remote` in the legends

```
%CHART{data="R4:C2..R7:C7" datalabel="off off
on box" legend="R4:C1..R7:C1" name="area_26"
table="2" title="area test #26"
topic="ChartPluginTestsRemote" type="area"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



Same as above except add an additional data set (**averages**) that is calculated by %CALC%. Also shows that since only 4 default area colors are specified, the 5th area reuses the 1st default area color.

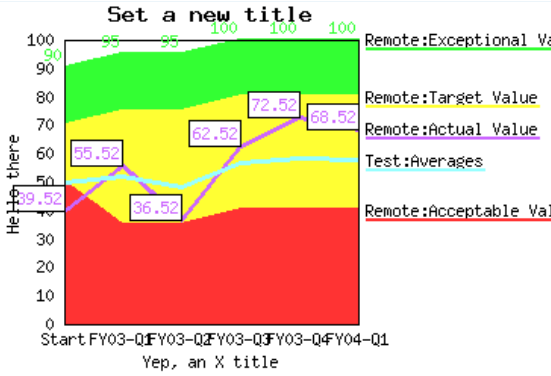
```
%CHART{data="R4:C2..R8:C7" datalabel="off off
on box" legend="R4:C1..R8:C1" name="area_27"
table="2" title="area test #26"
topic="ChartPluginTestsRemote" type="area"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



Set `title` = "Set a new title" to above

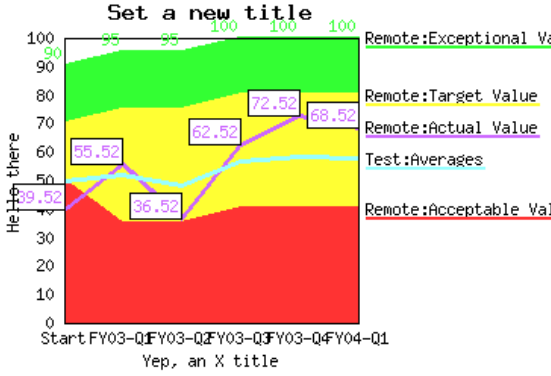
```
%CHART{data="R4:C2..R8:C7" datalabel="off off
on box" legend="R4:C1..R8:C1" name="area_28"
table="2" title="Set a new title"
topic="ChartPluginTestsRemote" type="area"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
```

```
ylabel="Hello there" ymax="100" ymin="0"}%
```



Same as above except add the `alt` tag = `This is the alt tag`

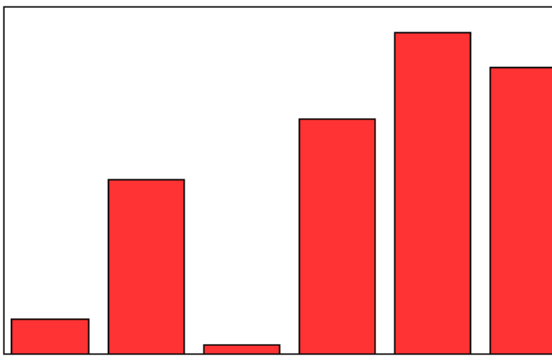
```
%CHART{alt="This is the alt tag"
data="R4:C2..R8:C7" datalabel="off off on box"
legend="R4:C1..R8:C1" name="area_29" table="2"
title="Set a new title"
topic="ChartPluginTestsRemote" type="area"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



bar tests

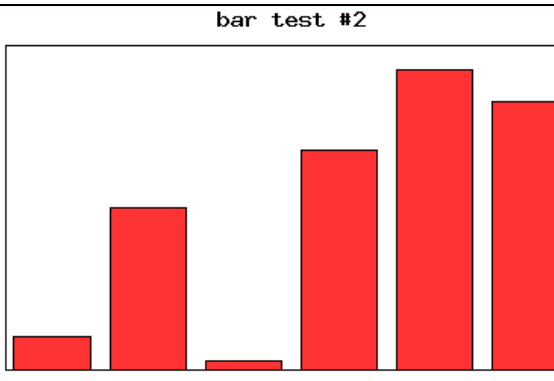
Simple single bar. No other markings at all

```
%CHART{data="R2:C7..R7:C7" name="bar_1"
table="table1" type="bar" ygrid="off"}%
```



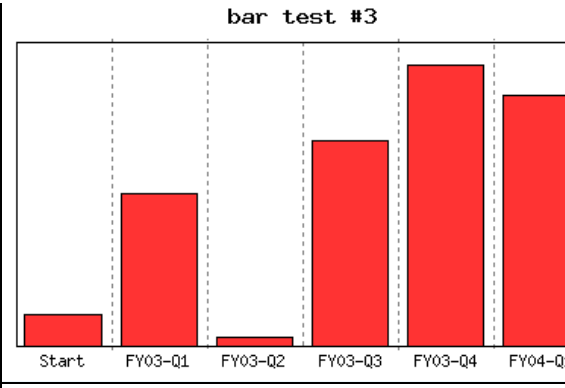
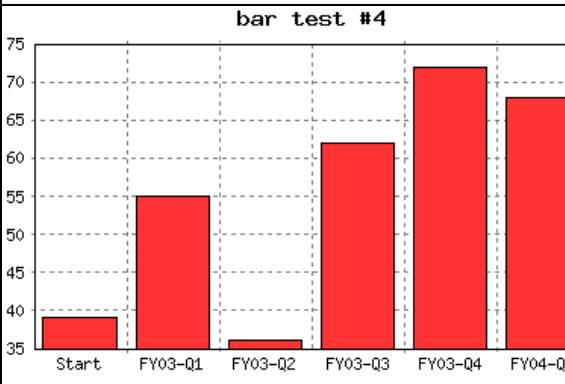
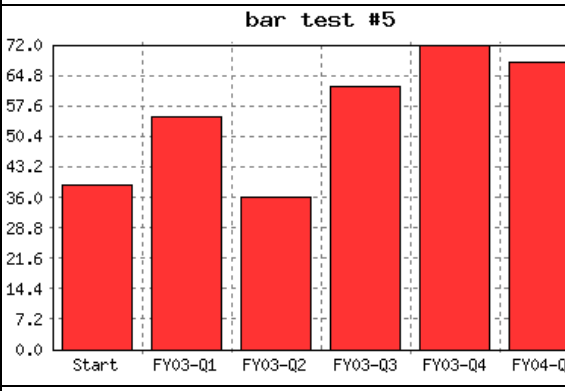
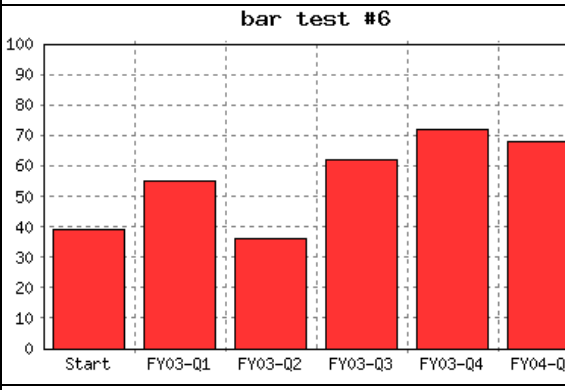
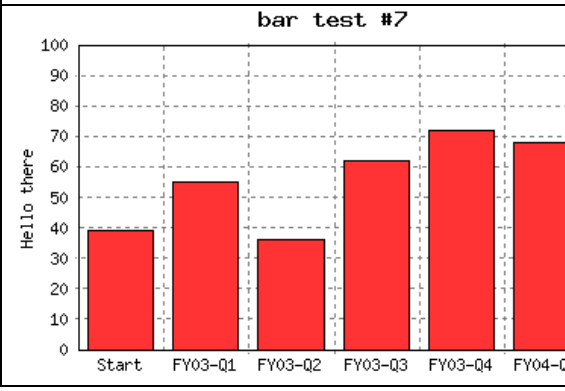
Simple single bar, add title.

```
%CHART{data="R2:C7..R7:C7" name="bar_2"
table="table1" title="bar test #2" type="bar"
ygrid="off"}%
```



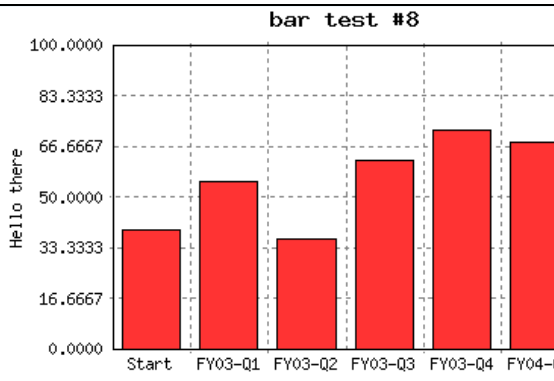
Add X axis to above

```
%CHART{data="R2:C7..R7:C7" name="bar_3"
table="table1" title="bar test #3" type="bar"
xaxis="R2:C2..R7:C2" ygrid="off"}%
```

	
Add Y axis to above `%CHART{data="R2:C7..R7:C7" name="bar_4" table="table1" title="bar test #4" type="bar" xaxis="R2:C2..R7:C2" yaxis="on"}%`	
Add `ymin` = 0 to above `%CHART{data="R2:C7..R7:C7" name="bar_5" table="table1" title="bar test #5" type="bar" xaxis="R2:C2..R7:C2" yaxis="on" ymin="0"}%`	
Add `ymax` = 100 to above `%CHART{data="R2:C7..R7:C7" name="bar_6" table="table1" title="bar test #6" type="bar" xaxis="R2:C2..R7:C2" yaxis="on" ymax="100" ymin="0"}%`	
Add `ylabel` "Hello there" to above `%CHART{data="R2:C7..R7:C7" name="bar_7" table="table1" title="bar test #7" type="bar" xaxis="R2:C2..R7:C2" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%`	

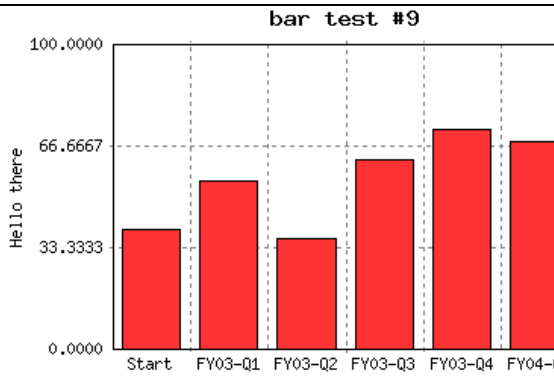
Add `numygrids="5"` above

```
%CHART{data="R2:C7..R7:C7" name="bar_8"
numygrids="5" table="table1" title="bar test
#8" type="bar" xaxis="R2:C2..R7:C2" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



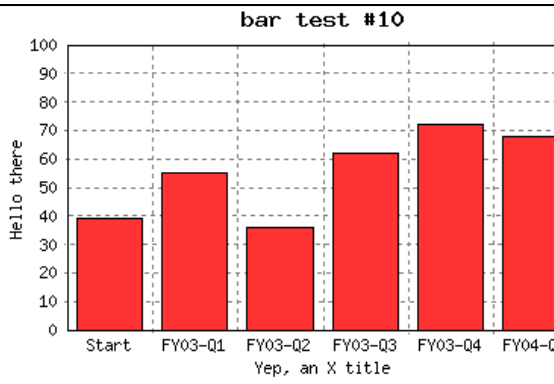
Change `numygrids="2"` above

```
%CHART{data="R2:C7..R7:C7" name="bar_9"
numygrids="2" table="table1" title="bar test
#9" type="bar" xaxis="R2:C2..R7:C2" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



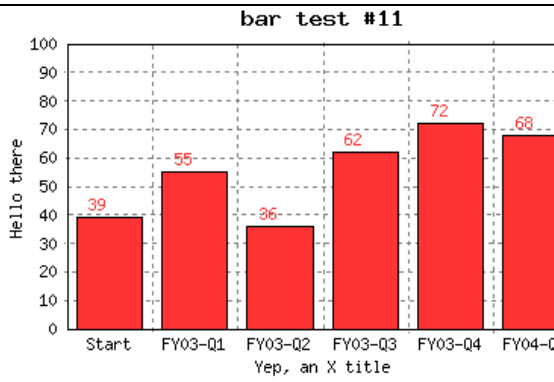
Remove `numygrids` from above and add `xlabel` "Yep, an X title" to above

```
%CHART{data="R2:C7..R7:C7" name="bar_10"
table="table1" title="bar test #10" type="bar"
xaxis="R2:C2..R7:C2" xlabel="Yep, an X title"
yaxis="on" ylabel="Hello there" ymax="100"
ymin="0"}%
```



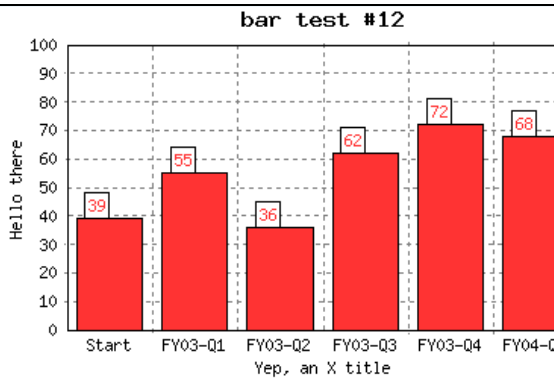
Add `datalabel` = `on` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="on"
name="bar_11" table="table1" title="bar test
#11" type="bar" xaxis="R2:C2..R7:C2"
xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



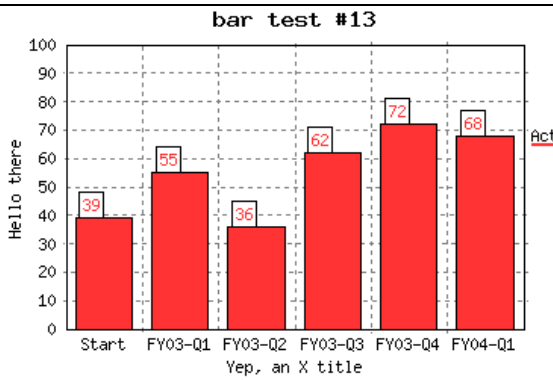
Add `datalabel` = `box` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="box"
name="bar_12" table="table1" title="bar test
#12" type="bar" xaxis="R2:C2..R7:C2"
xlabel="Yep, an X title" yaxis="on"
ylabel="Hello there" ymax="100" ymin="0"}%
```



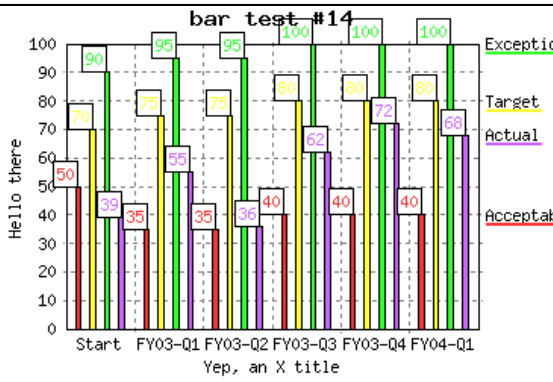
Add `legend` to above

```
%CHART{data="R2:C7..R7:C7" datalabel="box"
legend="R1:C7..R1:C7" name="bar_13"
table="table1" title="bar test #13" type="bar"
xaxis="R2:C2..R7:C2" xlabel="Yep, an X title"
yaxis="on" ylabel="Hello there" ymax="100"
ymin="0"}%
```



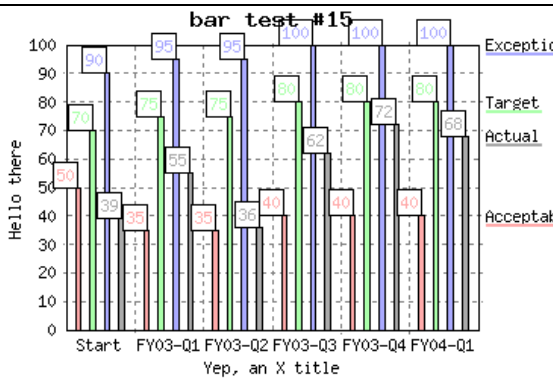
Add additional data bars to above and update `legend`

```
%CHART{data="R2:C4..R7:C7" datalabel="box"
legend="R1:C4..R1:C7" name="bar_14"
table="table1" title="bar test #14" type="bar"
xaxis="R2:C2..R7:C2" xlabel="Yep, an X title"
yaxis="on" ylabel="Hello there" ymax="100"
ymin="0"}%
```



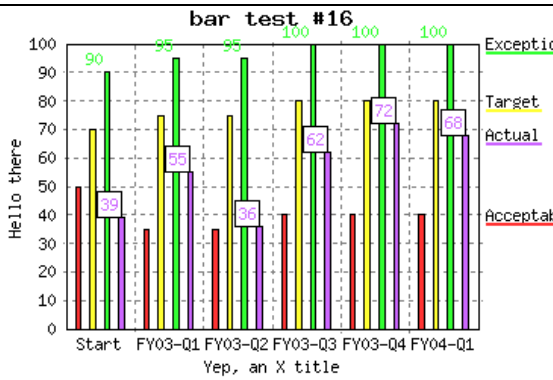
Specify different colors to above. Now are lite red, lite green, lite blue, gray instead of defaults

```
%CHART{colors="#ffAAAA,#AAffAA,#AAAAff,#AAAAAA"
data="R2:C4..R7:C7" datalabel="box"
legend="R1:C4..R1:C7" name="bar_15"
table="table1" title="bar test #15" type="bar"
xaxis="R2:C2..R7:C2" xlabel="Yep, an X title"
yaxis="on" ylabel="Hello there" ymax="100"
ymin="0"}%
```



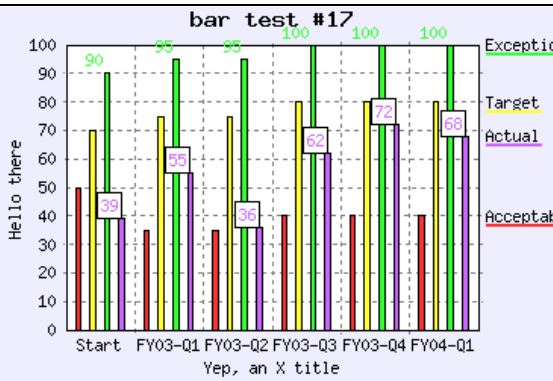
Restore default colors and change `datalabel` such that only the last bar has values in boxes and the 2nd to last has values (no box) to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="bar_16"
table="table1" title="bar test #16" type="bar"
xaxis="R2:C2..R7:C2" xlabel="Yep, an X title"
yaxis="on" ylabel="Hello there" ymax="100"
ymin="0"}%
```



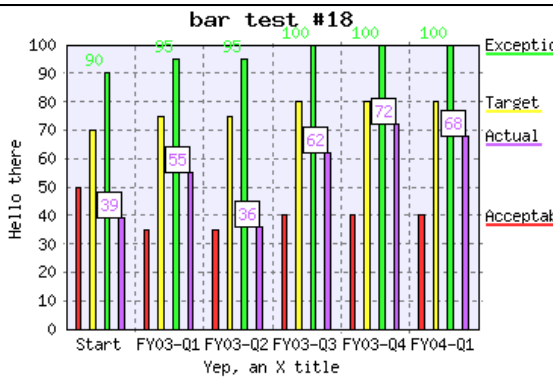
Same as above except specify `bgcolor="#EEEEEE"`

=%CHART{bgcolor="#EEEEFF" data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="bar_17" table="table1" title="bar test #17" type="bar" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%



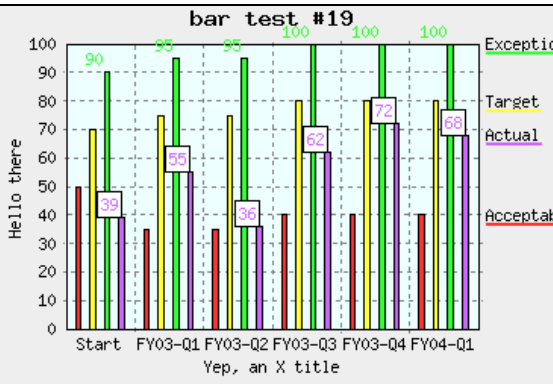
Change `bgcolor="#FFFFFF #EEEEEE"`

=%CHART{bgcolor="#FFFFFF #EEEEFF" data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="bar_18" table="table1" title="bar test #18" type="bar" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%



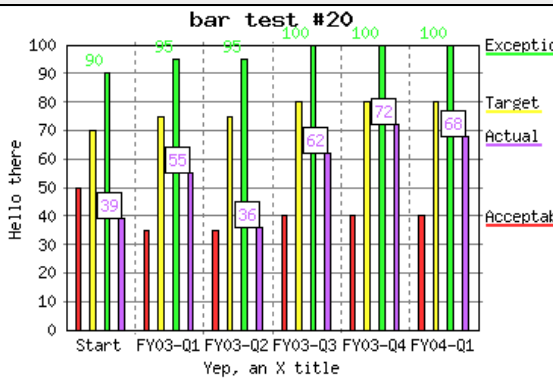
Change `bgcolor="#EEEEEE #EEFFEE"`

=%CHART{bgcolor="#EEEEEE #EEFFFF" data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="bar_19" table="table1" title="bar test #19" type="bar" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there" ymax="100" ymin="0"}%



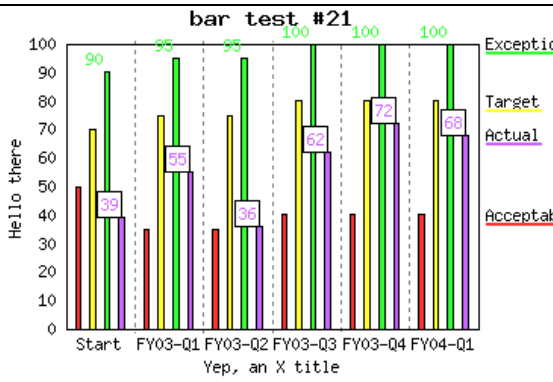
Restore `bgcolor` and change `ygrid` = `on` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="bar_20" table="table1" title="bar test #20" type="bar" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ygrid="on" ylabel="Hello there" ymax="100" ymin="0"}%
```



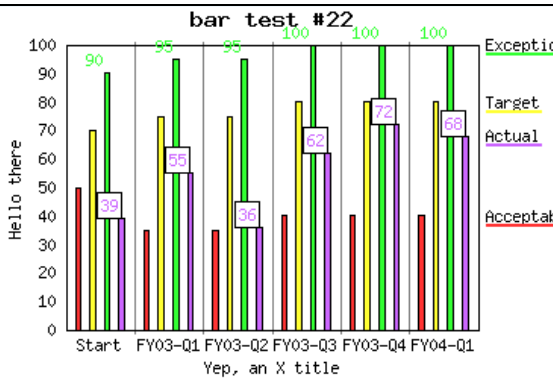
Change `ygrid` = `off` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="bar_21" table="table1" title="bar test #21" type="bar" xaxis="R2:C2..R7:C2" xlabel="Yep, an X title" yaxis="on" ygrid="off" ylabel="Hello there" ymax="100" ymin="0"}%
```



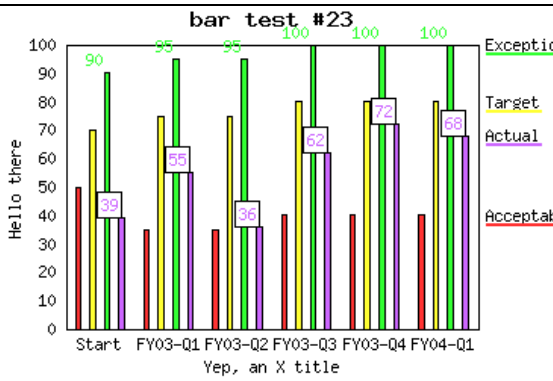
Change `xgrid` = `on` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off on box" legend="R1:C4..R1:C7" name="bar_22" table="table1" title="bar test #22" type="bar" xaxis="R2:C2..R7:C2" xgrid="on" xlabel="Yep, an X title" yaxis="on" ygrid="off" ylabel="Hello there" ymax="100" ymin="0"}%
```



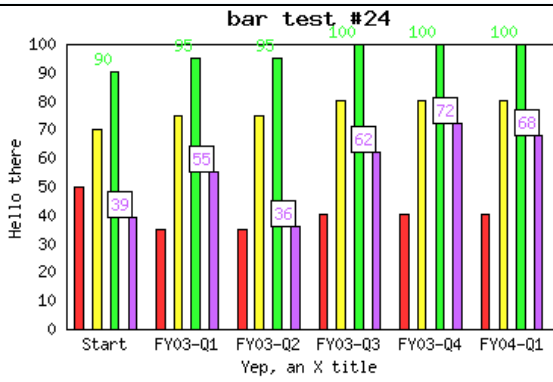
Change `xgrid = off` to above

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="bar_23"
table="table1" title="bar test #23" type="bar"
xaxis="R2:C2..R7:C2" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



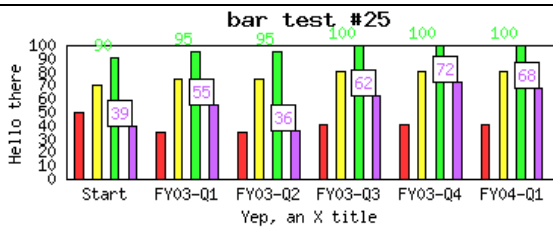
Change `width = 450`

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" legend="R1:C4..R1:C7" name="bar_24"
table="table1" title="bar test #24" type="bar"
width="450" xaxis="R2:C2..R7:C2" xgrid="off"
xlabel="Yep, an X title" yaxis="on"
ygrid="off" ylabel="Hello there" ymax="100"
ymin="0"}%
```



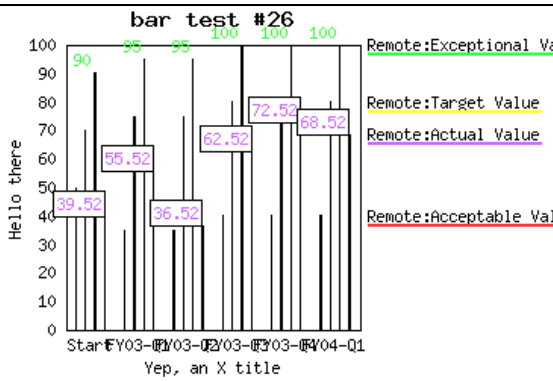
Change `height = 150`

```
%CHART{data="R2:C4..R7:C7" datalabel="off off
on box" height="150" legend="R1:C4..R1:C7"
name="bar_25" table="table1" title="bar test
#25" type="bar" width="450"
xaxis="R2:C2..R7:C2" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



Default width/height. Get data from ChartPluginTestsRemote. Specify `table="2"` on new `topic = ChartPluginTestsRemote`. Actual values should show up incremented by 0.52 since data is from a different topic page and the 0.02 denotes the data is from the 2nd table. Legend should show up with `Remote` since the data on the remote page was set up to include `Remote` in the legends

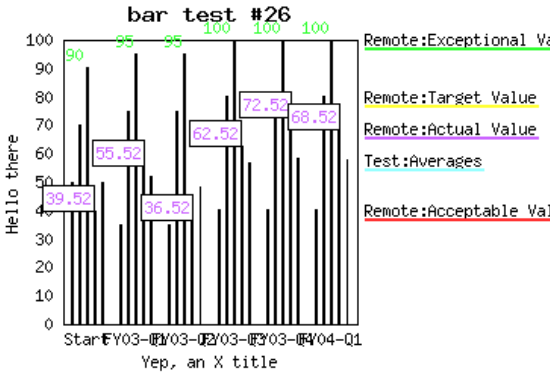
```
%CHART{data="R4:C2..R7:C7" datalabel="off off
on box" legend="R4:C1..R7:C1" name="bar_26"
table="2" title="bar test #26"
topic="ChartPluginTestsRemote" type="bar"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



Same as above except add an additional data set (**averages**) that is calculated by %CALC%. Also shows that since only 4 default bar colors are specified, the 5th bar reuses the 1st default bar color.

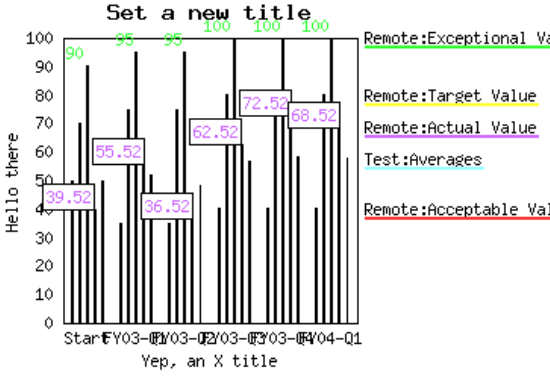
```
%CHART{data="R4:C2..R8:C7" datalabel="off off
on box" legend="R4:C1..R8:C1" name="bar_27"
table="2" title="bar test #26"
topic="ChartPluginTestsRemote" type="bar"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
```

```
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



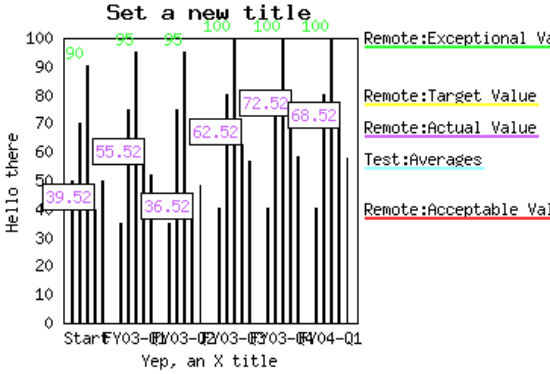
Set `title` = "Set a new title" to above

```
%CHART{data="R4:C2..R8:C7" datalabel="off off
on box" legend="R4:C1..R8:C1" name="bar_28"
table="2" title="Set a new title"
topic="ChartPluginTestsRemote" type="bar"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



Same as above except add the `alt` tag = `This is the alt tag`

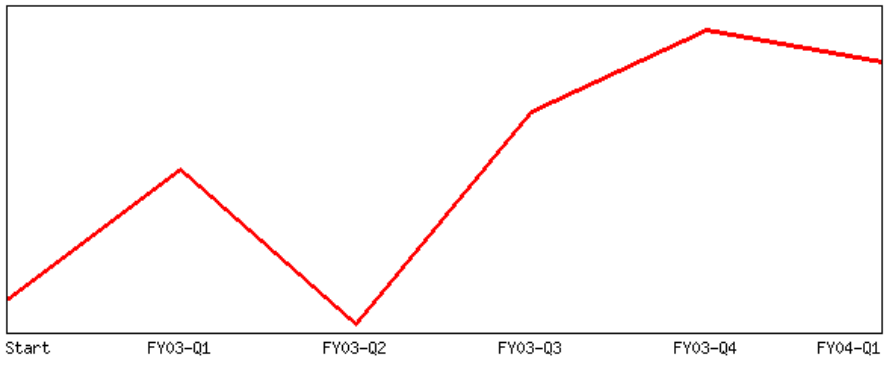
```
%CHART{alt="This is the alt tag"
data="R4:C2..R8:C7" datalabel="off off on box"
legend="R4:C1..R8:C1" name="bar_29" table="2"
title="Set a new title"
topic="ChartPluginTestsRemote" type="bar"
xaxis="R2:C2..R2:C7" xgrid="off" xlabel="Yep,
an X title" yaxis="on" ygrid="off"
ylabel="Hello there" ymax="100" ymin="0"}%
```



combo tests

Simple combo graph using table #2. Since no `datatype` is defined and only a single data set, `combo` defaults to a single `line`.

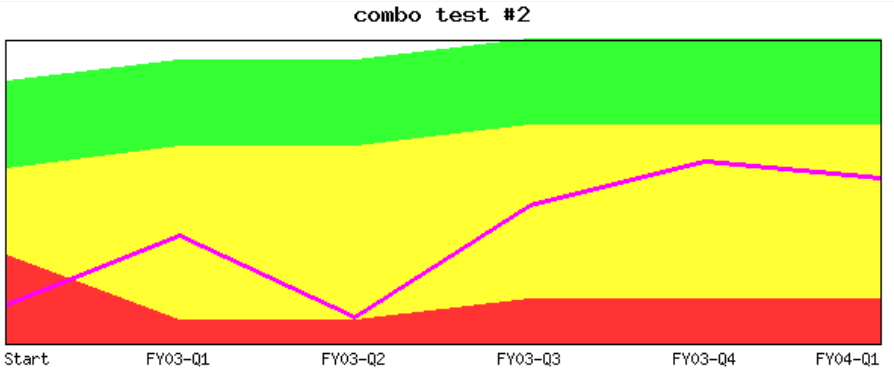
```
%CHART{data="R7:C2..R7:C7"
name="combo_1"
table="table2"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xgrid="off" ygrid="off"}%
```



Change so 3 data sets are drawn as areas and the last drawn as a line

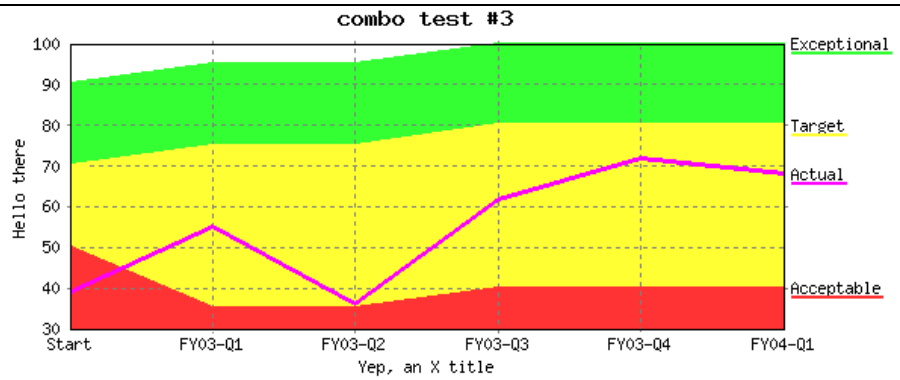
```
%CHART{data="R4:C2..R7:C7"
name="combo_2"
table="table2"
title="combo test #2"
type="combo" width="600"
```

```
xaxis="R2:C2..R2:C7"
xgrid="off" ygrid="off"}%
```



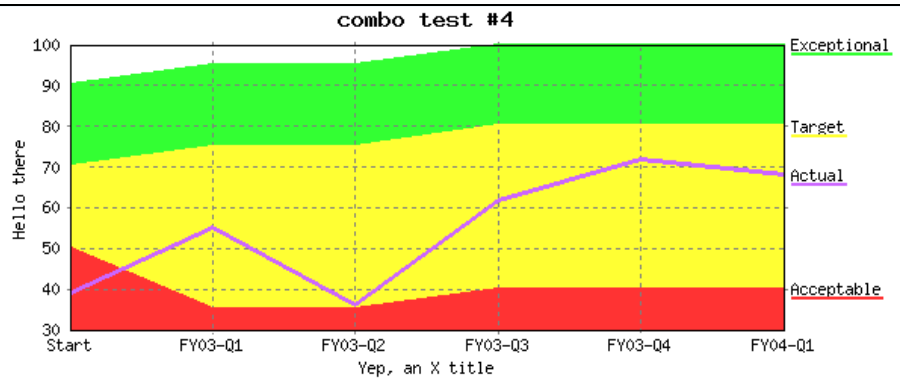
Same as above, adding grid lines and both X and Y axis labels and titles

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_3"
table="table2"
title="combo test #3"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



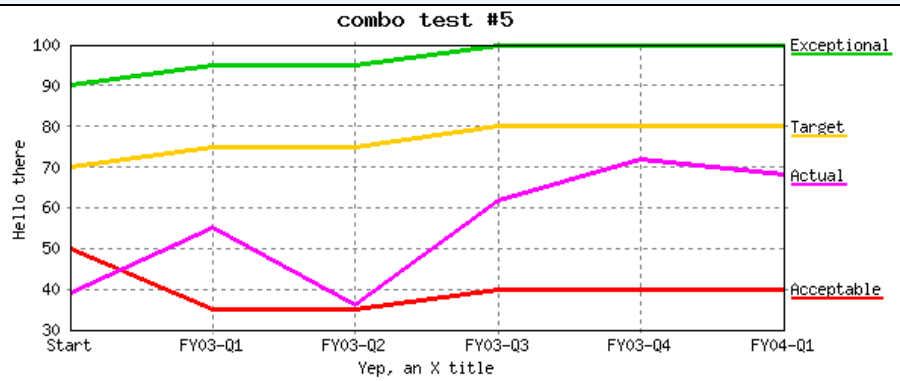
Same as above adding `subtype="area"` which should force all data sets to be drawn as `area`. Since the last data set would fall behind the previously drawn areas, it is drawn as a line

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_4"
subtype="area"
table="table2"
title="combo test #4"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



Same as above changing `subtype="line"` which should force all data sets to be drawn as `line`

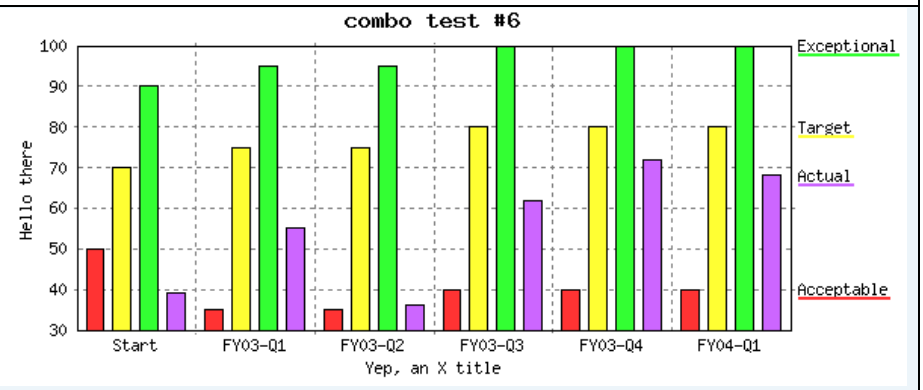
```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_5"
subtype="line"
table="table2"
title="combo test #5"
type="combo" width="600"
```



```
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```

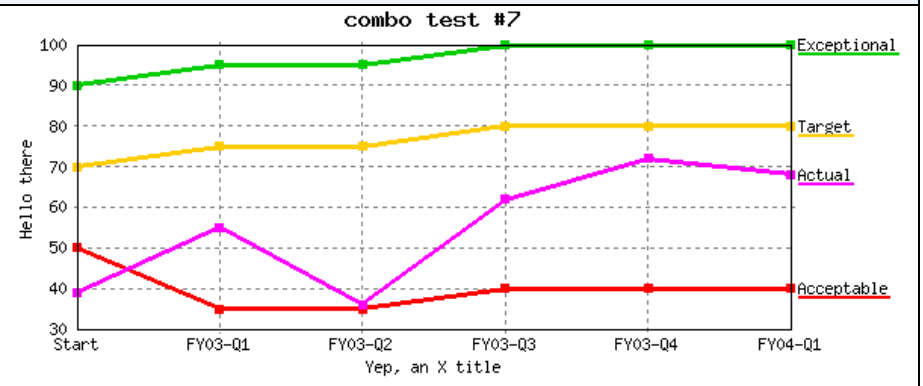
Same as above changing `subtype="bar"` which should force all data sets to be drawn as `bar`

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_6"
subtype="bar"
table="table2"
title="combo test #6"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



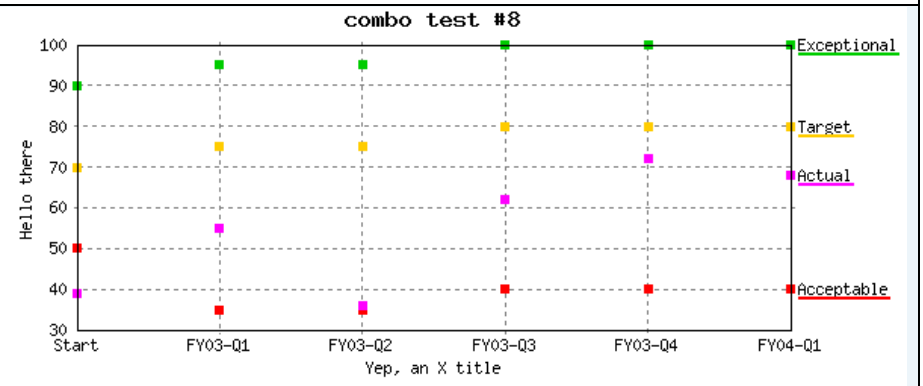
Same as above changing `subtype="pline"` which should force all data sets to be drawn as `pline`

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_7"
subtype="pline"
table="table2"
title="combo test #7"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



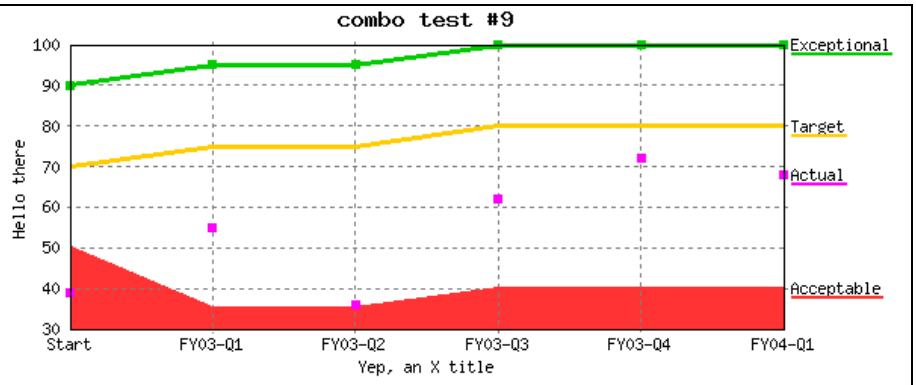
Same as above changing `subtype="point"` which should force all data sets to be drawn as `point`

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_8"
subtype="point"
table="table2"
title="combo test #8"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



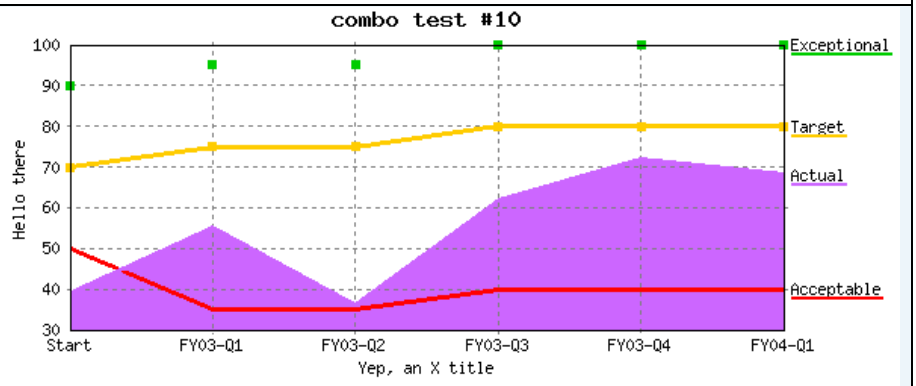
Same as above changing `subtype="area line pline point"`

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_9"
subtype="area line pline
point" table="table2"
title="combo test #9"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



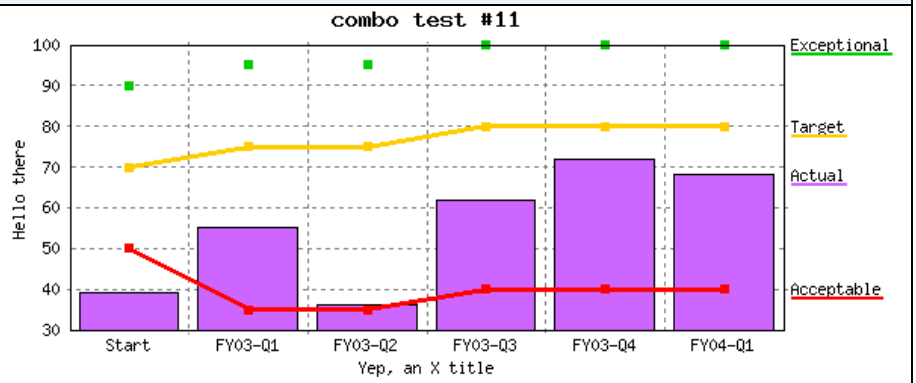
Same as above changing `subtype="line pline point area"`

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_10"
subtype="line pline point
area" table="table2"
title="combo test #10"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



Same as above changing `subtype="pline pline point bar"`

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_11"
subtype="pline pline point
bar" table="table2"
title="combo test #11"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



Same as above changing `subtype="area pline point bar"`. This should produce an error as you can't combine `area` and `bar` subtypes

```
%CHART{data="R4:C2..R7:C7"
legend="R4:C1..R7:C1"
name="combo_12"
```

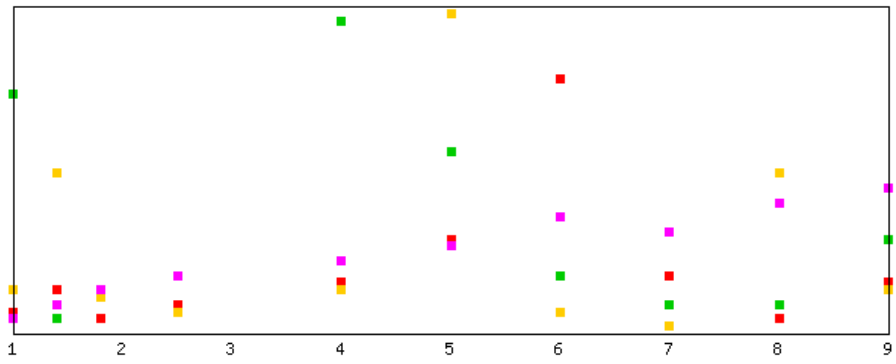
ChartPlugin error: chart error: name=combo_12: Error: Can't mix 'area' and 'bar' subtypes on the same chart

```
subtype="area pline point
bar" table="table2"
title="combo test #12"
type="combo" width="600"
xaxis="R2:C2..R2:C7"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```

scatter tests

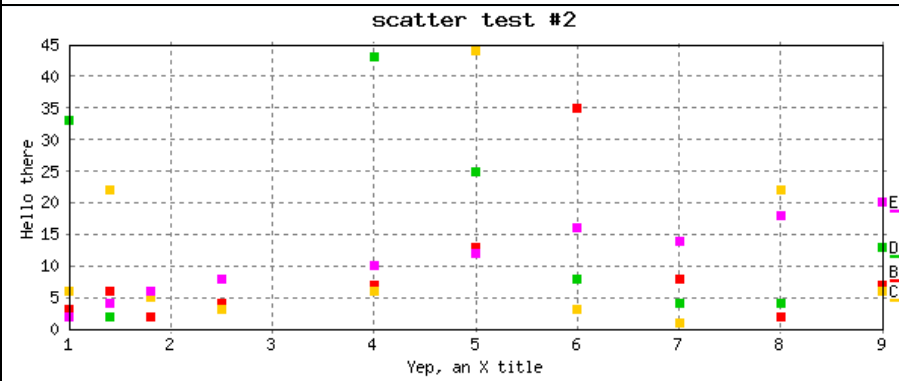
Simple scatter graph using table #3. Defaults to all data sets drawn as `point`

```
%CHART{data="R2:C2..R99:C99"
name="scatter_1"
table="table3"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xgrid="off" ygrid="off"}%
```



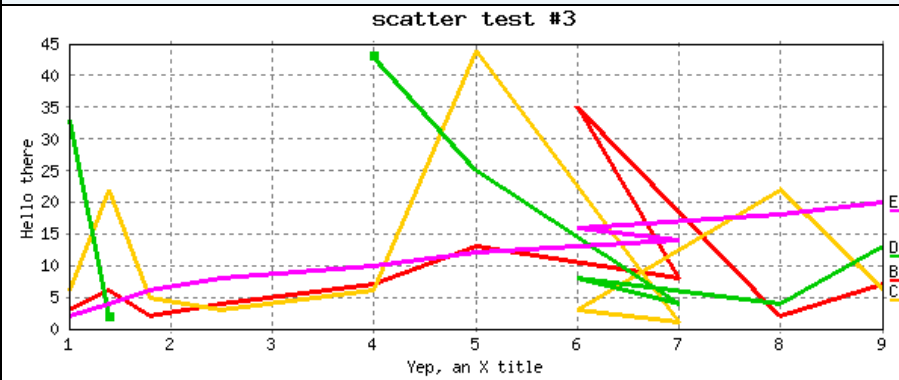
Same as above, adding title, grid lines and both X and Y axis labels and titles

```
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_2"
table="table3"
title="scatter test #2"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



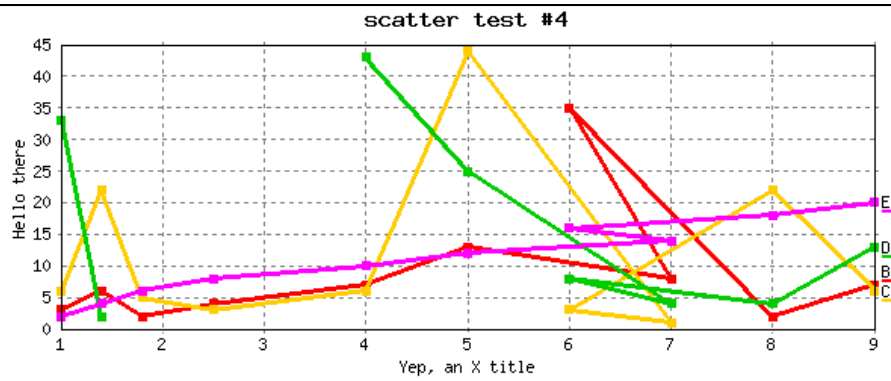
Same as above adding `subtype="line"`

```
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_3"
subtype="line"
table="table3"
title="scatter test #3"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



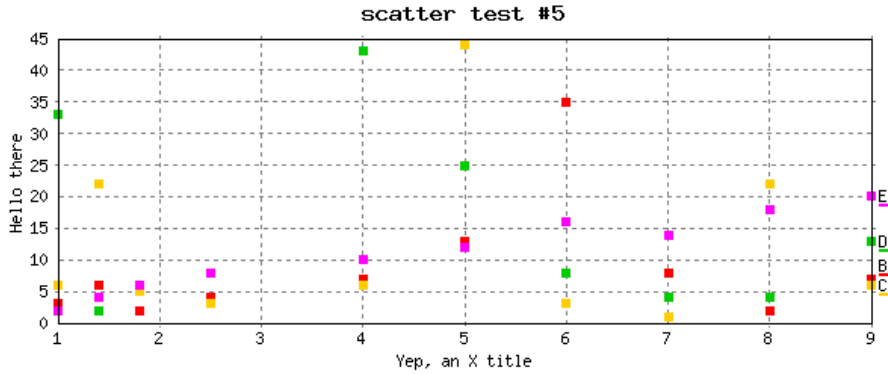
Same as above changing subtype="pline"

```
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_4"
subtype="pline"
table="table3"
title="scatter test #4"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



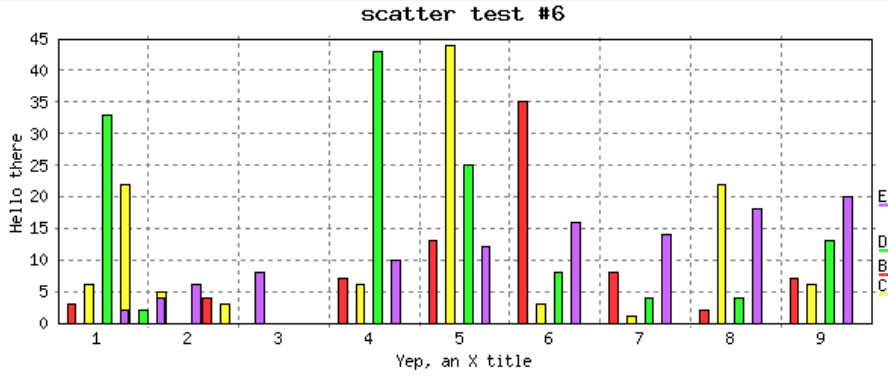
Same as above changing subtype="point"

```
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_5"
subtype="point"
table="table3"
title="scatter test #5"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



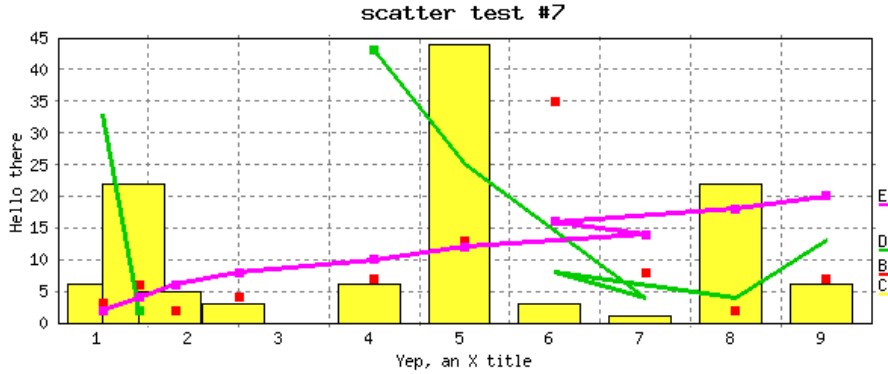
Same as above changing subtype="bar"

```
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_6"
subtype="bar" table="table3"
title="scatter test #6"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



Same as above changing subtype="point bar line pline"

```
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_7"
subtype="point bar line
pline" table="table3"
title="scatter test #7"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
```

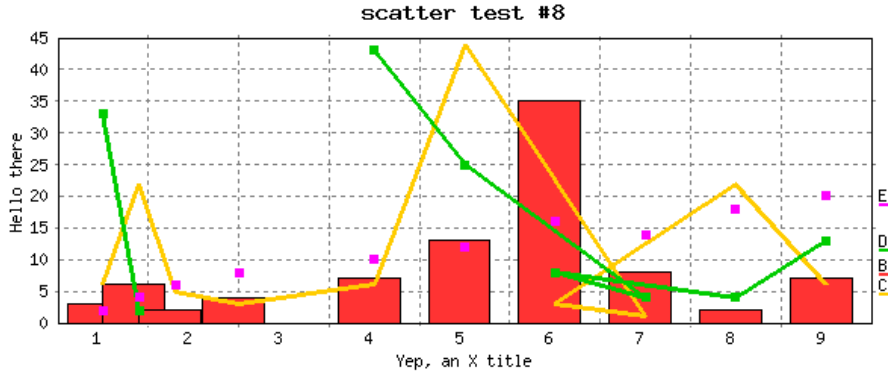


```
yaxis="on" ylabel="Hello
there"}%
```

Same as above changing

```
subtype="bar line pline
point"

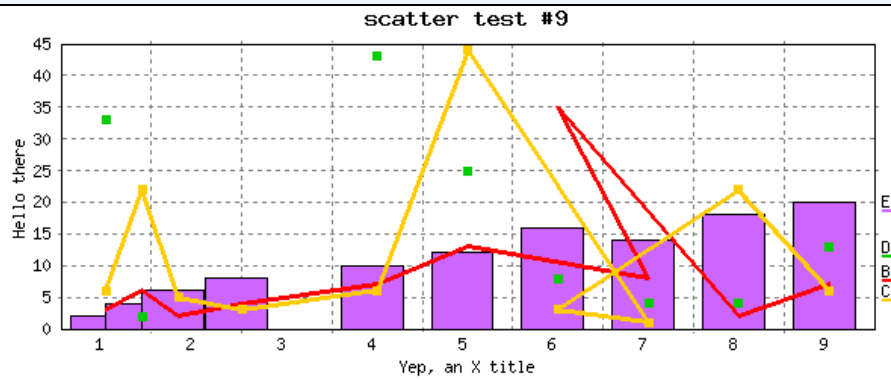
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_8"
subtype="bar line pline
point" table="table3"
title="scatter test #8"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



Same as above changing

```
subtype="line pline point
bar"

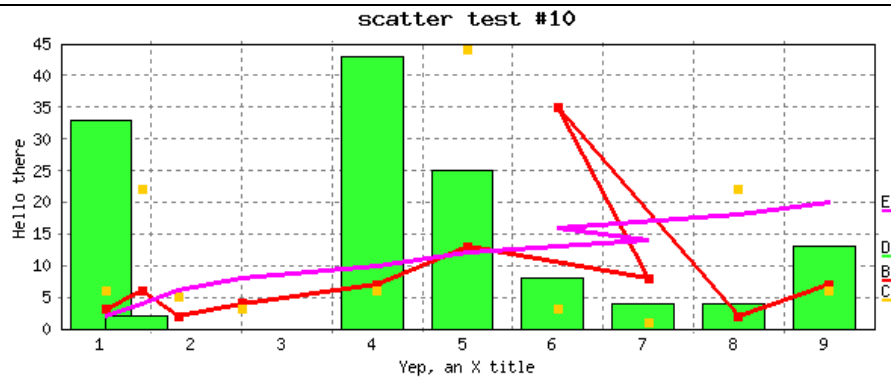
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_9"
subtype="line pline point
bar" table="table3"
title="scatter test #9"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```

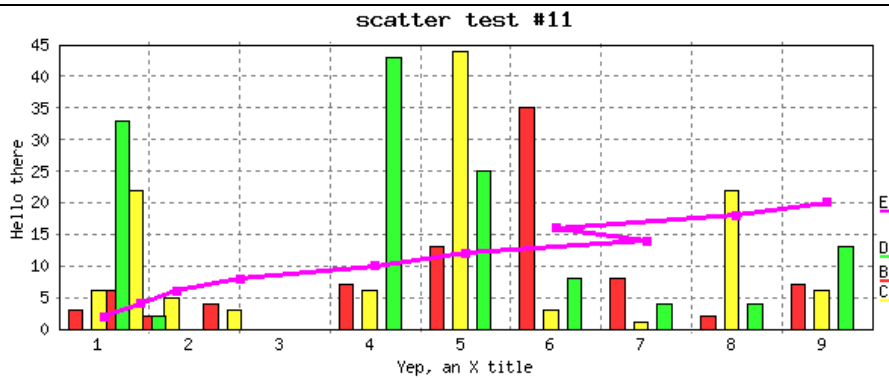


Same as above changing

```
subtype="pline point bar
line"

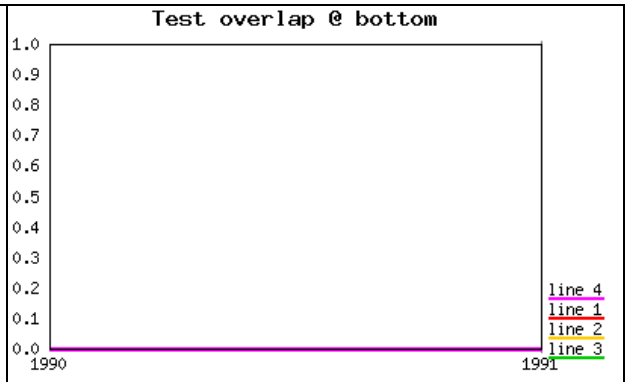
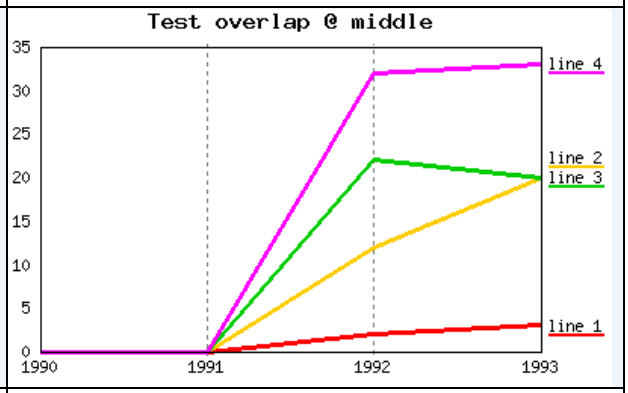
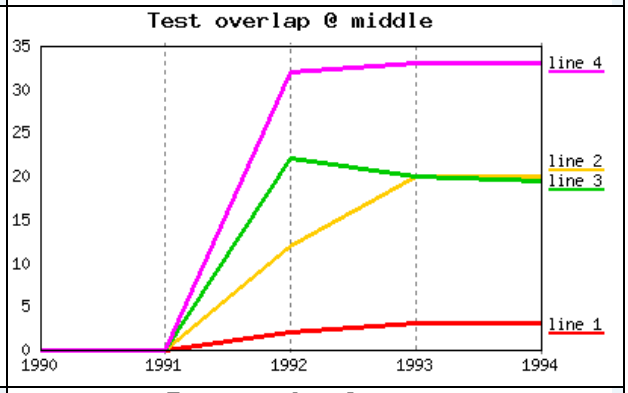
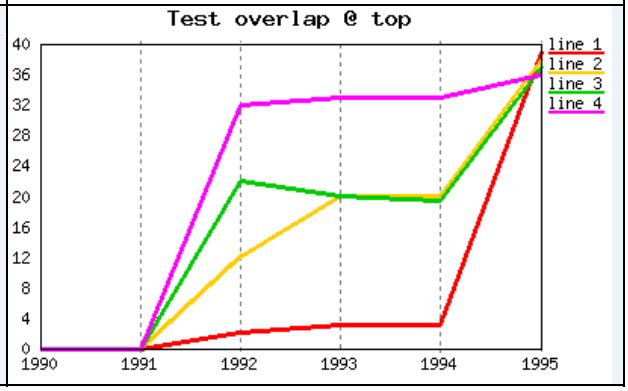
%CHART{data="R2:C2..R99:C99"
legend="R1:C2..R1:C99"
name="scatter_10"
subtype="pline point bar
line" table="table3"
title="scatter test #10"
type="scatter" width="600"
xaxis="R2:C1..R99:C1"
xlabel="Yep, an X title"
yaxis="on" ylabel="Hello
there"}%
```



Same as above changing `subtype="bar bar bar pline"` `%CHART{data="R2:C2..R99:C99" legend="R1:C2..R1:C99" name="scatter_11" subtype="bar bar bar pline" table="table3" title="scatter test #11" type="scatter" width="600" xaxis="R2:C1..R99:C1" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there"}%`	
Same as above changing `subtype="area pline point bar"`. This should produce an error as you can't combine `area` and `bar` subtypes `%CHART{data="R2:C2..R99:C99" legend="R1:C2..R1:C99" name="scatter_12" subtype="area pline point bar" table="table3" title="scatter test #12" type="scatter" width="600" xaxis="R2:C1..R99:C1" xlabel="Yep, an X title" yaxis="on" ylabel="Hello there"}%`	ChartPlugin error: chart error: name=scatter_12: Error: Can't mix 'area' and 'bar' subtypes on the same chart

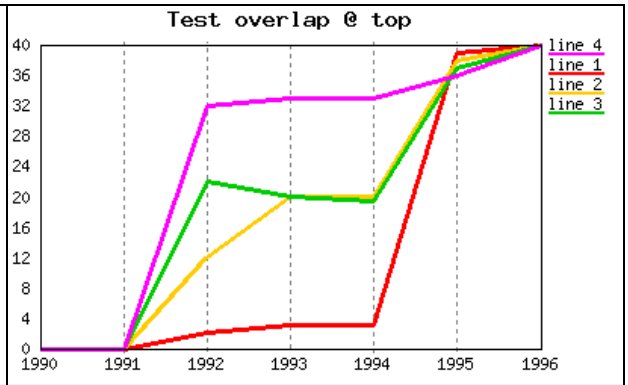
New functionality tests

Test various legend placement situations

Test that when all lines overlap on the very bottom of the chart, the legends all show up non-overlapped `%CHART{data="R2:C2..R3:C5" legend="R1:C2..R1:C5" name="line_30" table="table4" title="Test overlap @ bottom" type="line" xaxis="R2:C1..R9:C1" yaxis="on" ygrid="off" ymax="1" ymin="0"}%`	
Test that when two lines overlap in the middle of the chart, the legends get correctly placed `%CHART{data="R2:C2..R5:C5" legend="R1:C2..R1:C5" name="line_31" table="table4" title="Test overlap @ middle" type="line" xaxis="R2:C1..R9:C1" yaxis="on" ygrid="off"}%`	
Similar to the test above, except the data is changed such that the placement of the legends for the two middle lines should be reversed `%CHART{data="R2:C2..R6:C5" legend="R1:C2..R1:C5" name="line_32" table="table4" title="Test overlap @ middle" type="line" xaxis="R2:C1..R9:C1" yaxis="on" ygrid="off"}%`	
Test that when 4 lines are close to overlapping and are all located at the top of the chart, the legends get correctly placed. `%CHART{data="R2:C2..R7:C5" legend="R1:C2..R1:C5" name="line_33" table="table4" title="Test overlap @ top" type="line" xaxis="R2:C1..R9:C1" yaxis="on" ygrid="off" ymax="40"}%`	

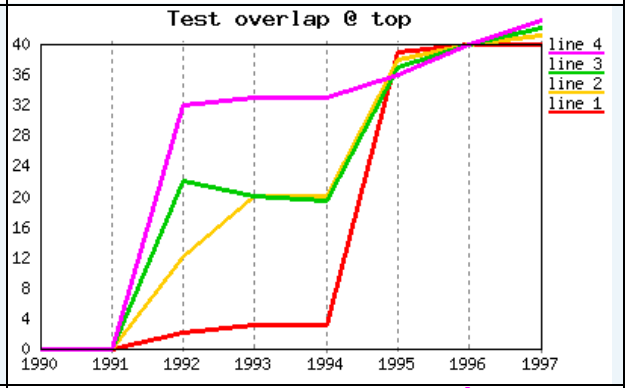
Test that when 4 lines do exactly overlap at the top of the chart, the legends get correctly placed.

```
%CHART{data="R2:C2..R8:C5"
legend="R1:C2..R1:C5" name="line_34"
table="table4" title="Test overlap @
top" type="line" xaxis="R2:C1..R9:C1"
yaxis="on" ygrid="off" ymax="40"}%
```



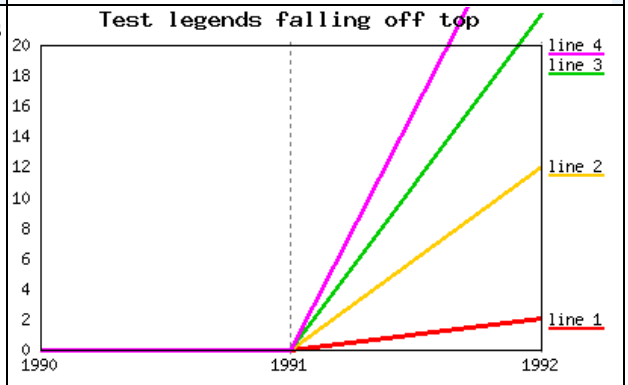
Test that the arrangement of legends of 4 lines located at the top of a chart is correct.

```
%CHART{data="R2:C2..R9:C5"
legend="R1:C2..R1:C5" name="line_35"
table="table4" title="Test overlap @
top" type="line" xaxis="R2:C1..R9:C1"
yaxis="on" ygrid="off" ymax="40"}%
```



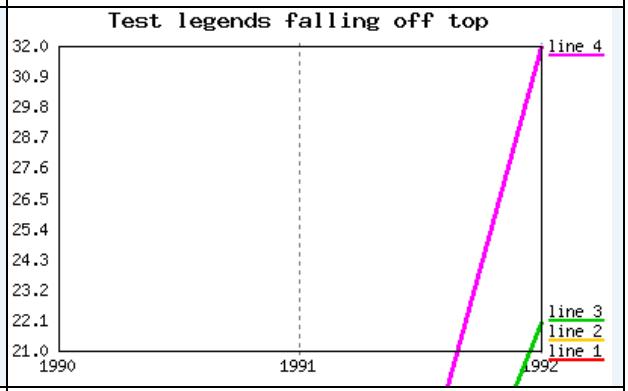
Test that even with a `ymax` set too low such that the lines go off the top of the chart, the legends still stay on the chart.

```
%CHART{data="R2:C2..R4:C5"
legend="R1:C2..R1:C5" name="line_36"
table="table4" title="Test legends
falling off top" type="line"
xaxis="R2:C1..R9:C1" yaxis="on"
ygrid="off" ymax="20"}%
```



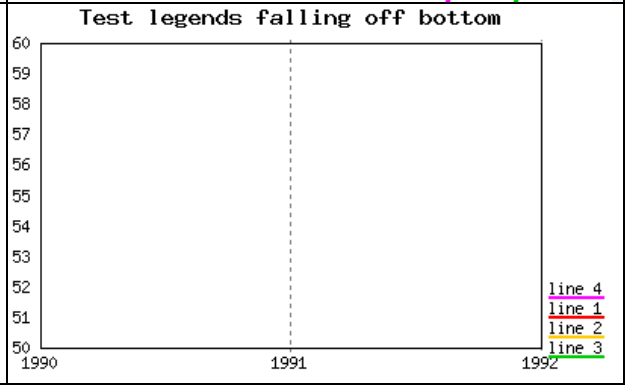
Test that even with a `ymin` set too high such that some lines do not even show up on the chart because they fall below the chart, the legends still stay on the chart.

```
%CHART{data="R2:C2..R4:C5"
legend="R1:C2..R1:C5" name="line_37"
table="table4" title="Test legends
falling off top" type="line"
xaxis="R2:C1..R9:C1" yaxis="on"
ygrid="off" ymin="21"}%
```



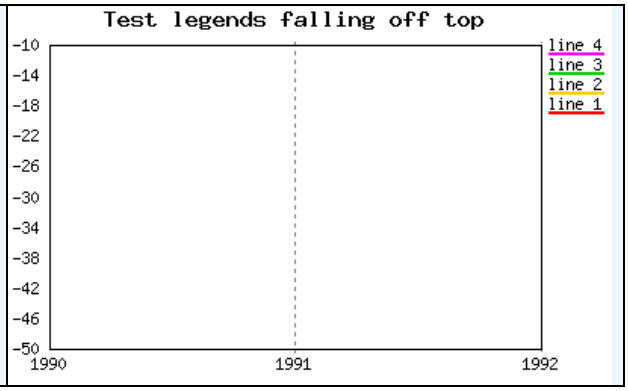
Test extremes that even when `ymin` is set higher than all data, that the legends still get drawn on the chart.

```
%CHART{data="R2:C2..R4:C5"
legend="R1:C2..R1:C5" name="line_38"
table="table4" title="Test legends
falling off bottom" type="line"
xaxis="R2:C1..R9:C1" yaxis="on"
ygrid="off" ymax="60" ymin="50"}%
```



Test extremes that even when `ymax` is set lower than all data, that the legends still get drawn on the chart.

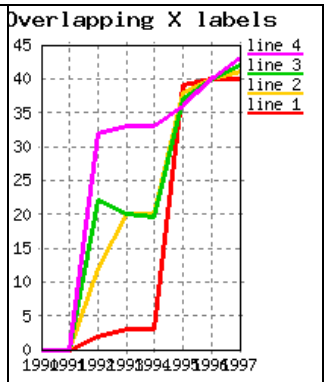
```
%CHART{data="R2:C2..R4:C5"
legend="R1:C2..R1:C5" name="line_39"
table="table4" title="Test legends
falling off top" type="line"
xaxis="R2:C1..R9:C1" yaxis="on"
ygrid="off" ymax="-10" ymin="-50"}%
```



Test *numxgrids* and *xaxisangle* options

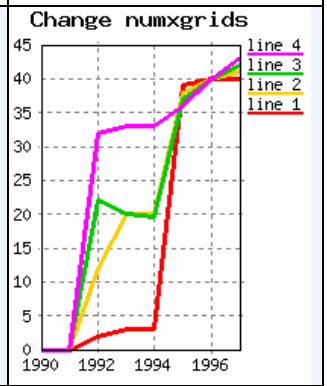
Show what happens when there is so much data that the X axis labels overlap

```
%CHART{data="R2:C2..R99:C5" legend="R1:C2..R1:C5"
name="line_40" table="table4" title="Overlapping X
labels" type="line" width="200" xaxis="R2:C1..R99:C1"
yaxis="on"}%
```



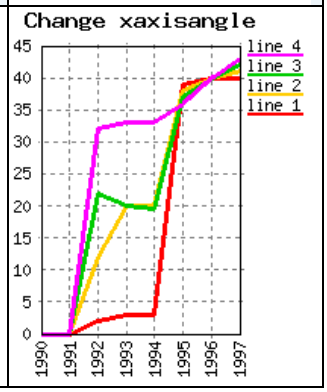
Take the above graph and specify `numxgrids` = "3" making the X axis labels more readable

```
%CHART{data="R2:C2..R99:C5" legend="R1:C2..R1:C5"
name="line_41" numxgrids="3" table="table4"
title="Change numxgrids" type="line" width="200"
xaxis="R2:C1..R99:C1" yaxis="on"}%
```



Take the first graph and specify `xaxisangle` = 90, changing the X axis label angle = 90 degrees

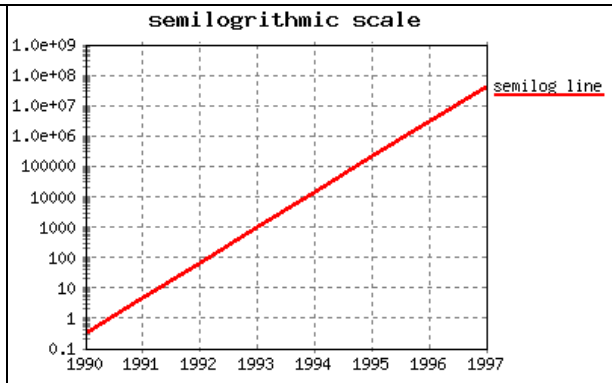
```
%CHART{data="R2:C2..R99:C5" legend="R1:C2..R1:C5"
name="line_42" numxgrids="9" table="table4"
title="Change xaxisangle" type="line" width="200"
xaxis="R2:C1..R99:C1" xaxisangle="90" yaxis="on"}%
```



Test *scale* and *ytics* options

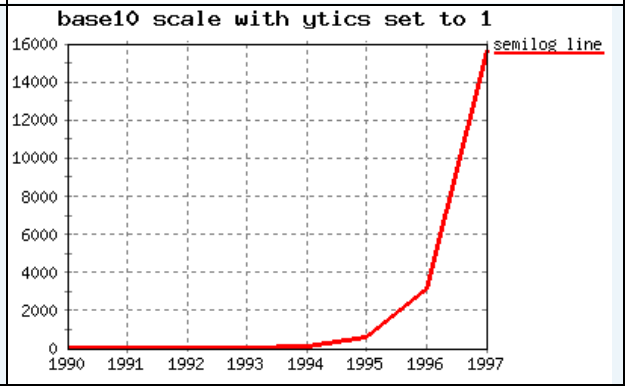
Show how `scale=semilog` makes the chart easier to read. Since `ytics` is NOT specified, it defaults to 8.

```
%CHART{data="R2:C8..R99:C8"
legend="R1:C8..R1:C8" name="line_43"
scale="semilog" table="table4"
title="semilogrithmic scale"
type="line" xaxis="R2:C1..R99:C1"
yaxis="on"}%
```



Show the above plotted data on a `linear` scale with `ytics=1`

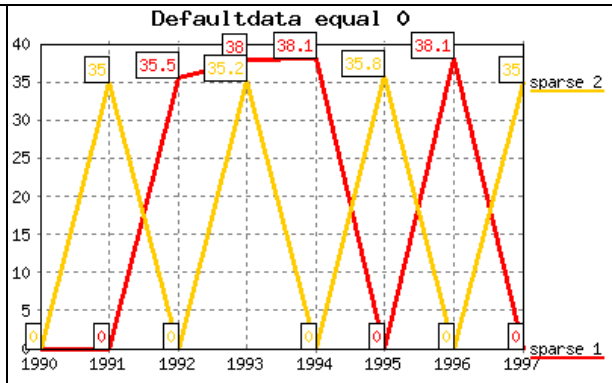
```
%CHART{data="R2:C8..R99:C8"
legend="R1:C8..R1:C8" name="line_44"
table="table4" title="base10 scale
with ytics set to 1" type="line"
xaxis="R2:C1..R99:C1" yaxis="on"
ytics="1"}%
```



Test *defaultdata* option

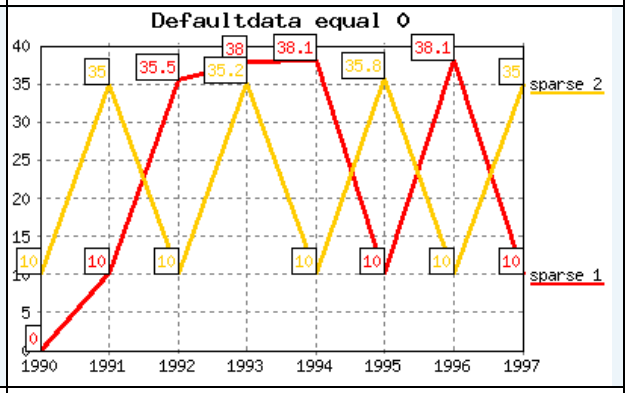
Show what happens when there is sparse data. `defaultdata` = 0

```
%CHART{data="R2:C6..R99:C7"
datalabel="box" defaultdata="0"
legend="R1:C6..R1:C7" name="line_45"
table="table4" title="Defaultdata
equal 0" type="line"
xaxis="R2:C1..R99:C1" yaxis="on"}%
```



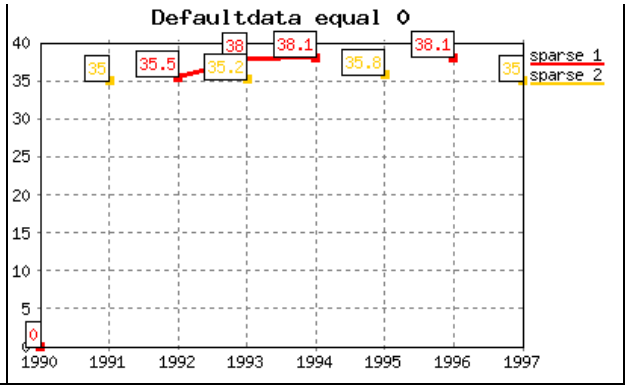
Same as above, but now `defaultdata` = 10

```
%CHART{data="R2:C6..R99:C7"
datalabel="box" defaultdata="10"
legend="R1:C6..R1:C7" name="line_46"
table="table4" title="Defaultdata
equal 0" type="line"
xaxis="R2:C1..R99:C1" yaxis="on"}%
```



Same as above, but now `defaultdata` = "none" (empty)

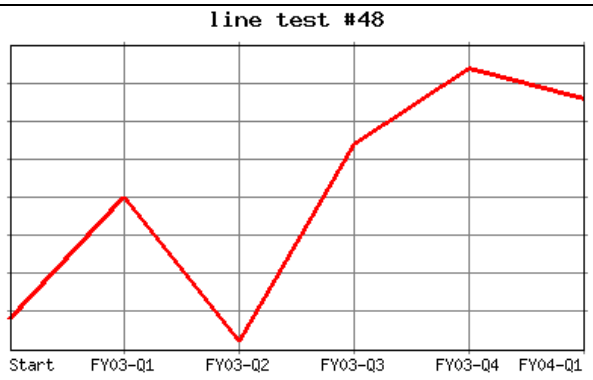
```
%CHART{data="R2:C6..R99:C7"
datalabel="box" defaultdata="none"
legend="R1:C6..R1:C7" name="line_47"
table="table4" title="Defaultdata
equal 0" type="line"
xaxis="R2:C1..R99:C1" yaxis="on"}%
```



Test *gridcolor* option

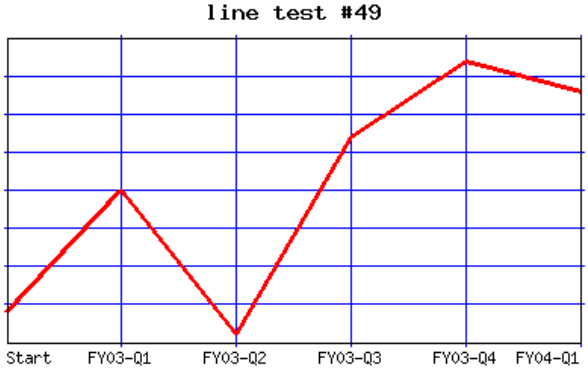
Show default grid color with solid grid lines.

```
%CHART{data="R2:C7..R7:C7"
name="line_48" table="table1"
title="line test #48" type="line"
xaxis="R2:C2..R7:C2" xgrid="on"
ygrid="on"}%
```



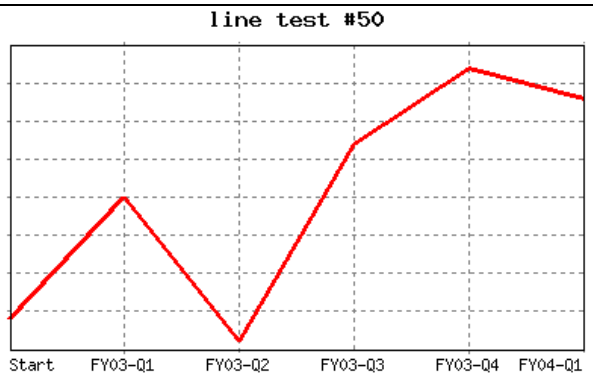
Change the grid color to blue.

```
%CHART{data="R2:C7..R7:C7"
gridcolor="#0000FF" name="line_49"
table="table1" title="line test #49"
type="line" xaxis="R2:C2..R7:C2"
xgrid="on" ygrid="on"}%
```



Change the grid color back to the default but make them dotted

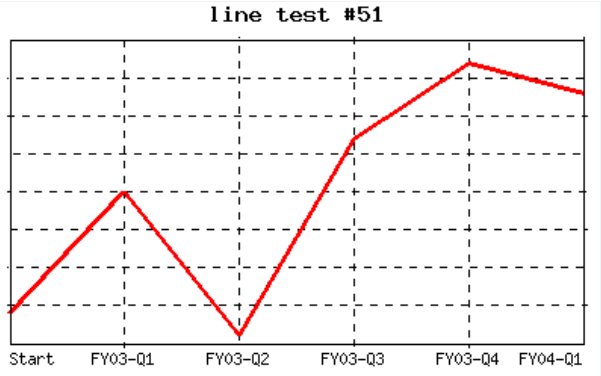
```
%CHART{data="R2:C7..R7:C7"
name="line_50" table="table1"
title="line test #50" type="line"
xaxis="R2:C2..R7:C2" xgrid="dot"
ygrid="dot"}%
```



Change the grid style to be 5 black dots and 5 transparent dots.

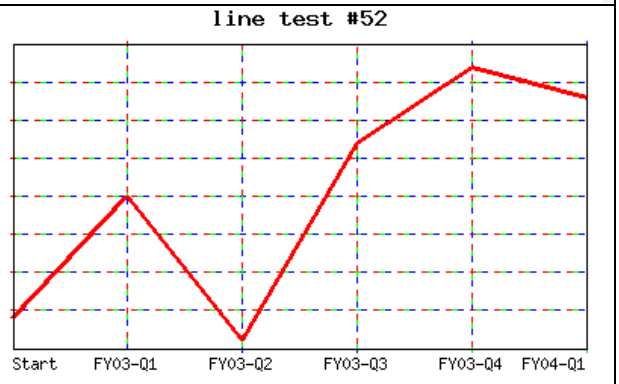
```
%CHART{data="R2:C7..R7:C7"
gridcolor="#000000, #000000, #000000,
#000000, #000000, transparent,
transparent, transparent, transparent,
transparent," name="line_51"
table="table1" title="line test #51"
```

```
type="line" xaxis="R2:C2..R7:C2"
xgrid="dot" ygrid="dot"}%
```



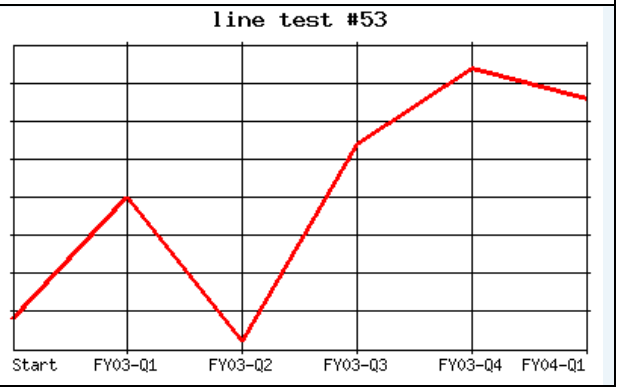
Change the grid style to be 4 red dots, 4 green dots, 4 blue dots and 4 transparent dots.

```
%CHART{data="R2:C7..R7:C7"
gridcolor="#FF0000, #FF0000, #FF0000,
#FF0000, #00FF00, #00FF00, #00FF00,
#00FF00, #0000FF, #0000FF, #0000FF,
#0000FF, transparent, transparent,
transparent, transparent,"
name="line_52" table="table1"
title="line test #52" type="line"
xaxis="R2:C2..R7:C2" xgrid="dot"
ygrid="dot"}%
```



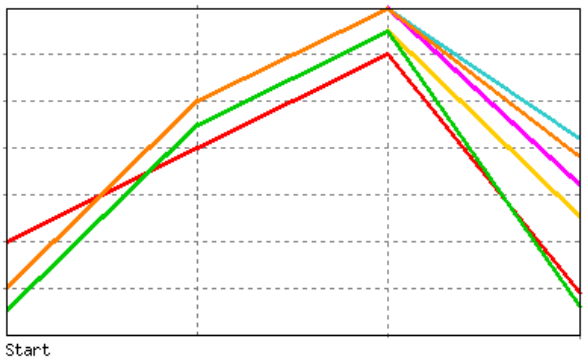
Change the grid style to be 1 black dot which basically makes a solid line

```
%CHART{data="R2:C7..R7:C7"
gridcolor="#000000" name="line_53"
table="table1" title="line test #53"
type="line" xaxis="R2:C2..R7:C2"
xgrid="dot" ygrid="dot"}%
```



Error handling tests

Description	Expected Output	Output
no parameters passed to CHART `%CHART{}%`	ChartPlugin error: parameter **name** must be specified </ p>	ChartPlugin error: parameter **name** must be specified
Define `type` but `name` not specified `%CHART{type="bar"}%`	ChartPlugin error: parameter **name** must be specified </ p>	ChartPlugin error: parameter **name** must be specified
Invalid `type` of `badtype` `%CHART{type="badtype"}%`	ChartPlugin error: Invalid value of **badtype** for parameter **type** </ p>	ChartPlugin error: Invalid value of **badtype** for parameter **type**
Missing topic page `%CHART{name="err1" topic="DoesNotExist" type="line"}%`	ChartPlugin error: Error retrieving Foswiki topic DoesNotExist? </ p>	ChartPlugin error: Error retrieving Foswiki topic System.DoesNotExist
Missing web `%CHART{name="err1" type="line" web="DoesNotExist"}%`	ChartPlugin error: Error retrieving Foswiki topic ChartPluginTests? </ p>	ChartPlugin error: Error retrieving Foswiki topic DoesNotExist?.ChartPluginTests
Invalid table number `%CHART{name="err1" table="999" type="line"}%`	ChartPlugin error: parameter **table** is not valid table; the specified table '999' does not exist. </ p>	ChartPlugin error: parameter **table** is not valid table; the specified table '999' does not exist.
No data specified `%CHART{name="err1" type="line"}%`	ChartPlugin error: parameter **data** must be specified </ p>	ChartPlugin error: parameter **data** must be specified
invalid `xaxis` value `%CHART{data="R2:C4..R7:C7" name="err1" type="line" xaxis="R2:C4..R7:C7"}%`	ChartPlugin error: parameter **xaxis** specifies multiple rows and columns. </ p>	ChartPlugin error: parameter **xaxis** specifies multiple (6X4) rows and columns.
invalid `legend` `%CHART{data="R1:C1..R2:C2" legend="R1:C1..R2:C2" name="err1" type="line" xaxis="R1:C1..R2:C2"}%`	ChartPlugin error: parameter **legend** specifies multiple rows and columns. </ p>	ChartPlugin error: parameter **legend** specifies multiple (2) rows.

Description	Expected Output	Output
`ymin = =ymax` such that there is no chart height `%CHART{data="R1:C1..R2:C2" name="err1" type="line" xaxis="R1:C1..R1:C2" ymax="10" ymin="10"}%`	ChartPlugin error: chart error: name=err1: Chart height = 0 (ymin(10) == ymax(10)) </ p>	ChartPlugin error: chart error: name=err1: Chart height = 0 (ymin(10) == ymax(10))
`xmin = =xmax` such that there is no chart width `%CHART{data="R2:C4..R7:C4" name="err1" type="scatter" xaxis="R2:C3..R7:C3"}%`	ChartPlugin error: chart error: name=err1: Chart width = 0 (xmin(0) = xmax(0)) </ p>	ChartPlugin error: chart error: name=err1: Chart width = 0 (xmin(0) == xmax(0))
Use an invalid `xaxis` range `%CHART{data="R2:C4..R7:C7" name="err1" xaxis="R2:C2"}%`	ChartPlugin error: parameter **xaxis** value of 'R2:C2' is not valid </ p>	
Use an invalid `data` range `%CHART{data="R2:C4" name="err1"}%`	ChartPlugin error: parameter **data** value of 'R2:C4' is not valid </ p>	ChartPlugin error: chart error: name=err1: Error: Number of data points needs to be > 1
Use an invalid `legend` range `%CHART{data="R2:C4..R7:C7" legend="R1:C4" name="err1"}%`	ChartPlugin error: parameter **legend** contains an invalid value 'R1:C4'. </ p>	ChartPlugin error: parameter **legend** contains an invalid value 'R1:C4' since it specifies 1 legends and there are 4 data sets.
`scale=semilog` and data <= 0 `%CHART{data="R2:C3..R7:C7" name="err1" scale="semilog"}%`	ChartPlugin error: data (0) <= 0 not valid when scale=semilog </ p>	ChartPlugin error: data (0) <= 0 not valid when scale=semilog

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