Getting Started with QlikView Part XII

Description:

BISP is committed to provide BEST learning material to the beginners and advance learners. In the same series, we have prepared a complete end-to end Hands-on Beginner's Guide for Qlikview Report, Dashboard and Data Models. The document focuses on Gauge, Pivot Tables and Radar Chart. Join our professional training program and learn from experts.

History:

| Version	Description Change	Author	Publish Date
0.1	Initial Draft	Surbhi Sahu	21st Aug 2012
0.1	Review#1	Rajkumar Nyalamadugula	29th Aug 2012

Table of Contents

# *Linking the table level data for the 3 Dashboard KPIs (Meter Guage) :*

We have created the three gauge charts to cover our three following KPIs as LOAD FACTOR%, DEPARTURE PERFORM% and AIRTIME%.

As the straight table we have created is containing the two fields LOADFACTOR and DEPARTURE PERFORM will is not covering our third field so we do edit the straight table to get the third field. Go to the properties of the straight table ->goto the expression tab ->edit the previous expression as Airtime%
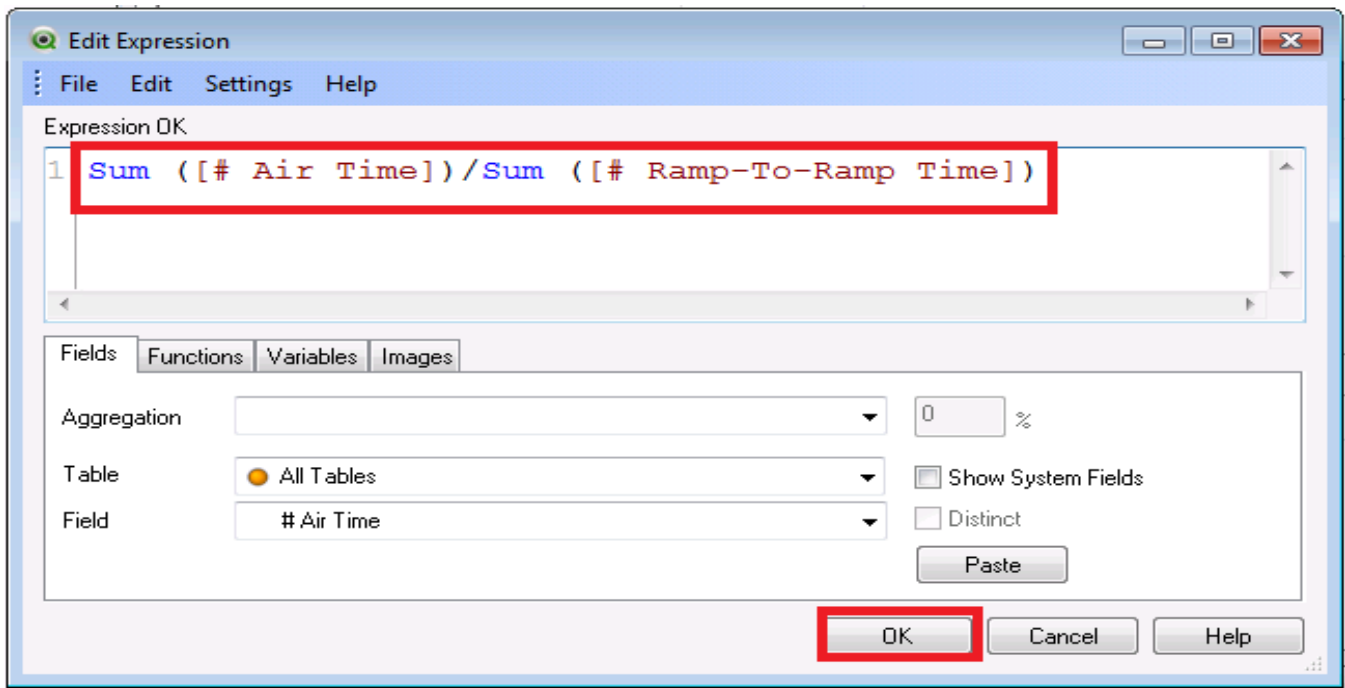
Use the expression as Sum([#Air Time])/Sum([#Ramp-To-Ramp Time]) then-> ok.
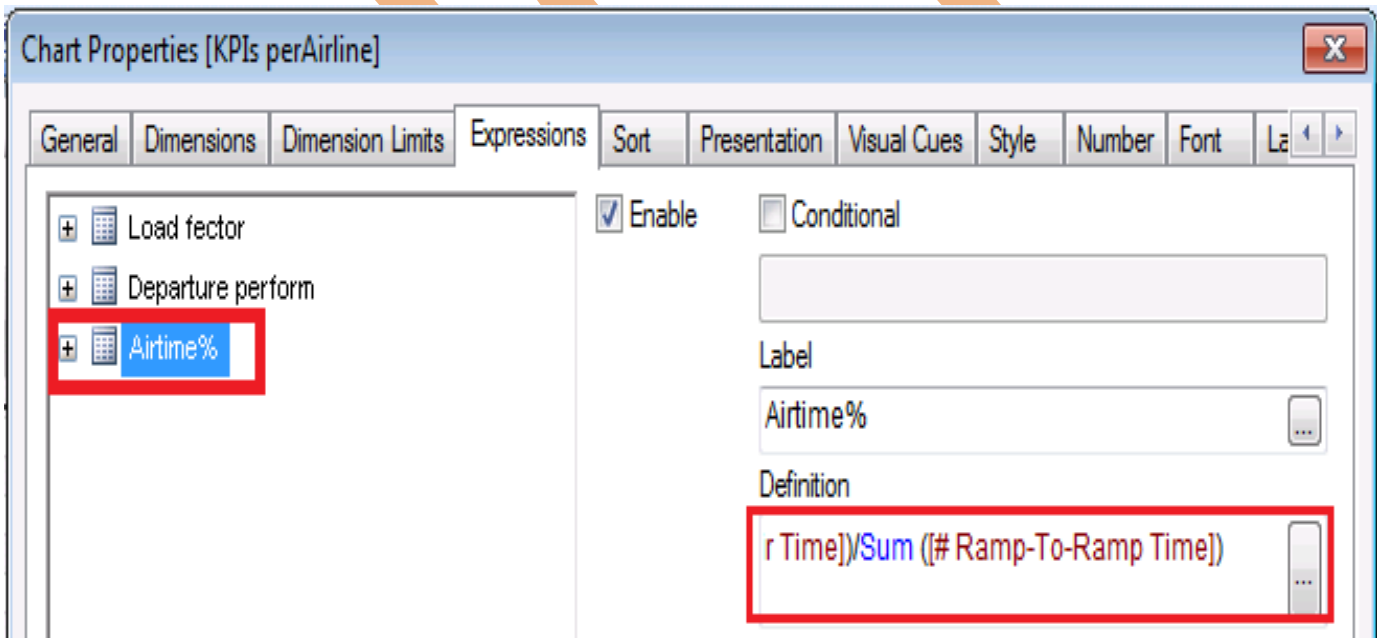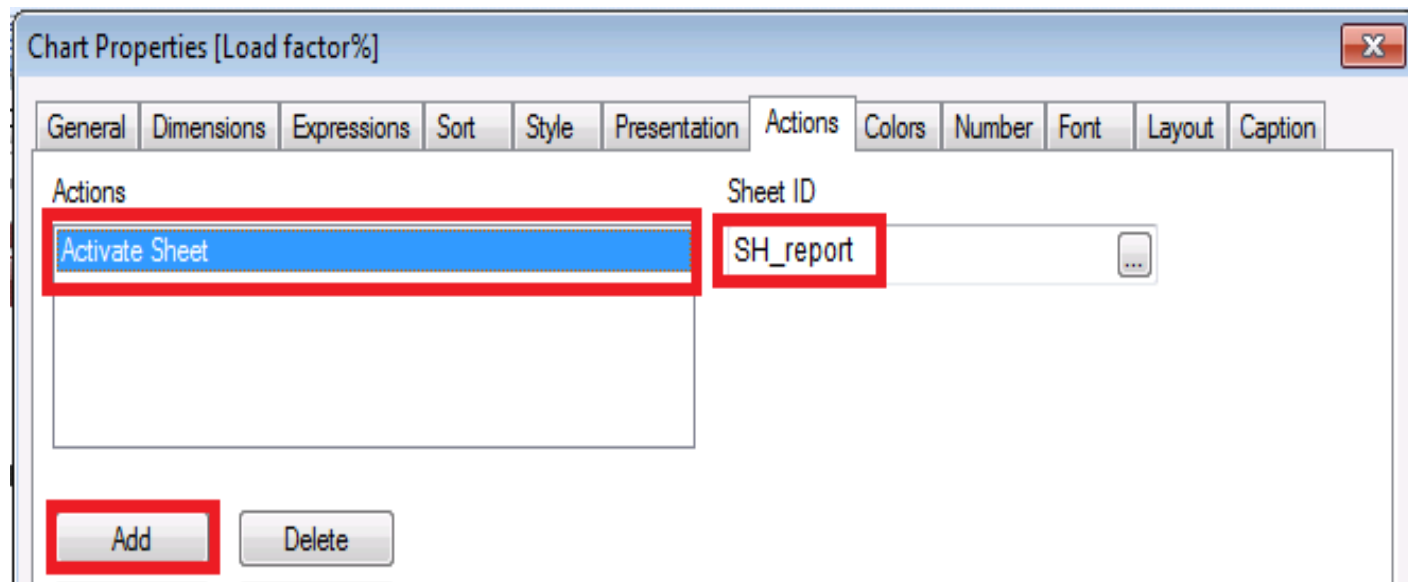
The expression is here then->Apply->ok

Now the table is here…………

KPIs perOrigin City

Origin City	Load fector	Departure perform	Airtime%
	0.77519896206307	3229636	0.82995203329371
47-Mile Mine, AK	0.14625850340136	55	0.8303973781237
A Coruna, Spain	0.25806451612903	4	-
Aalborg, Denmark	0.9231843575419	4	-
Aarhus, Denmark	0.41666666666667	1	-
Abbotsford, Canada	0.36538461538462	9	0.882309400444
Aberdeen, ID	0.0625	2	0.9663250366032
Aberdeen, SD	0.55595377970128	3889	0.738926387013⁹
Abilene, TX	0.66585329746341	9232	0.7224518688049
Abu Dhabi, United Arab ...	0.82920190645297	1902	0.960167714884
Abuja, Nigeria	0.51978505129458	40	0.9322809673117
Acapulco, Mexico	0.69324082744531	1995	0.880619858427
Accra, Ghana	0.74816212482085	1392	0.954119825737⁶
Adak Island, AK	0.19188854085095	319	0.9382494804872
Adana, Turkey	0	51	0.9642377204289
Addis Ababa, Ethiopia	0.77574287260709	846	-
Agadir, Morocco	0	1	-
Aguadilla, PR	0.82563310743806	15463	0.8900506736893
Aguascalientes, Mexico	0.69101485811981	2695	0.854756479549;
Aiken, SC	0.66666666666667	8	0.9254658385093
Akhiok, AK	0.3618809225818	1996	0.9498386733698
Akiachak, AK	0.3282630717846	6821	0.7951266634165
Akiak, AK	0.30826140567201	5624	0.797980487804⁸

Its time to connect this straight table with the gauge chart so-> goto the sheet where gauge chart is ->goto the properties of the gauge chart. We are going to add an action which take us to the sheet where the straight table is present. Go to the Action tab->hit the Add button ->Select the action Activate Sheet and give the id of the Report sheet which is SH_report.

Apply->ok

After click on the gauge chart the Report sheet will appear whose Id is SH_report on which the straight table exists.

Look here in the table the total is coming on the top row of the table if we want the total in the bottom row of the table .

Go to the properties of the Straight Table ->Presentation tab, here the option available is Totals on Last Row, check the option and Use Label as Total. Here the alignment given as Label and text on the left and the numeric value in the right ->Apply->ok

We can give some baseline in our chart if the value cross this baseline the value indicates in different colors. Go to the properties of chart->Visual cues tab
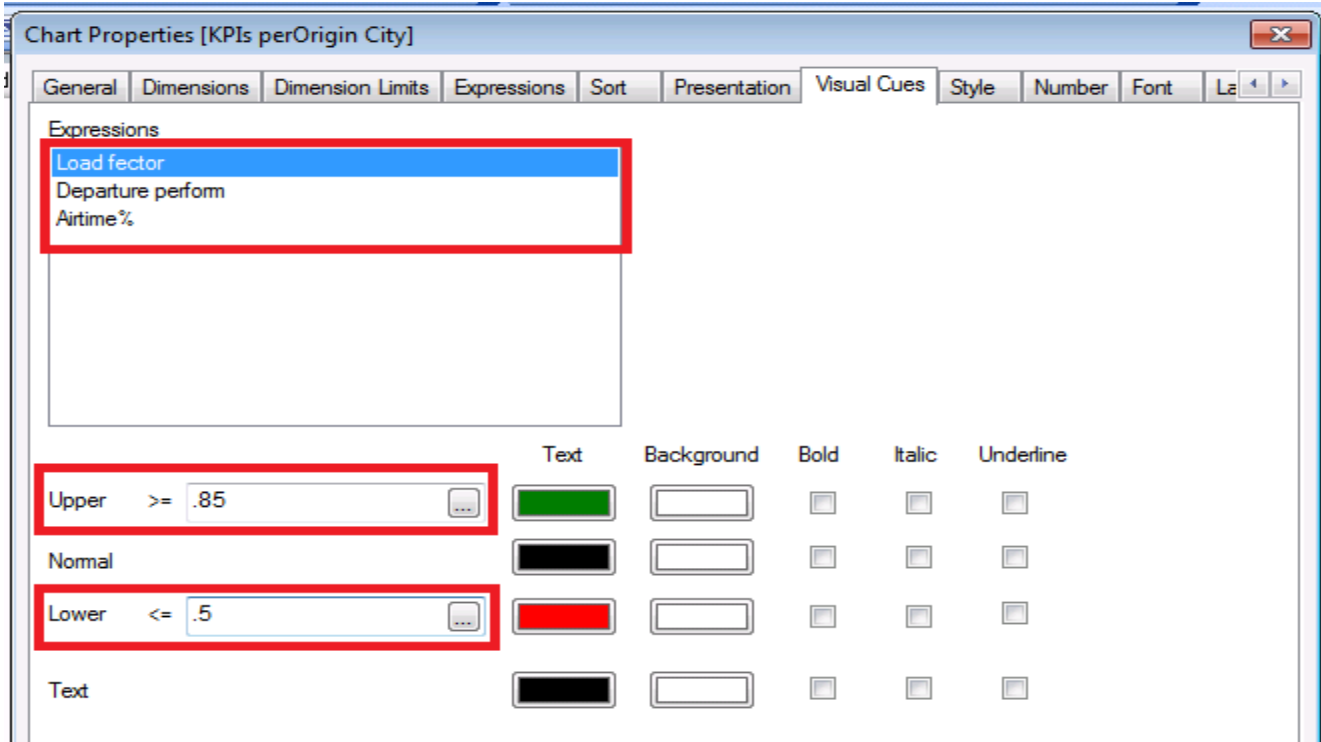
Here if the Load factor has values above 85% those value will show in green color and if lower than 50% will be shown in red color. Apply this setting with the two remaining field then->Apply->ok.

ORIGIN CITY	LOAD FECTOR	DEPARTURE PERFORM	AIRTIME%
47-MILE MINE, AK	0.14625850340136	55	0.8303973781237
A CORUNA, SPAIN	0.25806451612903	4	-
AALBORG, DENMARK	0.9231843575419	4	-
AARHUS, DENMARK	0.41666666666667	1	-
ABBOTSFORD, CANADA	0.36538461538462	9	0.882309400444
ABERDEEN, ID	0.0625	2	0.9663250366032
ABERDEEN, SD	0.55595377970128	3889	0.7389263870139
ABILENE, TX	0.66585329746341	9232	0.7224518688049
ABU DHABI, UNITED ARAB ...	0.82920190645297	1902	0.960167714884
ABUJA, NIGERIA	0.51978505129458	40	0.9322809673117
ACAPULCO, MEXICO	0.69324082744531	1995	0.880619858427
ACCRA, GHANA	0.74816212482085	1392	0.9541198257376
ADAK ISLAND, AK	0.19188854085095	319	0.9382494804872
ADANA, TURKEY	0	51	0.9642377204289
ADDIS ABABA, ETHIOPIA	0.77574287260709	846	-
AGADIR, MOROCCO	0	1	-
AGUADILLA, PR	0.82563310743806	15463	0.8900506736893
AGUASCALIENTES, MEXICO	0.6910148581198	2695	0.854756479549
AIKEN, SC	0.66666666666667	8	0.9254658385093
AKHIOK, AK	0.3618809225818	1996	0.9498386733698
AKIACHAK, AK	0.3282630717846	6821	0.7951266634165
AKIAK, AK	0.30826140567201	5624	0.7979804878048
AKITA, JAPAN	0.74838709677419	2	0.9419642857142
AKRON, OH	0.79902993098581	35651	0.7745133159506
AKULIK, AK	-	9	0.761904761904
AKURE, NIGERIA	0.71428571428571	1	-
AKUREYRI, ICELAND	0.65573770491803	1	-
TOTAL	0.77519896206307	3229633	0.8299520332937

Look these values indicated in green and red colors.

This chart is viewing so simple so we can give some colors effect on it by going through the Style tab, then keep the value = 1 for Stripes every this will give the light effect after every 1 stripes.

Now see the result here...............

Pivot Table

A pivot table is a data summarization tool found in data visualization programs such as spreadsheets or business intelligence software. Among other functions, a pivot-table can automatically sort, count, total or give the average of the data stored in one table or spreadsheet. It displays the results in a second table (called a "pivot table") showing the summarized data. Pivot tables are also useful for quickly creating unweighted cross tabulations. The user sets up and changes the summary's structure by dragging and dropping fields graphically. This rotate the values dimensionally as in the yearly or monthly.
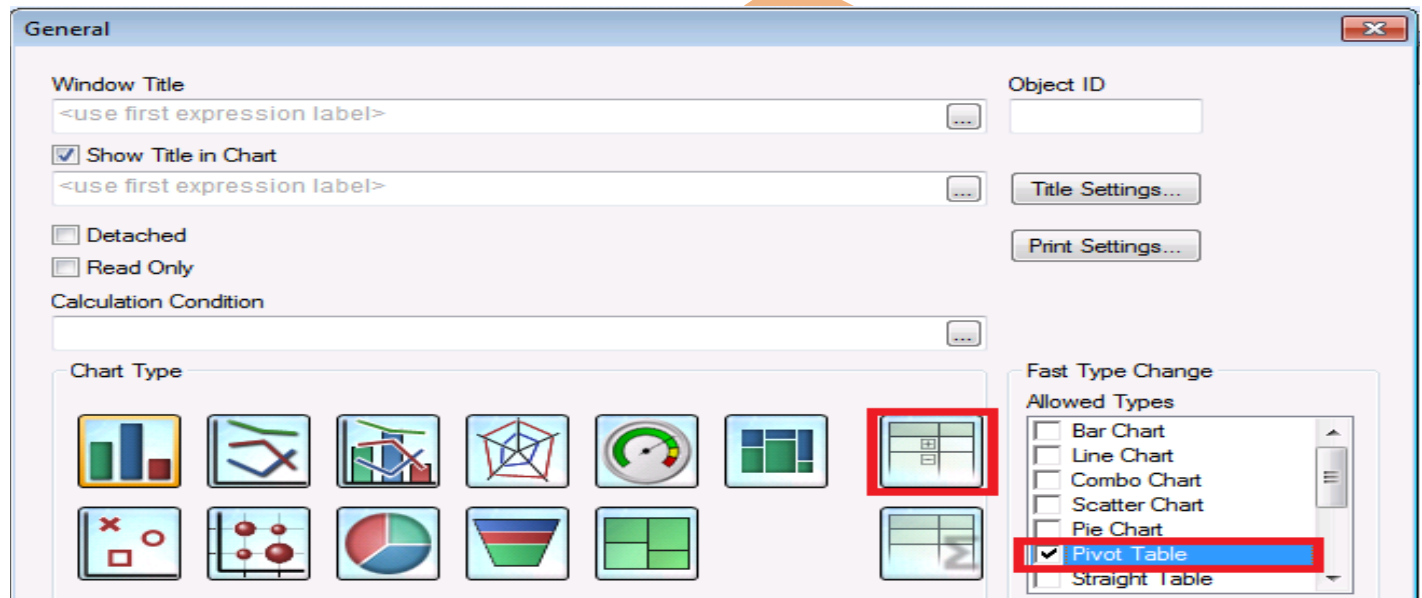
Go to the new sheet object->charts->pivot table.

We now have to create a table that shows enplaned passengers and departures performed across the Carrier Group, Airline, Year and Month dimensions. This table should show totals for each

year, and subtotals for each carrier group.

so here two expression require which is enplaned passengers and departure perform, Go to expression tab -> add expression.

Edit Expression

File   Edit   Settings   Help

Expression OK

1   `$(eEnplanedPassenger)`

Fields | Functions | Variables | Images

Aggregation [▼] [0] %

Table   ⦿ All Tables   [▼]   ☐ Show System Fields

Field   # Air Time   [▼]   ☐ Distinct

[Paste]

[OK]   Cancel   Help
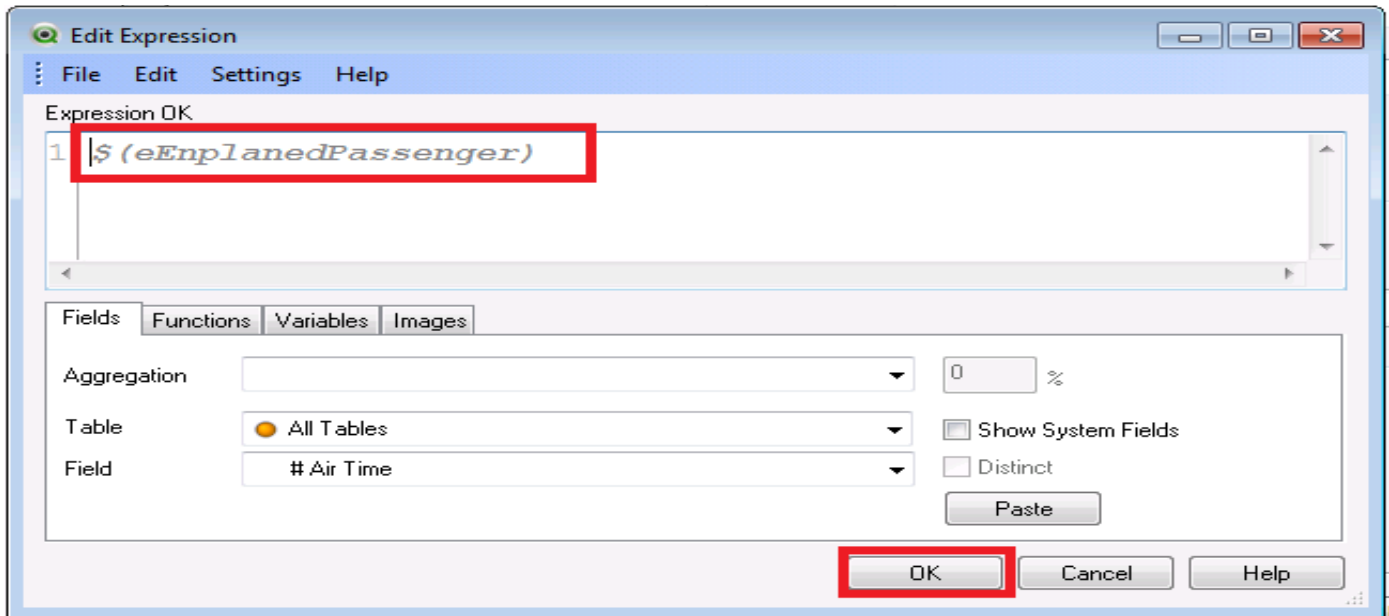
Here we are using a variable as we have already created. Now add here one more expression for departures perform.

Edit Expression

File   Edit   Settings   Help

Expression OK

1   `$(eDeparturePerform)`

Fields | Functions | Variables | Images

Aggregation [▼] [0] %

Table   ⦿ All Tables   [▼]   ☐ Show System Fields

Field   # Air Time   [▼]   ☐ Distinct

[Paste]

[OK]   Cancel   Help
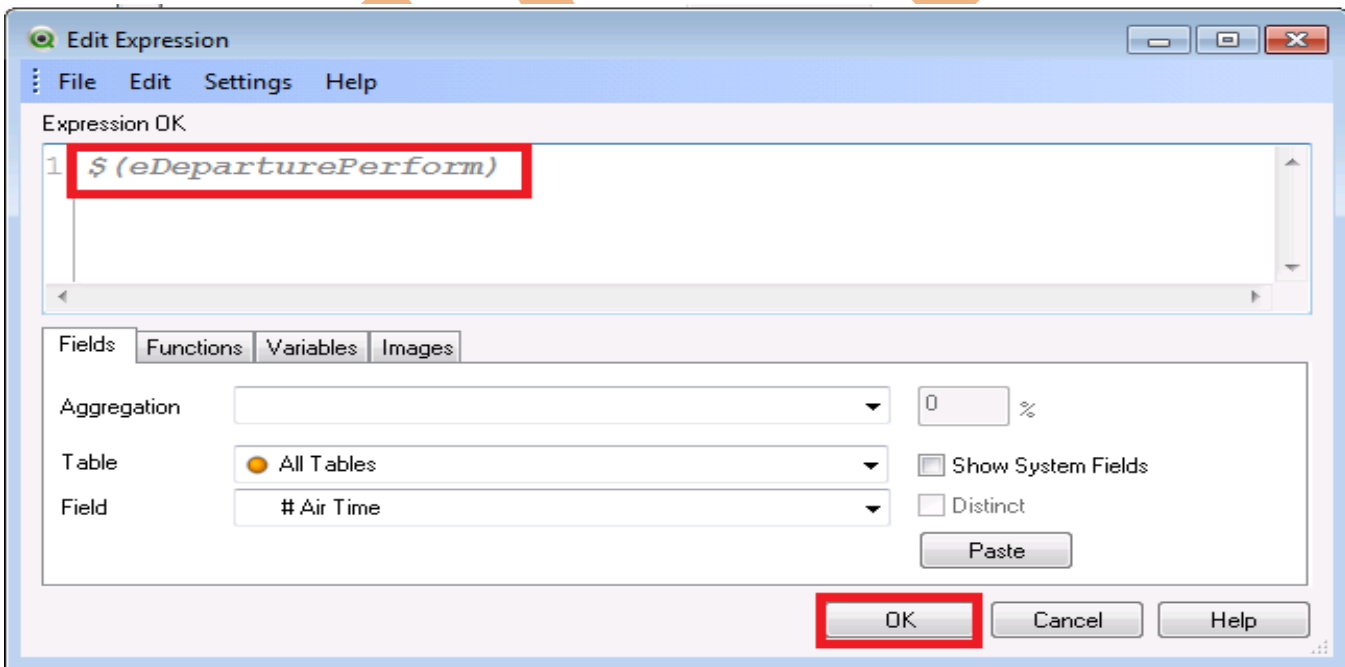
Now these are the expressions here then ->Next
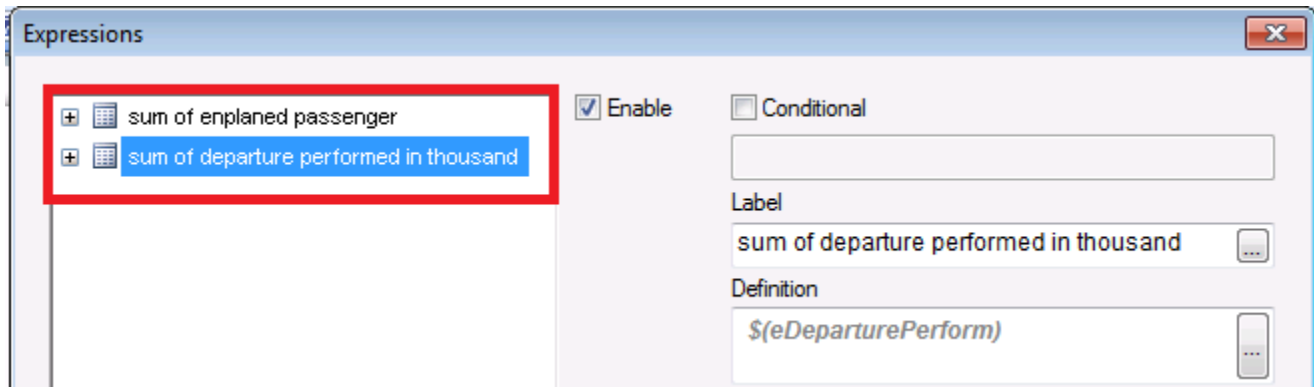
Now come to the presentation tab
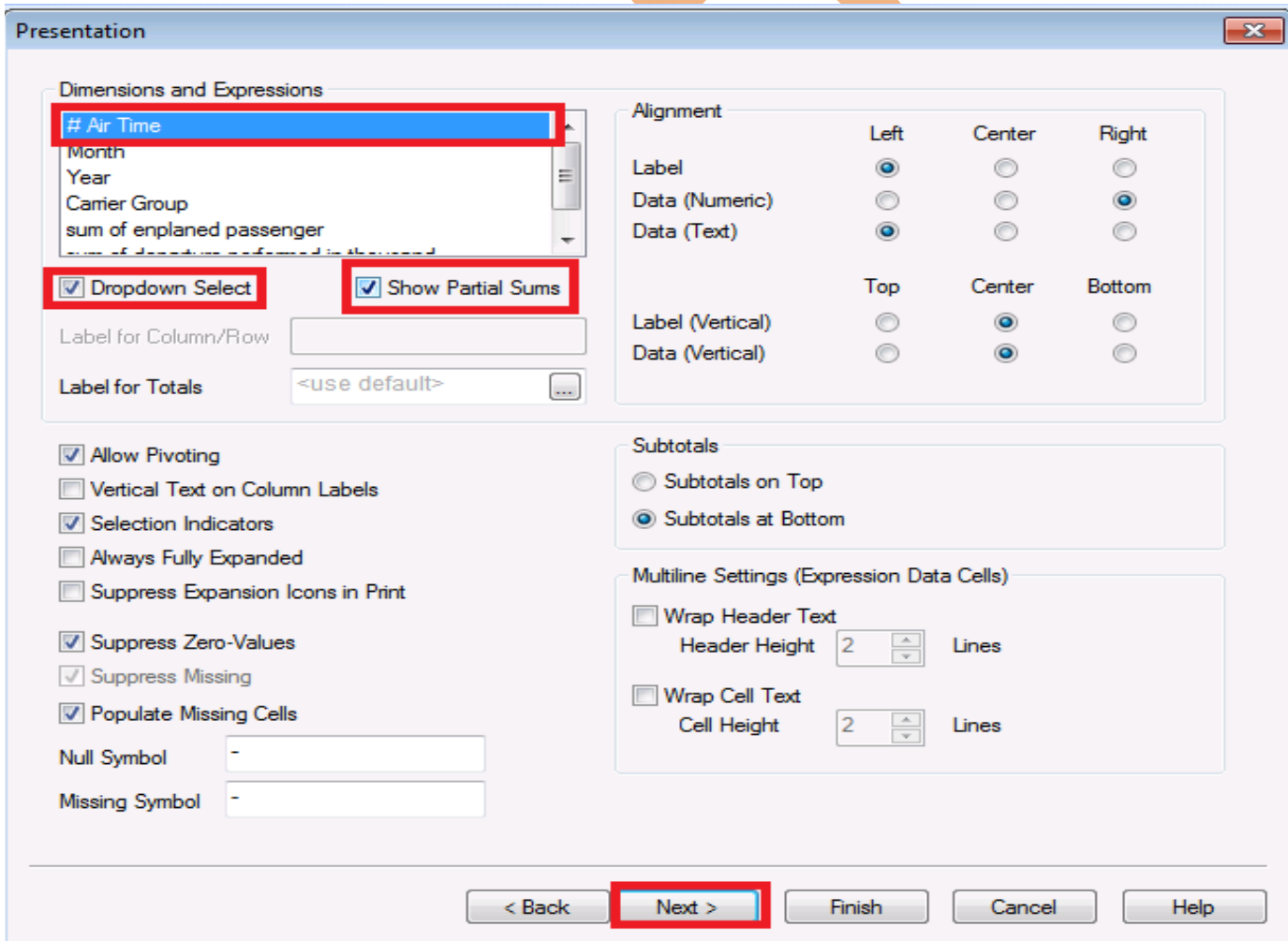
Here check the options Dropdown Select and Show partial sums, follow the same setting with Carrier group and Airline. And with the field month and year only keep checked Dropdown select the Show partial sums remain unchecked -> Next.

Now come to the dimension tab here and add the field's 'Carrier Group' ,'Airline' ,'Month' ,'
Year'

> Next.

Now table is created

Matrics ⊞ XL _ □

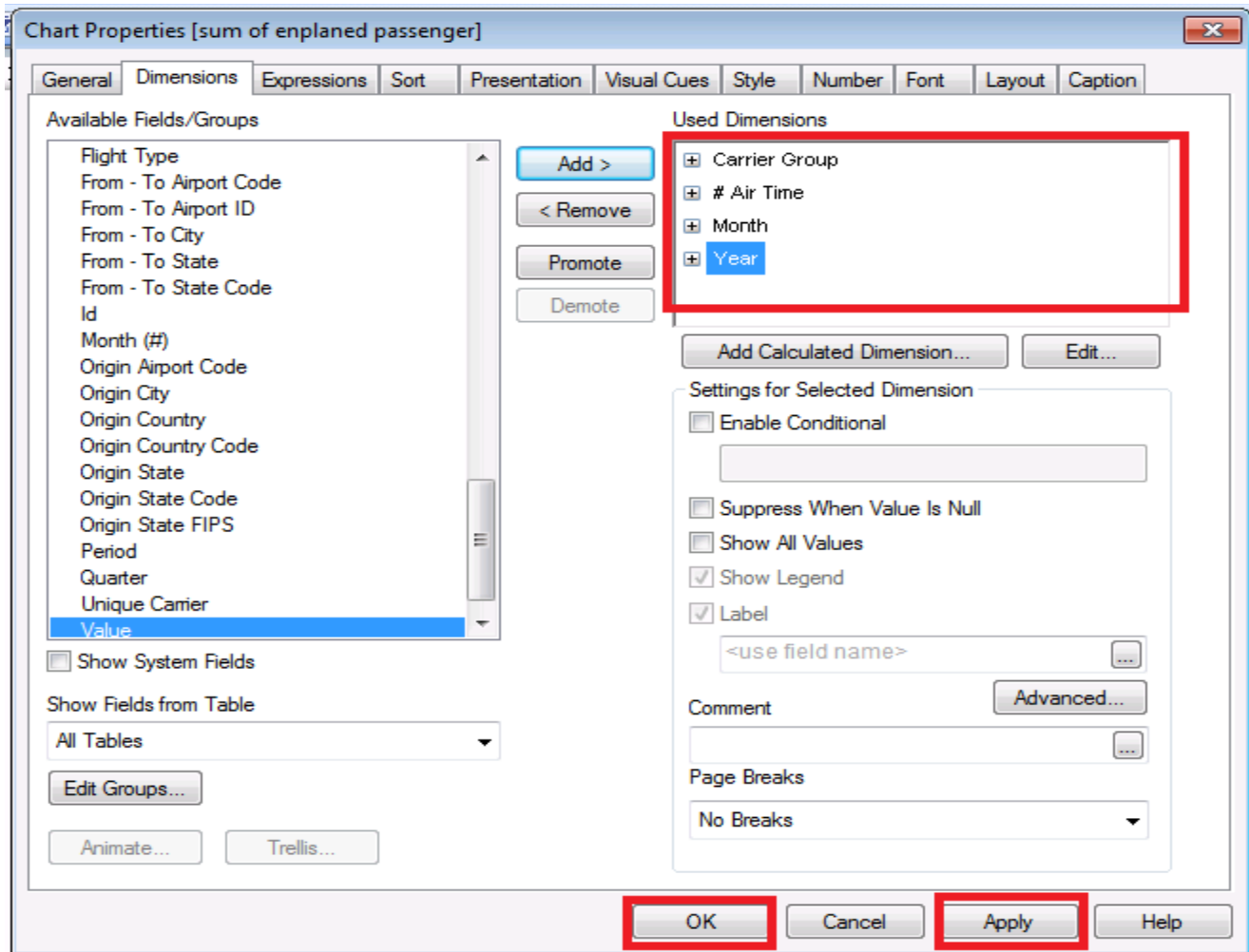| Carrier Group		sum of enplaned...	sum of departure performed in thousand
Commuter Ca...	⊞	37592837	2214573
Foreign Carriers	⊞	214326703	1742817
Large Regional...	⊞	9555228	345912
Major Carriers...	⊞	1824677744	19862066
Medium Regi...	⊞	2107343	50191
National Carri...	⊞	312870228	6341060
Small Certific...	⊞	14215611	1739327
-	⊞	16327	367

Now look the sheet in expanded format.

Matrics ⊞ XL _ □

Carrier... ● ▼	Airline ▼	Year ▼	Month ▼	sum of enplaned...	sum of departure performed in thousand
	⊟ Bemidji Airli... ⊞			0	1666
	Cape Air: 9K ⊞			1989083	392171
	Charter Air Tr... ⊞			68172	3796
Commuter Carriers (air taxi operator which performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the weeks and plans between which such flights are performed.)	⊟ Chautauqua Airlines Inc.: RP	⊟ 2009	Jan	440895	15190
			Feb	446451	14163
			Mar	555575	15736
			Apr	522137	14454
			May	503870	13489
			Jun	510516	13102
			Jul	518981	13423
			Aug	511151	13885
			Sep	465002	13123
			Oct	528071	14546
			Nov	474693	13772
			Dec	482886	14076
		2010 ⊞		5838429	167447
		⊟ 2011	Jan	400450	13077
			Feb	359877	11290
			Mar	480317	14245
			Apr	465147	13370
			May	501855	13778
			Jun	494843	13534

Here if we want to see the data exploration with respect to year we can manage it by simply drag and drop the following.

Matrics					🖥 XL _ ▢
Carrier Group ▼	Year ▼	**Airline** ▼	**Month** ▼	sum of enplaned...	sum of departure performed in thousand
⊟		⊟ Air Greco, Inc... ⊞		900	304
		Bemidji Airli... ⊞		0	567
		Cape Air: 9K ⊞		629051	131230
		⊟	Jan	440895	15190
			Feb	446451	14163
Commuter			Mar	555575	15736
Carriers (air taxi			Apr	522137	14454
operator which			May	503870	13489
performs at least			Jun	510516	13102
five round trips		Chautauqua	Jul	518981	13423
per week between		Airlines Inc.: RP	Aug	511151	13885
two or more			Sep	465002	13123
points and	2009		Oct	528071	14546
publishes flight			Nov	474693	13772
schedules which			Dec	482886	14076
specify the times,		Commutair A... ⊞		831588	35039
days of the weeks		Ellis Air Taxi... ⊞		245	578
and plans		Freedom Air: ... ⊞		76734	10138
between which		Grand Canyon... ⊞		224795	19094
such flights are		Great Lakes A... ⊞		560376	92518
performed.)		Gulfstream Int:... ⊞		456854	47231
		Harris Air Ser... ⊞		338	178

The data explored with respect to year

Radar Chart

A radar chart is a graphical method of displaying multivariate data in the form of a two-dimensional chart of three or more quantitative variables represented on axes starting from the same point. The relative position and angle of the axes is typically uninformative.

The Radar Chart can be used to depict information that is cyclical in nature. For Here we create the radar chart which illustrates the number of enplaned passengers per month. In this example you can clearly see that travel increases during the summer months.
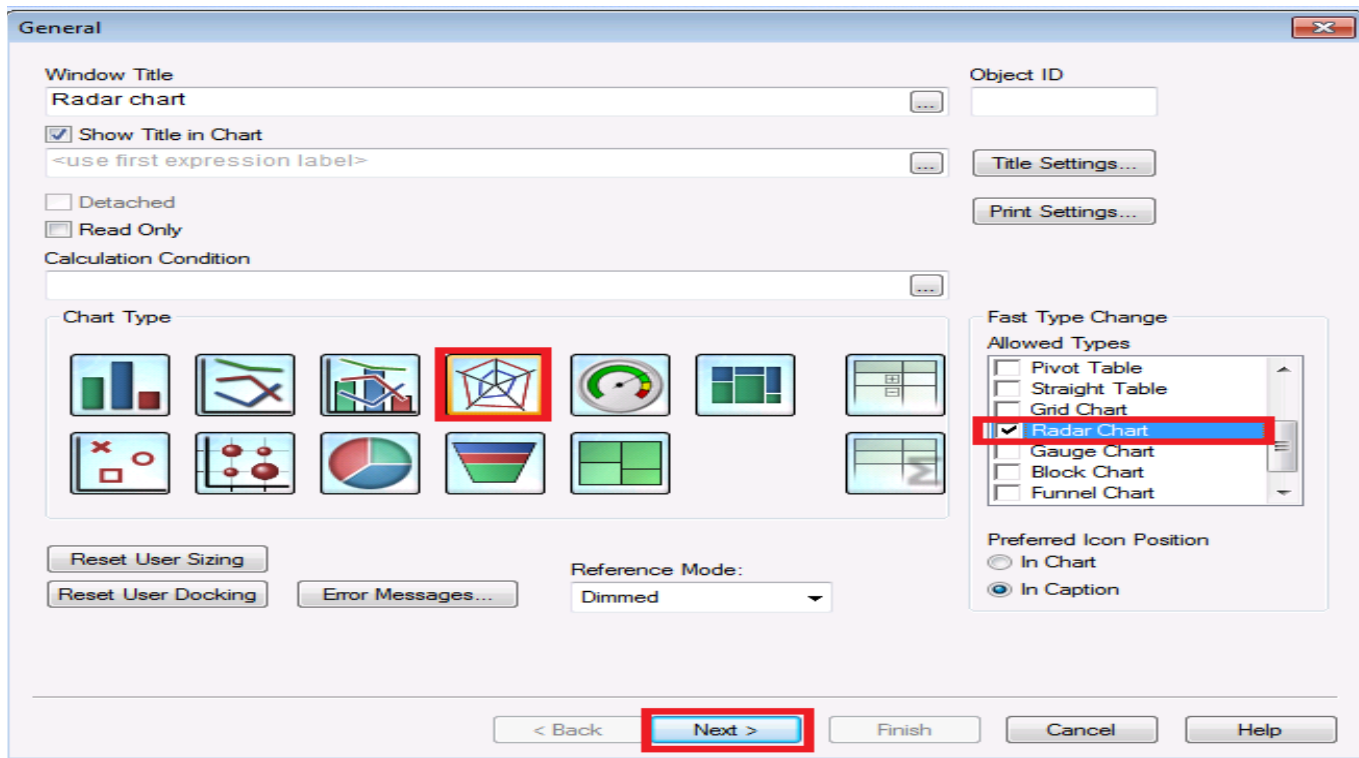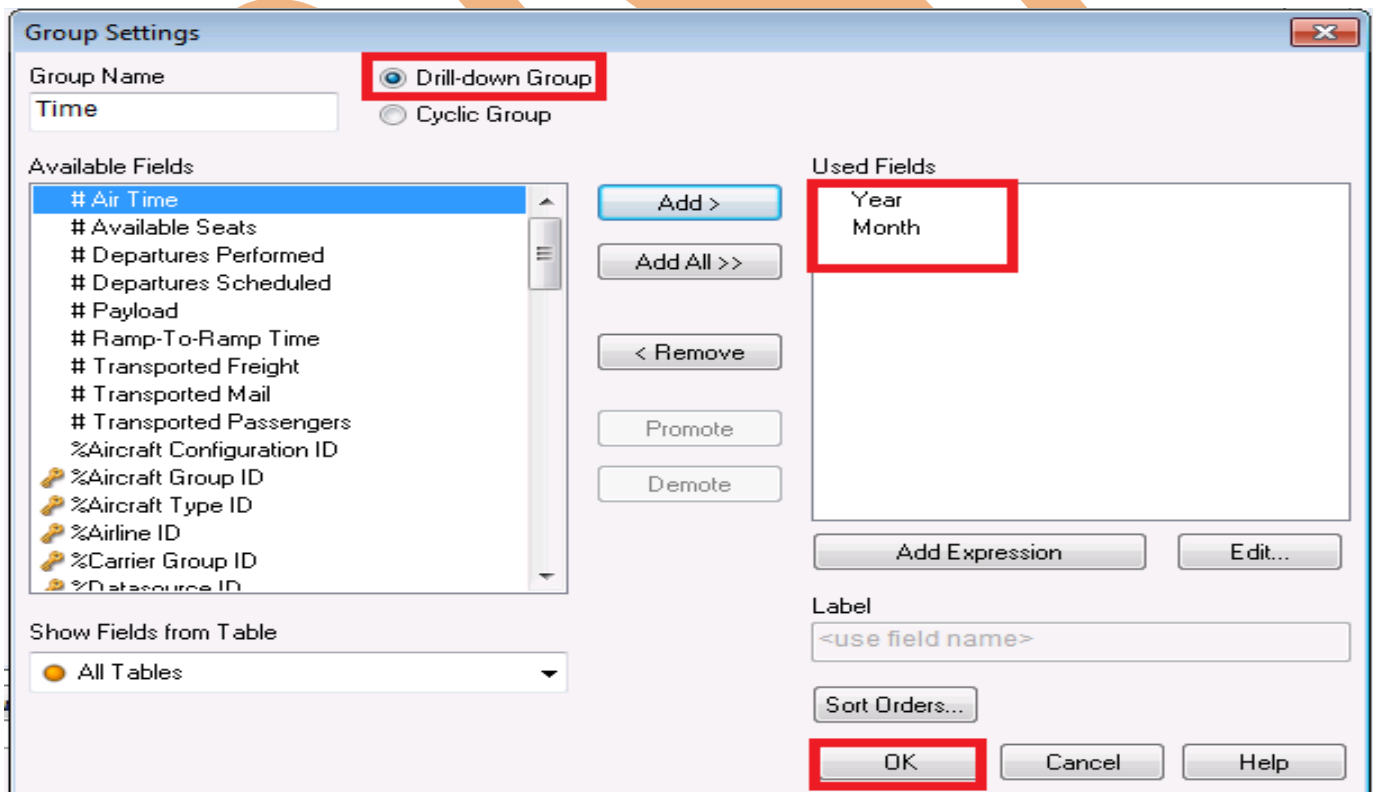
Now come to the Dimension tab and take the dimension time which is the drill down group we have already built.
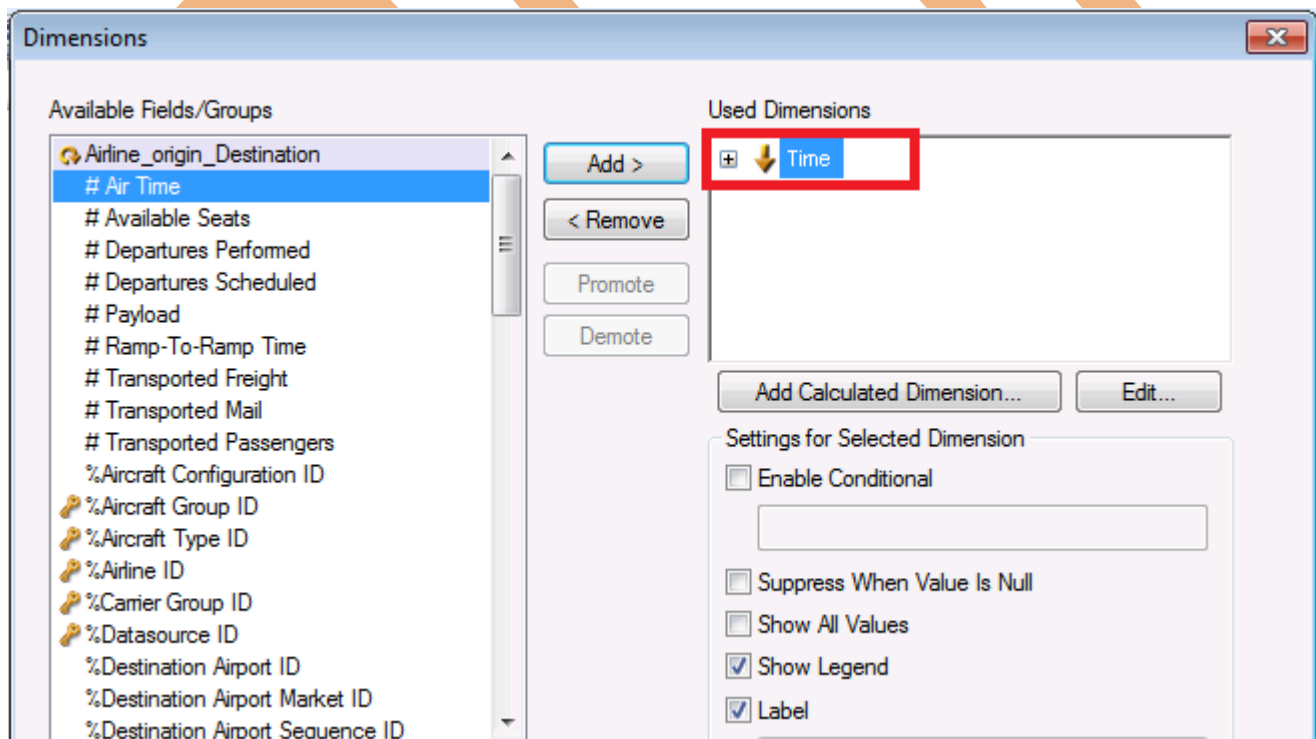
In the expression tab, expression to be selected is "sum of Transported passengers" ->OK.

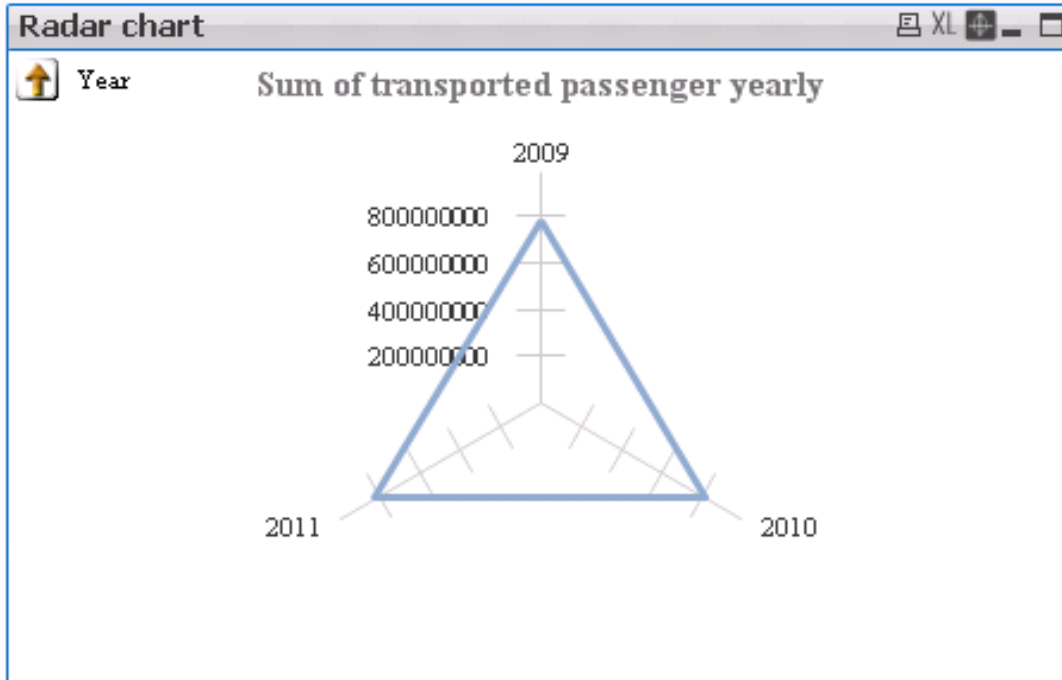Because we have to visualize the sum of transported passengers monthly.
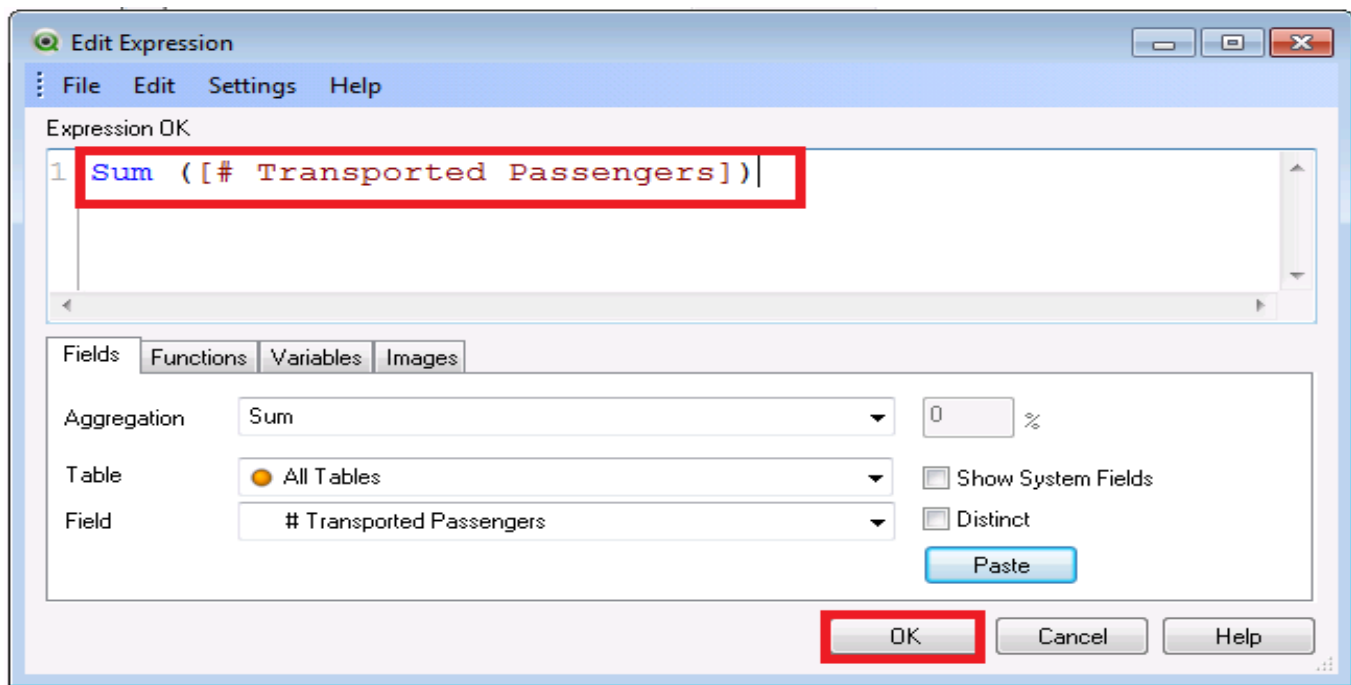
Here we will create the Drill-down group "Time" which contains the field's as shown below.
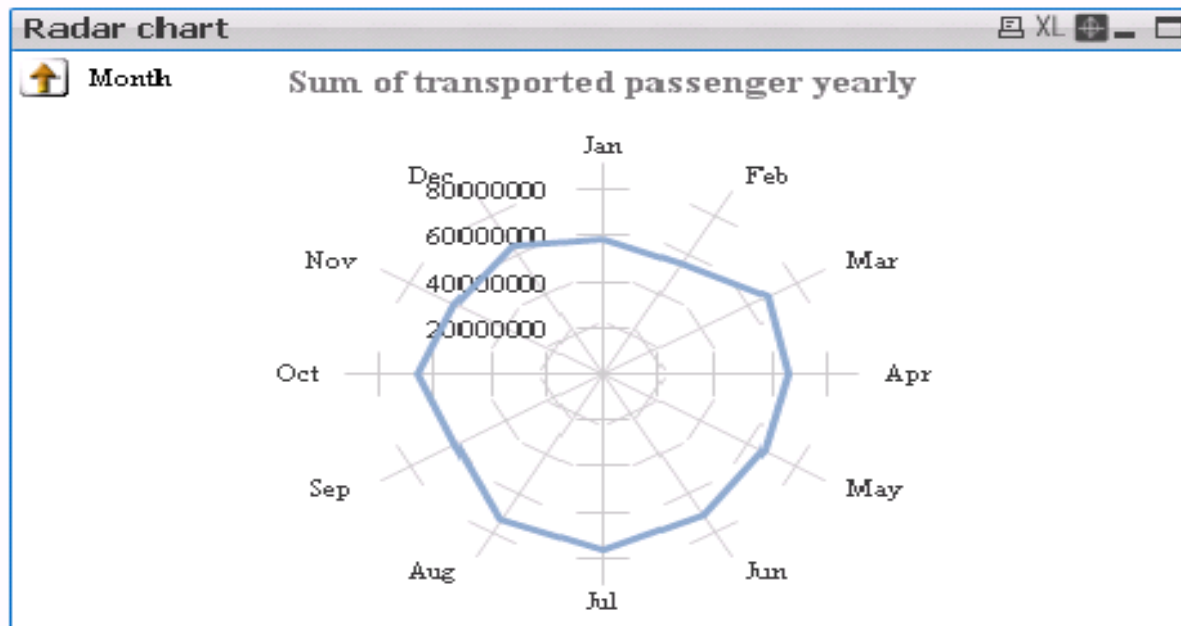

Once the "Time" Drill-down is created > OK

Now the chart is being created

Now select any of the Year, the chart is scattered / drill down into the months.


If we convert the number in the million the value will be easy to identify. Go to the Number tab, input the Thousand symbol with "x Thousand" and Million symbol with "x Million" and Billion symbol with "x Billion" -> Apply and see the change in the chart.
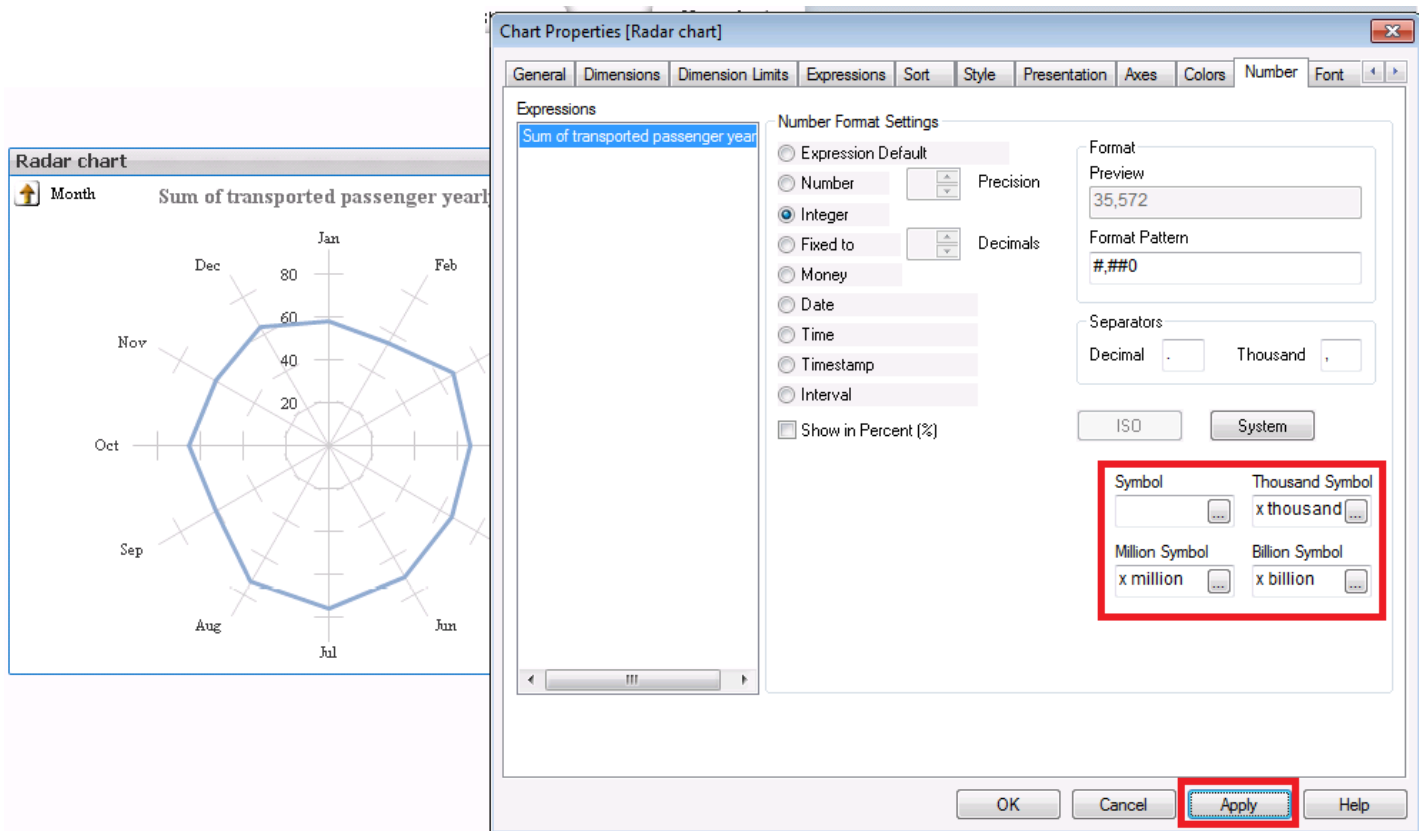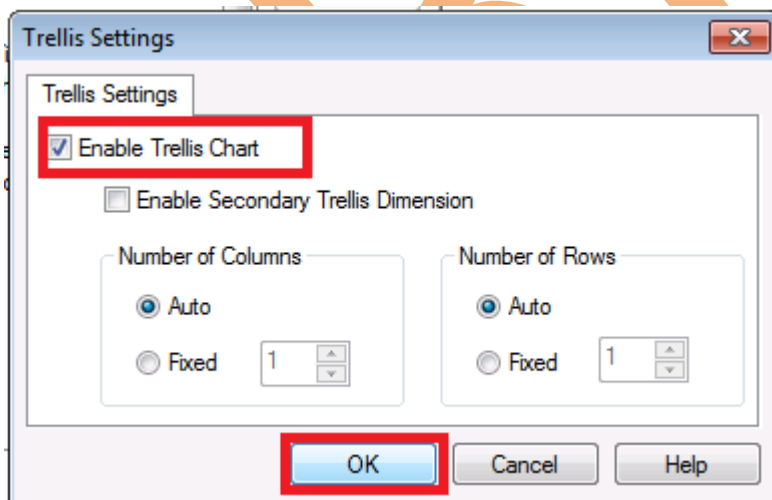
Trellis Chart :

In the Radar chart a option is available which will split the chart according to members available in the chart. To perform this come to the Dimensions tab then click on the Trellis option.
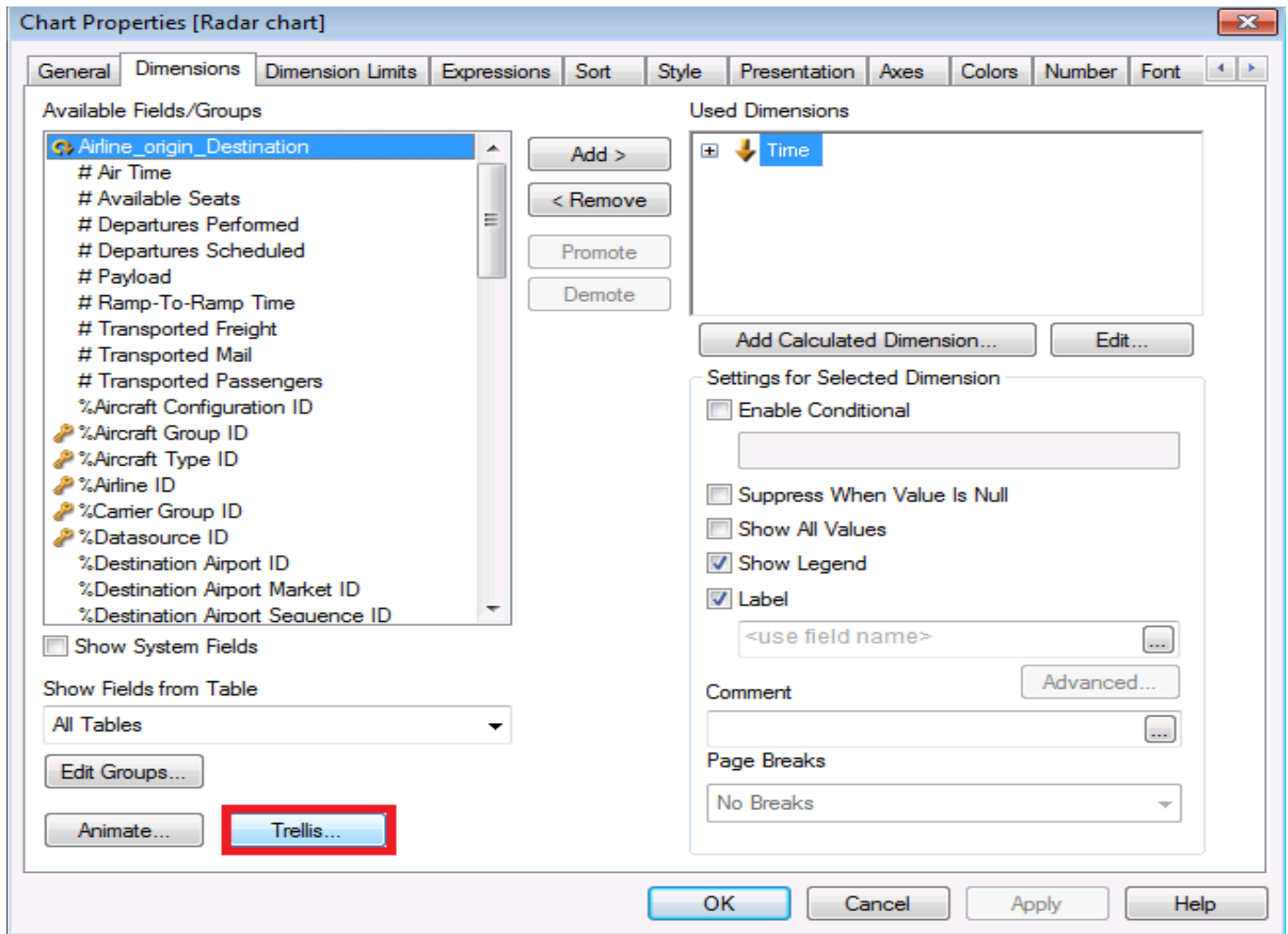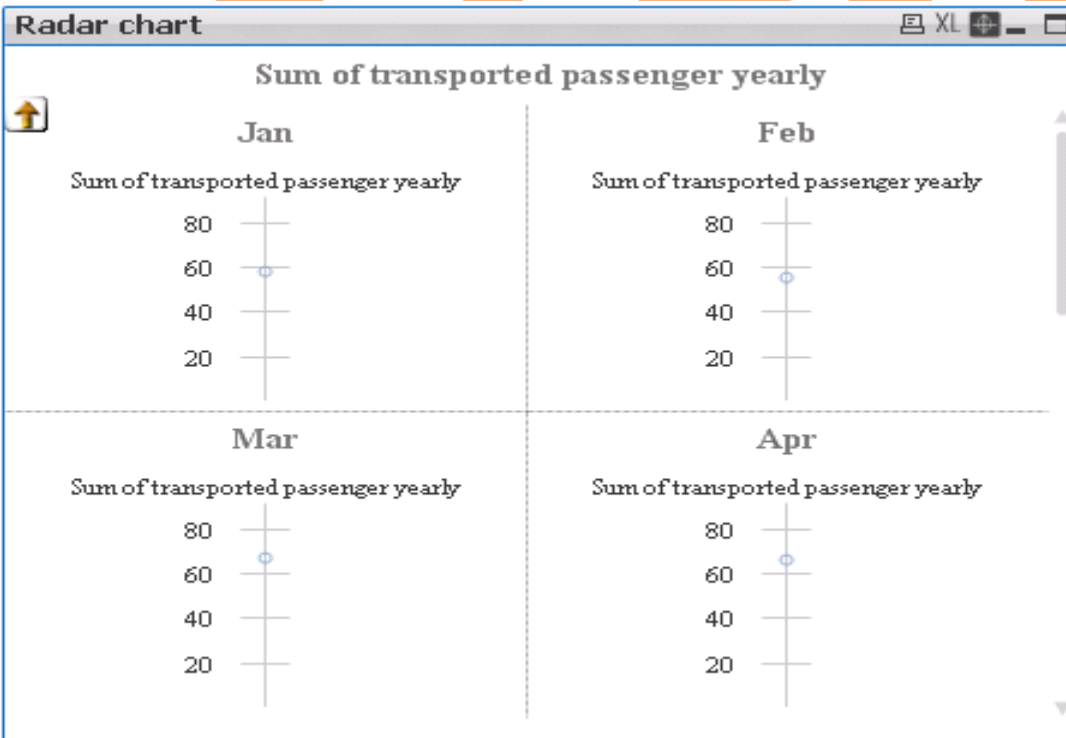
This will open the popup window->check the option Enable Trellis Chart then->ok

This will scattered the chart in the whole three years in the quadrants.
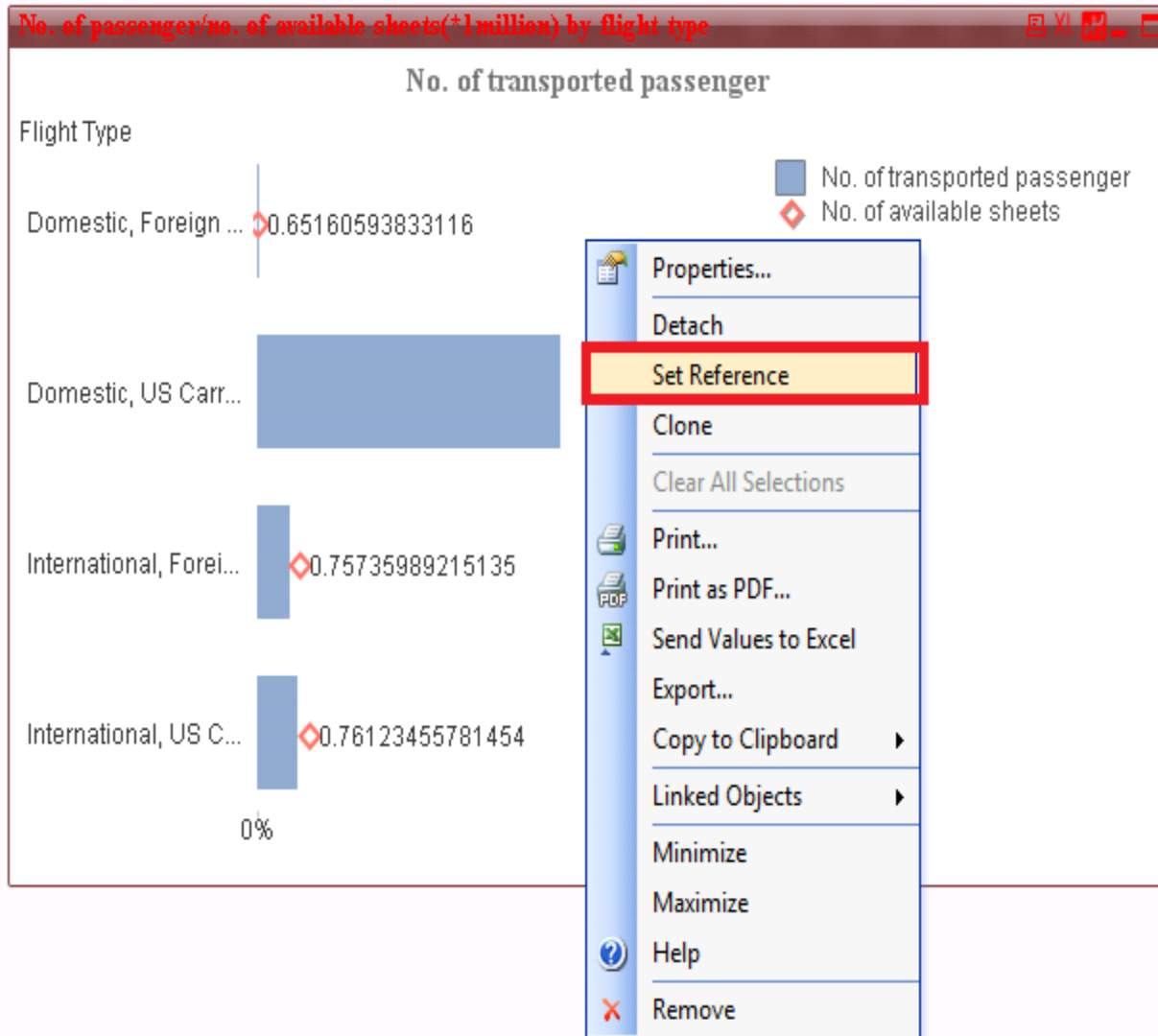
Here the result shown in the points as marked, we can explore the chart in the months by clicking on drill down group symbol.

Comparing the data in the chart (Setting References):

Suppose we have to compare the transported passenger year wise across a particular Flight Type. To do this right click on the chart and select "Set Reference".
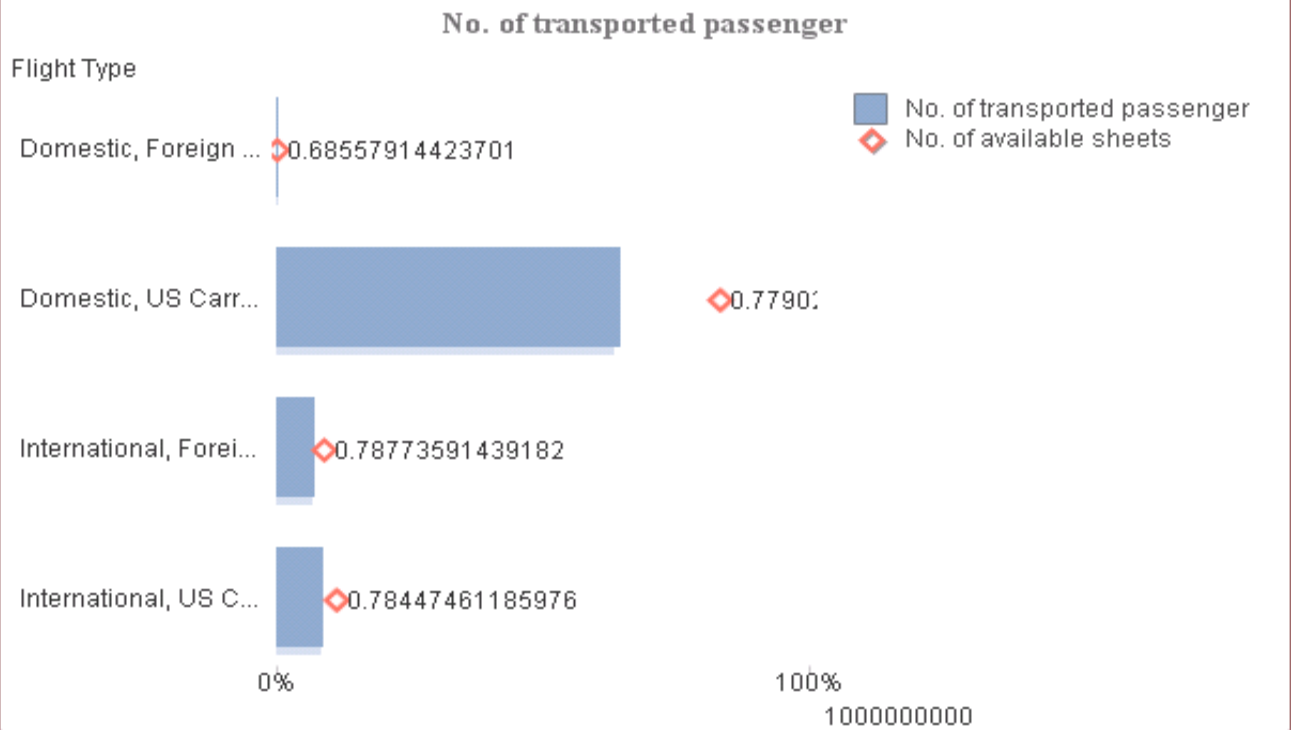

This is the record showing of the year 2009 then by applying set reference the points will be recorded. And when we see the sum of transported passengers in year 2010 we can clearly see the different with respect to the sum of transported passengers in 2009. Now select the year 2010.
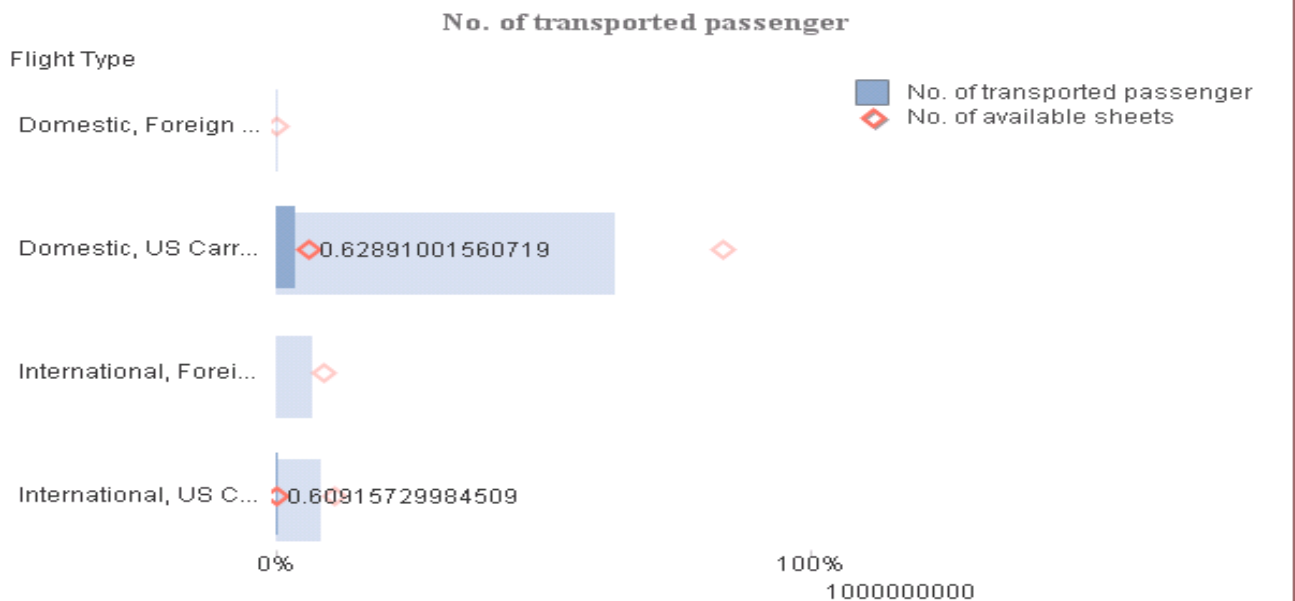
Below the difference shown clearly.

2009 **2010** 2011

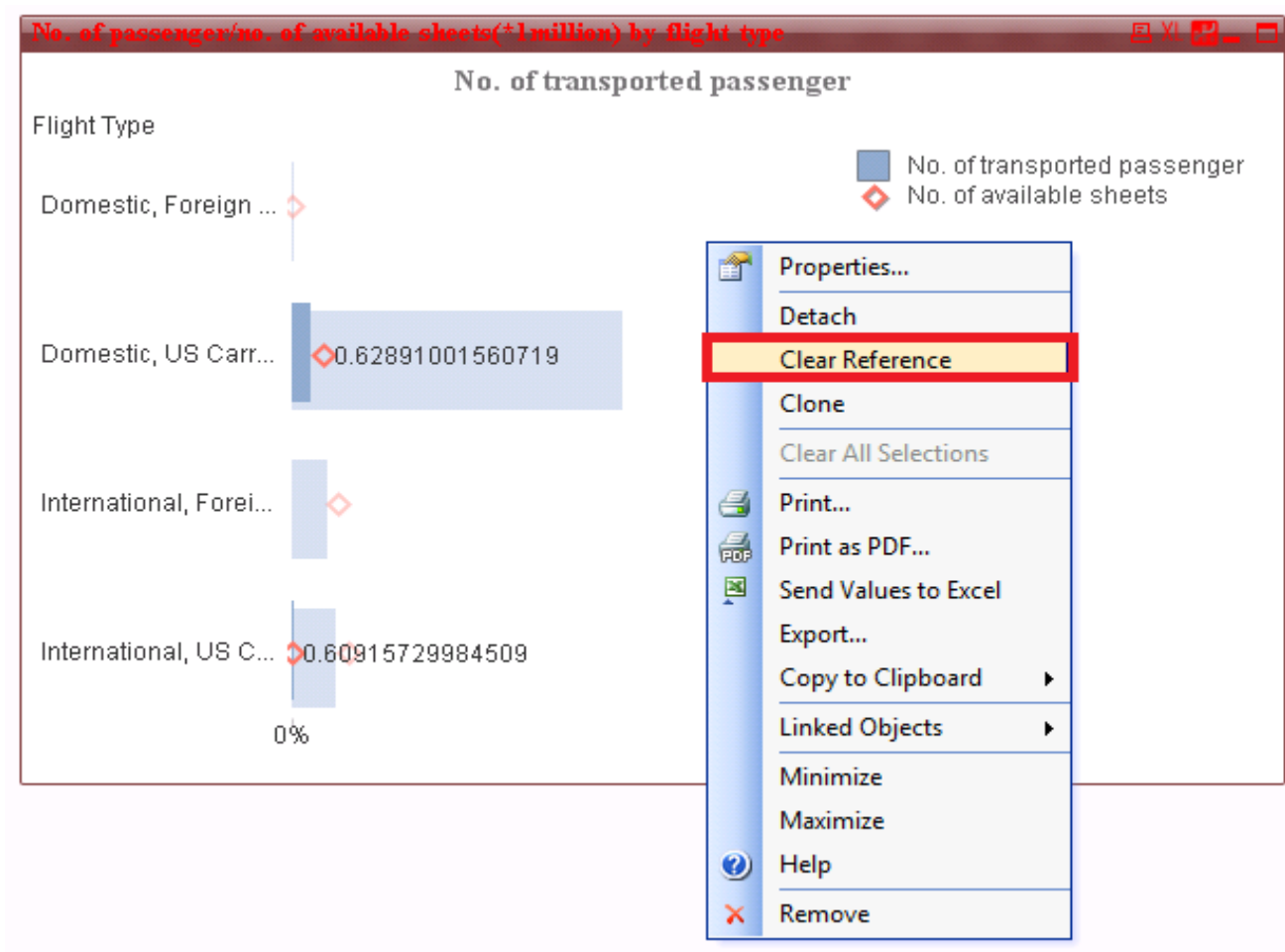**No. of passenger/no. of available sheets(*1million) by flight type**

No. of transported passenger

Flight Type

- No. of transported passenger
- No. of available sheets

Domestic, Foreign ...   0.68557914423701

Domestic, US Carr...   0.77901

International, Forei...   0.78773591439182

International, US C...   0.78447461185976

0%   100%
                         1000000000

Select 2011 now, the difference shown more clearly.

No. of passenger/no. of available sheets(*1million) by flight type

No. of transported passenger

Flight Type

- No. of transported passenger
- No. of available sheets

Domestic, Foreign ...

Domestic, US Carr...   0.62891001560719

International, Forei...

International, US C...   0.60915729984509

0%   100%
                         1000000000

We can clear the reference by right click on the chart > Clear Reference.

Using references, we can compare data across times (Year / Months).