

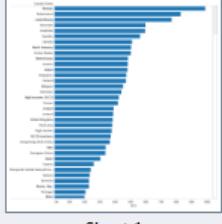
# Tableau Dashboard Cookbook

## Chapter 1

Save To Web Results

Chapter 1 successfully saved to Tableau Public

**Views**  
This workbook contains the following **2** views



Sheet 1



Interactions

**Preview**

Copy and Paste link into your email message <http://public.tableausoftware.com/views/C...> Copy

Copy and Paste html code to embed the Viz in your website <script type='text/javascript' src='http://pu...> Copy

Sheet 1 Interactions

2012	Country Name	98,860
220	Norway	98,860
	Switzerland	82,730
	Luxembourg	76,960
	Denmark	59,770
	Australia	59,570
	Sweden	56,210
	Canada	50,970
	North America	50,216
	United States	50,120
	Netherlands	48,250
	Austria	48,160
	Japan	47,870
	Singapore	47,210
	Finland	46,940
	Belgium	44,990
	China	44,660

Share [Open in browser window](#) [Learn how to share](#) See more by this author

Extract Data

Specify how much data to extract:

Filters (Optional)

Filter	Details

Add... Edit... Remove

Aggregation

Aggregate data for visible dimensions  
 Roll up dates to

Number of Rows

All rows  
 Incremental refresh

Top:  rows

History... Hide All Unused Fields Extract Cancel



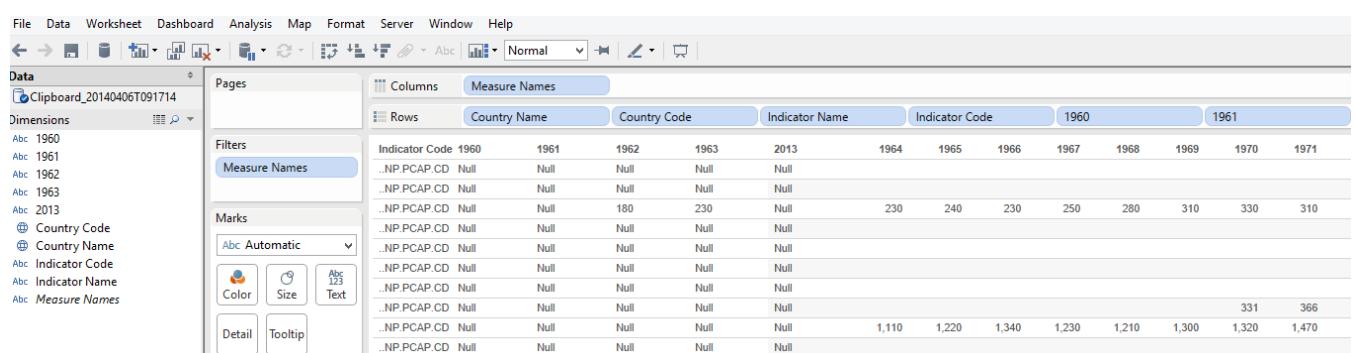
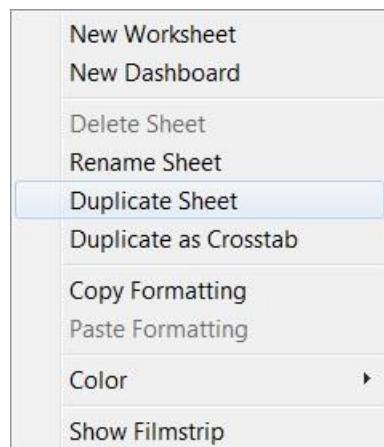
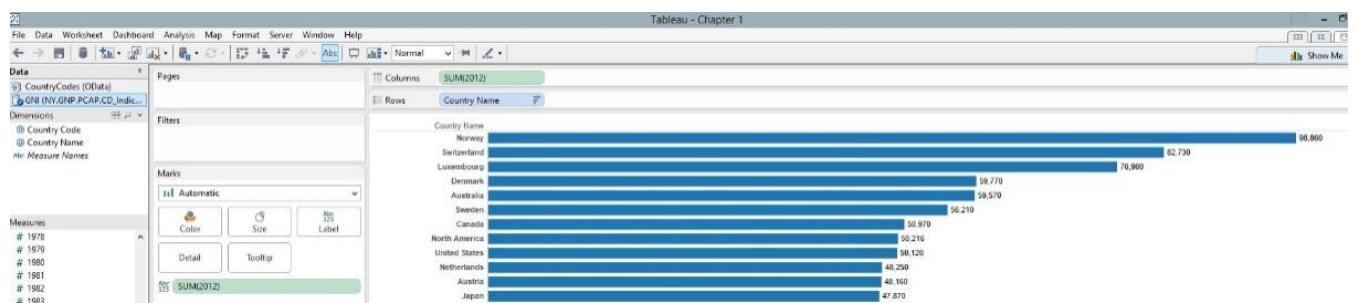
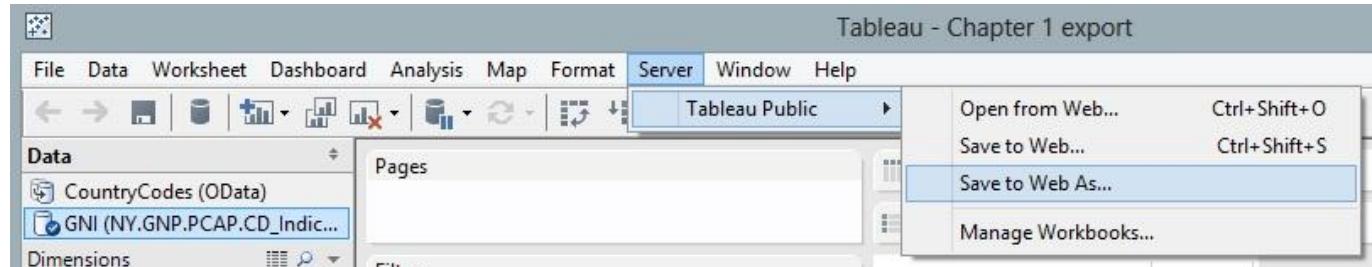
Save Workbook to the Public Web

Name:

Show Sheets as Tabs

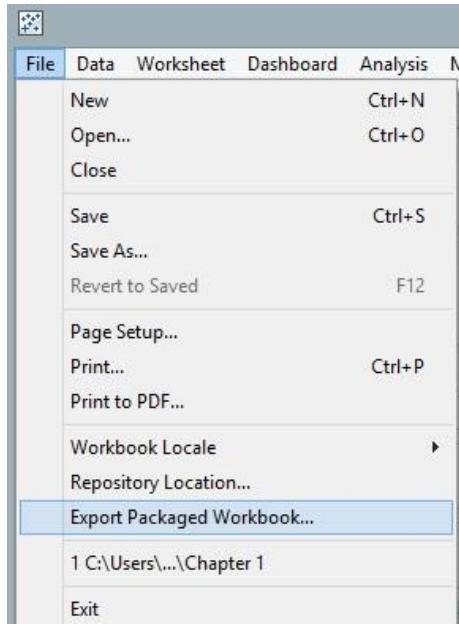
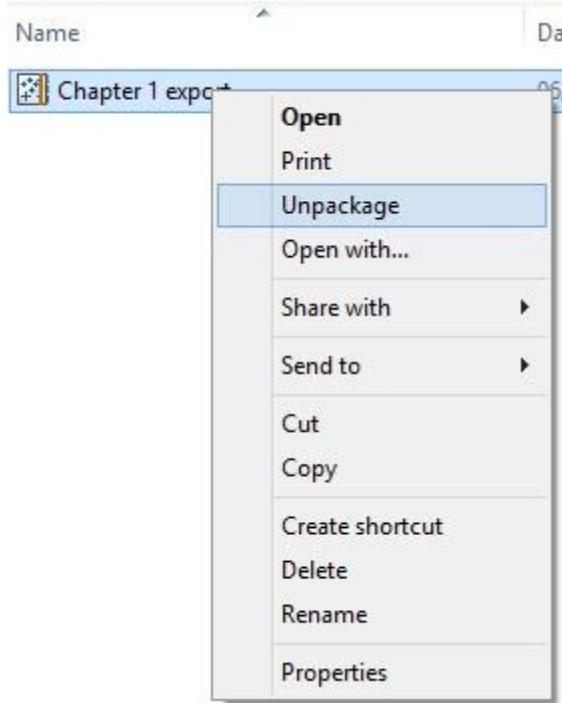
Save Cancel

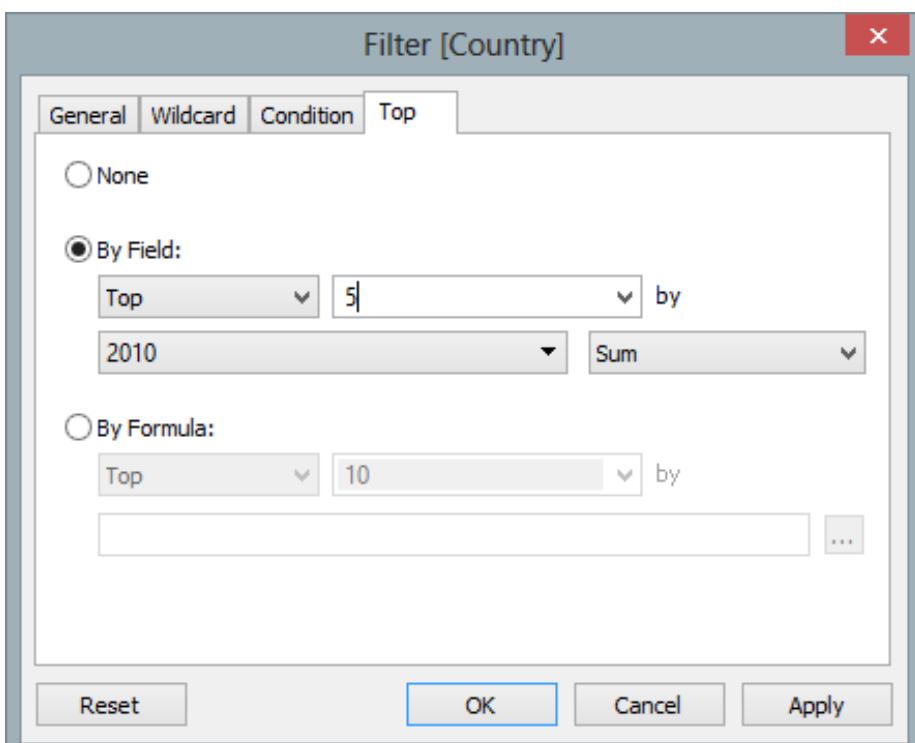
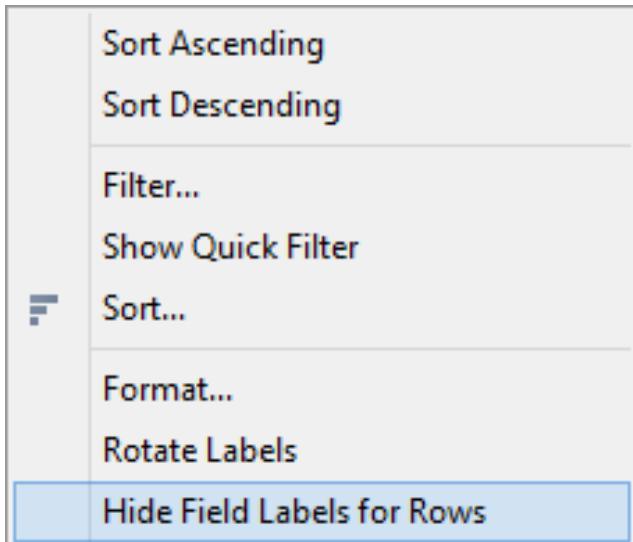
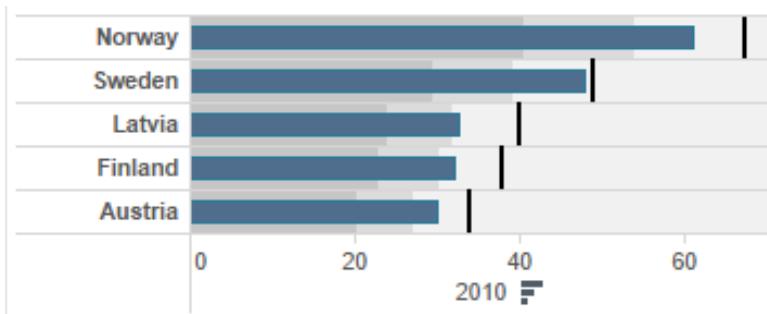
## Tableau - Chapter 1 export

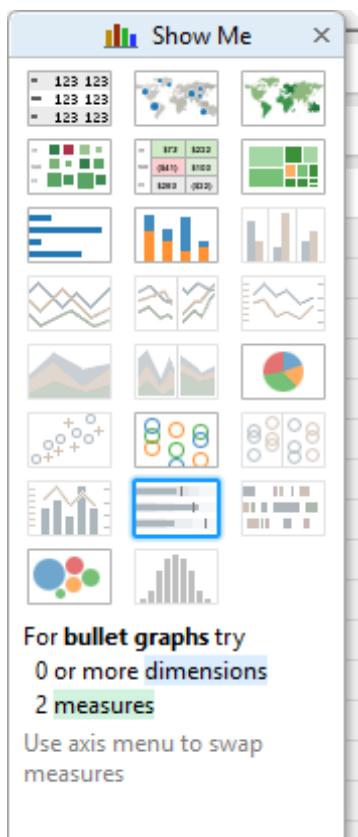
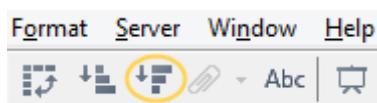
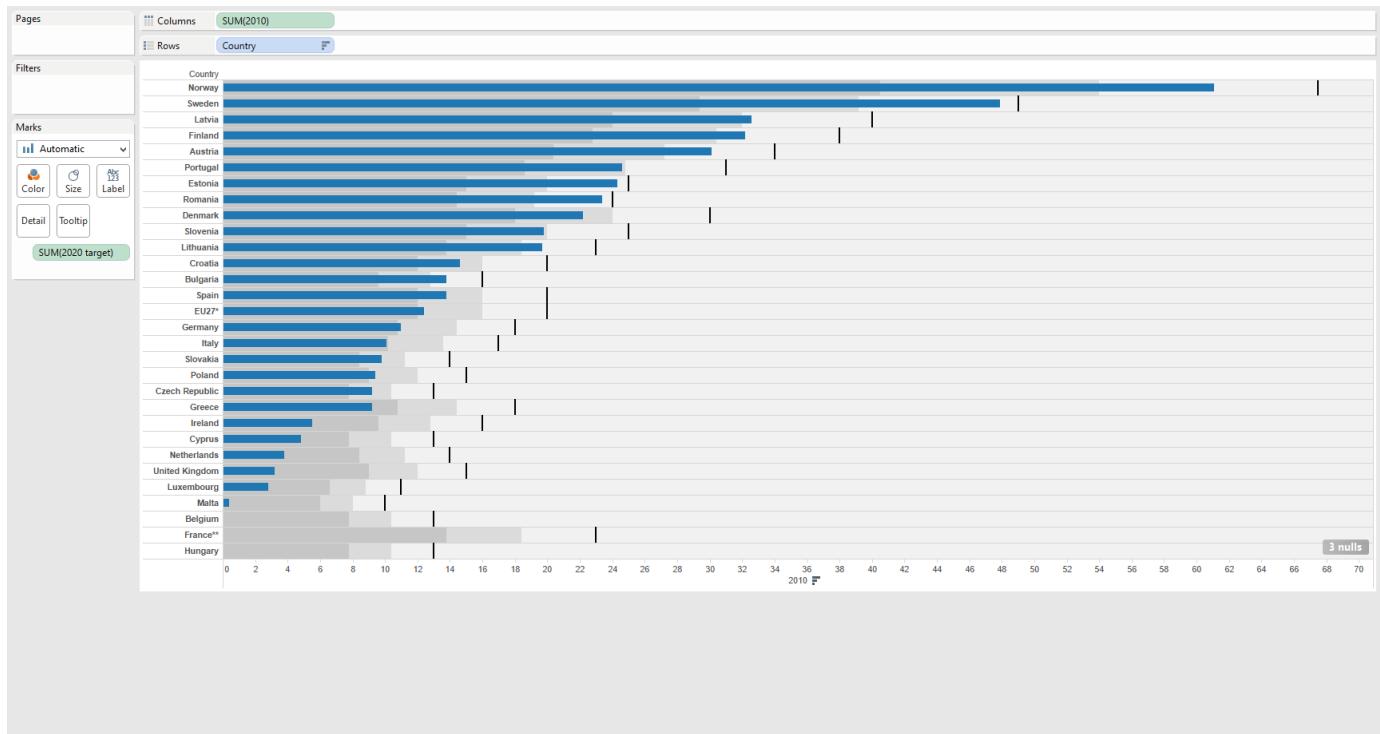


Country Name	Country Code	Indicator Name	Indicator Code	1960	1961	1962	1963	1964	1965
Aruba	ABW	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Andorra	AND	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Afghanistan	AFG	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Angola	AGO	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Albania	ALB	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Arab World	ARB	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
United Arab Emirates	ARE	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Argentina	ARG	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Armenia	ARM	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
American Samoa	ASM	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Antigua and Barbuda	ATG	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Australia	AUS	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							
Austria	AUT	GNI per capita, Atlas method (current U.N.Y.GNP.PCAP.CD)							

A	B	C	D	E	F	G	H	I	J	K
1 Data Source	World Development Indicators									
3 Country Name	Country Code	Indicator Name	Indicator Code	1960	1961	1962	1963	1964	1965	1966
4 Aruba	ABW	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
5 Andorra	AND	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
6 Afghanistan	AFG	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
7 Angola	AGO	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
8 Albania	ALB	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
9 Arab World	ARB	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
10 United Arab Emirates	ARE	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
11 Argentina	ARG	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)							1110	1220
12 Armenia	ARM	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
13 American Samoa	ASM	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
14 Antigua and Barbuda	ATG	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								
15 Australia	AUS	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)					1880	1980	2110	2280
16 Austria	AUT	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)					1060	1140	1240	1340
17 Azerbaijan	AZE	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)								1470
18 Burundi	BDI	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)					70	80	80	70
19 Belgium	BEL	GNI per capita, Atlas method (current U:NY.GNP.PCAP.CD)					1450	1530	1670	1800
										1950









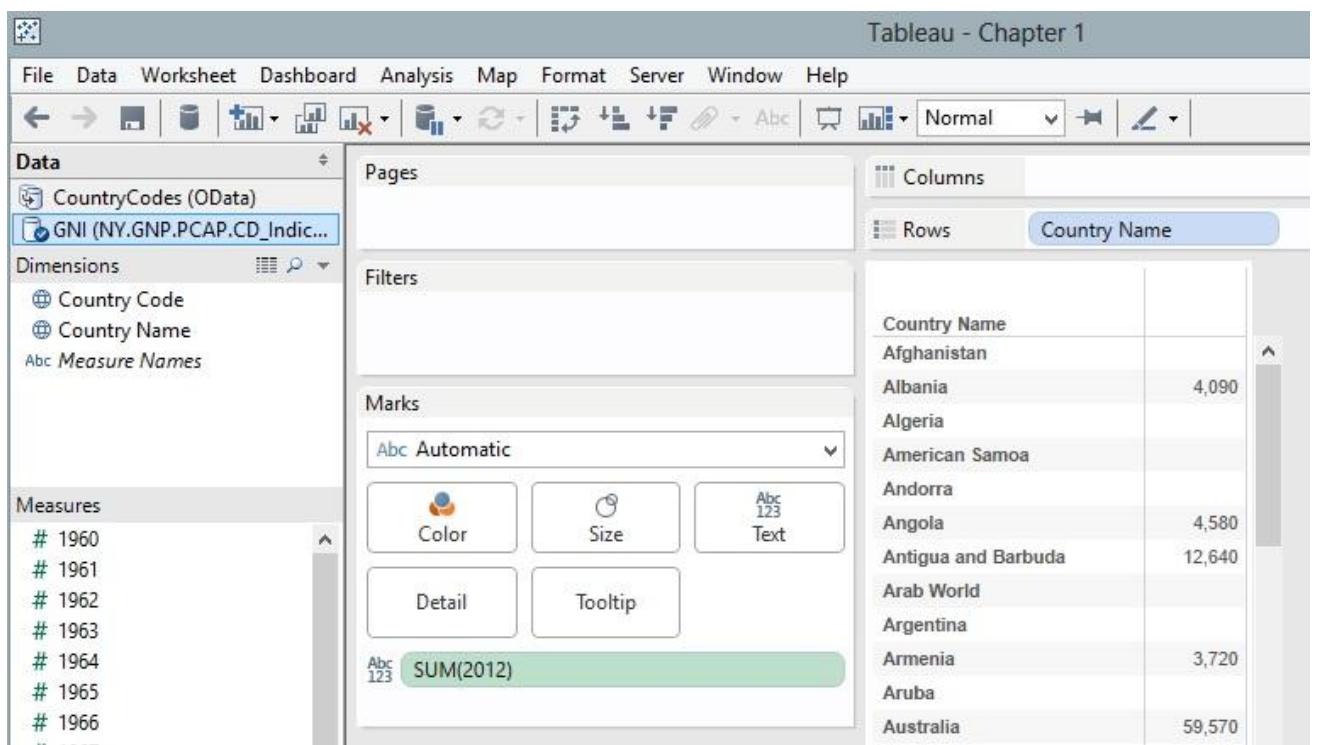
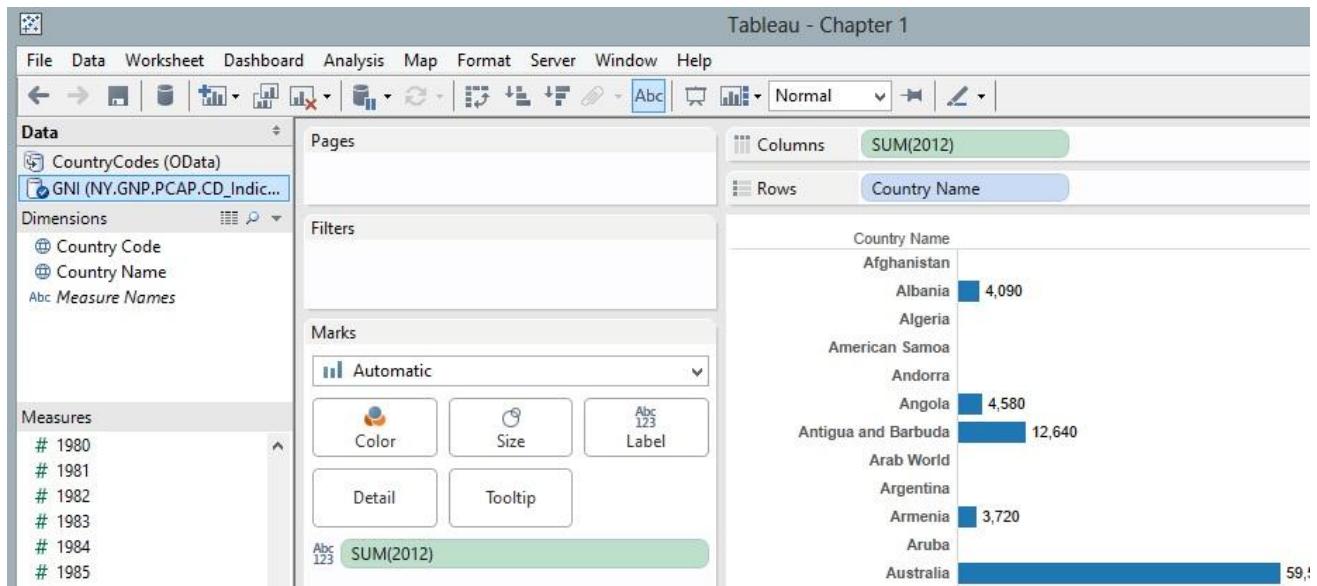
The screenshot shows the Tableau Data Editor interface. The top menu bar includes File, Data, Worksheet, Dashboard, Analysis, Map, Format, Server, Window, and Help. Below the menu is a toolbar with various icons for file operations. On the left, there's a sidebar titled 'Data' containing a list of data sources: 'Clipboard\_20131023T010113' (selected), 'CountryCodes (OData)', and 'Dimensions'. Under 'Dimensions', there are two items: 'Country' and 'Measure Names'. A 'Measures' section lists several measures with their corresponding formulas: # 2006, # 2007, # 2008, # 2009, # 2010, # 2020 target, Latitude (generated), Longitude (generated), # Number of Records, and # Measure Values.

The main workspace displays a table with data for European countries. The columns are labeled: Country, 2006, 2007, 2008, 2009, 2010, and 2020 target. The data rows include Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, EU27\*, Finland, France\*\*, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom. Each row has a numerical value for each year column.

Country	2006	2007	2008	2009	2010	2020 target
Austria	26.60	28.90	29.20	31.00	30.10	34.00
Belgium	2.70	3.00	3.30	4.60		13.00
Bulgaria	9.60	9.30	9.80	11.90	13.80	16.00
Croatia	13.80	12.40	12.20	13.20	14.60	20.00
Cyprus	2.50	3.10	4.10	4.60	4.80	13.00
Czech Republic	6.50	7.40	7.60	8.50	9.20	13.00
Denmark	16.50	18.00	18.80	20.20	22.20	30.00
Estonia	16.10	17.10	18.90	23.00	24.30	25.00
EU27*	9.00	9.90	10.50	11.70	12.40	20.00
Finland	29.90	29.50	31.10	31.10	32.20	38.00
France**	9.60	10.20	11.10	11.90		23.00
Germany	6.90	9.00	9.10	9.50	11.00	18.00
Greece	7.00	8.10	8.00	8.10	9.20	18.00
Hungary	5.10	5.90	6.60	8.10		13.00
Ireland	2.90	3.30	3.90	5.10	5.50	16.00
Italy	5.80	5.70	7.10	8.90	10.10	17.00
Latvia	31.10	29.60	29.80	34.30	32.60	40.00
Lithuania	16.90	16.60	17.90	20.00	19.70	23.00
Luxembourg	1.40	2.70	2.80	2.80	2.80	11.00
Malta	0.20	0.20	0.20	0.20	0.40	10.00
Netherlands	2.70	3.10	3.40	4.10	3.80	14.00
Norway	60.60	60.50	62.00	65.10	61.10	67.50
Poland	7.00	7.00	7.90	8.90	9.40	15.00
Portugal	20.80	22.00	23.00	24.60	24.60	31.00
Romania	17.10	18.30	20.30	22.40	23.40	24.00
Slovakia	6.60	8.20	8.40	10.40	9.80	14.00
Slovenia	15.50	15.60	15.10	18.90	19.80	25.00
Spain	9.00	9.50	10.60	12.80	13.80	20.00
Sweden	42.70	44.20	45.20	48.10	47.90	49.00
United Kingdom	1.50	1.80	2.30	2.90	3.20	15.00

EU COUNTRIES SHARE OF RENEWABLE ENERGY							
	Country	Share of renewable energy (in % of gross final energy consumption)	2006	2007	2008	2009	2010
1	EU27*	9.0	9.9	10.5	11.7	12.4	20.0
2	Belgium	2.7	3.0	3.3	4.6	:	13.0
3	Bulgaria	9.6	9.3	9.8	11.9	13.8	16.0
4	Czech Republic	6.5	7.4	7.6	8.5	9.2	13.0
5	Denmark	16.5	18.0	18.8	20.2	22.2	30.0
6	Germany	6.9	9.0	9.1	9.5	11.0	18.0
7	Estonia	16.1	17.1	18.9	23.0	24.3	25.0
8	Ireland	2.9	3.3	3.9	5.1	5.5	16.0
9	Greece	7.0	8.1	8.0	8.1	9.2	18.0
10	Spain	9.0	9.5	10.6	12.8	13.8	20.0
11	France**	9.6	10.2	11.1	11.9	:	23.0
12	Italy	5.8	5.7	7.1	8.9	10.1	17.0
13	Cyprus	2.5	3.1	4.1	4.6	4.8	13.0
14	Latvia	31.1	29.6	29.8	34.3	32.6	40.0
15	Lithuania	16.9	16.6	17.9	20.0	19.7	23.0
16	Luxembourg	1.4	2.7	2.8	2.8	2.8	11.0
17	Hungary	5.1	5.9	6.6	8.1	:	13.0
18	Malta	0.2	0.2	0.2	0.2	0.4	10.0
19	Netherlands	2.7	3.1	3.4	4.1	3.8	14.0
20	Austria	26.6	28.9	29.2	31.0	30.1	34.0
21	Poland	7.0	7.0	7.9	8.9	9.4	15.0
22	Portugal	20.8	22.0	23.0	24.6	24.6	31.0
23	Romania	17.1	18.3	20.3	22.4	23.4	24.0
24	Slovenia	15.5	15.6	15.1	18.9	19.8	25.0
25	Slovakia	6.6	8.2	8.4	10.4	9.8	14.0
26	Finland	29.9	29.5	31.1	31.1	32.2	38.0
27	Sweden	42.7	44.2	45.2	48.1	47.9	49.0
28	United Kingdom	1.5	1.8	2.3	2.9	3.2	15.0
29	Croatia	13.8	12.4	12.2	13.2	14.6	20.0
30	Norway	60.6	60.5	62.0	65.1	61.1	67.5

The screenshot shows the Tableau desktop application. The ribbon menu includes File, Data, Worksheet, Dashboard, Analysis, Map, Format, Server, Window, and Help. The toolbar contains various icons for navigation, refresh, and data selection. The data pane on the left lists a connection named "CountryCodes (OData)" and a list of countries: CHN, AUS, CND, PGR, GBR, LBN, FRA, and SWE. The main workspace shows a single page titled "Pages" with a sorting command: "Sort Country Name descending by 2012".



The screenshot shows the Tableau Data pane with the following details:

- Data Source:** GNI (NY.GNP.PCAP.CD\_Indic...)
- Dimensions:** Country Code, Country Name, Measure Names
- Measures:** 1960 (Count), 1961 (Count), # 1962, # 1963, # 1964, # 1965, # 1966, # 1967, # 1968, # 1969, # 1970, # 1971, # 1972, # 1973, # 1974, # 1975, # 1976, # 1977, # 1978, # 1979, # 1980, # 1981, # 1982, # 1983, # 1984, ...  
The measure "1960 (Count)" is selected and highlighted in green.

A context menu is open for the selected measure, with the following options:

- Add to Sheet**
  - Show Quick Filter
  - Copy
  - Paste
  - Duplicate
  - Rename...
  - Hide
  - Create Calculated Field...
  - Create Group...
  - Create Set...
  - Create Parameter...
  - Convert to Discrete
  - Convert to Dimension
- Change Data Type**
  - Number
  - Date & time
  - Date
  - String
  - Default

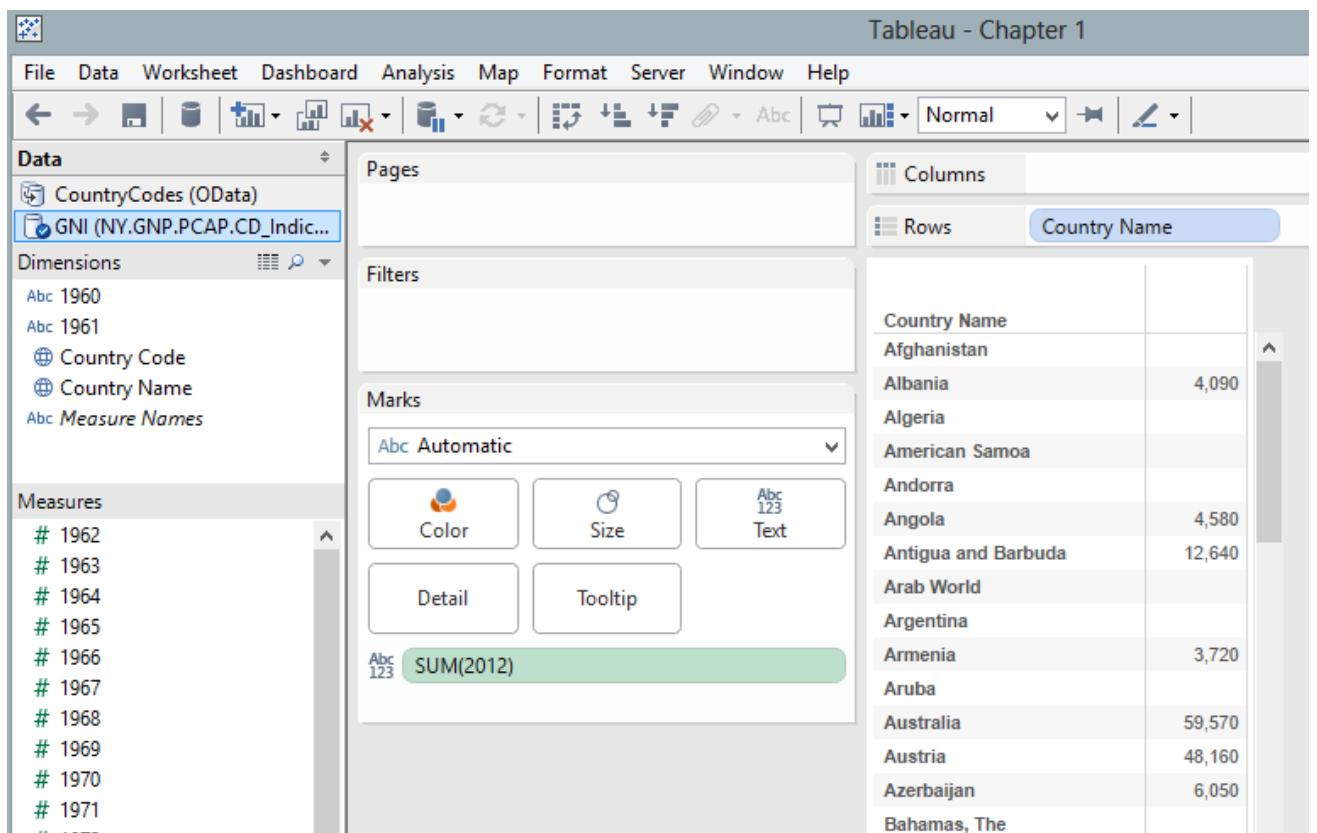
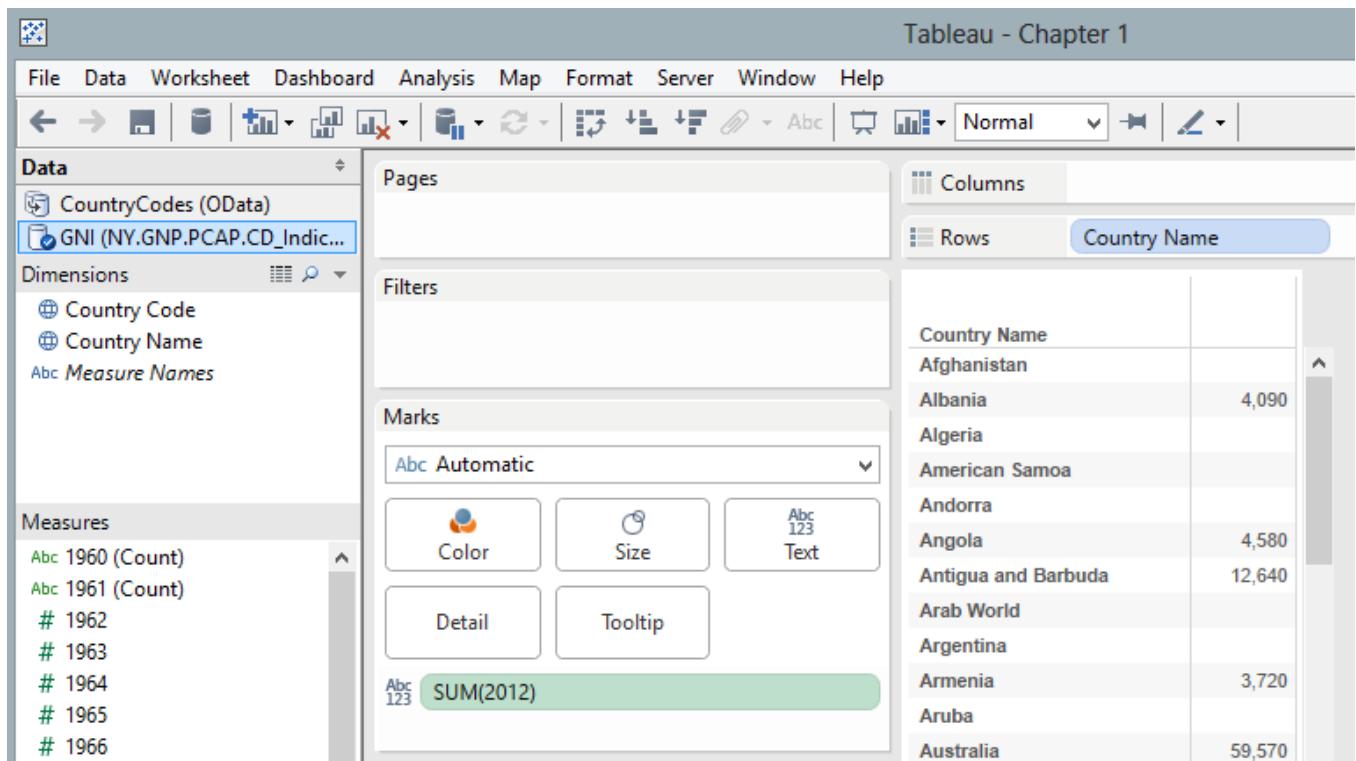


Tableau - Chapter 1

**Data**

- CountryCodes (OData)
- GNI (NY.GNP.PCAP.CD\_Indicator\_MetaData\_en\_EXCEL.xls) **(Selected)**

**Dimensions**

- Country Code
- Country Name
- Abc Measure Names

Tableau - Chapter 1

**Data**

- CountryCodes (OData)
- GNI (NY.GNP.PCAP.CD\_Indicator\_MetaData\_en\_EXCEL.xls) **(Selected)**

**Dimensions**

- Country Code
- Country Name
- Abc Measure Names

**Measures**

- Abc 1960 (Count)
- Abc 1961 (Count)
- # 1962

**Marks**

Automatic

- Color
- Size
- Text
- Detail
- Tooltip

Rows: Country Name

Columns:

For symbol maps try  
1 geo @ dimension  
0 or more dimensions  
0 to 2 measures



THE WORLD BANK  
Working for a World Free of Poverty

English Español Français Русский عربي 中文 ▶

GO

ABOUT DATA RESEARCH LEARNING NEWS PROJECTS & OPERATIONS PUBLICATIONS COUNTRIES TOPICS

## Data

By Country By Topic Indicators Data Catalog Microdata Blog News About Support Products

This page in English | Español | Français | العربية | 中文

GNI per capita, Atlas method (current US\$)

DATABANK  DOWNLOAD DATA  SHARE



# Connect to Data

## In a file

- Tableau Data Extract
- Microsoft Access
- Microsoft Excel
- Text File
- Import from Workbook

## On a server

- Tableau Server
- Actian Vectorwise
- Amazon Redshift
- Aster Database
- Cloudera Hadoop
- DataStax Enterprise
- EMC Greenplum
- Firebird
- Google Analytics
- Google BigQuery
- Hortonworks Hadoop Hive
- HP Vertica
- IBM DB2
- IBM Netezza
- MapR Hadoop Hive
- Microsoft Analysis Services
- Microsoft PowerPivot
- Microsoft SQL Server
- MySQL
- OData

## Saved data sources

- Sample - Coffee Chain (Access)
- Sample - Superstore - English (Ext...)
- Sample - Superstore Subset (Excel)
- Sample - World Bank Indicators (E...)

### Country Codes

Country Codes contains codes to nearly all countries of the world like ISO2, ISO3 or FIPS. In Addition to the English name the dataset contains country names in 9 different languages like German, Spain, Chinese or Russian.

Primary Account Key Show

URL for current expressed query:

<https://api.datamarket.azure.com/oh22is/CountryCodes/v1/CountryCodes>

Displaying 100 of 252 rows Page 1 ►

CountryID	CountryName	ISO2	ISO3	ISONumeric	FIPS	Continent	TLD	CurrencyCode	CountryCallingCode
1	Afghanistan	AF	AF	4	AF	AS	.af	AFN	93
2	Albania	AL	AL	8	AL	EU	.al	ALL	355
3	Algeria	DZ	DZ	12	AG	AF	.dz	DZD	213
4	American Samoa	AS	AS	16	AQ	OC	.as	USD	-683



**Windows Azure Marketplace**

Hello, Jennifer Stirrup

Learn Applications Data My Account

HOME > DATA > COUNTRY CODES



## Country Codes

### Data

Published by: oh22information services GmbH

Categories: Reference

Date added: 21/02/2013

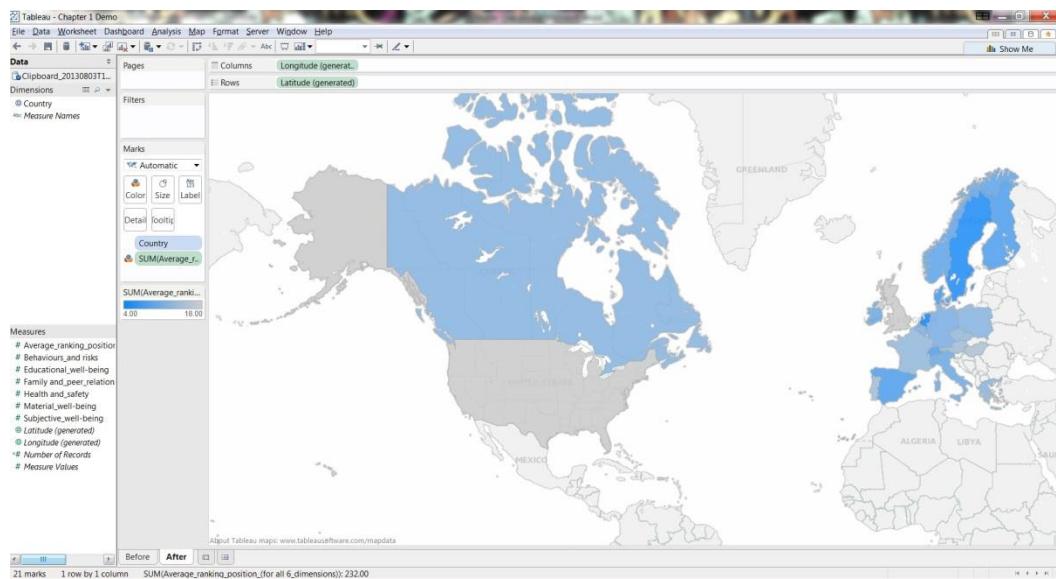
[Get support for this offering](#)

Country Codes contains codes to nearly all countries of the world like ISO2, ISO3 or FIPS. In Addition to the English name the dataset contains country names in 9 different languages like German, Spain, Chinese or Russian.



### EXPLORE THIS DATASET

Launch the DataMarket service explorer which allows you to browse the dataset interactively.



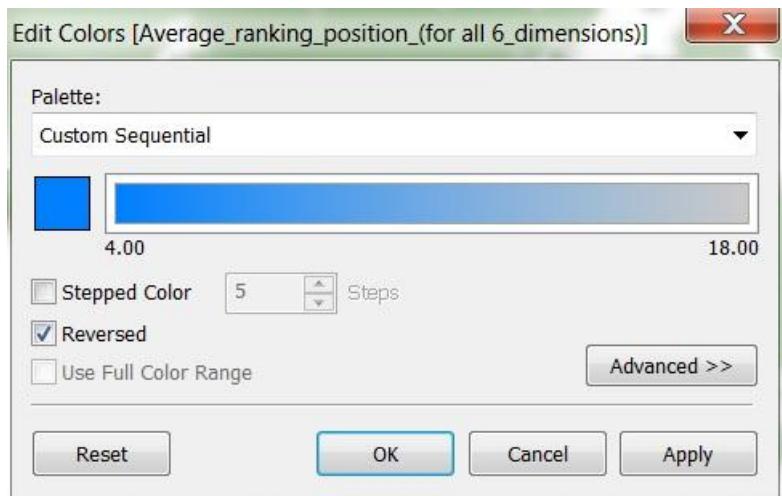


Tableau - Chapter 1 Demo

File Data Worksheet Dashboard Analysis Map Format

Data Dimensions Measures

Clipboard\_20130803T1...

Country

Abc Measure Names

Pages

Filters

Marks

Automatic

Color Size Label

Detail Tooltip

Country

SUM(Average\_r...

SUM(Average\_r...

Edit Colors...

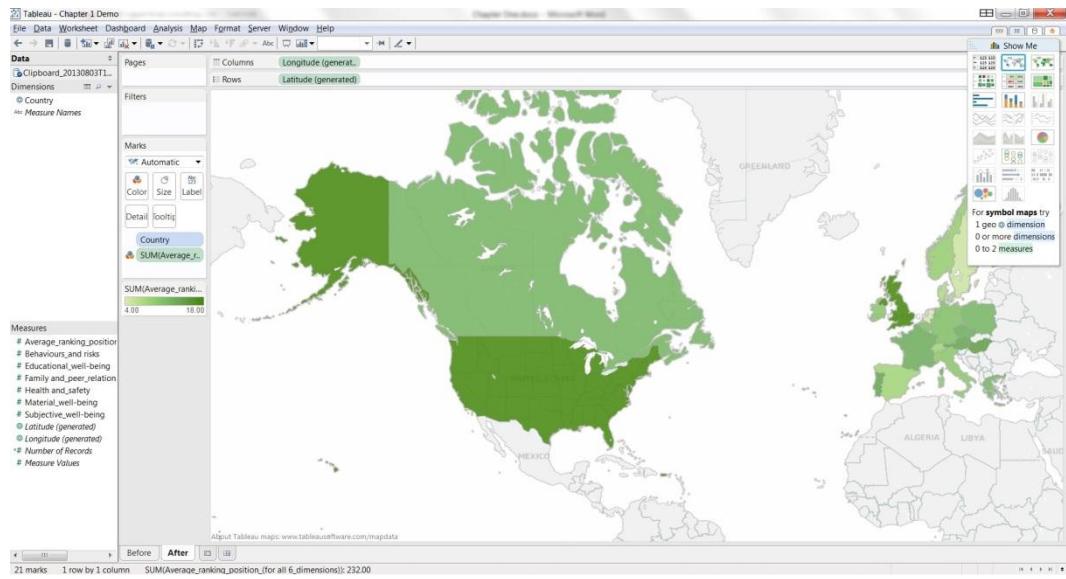
Show Title

Edit Title...

Format Legends...

Hide Card

This screenshot shows the Tableau interface with a dashboard titled 'Tableau - Chapter 1 Demo'. The 'Marks' shelf is open, showing 'Automatic' selected. Under 'Color', 'Country' is highlighted. Under 'Label', 'SUM(Average\_r...' is selected. A context menu is open over the 'SUM(Average\_r...' label, with 'Edit Colors...' highlighted. Other options in the menu include 'Show Title', 'Edit Title...', 'Format Legends...', and 'Hide Card'.



For **filled maps** try

1 geo @ dimension

0 or more dimensions

0 or 1 measure

Format Server Window Help

Columns Measure Names

Rows Country

Average position\_for

Country	Average position_for
Austria	12.00
Belgium	15.00
Canada	10.00
Czech Republic	10.00
Denmark	4.00
Finland	9.00
France	12.00
Germany	14.00
Greece	8.00
Hungary	5.00
Ireland	8.00
Italy	18.00
Netherlands	18.00
Norway	18.00
Poland	12.00
Portugal	10.00
Spain	14.00
Sweden	10.00
Switzerland	12.00
United Kingdom	18.00
United States	18.00

Keep Only

- Keep Only
- Exclude
- Hide
- Format...
- Rotate Label
- Show Header
- Edit Alias...



Tableau - Chapter 1

File Data Worksheet Dashboard Analysis Map Format Server Window Help

Clipboard\_20140514T003538

**Data**

Dimensions: Country, Measure Names

Marks: Automatic, Color, Size, Text, Detail, Tooltip, Measure Values

Measure Values:

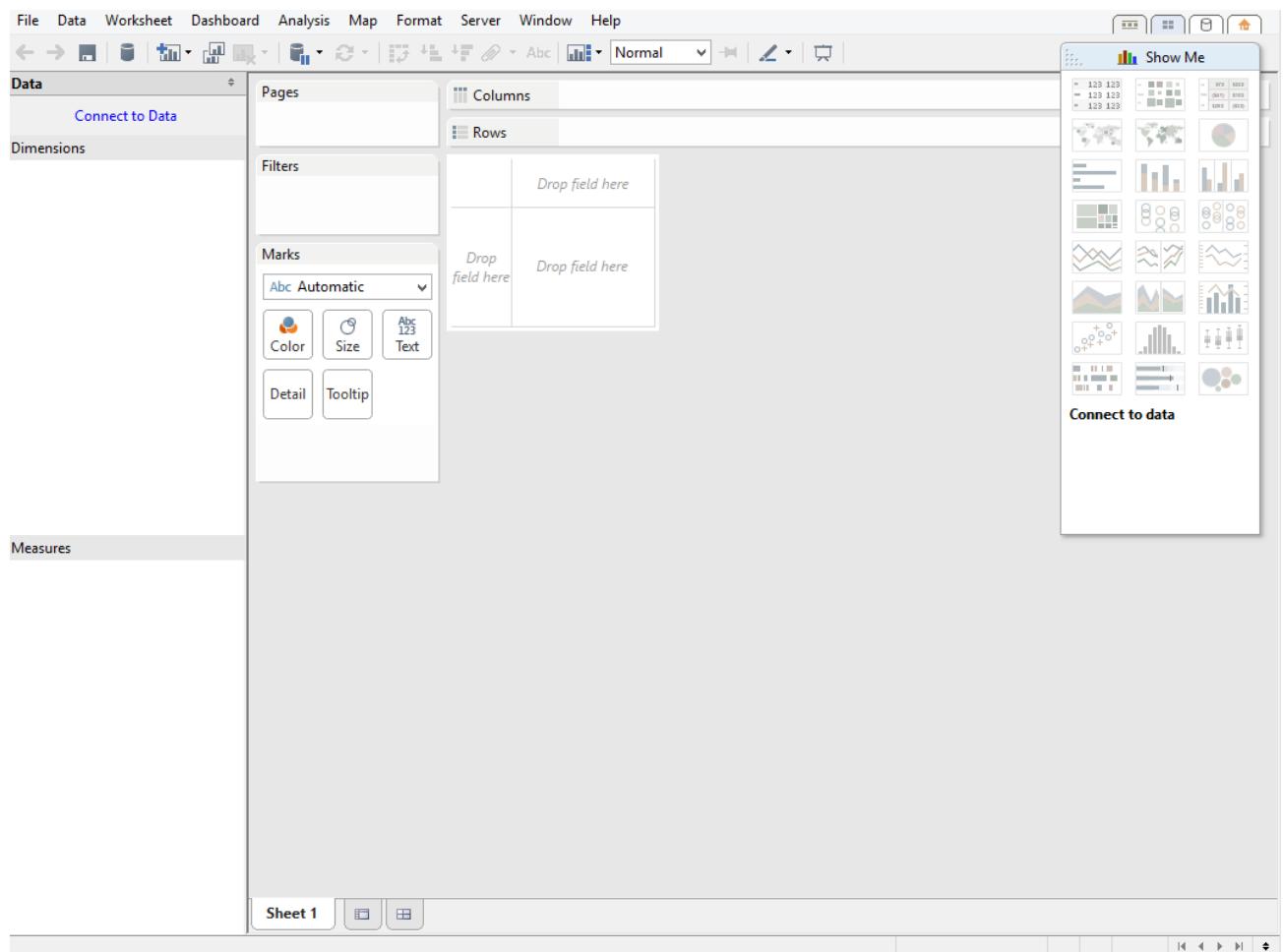
- # Average\_ranking\_position\_(f...)
- # Behaviours\_and\_risks
- # Educational\_well-being
- # Family\_and\_peer\_relationships
- # Health\_and\_safety
- # Material\_well-being
- # Subjective\_well-being
- # Latitude (generated)
- # Longitude (generated)
- =# Number of Records
- # Measure Values

Pages: Measure Names (Country)

Country	Average_ranking_position..	Behaviour_risks_and_ris...	Educational_well-b...	Family_and_peer_rel...
Austria	13.80	16.00	19.00	16.00
Belgium	10.70	19.00	1.00	5.00
Canada	11.80	17.00	2.00	18.00
Czech Republic	12.50	9.00	9.00	19.00
Denmark	7.20	6.00	8.00	9.00
Finland	7.50	7.00	4.00	17.00
France	13.00	14.00	18.00	12.00
Germany	11.20	11.00	10.00	13.00
Greece	11.80	8.00	16.00	11.00
Hungary	14.50	18.00	13.00	6.00
Ireland	10.20	4.00	7.00	7.00
Italy	10.00	10.00	20.00	1.00
Netherlands	4.20	3.00	6.00	3.00
Norway	8.70	13.00	11.00	10.00
Poland	12.30	2.00	3.00	14.00
Portugal	13.70	15.00	21.00	2.00
Spain	8.00	5.00	15.00	8.00
Sweden	5.00	1.00	5.00	15.00
Switzerland	8.30	12.00	14.00	4.00
United Kingdom	18.20	21.00	17.00	21.00
United States	18.00	20.00	12.00	20.00

Show Me

For horizontal bars try  
0 or more dimensions  
1 or more measures



## Sales Commission Model

Enter new quota, commission rate and base salary to estimate sales and compensation

New quota

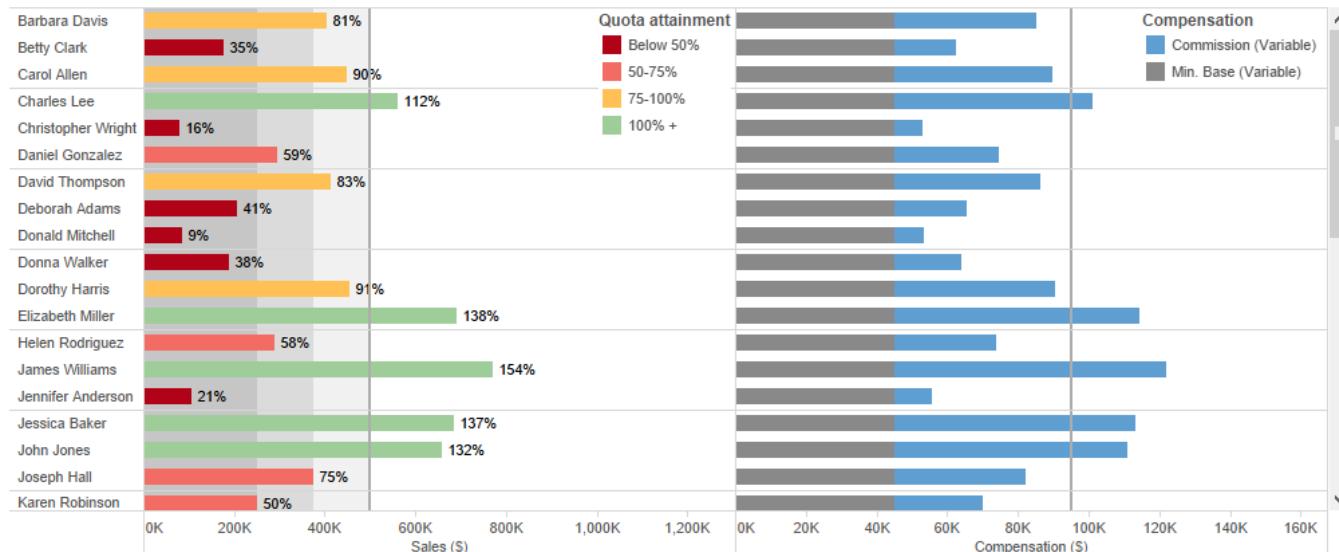
Commission rate

Base salary (rounds to closest \$5,000)

Sort by

- % quota ascending
- % quota descending
- Names

### Estimated Results with These Assumptions



Sales      \$15.60M  
% of quota achieved      73%

OTE (Variable)      \$4.09M  
Avg. OTE (Variable)      \$95K

## Sales Commission Model

Enter new quota, commission rate and base salary to estimate sales and compensation

New quota

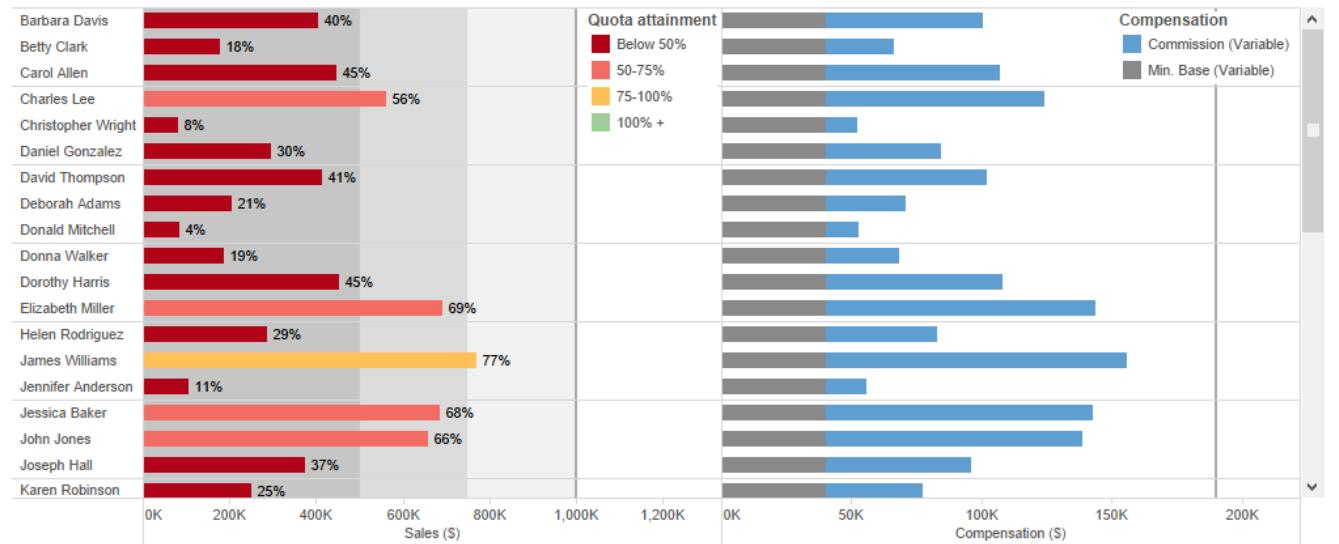
Commission rate

Base salary (rounds to closest \$5,000)

Sort by

- % quota ascending
- % quota descending
- Names

### Estimated Results with These Assumptions



Sales      \$15.60M  
% of quota achieved      36%

OTE (Variable)      \$8.17M  
Avg. OTE (Variable)      \$190K

## Sales Commission Model

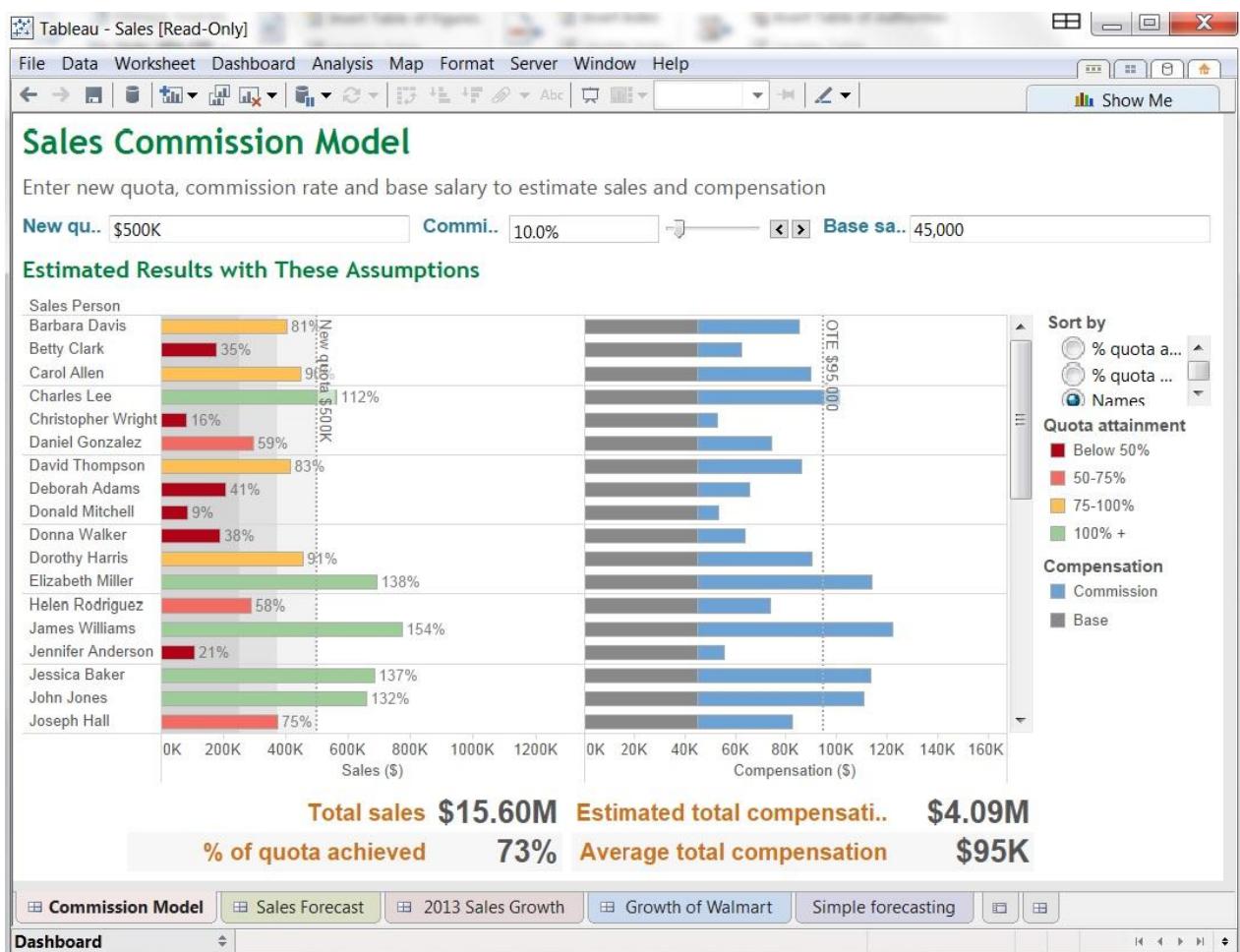
Enter new quota, commission rate and base salary to estimate sales and compensation

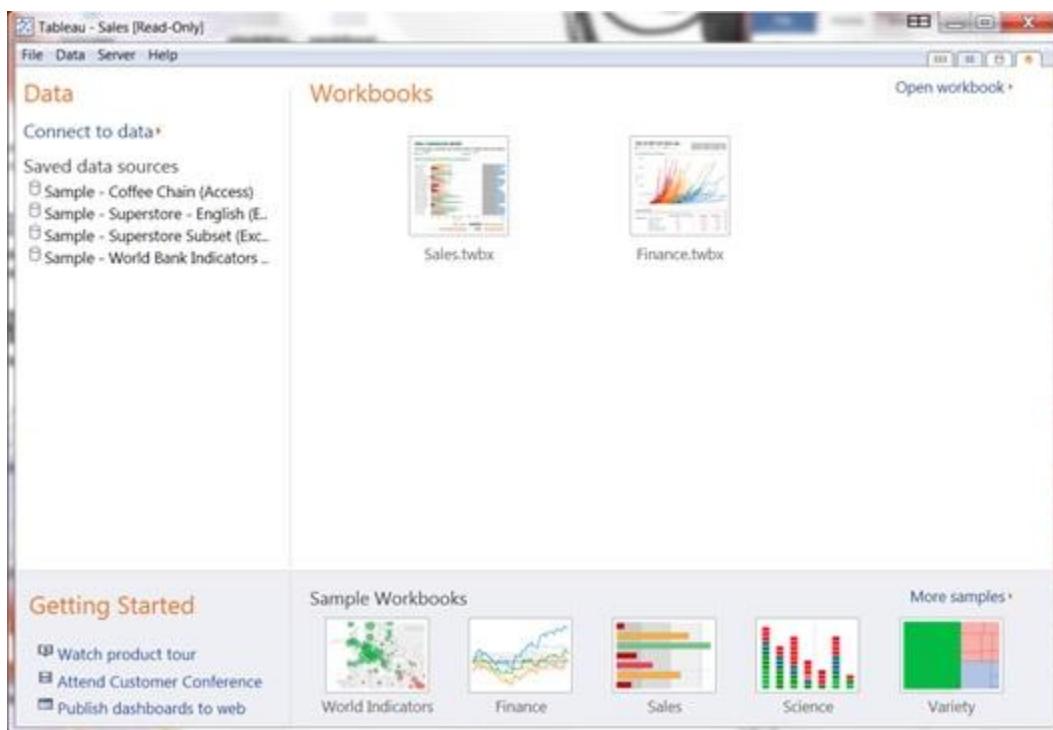
New quota: \$500K | Commission rate: 10.0% | Base salary: \$45,000

Estimated Results with These Assumptions

Salesperson	Sales (\$)	Quota attainment	Compensation (\$)
Barbara Davis	81%	75-100%	\$45,000 + \$81,000
Betty Clark	35%	Below 50%	\$45,000 + \$35,000
Carol Allen	90%	75-100%	\$45,000 + \$90,000
Charles Lee	112%	100%+	\$45,000 + \$112,000
Christopher Wright	16%	Below 50%	\$45,000 + \$16,000
Daniel Gonzalez	59%	50-75%	\$45,000 + \$59,000
David Thompson	83%	75-100%	\$45,000 + \$83,000
Deborah Adams	41%	Below 50%	\$45,000 + \$41,000
Donald Mitchell	9%	Below 50%	\$45,000 + \$9,000
Donna Walker	38%	Below 50%	\$45,000 + \$38,000
Dorothy Harris	91%	75-100%	\$45,000 + \$91,000
Elizabeth Miller	138%	100%+	\$45,000 + \$138,000
Helen Rodriguez	58%	50-75%	\$45,000 + \$58,000
James Williams	154%	100%+	\$45,000 + \$154,000
Jennifer Anderson	21%	Below 50%	\$45,000 + \$21,000
Jessica Baker	137%	100%+	\$45,000 + \$137,000
John Jones	132%	100%+	\$45,000 + \$132,000
Joseph Hall	75%	50-75%	\$45,000 + \$75,000
Karen Robinson	50%	50-75%	\$45,000 + \$50,000

**Sales** \$15.60M | **OTE (Variable)** \$4.09M  
**% of quota achieved** 73% | **Avg. OTE (Variable)** \$95K

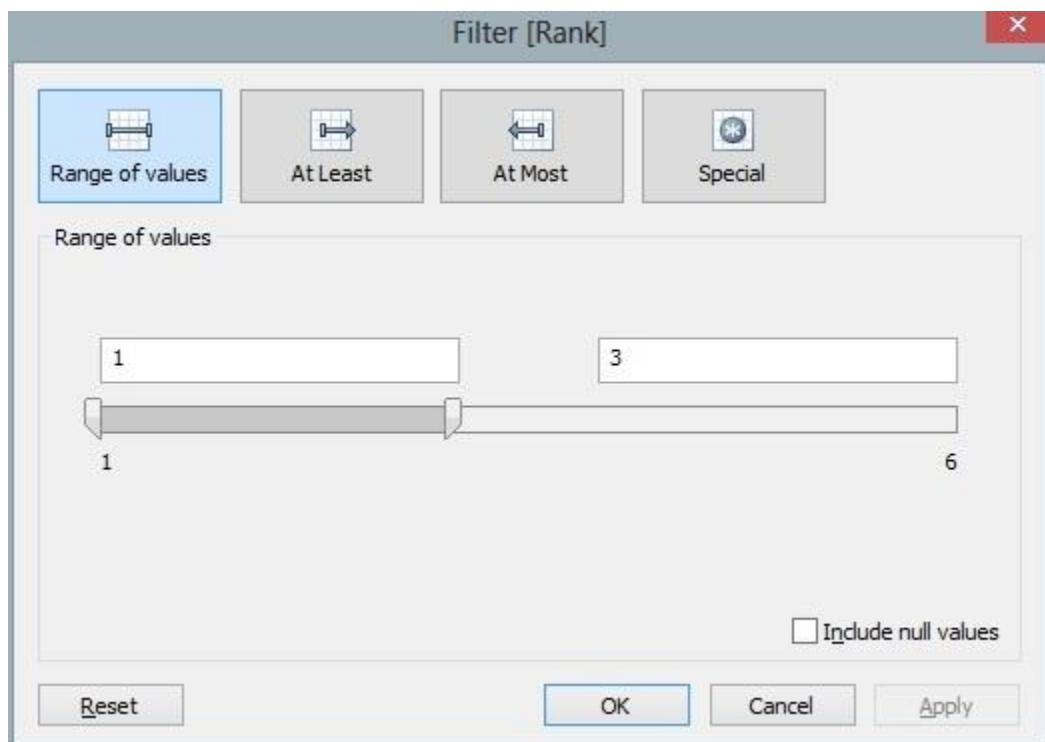




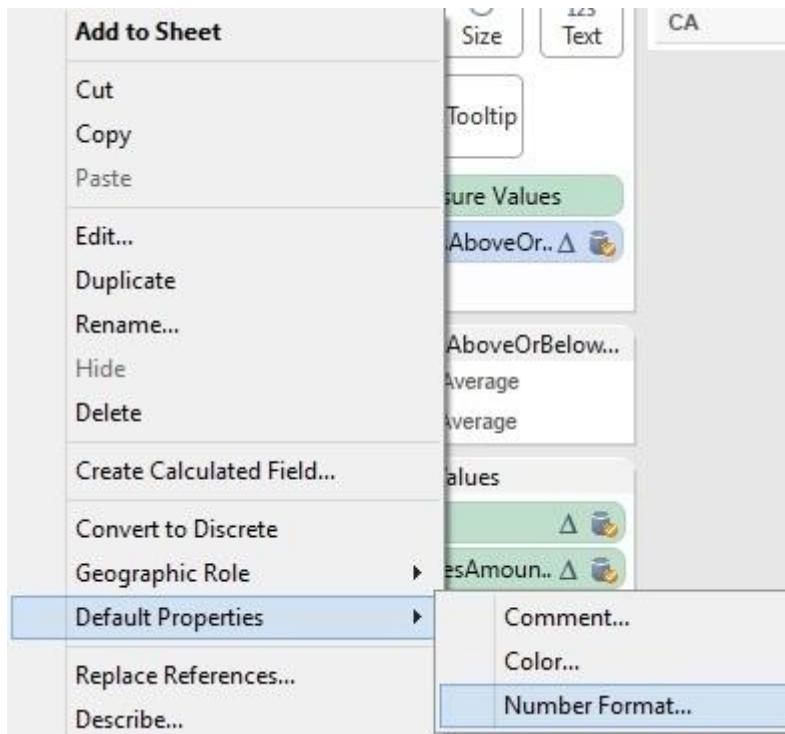
## Chapter 2

The screenshot shows the Tableau Data Editor interface. The top menu bar includes File, Data, Worksheet, Dashboard, Analysis, Map, Format, Server, Window, and Help. The left sidebar is titled 'Data' and lists various dimensions and measures. Dimensions include Connection\_DimCustomer, Connection\_DimDate, Connection\_DimGeography, and Connection\_FactInternetSales. Measures include CarrierTrackingNumber, CustomerKey, CustomerPONumber, DueDate, OrderDate, OrderDateKey, SalesOrderLineNumber, SalesOrderNumber, SalesTerritoryKey, ShipDate, and Measure Names. The main workspace shows a 'Pages' pane with 'Rank' and 'Measure Names' filters, a 'Filters' pane with 'Rank' and 'Measure Names' filters, and a 'Marks' pane with 'Color', 'Size', 'Text', 'Detail', and 'Tooltip' options. A detailed view of the 'Data' pane shows a table with columns CountryRegion.., Rank along CountryRegionCode, and % of Total SalesAmount along CountryRegionCode. The data rows are US (Rank 1, 31.98%), AU (Rank 2, 30.86%), and GB (Rank 3, 11.55%).

CountryRegion..	Rank along CountryRegionCode	% of Total SalesAmount along CountryRegionCode
US	1	31.98%
AU	2	30.86%
GB	3	11.55%



CountryRegi..	Rank along CountryRegionCode	% of Total SalesAmount along CountryRegionCode
US	1	31.98%
AU	2	30.86%
GB	3	11.55%
DE	4	9.86%
FR	5	9.01%
CA	6	6.74%



**Calculated Field [Rank]**

Name:  Default Table Calculation

Formula:  
Results are computed along Table (Across).  
`Index()`

The calculation is valid. Clear

Fields:	Parameters:	Functions:
<input type="button" value="Connection_FactIn..."/> Enter Text to Search	<input type="button" value="All"/> Enter Text to Search	<input type="button" value="All"/> Enter Text to Search
Abc CarrierTracking... # CurrencyKey # CustomerKey Abc CustomerPONu... # DiscountAmount DueDate # DueDateKey # ExtendedAmount # Freight =# Number of Reco... # OrderDate # OrderDateKey # OrderQuantity # ProductKey		DATETIME DATETRUNC DAY DEGREES ENDSWITH EXP FIND FIRST FLOAT FULLNAME IF IFNULL IIF <b>INDEX</b>

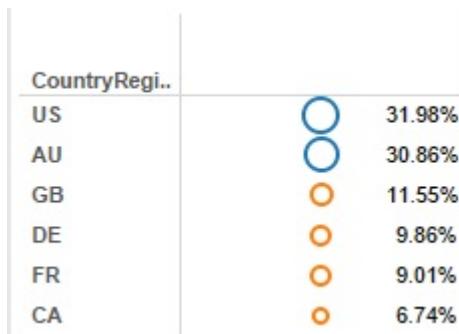
**INDEX()**

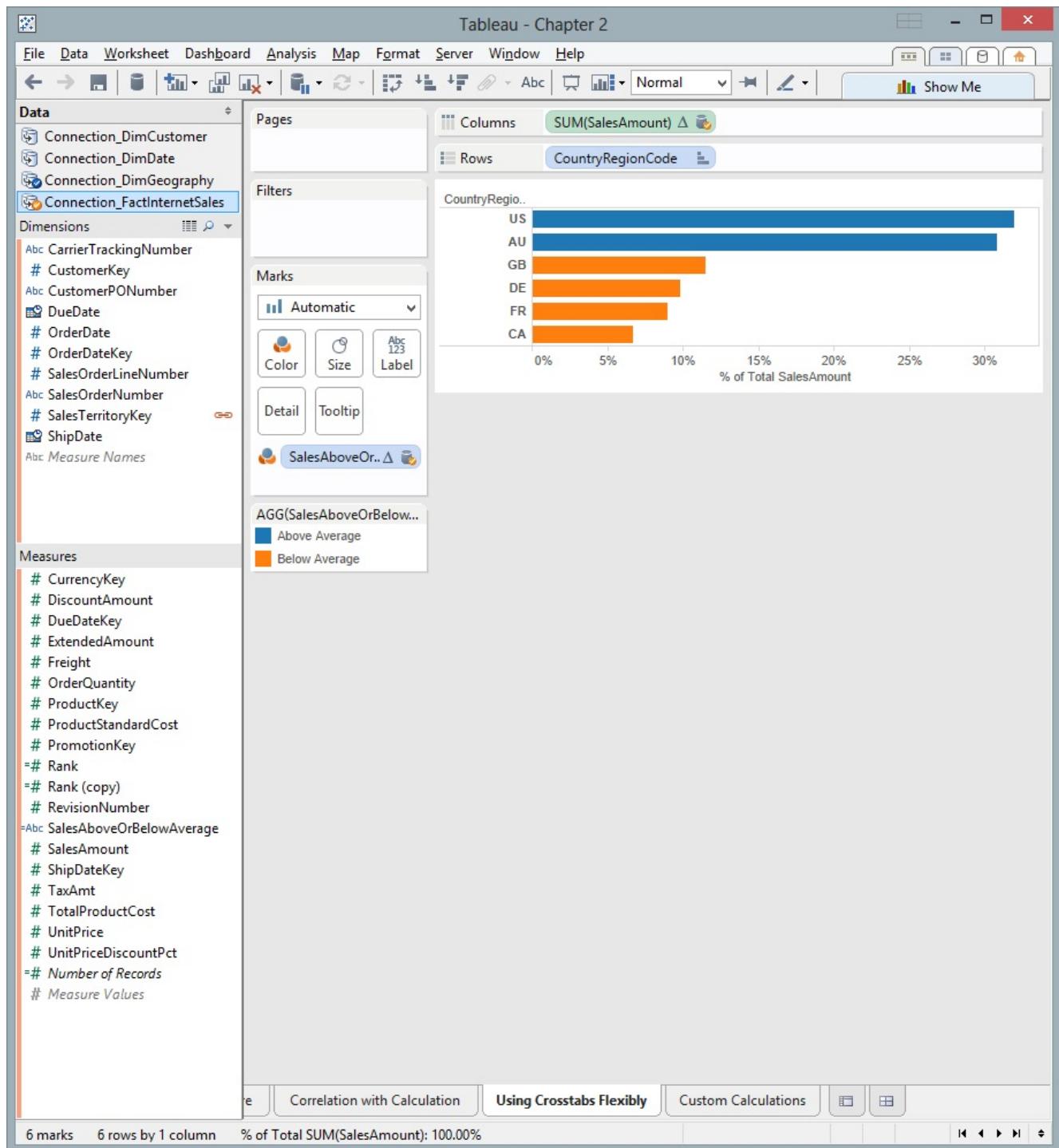
Returns the index of the current row in the partition.  
Example (for the first row in the partition):  
`INDEX() = 1`

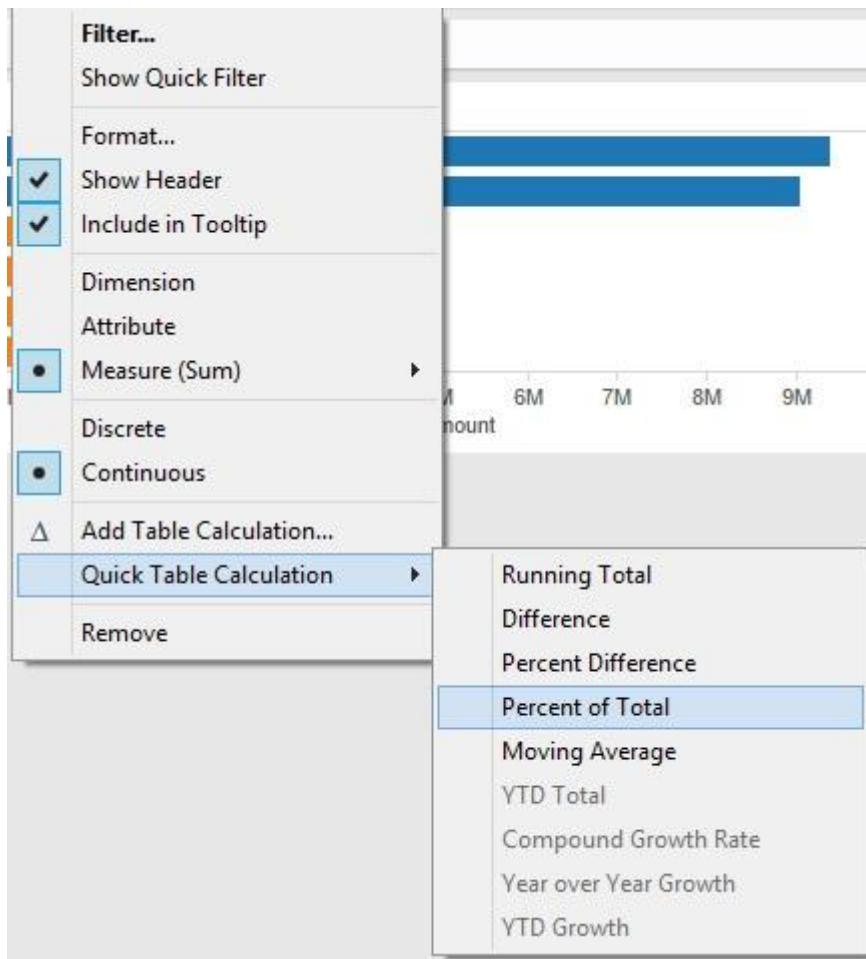
**Changes to this calculation might change the following:**  
**Worksheet "Custom Calculations"**

**OK** **Cancel** **Apply**

Add to Sheet
Cut
Copy
Paste
Edit...
Duplicate
Rename...
Hide
Delete
Create Calculated Field...
Convert to Discrete
Geographic Role ▶
Default Properties ▶
Replace References...
Describe...







**Describe Trend Model**

**Trend Lines Model**

A linear trend model is computed for sum of Number of Records given sum of SalesAmount. The model may be significant at  $p \leq 0.05$ .

**Model formula:**  $(SalesAmount + \text{intercept})$

**Number of modeled observations:** 5

**Number of filtered observations:** 0

**Model degrees of freedom:** 2

**Residual degrees of freedom (DF):** 3

**SSE (sum squared error):** 1.44198e+007

**MSE (mean squared error):** 4.80658e+006

**R-Squared:** 0.92427

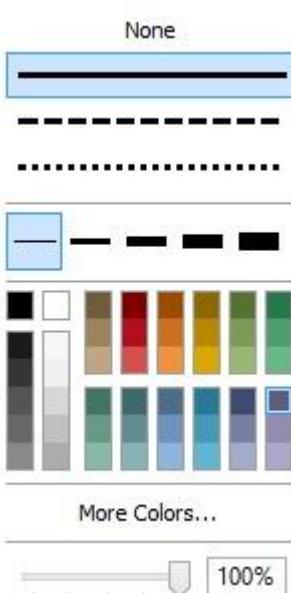
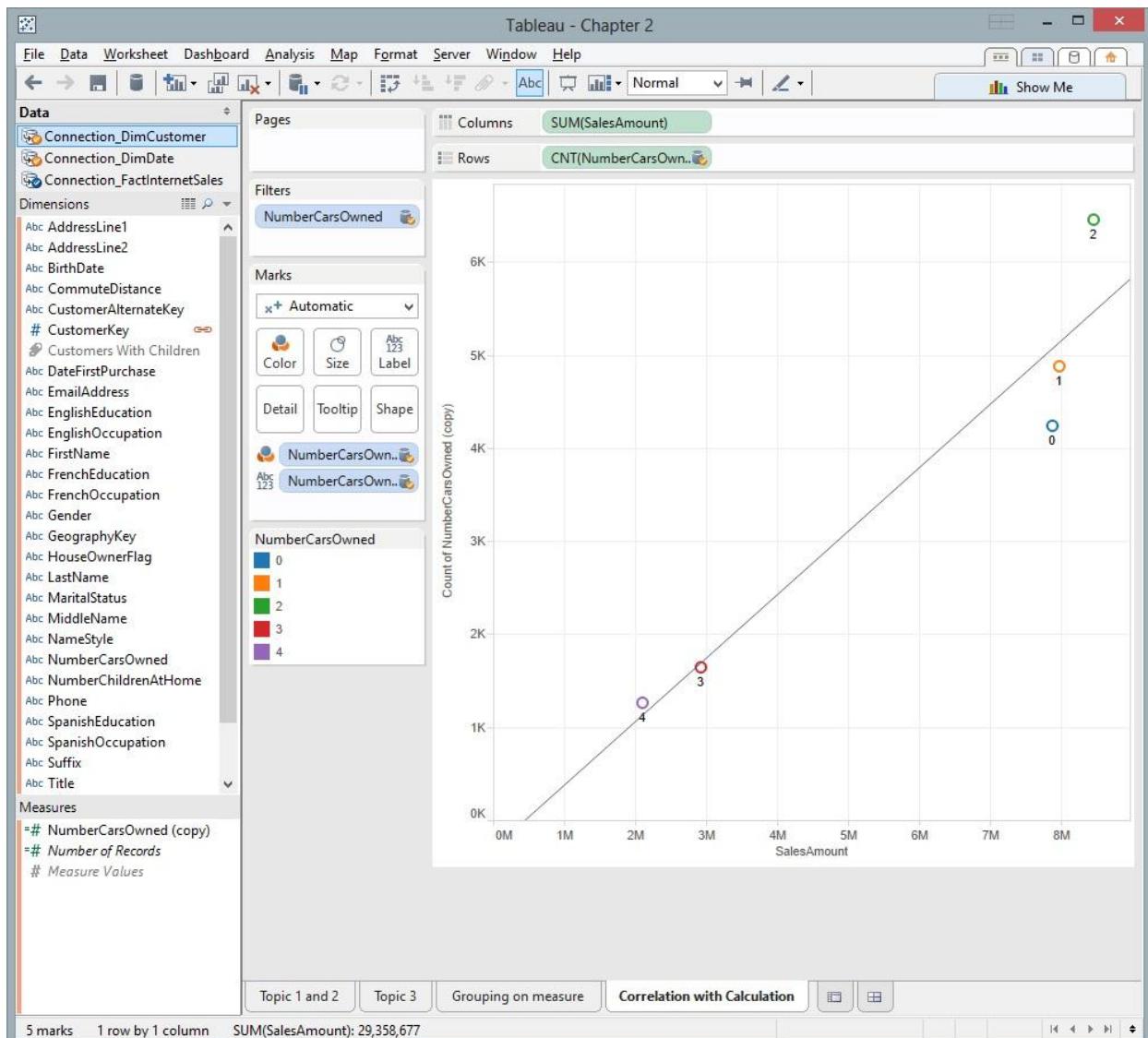
**Standard error:** 2192.39

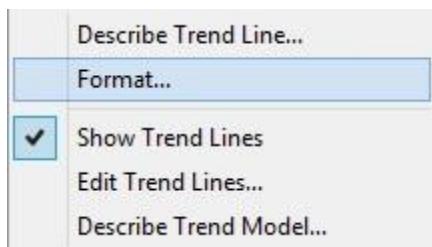
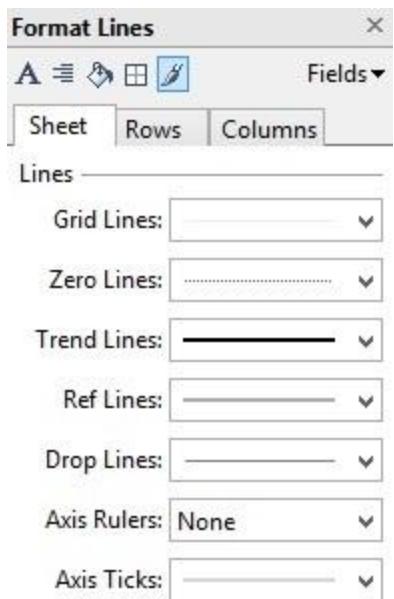
**p-value (significance):** 0.0090545

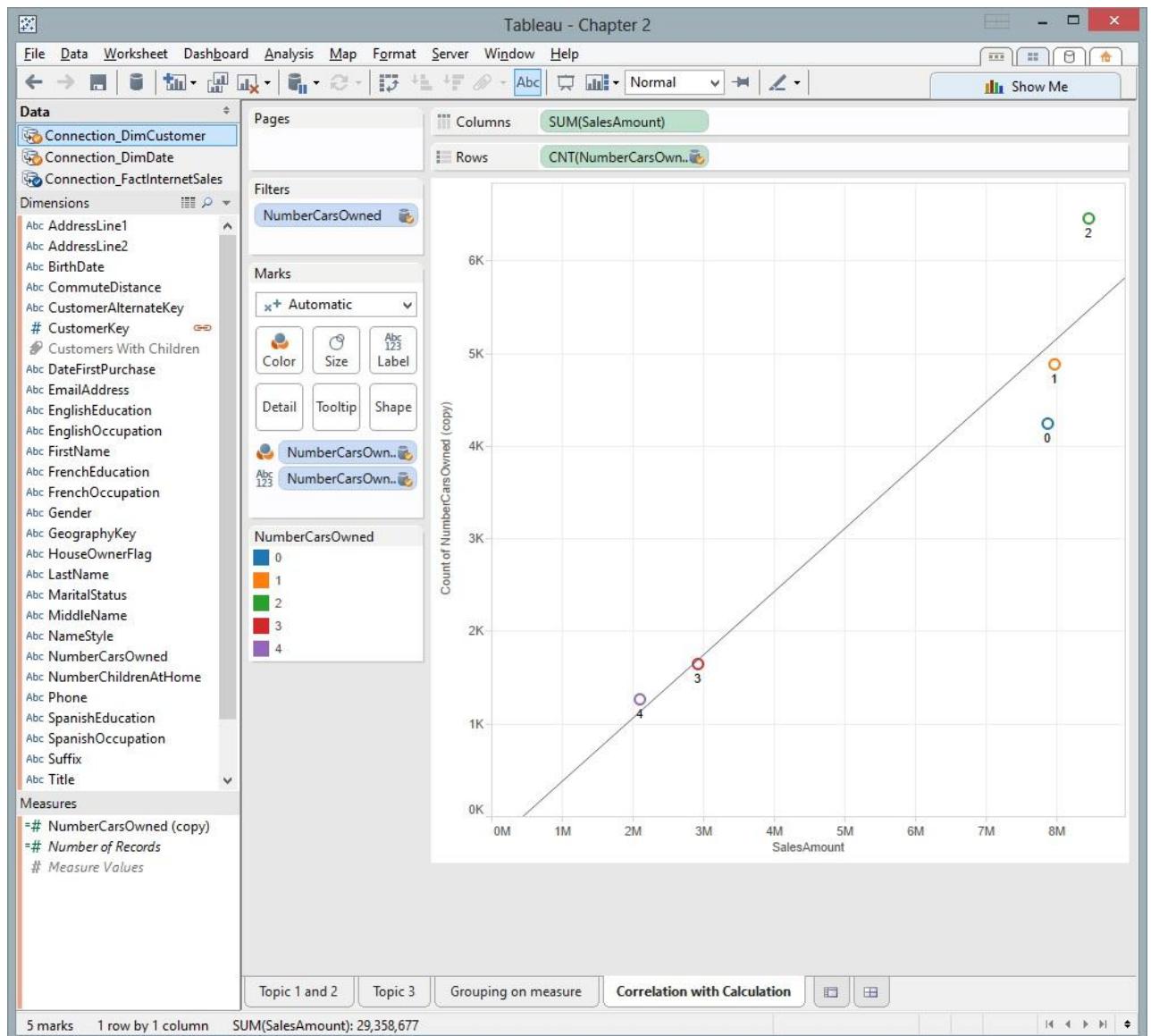
**Individual trend lines:**

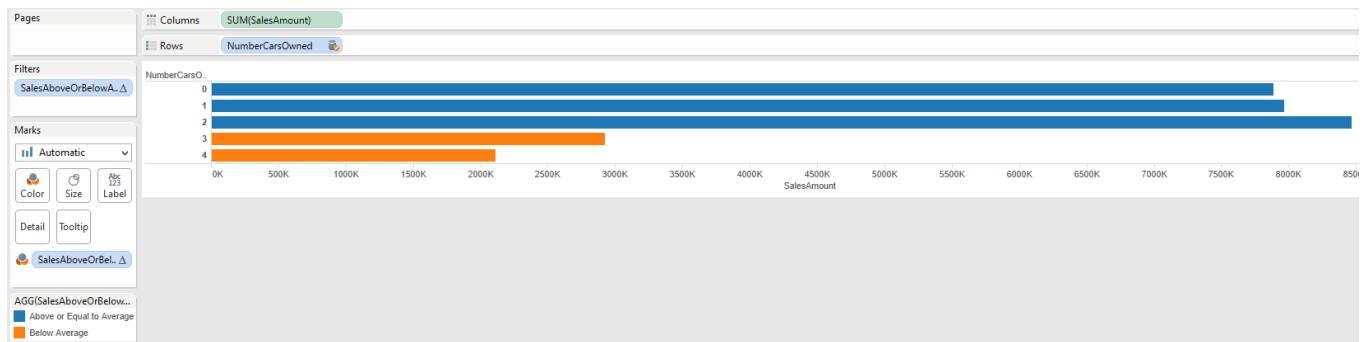
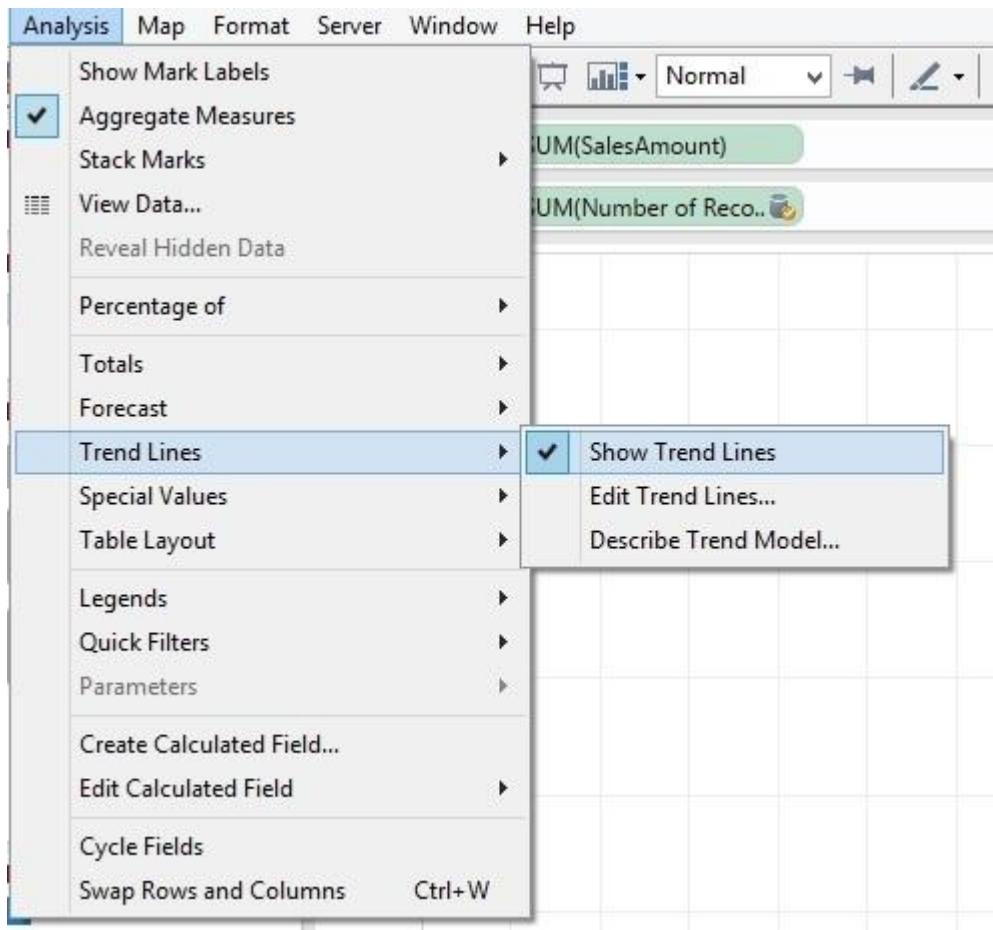
Panes	Line	Coefficients						
Row	Column	p-value	DF	Term	Value	StdErr	t-value	p-value
Number of Records	SalesAmount	0.0090545	3	SalesAmount	0.0021513	0.0003555	6.05097	0.0090545
				intercept	-552.014	2306.32	-0.239348	0.826256

**Copy** **Close**









Calculated Field [SalesAboveOrBelowAverage]

Name: SalesAboveOrBelowAverage

Formula: Default Table Calculation

Results are computed along Table (Across).

```
IF ( SUM([SalesAmount]) - WINDOW_AVG(SUM([SalesAmount]), First(), Last()) < 0 )
Then 'Below Average'
Else 'Above Average'
END
```

The calculation is valid.

Fields:	Parameters:	Functions:
Connection_FactIn... ▾	All	All
Enter Text to Search	Enter Text to Search	Enter Text to Search
Abc CarrierTracking... ▾		ABS
# CurrencyKey		ACOS
# CustomerKey		ASCII
Abc CustomerPONu...		ASIN
# DiscountAmount		ATAN
DueDate		ATAN2
# DueDateKey		ATTR
# ExtendedAmount		Avg
# Freight		CASE
=# Number of Reco...		CHAR
# OrderDate		CONTAINS
# OrderDateKey		COS
# OrderQuantity		COT
# ProductKey		COUNT

**CarrierTrackingNumber**

Data type: String

Changes to this calculation might change the following:  
Worksheet "Grouping on measure"

- Add to Sheet**
- Show Quick Filter
- Copy
- Paste
- Duplicate
- Rename...
- Hide
- Create Calculated Field...**
- Create Group...
- Create Bins...
- Create Parameter...
- Convert to Discrete
- Convert to Dimension
- Change Data Type ▾
- Geographic Role ▾
- Default Properties ▾
- Replace References...
- Describe...

	Customers With No Children	Customers With Children
--	----------------------------	-------------------------

Create Group [NumberChildrenAtHome]

Field Name: NumberChildrenAtHome (group)

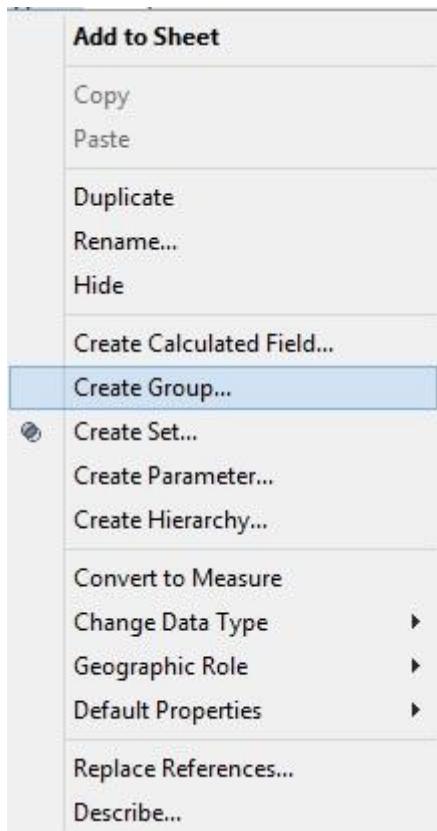
Groups: Add to:

0  
1  
2  
3  
4  
5

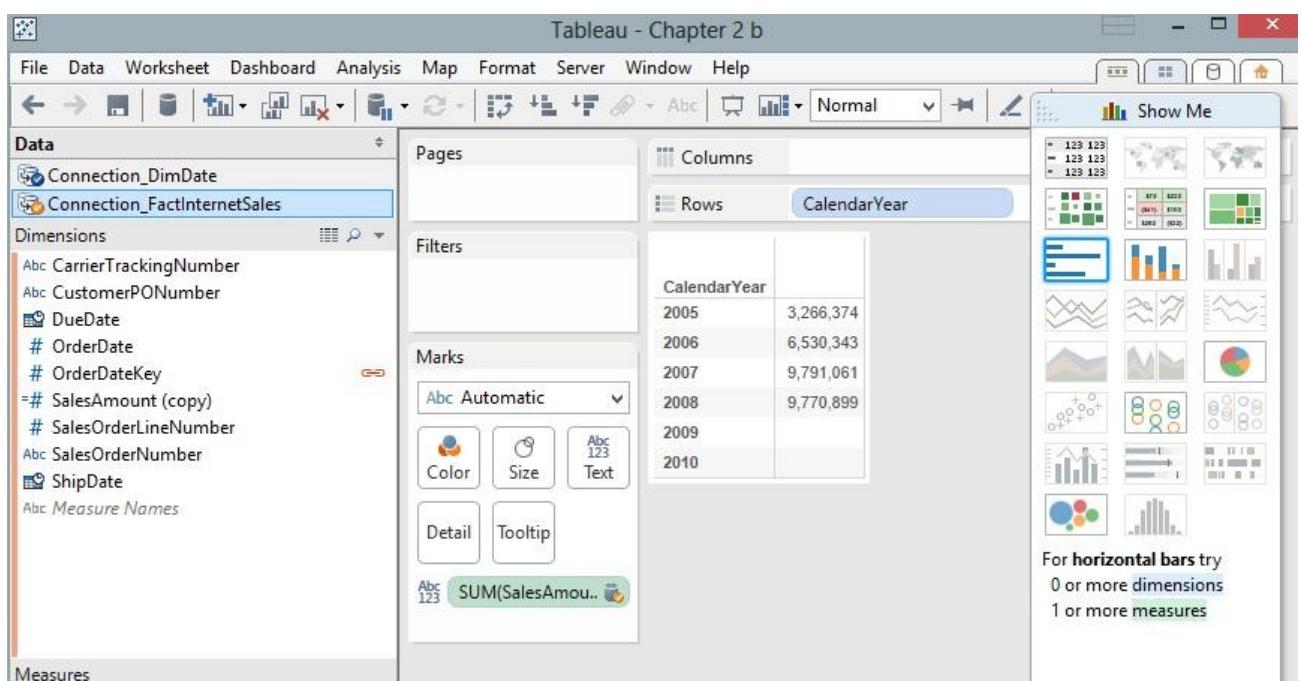
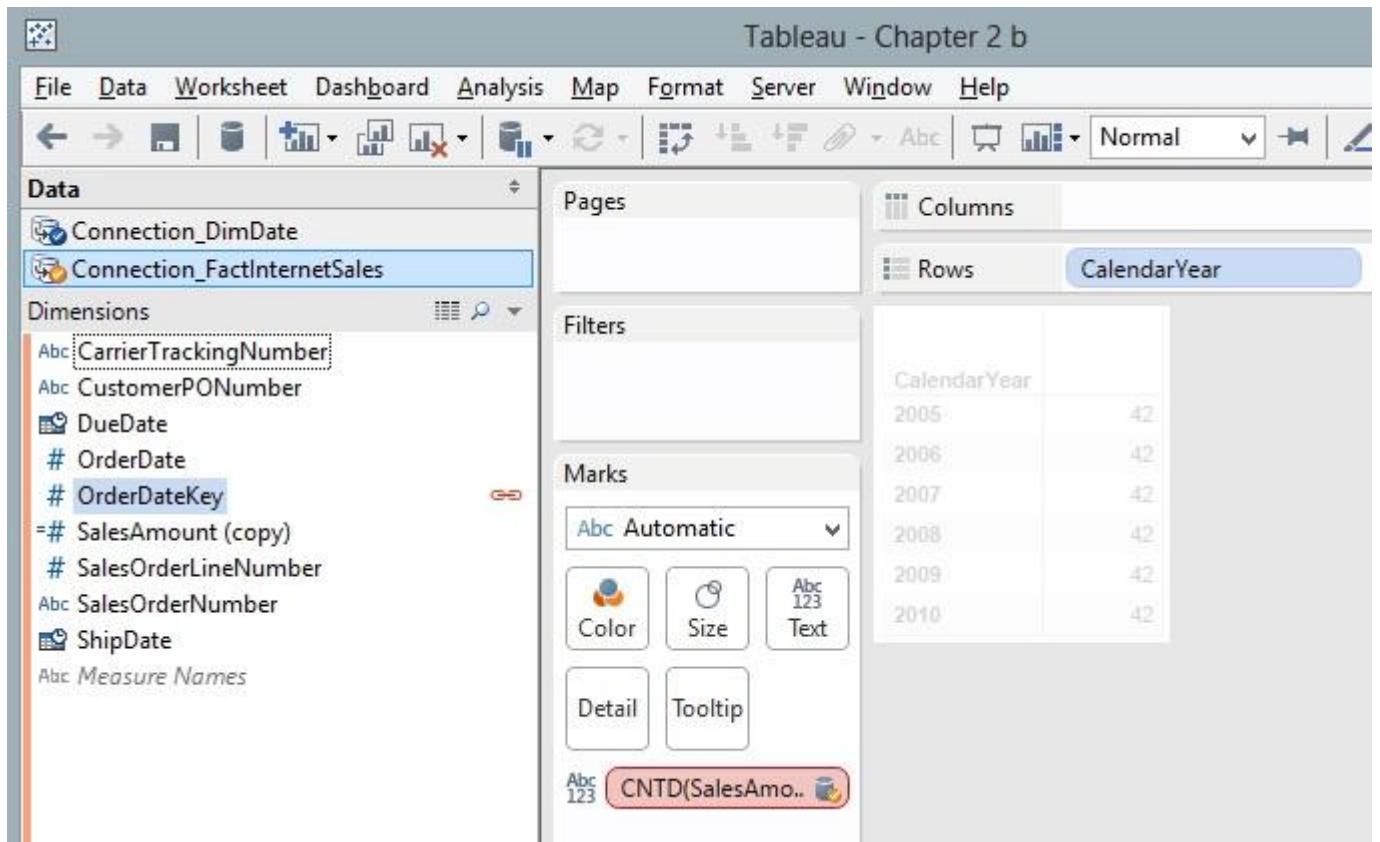
Group      Rename      Ungroup       Show Add Location

Include 'Other'      Find >>

Reset      OK      Cancel      Apply



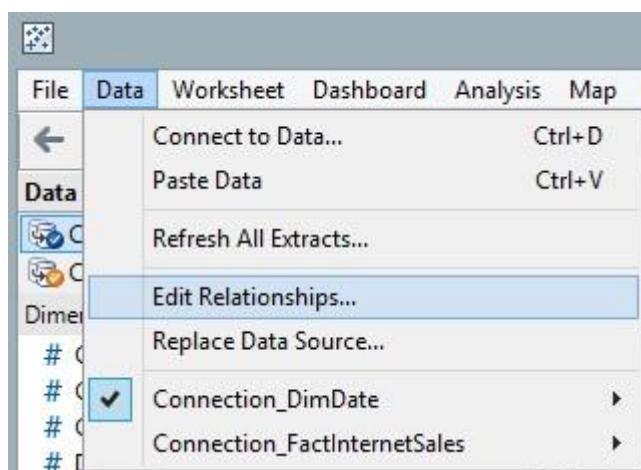
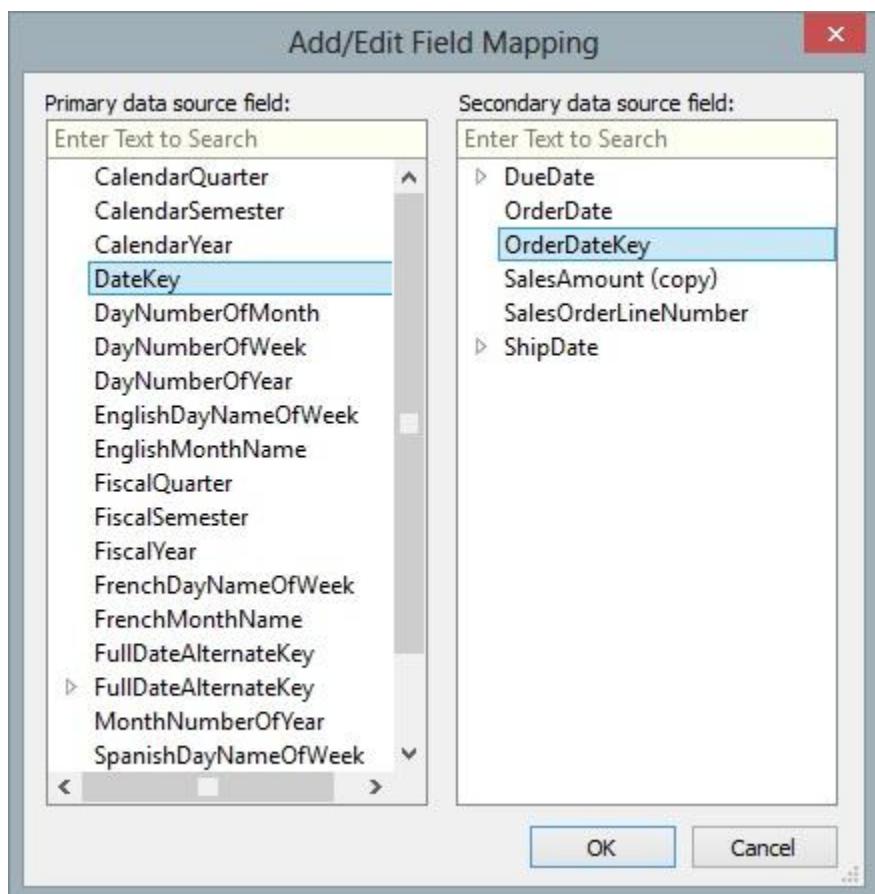
NumberChildrenAtHome	
0	11,116
1	2,460
2	1,648
3	1,204
4	1,089
5	967



The screenshot shows the Analysis Services Data view. The top menu bar includes File, Data, Worksheet, Dashboard, Analysis, and a toolbar with various icons. The main pane is titled "Data" and displays two connections: "Connection\_DimDate" and "Connection\_FactInternetSales". The "Dimensions" section is expanded, showing the following items:

- Abc CarrierTrackingNumber
- Abc CustomerPONumber
- DueDate
- # OrderDate
- # OrderDateKey
- =# SalesAmount (copy)
- # SalesOrderLineNumber
- Abc SalesOrderNumber
- ShipDate
- Abc Measure Names

This screenshot is identical to the one above, showing the Analysis Services Data view with the same connections, dimensions, and list of items under the Dimensions section.



The screenshot shows the Tableau Data Editor interface. The top menu bar includes File, Data, Worksheet, Dashboard, Analysis, Map, Format, Server, Window, and Help. Below the menu is a toolbar with various icons for navigation and data manipulation. On the left, the 'Data' pane is open, displaying the connection 'Connection\_FactInternetSales'. It lists dimensions such as CarrierTrackingNumber, CustomerPONumber, DueDate, OrderDateKey, SalesAmount (copy), SalesOrderLineNumber, SalesOrderNumber, ShipDate, and Measure Names. It also lists measures like CurrencyKey, CustomerKey, and RecordCount. The main workspace shows a table with 'SalesAmount (copy)' as the primary measure. The table has two columns: SalesAmount (copy) and another unnamed column. The data is as follows:

SalesAmount (copy)	
4.99	8,827
34.99	6,440
8.99	4,470
2.29	3,191
3.99	2,376
21.98	2,121
9.99	2,025
24.9899	1,788
49.99	1,736
539.99	1,695
53.99	1,596
3578.27	1,551
24.4899	1,430
35	1,396
2294.9899	1,262
2384.07	1,255

The screenshot shows the Qlik Sense desktop application. The top navigation bar includes File, Data, Worksheet, Dashboard, Analysis, Map, Format, Server, Window, and Help. Below the ribbon is a toolbar with various icons for navigation, search, and data manipulation. A context menu is open over a data table, with the 'Sort SalesAmount (copy) descending by Number of Records' option highlighted. The main workspace displays a data table with columns like ProductID, ProductName, and SalesAmount.

**Add to Sheet**

Show Quick Filter

Copy

Paste

**Duplicate**

Rename...

Hide

Create Calculated Field...

Create Group...

Create Bins...

Create Parameter...

Convert to Discrete

Convert to Dimension

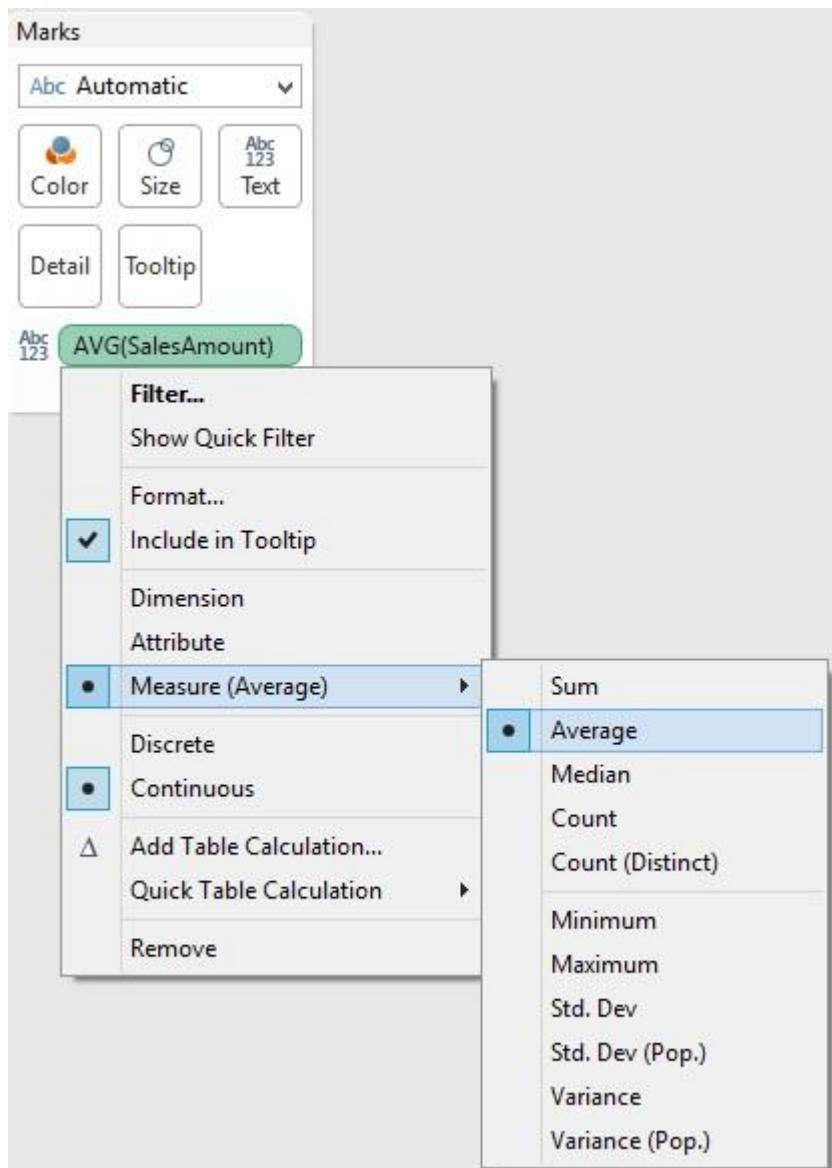
Change Data Type ▶

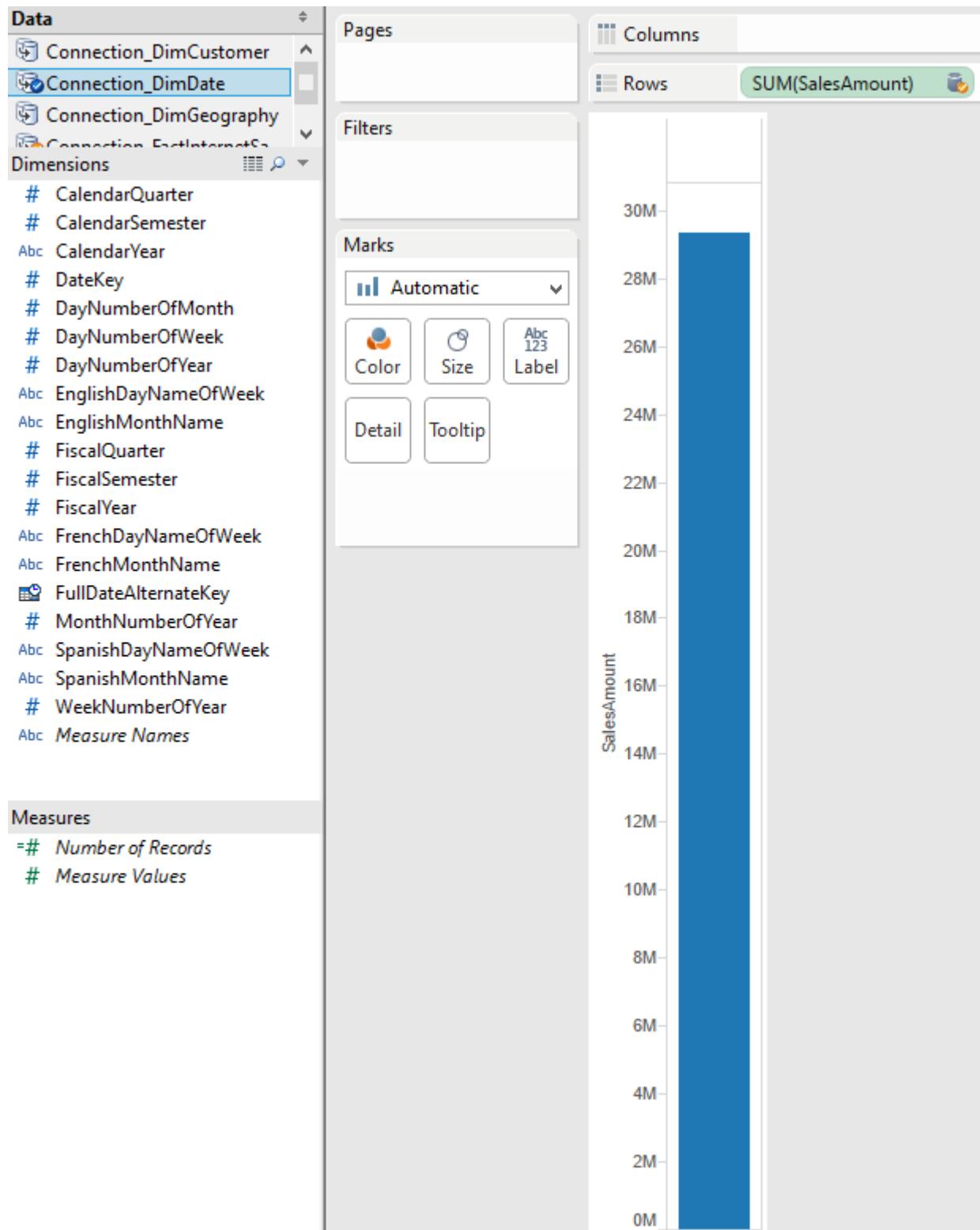
Geographic Role ▶

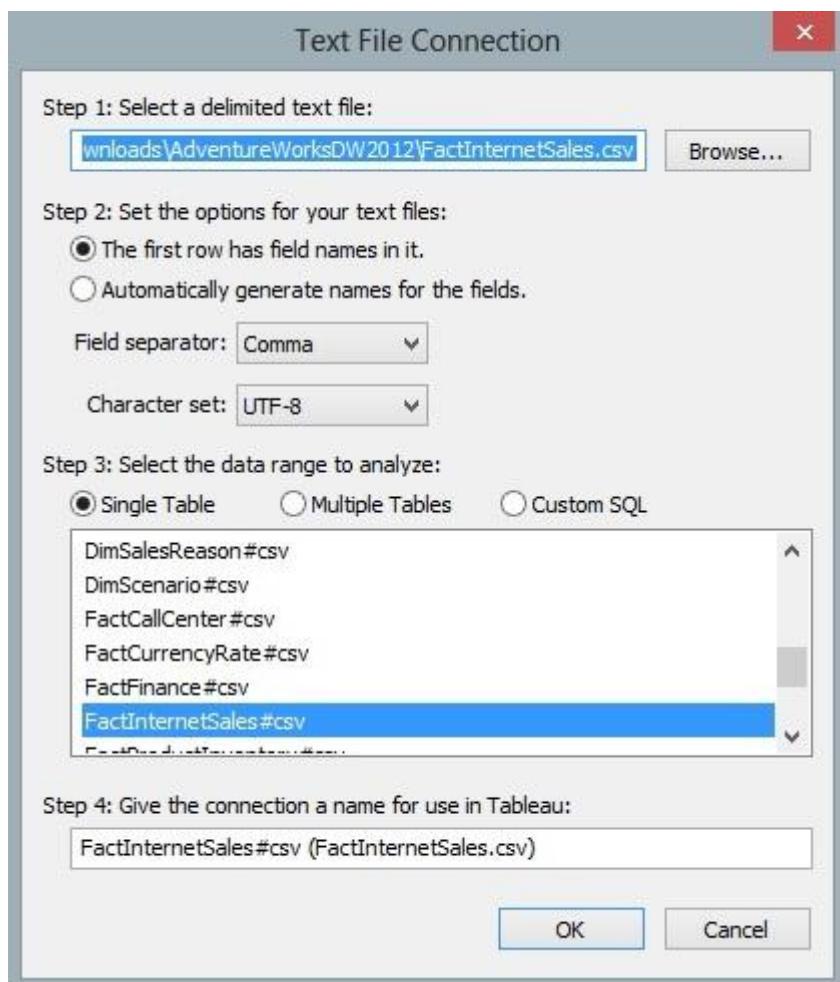
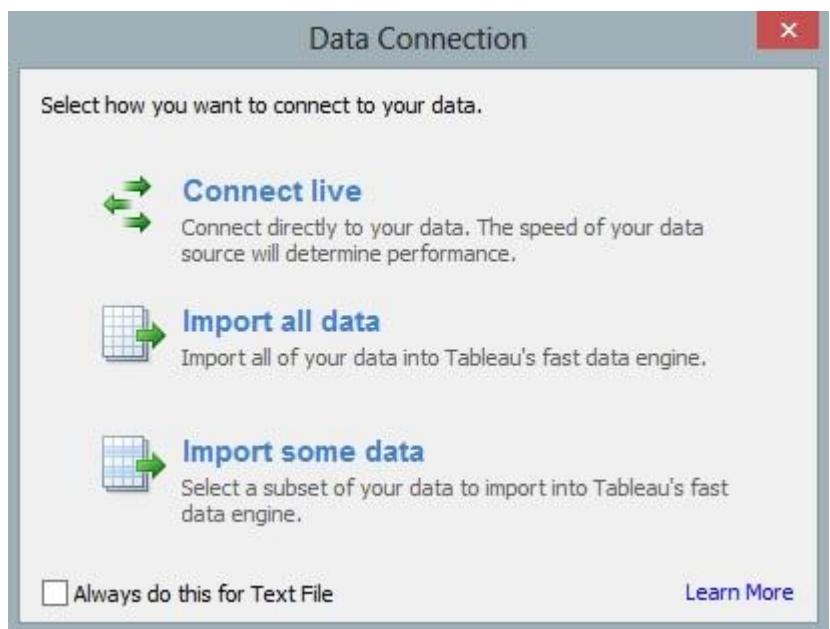
Default Properties ▶

Replace References...

Describe...







## Chapter 3

Pages

Columns: + YEAR(FullDateAlternateKey)

Rows: EnglishProductCategory.. Measure Names

**Filters**

Measure Names

**Marks**

Abc Automatic ▾

Color, Size, Text

Detail, Tooltip

Abc 123 Measure Values

		Null	2005	2006	2007	2008
EnglishProd..	SalesAmount			£293,709.71	£407,050.25	
	YoY Sales Difference	0	0	293,710	113,341	
Accessories	SalesAmount					
	YoY Sales Difference	0	0	293,710	113,341	
Bikes	SalesAmount	£3,266,373.86	£6,530,343.49	£9,359,103.12	£9,162,324.85	
	YoY Sales Difference	3,266,374	3,263,970	2,828,760	-196,778	
Clothing	SalesAmount			£138,247.97	£201,524.64	
	YoY Sales Difference	0	0	138,248	63,277	
Components	SalesAmount					
	YoY Sales Difference	0	0	0	0	

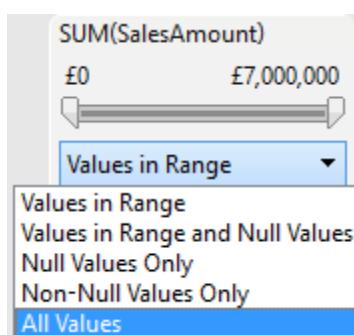
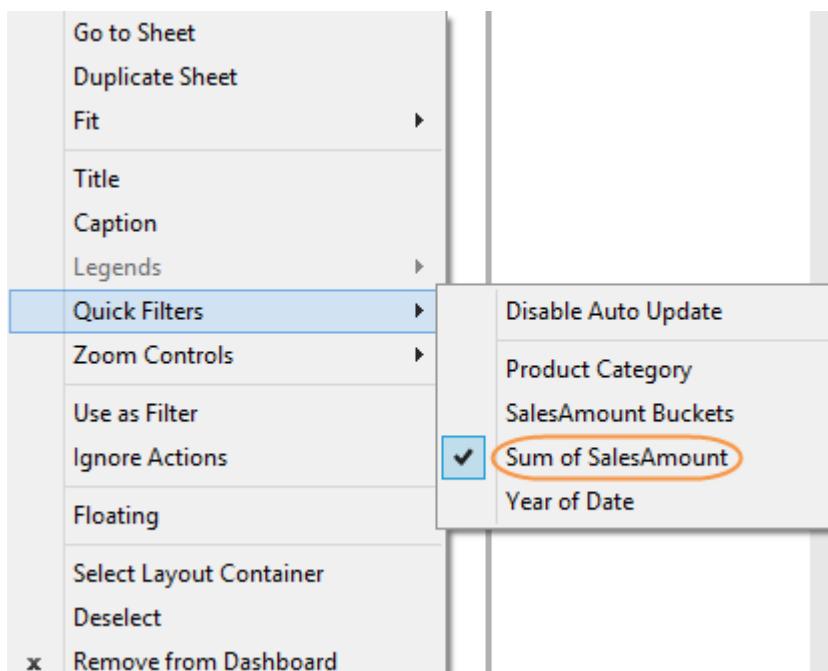
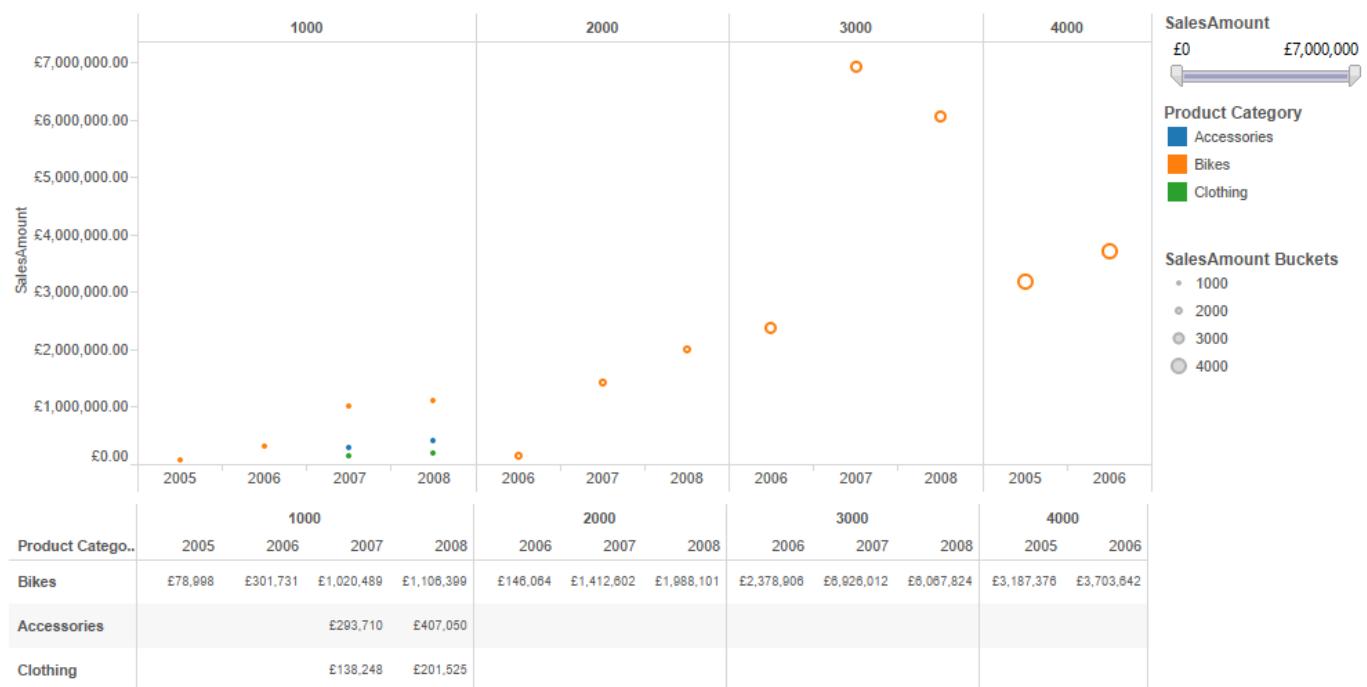
**Measure Values**

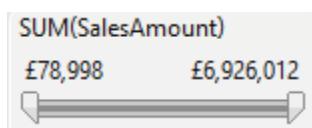
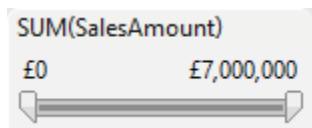
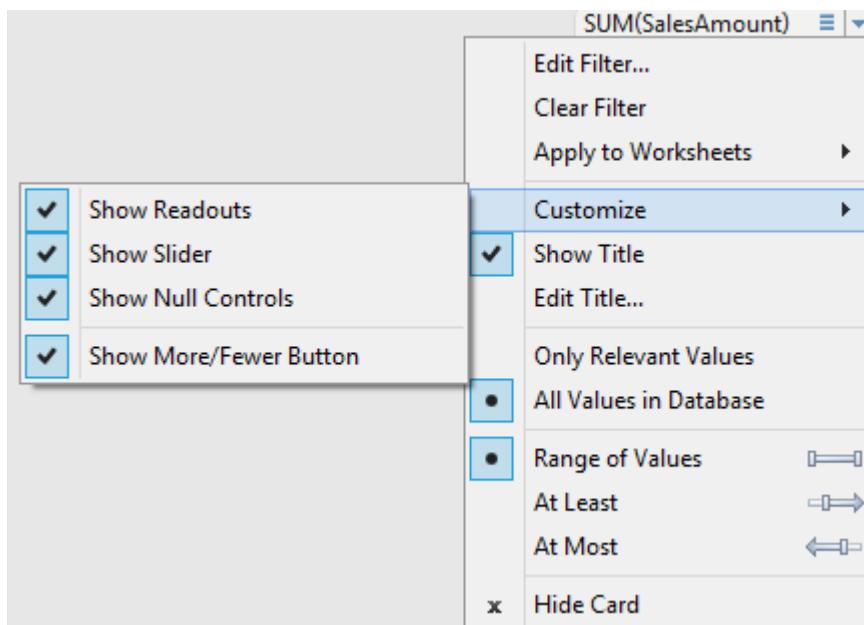
SUM(SalesAmount)

- Filter...
- Show Quick Filter
- Format...
- Include in Tooltip
- Attribute
- Measure (Sum) ▾
- Discrete
- Continuous
- △ Add Table Calculation...
- Quick Table Calculation ▾
- Remove

Running Total  
 Difference  
 Percent Difference  
 Percent of Total  
**Moving Average**  
 YTD Total  
 Compound Growth Rate  
 Year over Year Growth  
 YTD Growth

### What are my Sales Buckets by Category and by Year?





A screenshot of a Power BI context menu for the measure "SUM(SalesAmount)". The menu options include:

- Filter...
- Show Quick Filter (circled in red)
- Clear Filter
- Apply to Worksheets ⚡
- Dimension
- Measure (Sum)
- Add Table Calculation...
- Quick Table Calculation
- Remove

Filter [SalesAmount] X

Range of values    At Least    At Most    Special

Range of values

78,998.3                          6,926,012.19

£78,998.30                          £6,926,012.19

Show: Only Relevant Values  Include null values

Reset OK Cancel Apply

Filter Field [SalesAmount] X

How do you want to filter on [SalesAmount]?

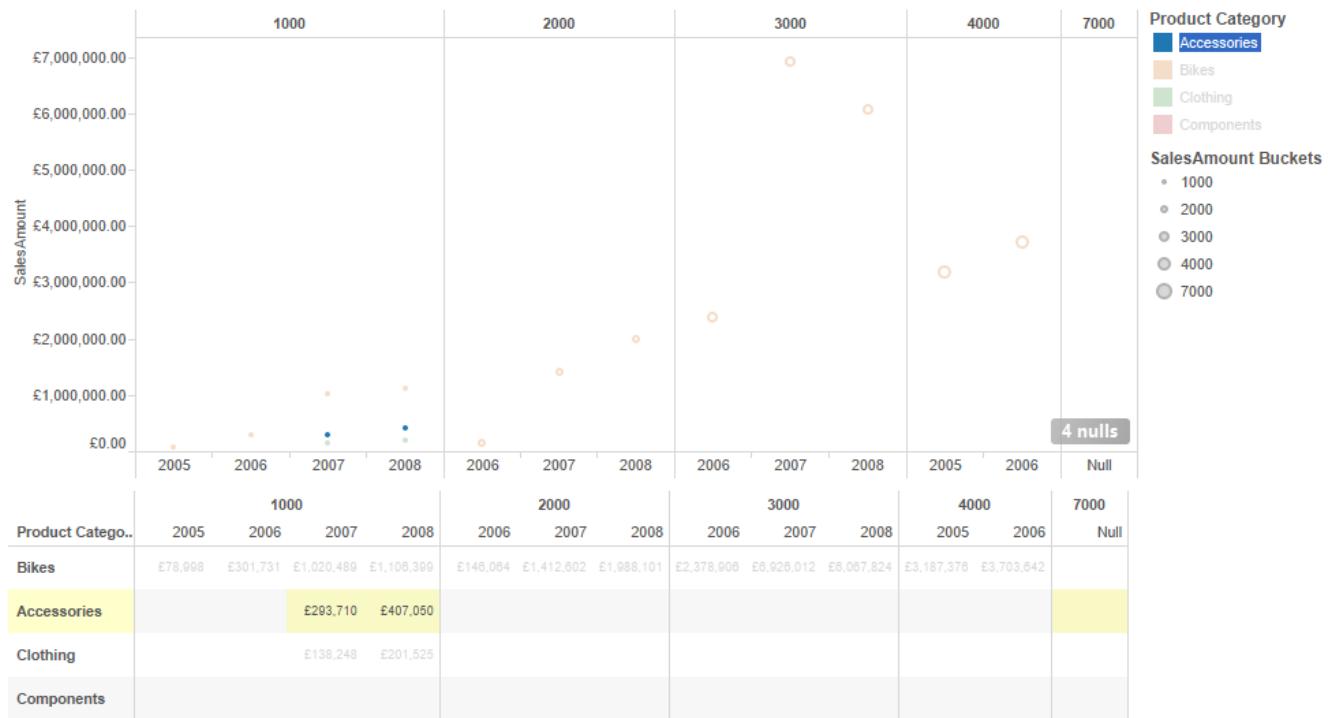
**# All values**

# Count  
# Count (Distinct)  
# Sum  
# Average  
# Median  
# Minimum  
# Maximum

# Standard deviation  
# Standard deviation (Population)  
# Variance  
# Variance (Population)

Next > Cancel

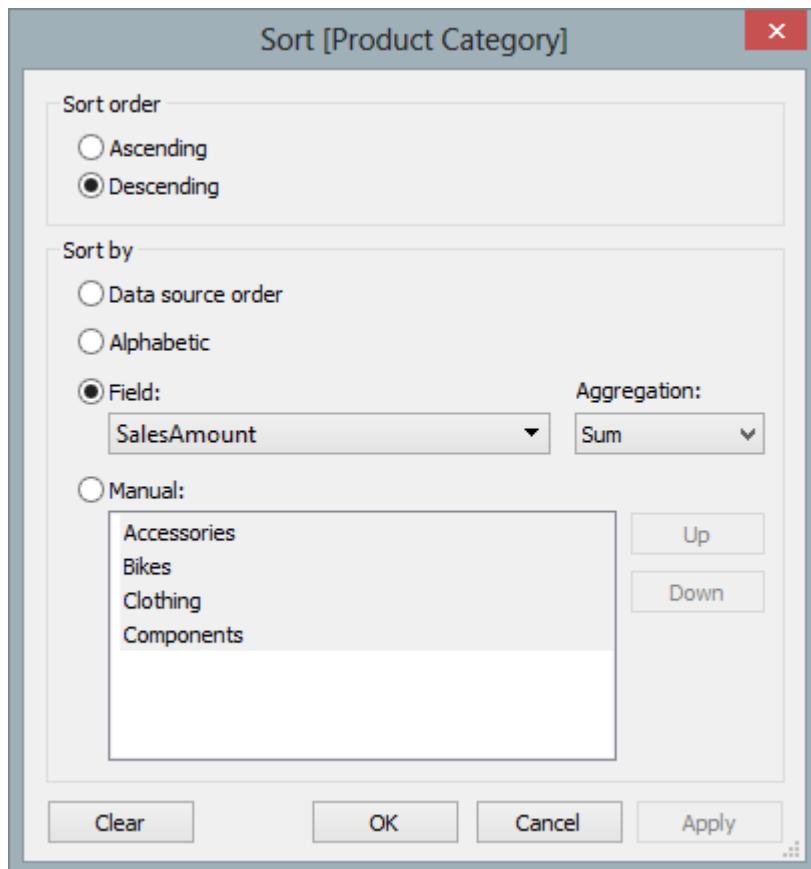
What are my Sales Buckets by Category and by Year?



### Bins Set Manually Table

Product Catego..	2005				2006				Null
	1000		2000		3000		4000		
	2005	2006	2007	2008	2006	2007	2008	2005	2006
Bikes	£78,998	£301,731	£1,020,489	£1,106,399	£146,064	£1,412,602	£1,988,101	£2,378,906	£6,026,012
Accessories			£293,710	£407,050				£3,187,376	£3,703,842
Clothing			£138,248	£201,525					
Components									

Edit Title...  
Reset Title  
Hide Title  
Format Title...



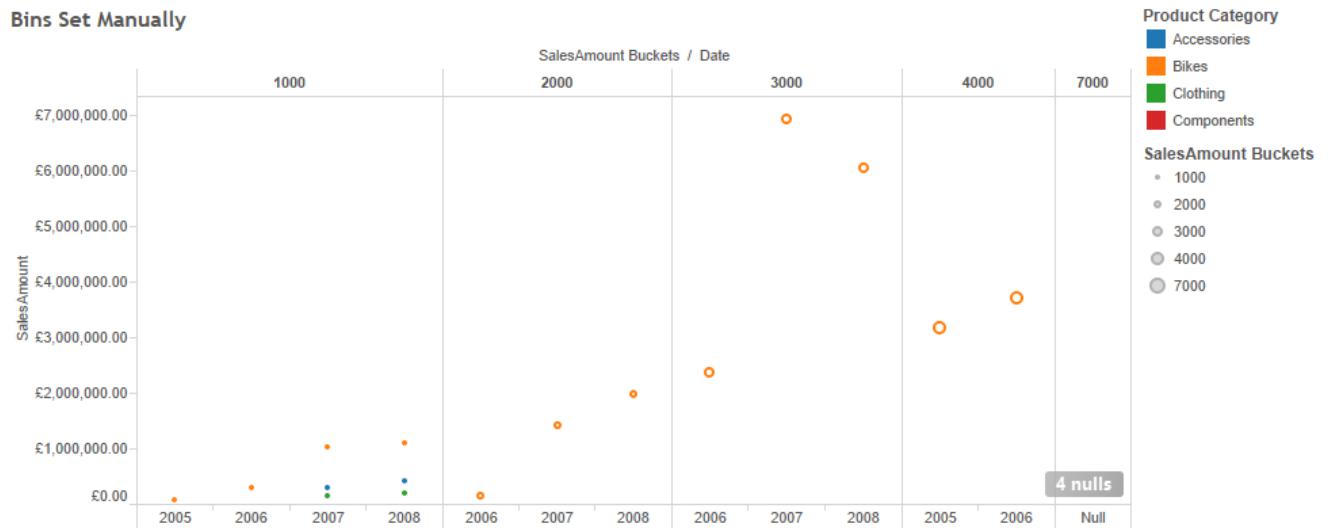
Columns SalesAmount Buckets YEAR(Date)

Rows Product Category

Product Catego.	2008	2006
Accessories	£407,050	
Bikes	£1,106,399	£146,064
Clothing	£201,525	
Components		

Filter...  
Show Quick Filter  
Sort...  
Format...  
Show Header  
Include in Tooltip  
Edit Aliases...  
Dimension  
Attribute  
Measure  
Remove

### Bins Set Manually



**Format SUM(SalesAmount)**

**Fields**

**Axis** **Pane**

**Default**

Font: Arial, 7pt

Alignment: Automatic

Numbers: £123,456

**Totals**

Font: Arial, 7pt

Alignment: Automatic

Numbers: £123,456

**Grand Totals**

Font: Arial, 7pt

Alignment: Automatic

Numbers: £123,456

**Special Values**

Text:

Marks:

- Automatic
- Number (Standard)
- Number (Custom)
- Currency (Standard)
- Currency (Custom)**
- Scientific
- Percentage
- Custom

**Pages**

**Filters**

**Marks**

Abc Automatic

Color Size Text

Detail Tooltip

Abc 123 **SUM(SalesAmount)**

**Product Categories**

Accessories

Bikes

Clothing

Components

**Currency (Custom)**

Decimal places: 0

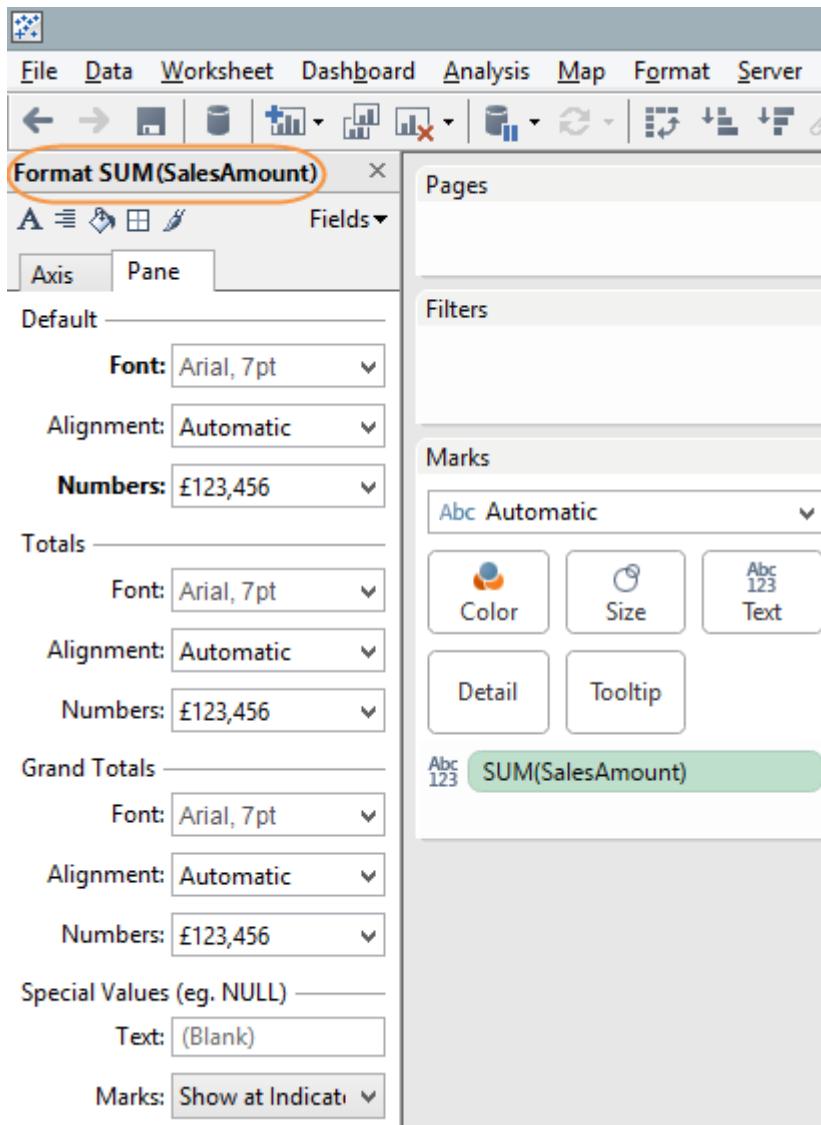
Negative values: -1234

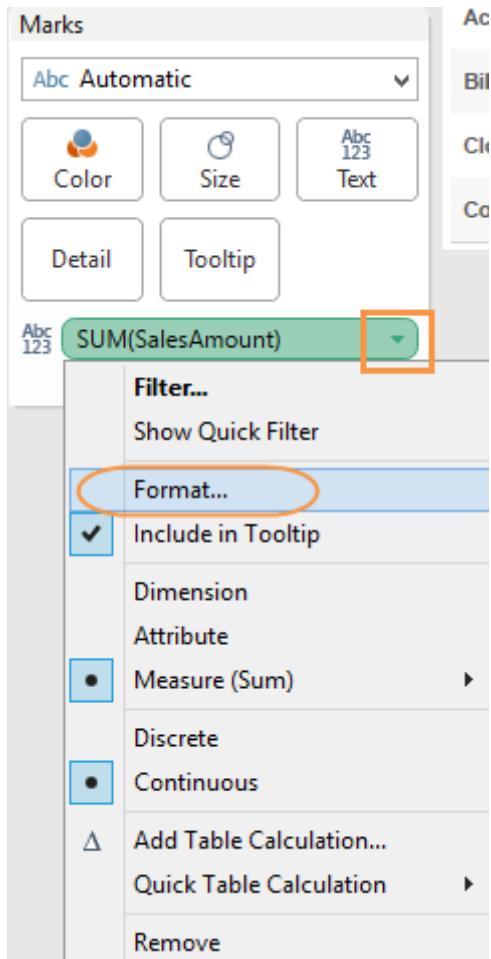
Units: None

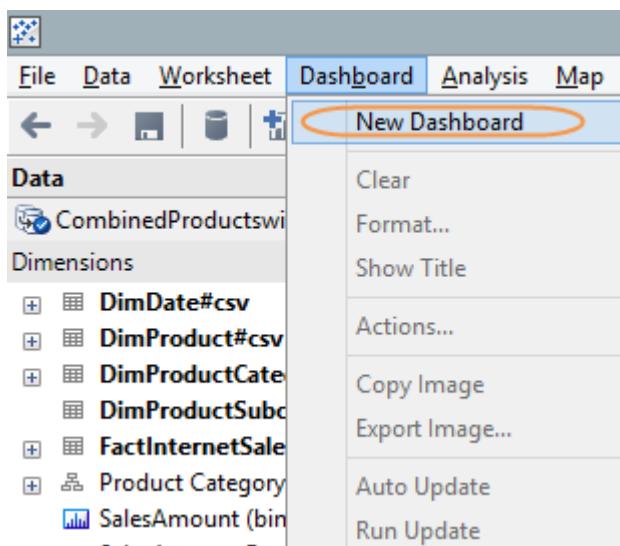
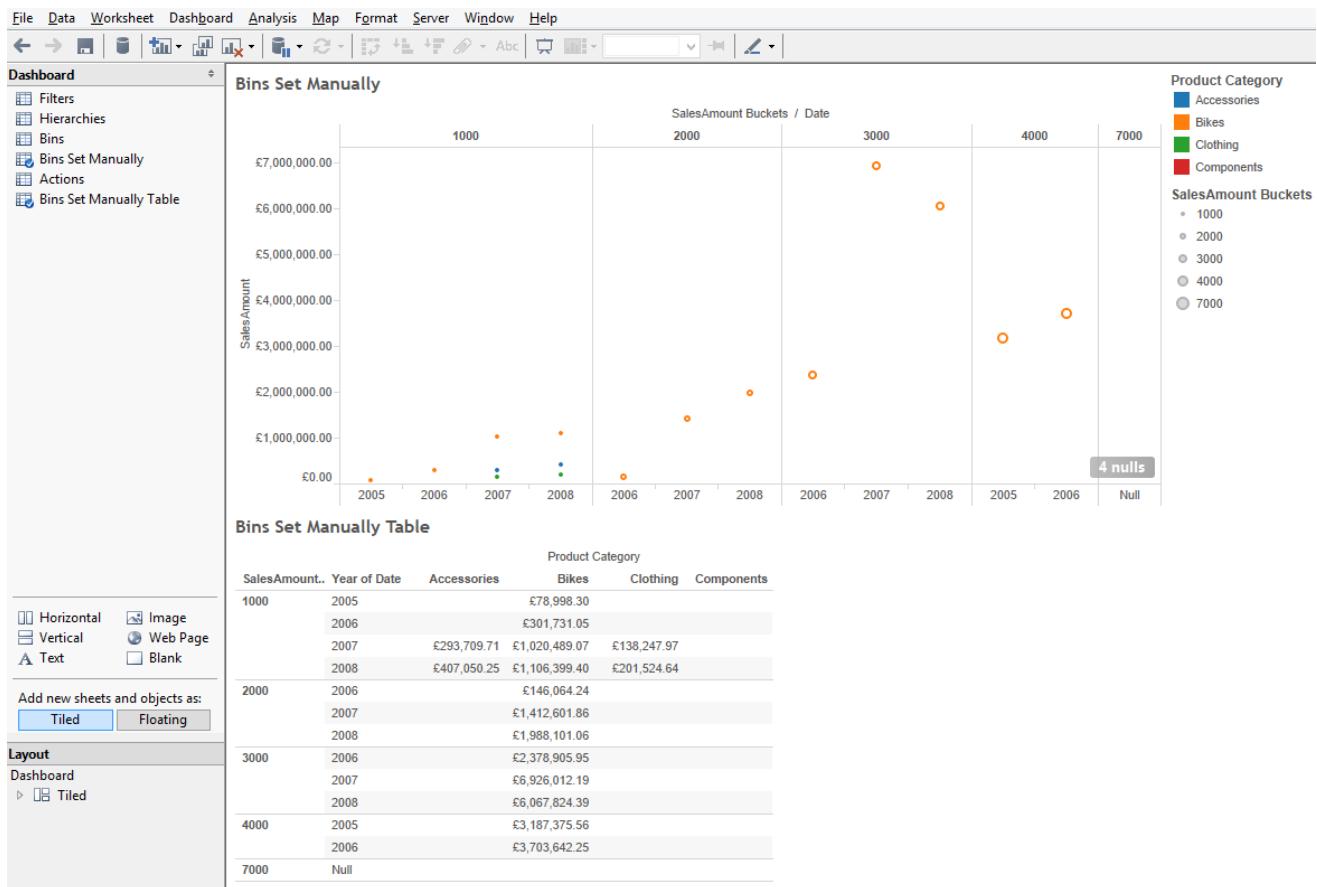
Prefix / Suffix: £

Include thousands separators

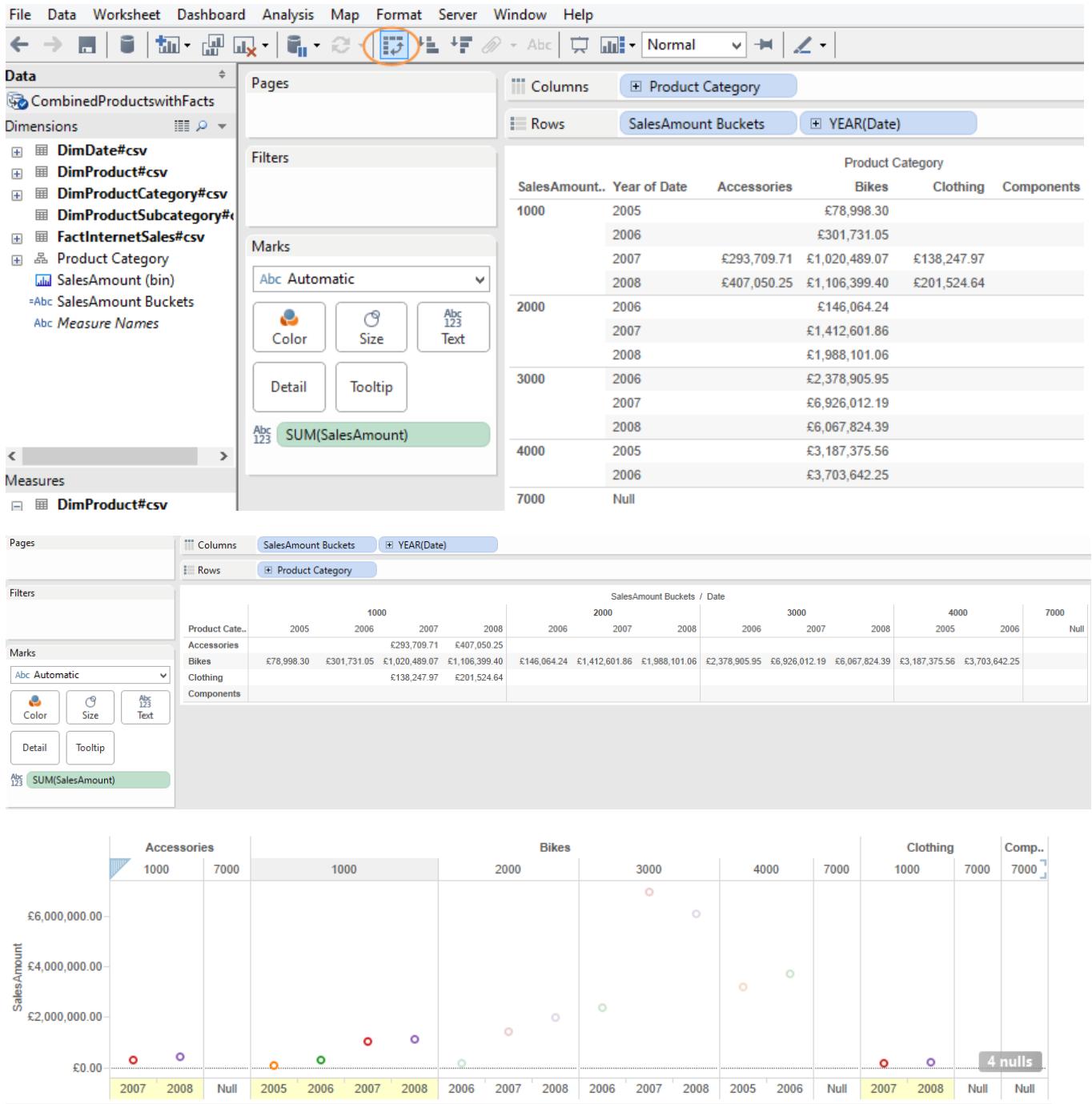
This screenshot shows the 'Format' dialog for a calculated field named 'SUM(SalesAmount)'. The 'Marks' tab is selected. Under 'Text', the 'Special Values' dropdown is open, showing options like 'Automatic', 'Number (Standard)', 'Number (Custom)', 'Currency (Standard)', and 'Currency (Custom)'. The 'Currency (Custom)' option is highlighted with a blue selection bar. On the right, the 'Currency (Custom)' settings are displayed: 'Decimal places' is set to 0, 'Negative values' is set to '-1234', 'Units' is set to 'None', and 'Prefix / Suffix' is set to '£'. A checked checkbox at the bottom indicates 'Include thousands separators'. The background of the dialog shows other tabs like 'Pages', 'Filters', and 'Marks'.







File Data Worksheet Dashboard Analysis Map Format Server Window Help



The screenshot shows a Tableau desktop interface with the following components:

- Top Bar:** File, Data, Worksheet, Dashboard, Analysis, Map, Format, Server, Window, Help.
- Toolbar:** Includes icons for back, forward, refresh, and various settings.
- Left Panel (Data View):**
  - Pages:** Shows the current page is "CombinedProductswithFacts".
  - Dimensions:** DimDate#csv, DimProduct#csv, DimProductCategory#csv, DimProductSubcategory#csv, FactInternetSales#csv.
  - Measures:** Product Category, SalesAmount (bin), SalesAmount Buckets, Measure Names.
- Middle Panel (Card 1):**
  - Columns:** Product Category (selected).
  - Rows:** SalesAmount Buckets (selected), YEAR(Date).
  - Data Table:**

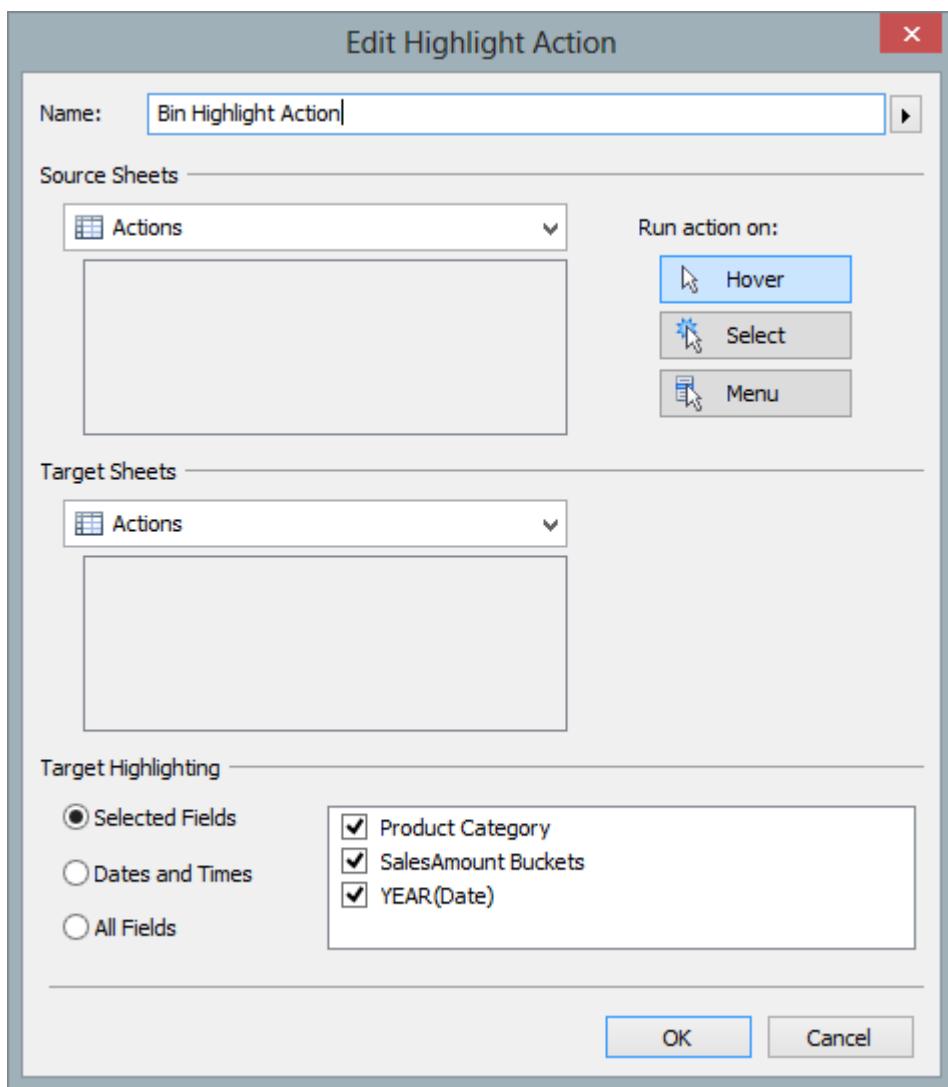
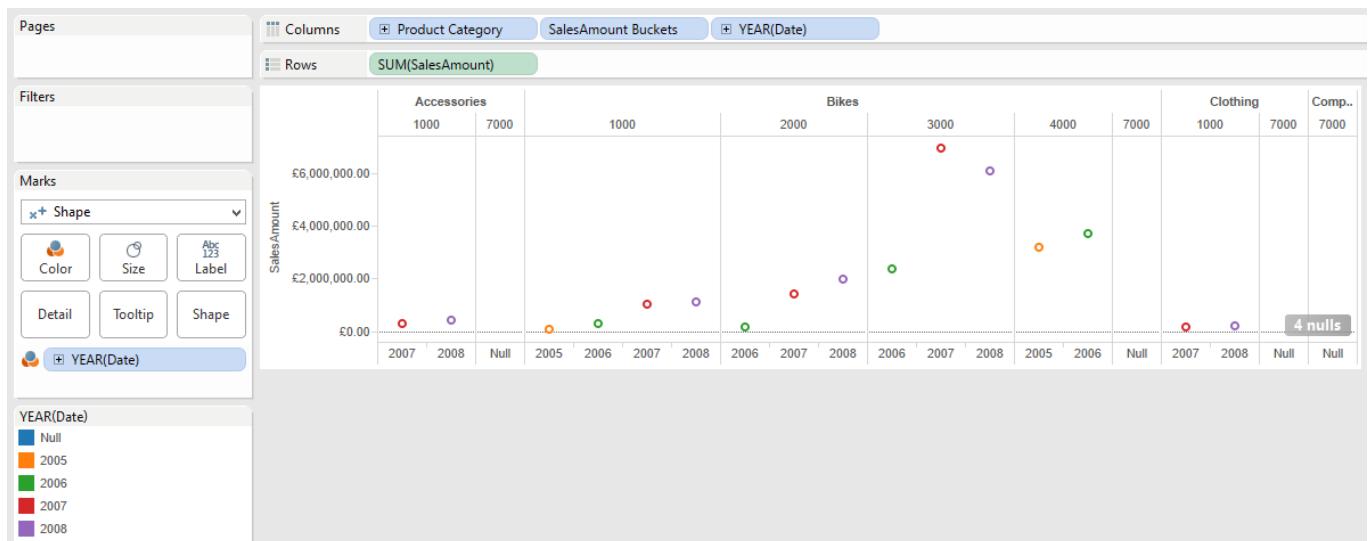
	SalesAmount..	Year of Date	Product Category		
			Accessories	Bikes	Clothing
1000	2005		£78,998.30		
	2006		£301,731.05		
	2007		£293,709.71	£1,020,489.07	£138,247.97
	2008		£407,050.25	£1,106,399.40	£201,524.64
2000	2006			£146,064.24	
	2007			£1,412,601.86	
	2008			£1,988,101.06	
3000	2006			£2,378,905.95	
	2007			£6,926,012.19	
	2008			£6,067,824.39	
4000	2005			£3,187,375.56	
	2006			£3,703,642.25	
7000	Null				
- Middle Panel (Card 2):**
  - Columns:** SalesAmount Buckets (selected), YEAR(Date).
  - Rows:** Product Category (selected).
  - Data Table:**

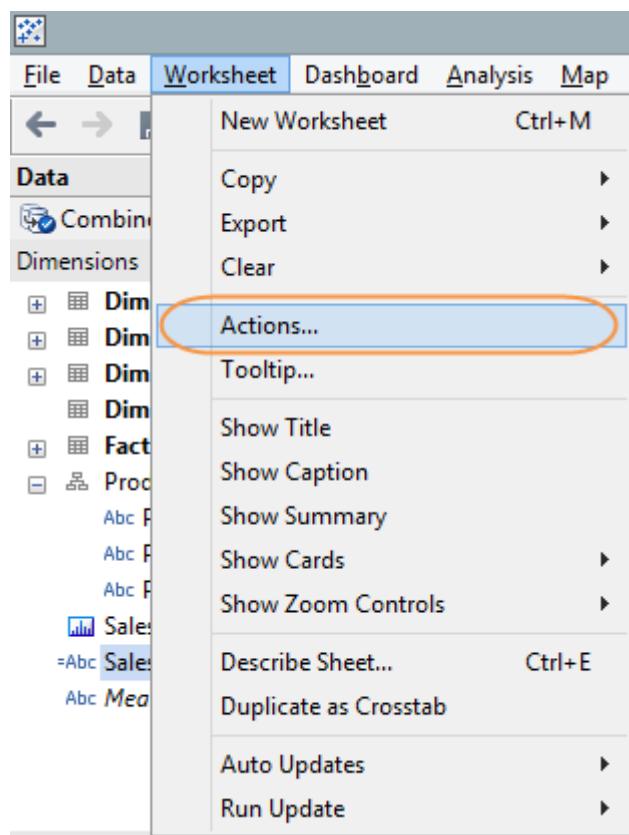
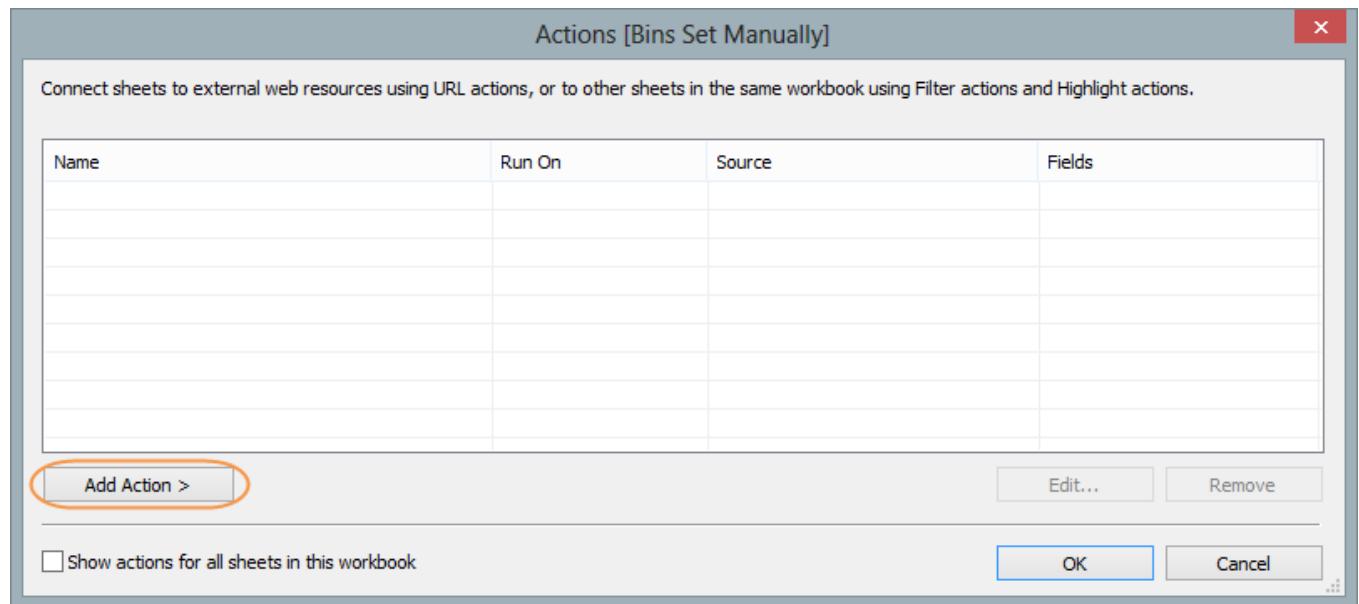
Product Cate..	1000				2000				3000				4000				7000	
	2005	2006	2007	2008	2006	2007	2008	2006	2007	2008	2005	2006	2007	2008	2005	2006	Null	
Accessories	£78,998.30	£301,731.05	£293,709.71	£407,050.25														
Bikes					£146,064.24	£1,412,601.86	£1,988,101.06				£2,378,905.95	£6,926,012.19	£6,067,824.39					
Clothing					£138,247.97	£201,524.64												
Components																		
- Bottom Shelf (Card 3):**

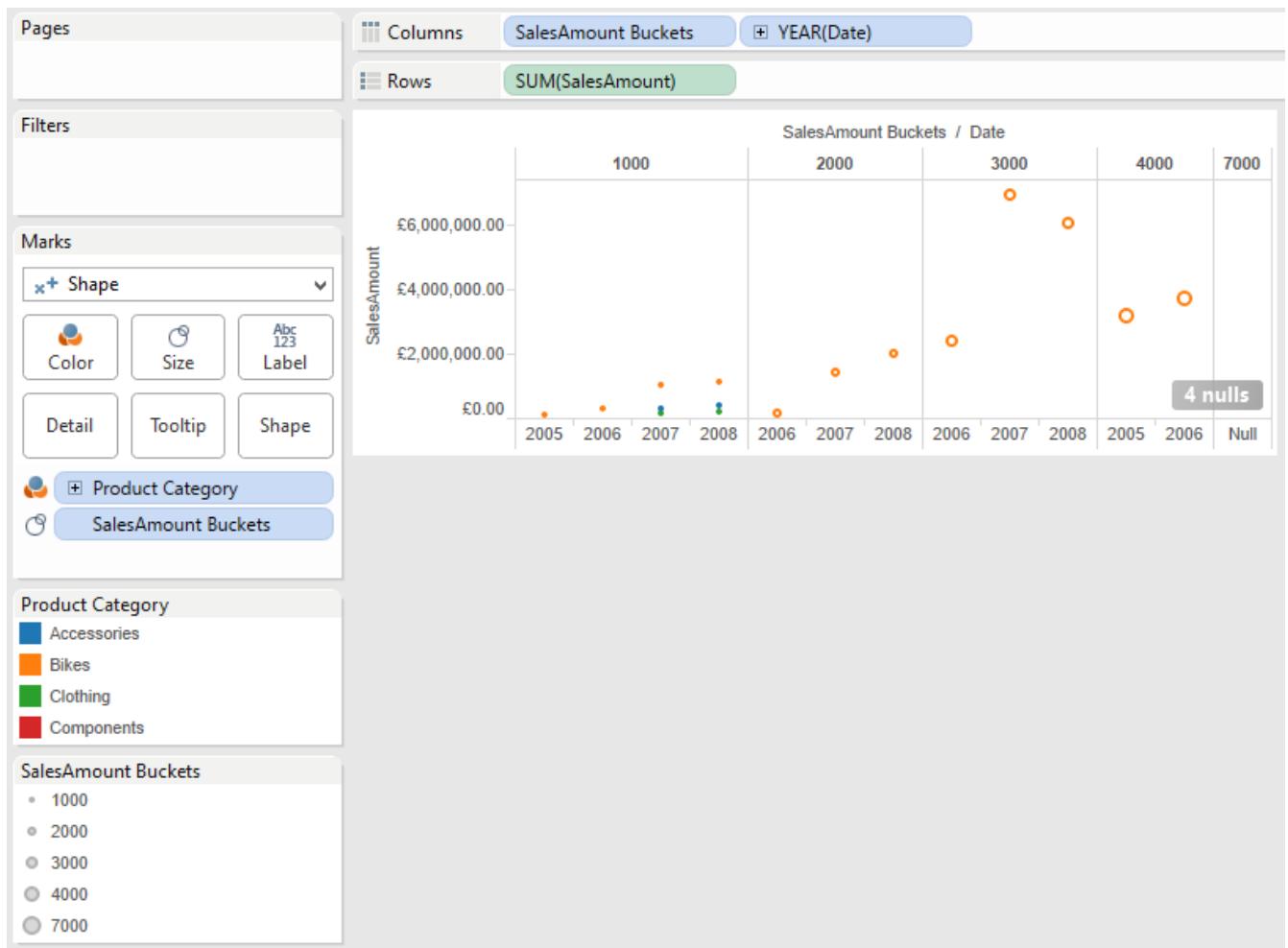
A scatter plot showing SalesAmount (Y-axis, £0.00 to £6,000,000.00) versus Year (X-axis, 2005 to 2008). The plot is divided into four quadrants by Product Category:

  - Accessories:** Top-left quadrant (red circles).
  - Bikes:** Top-right quadrant (orange circles).
  - Clothing:** Bottom-right quadrant (green circles).
  - Components:** Bottom-left quadrant (blue circles).

There are 4 nulls indicated at the bottom right of the plot area.



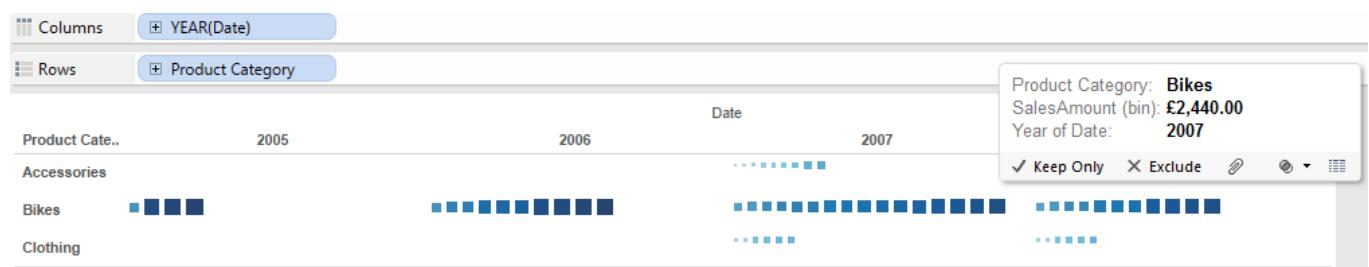


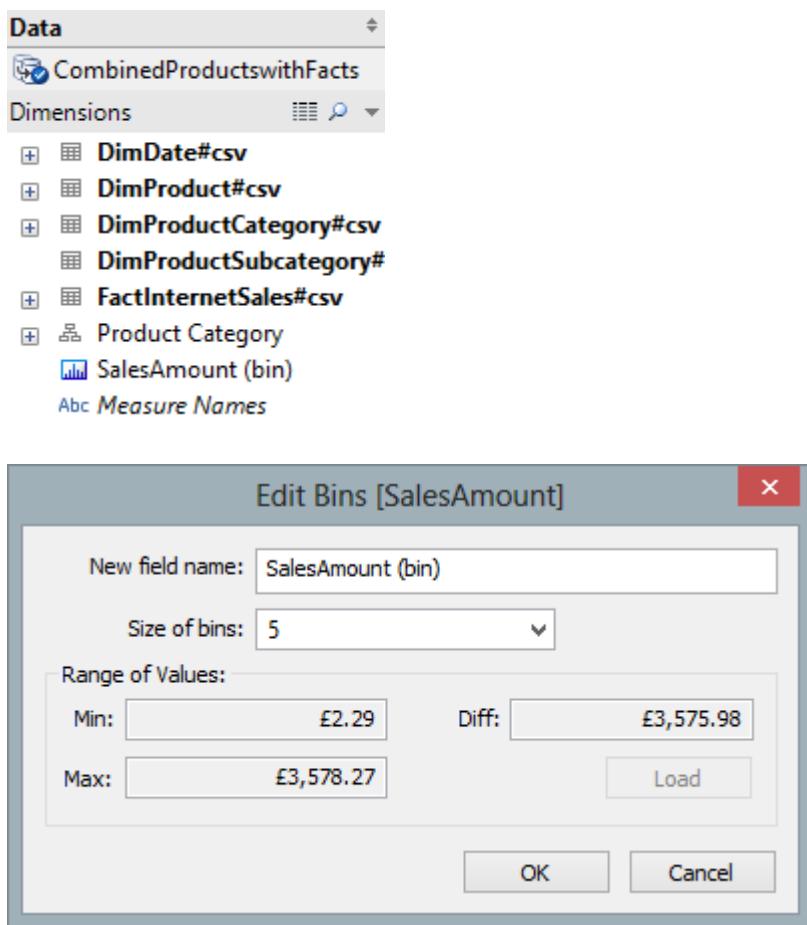
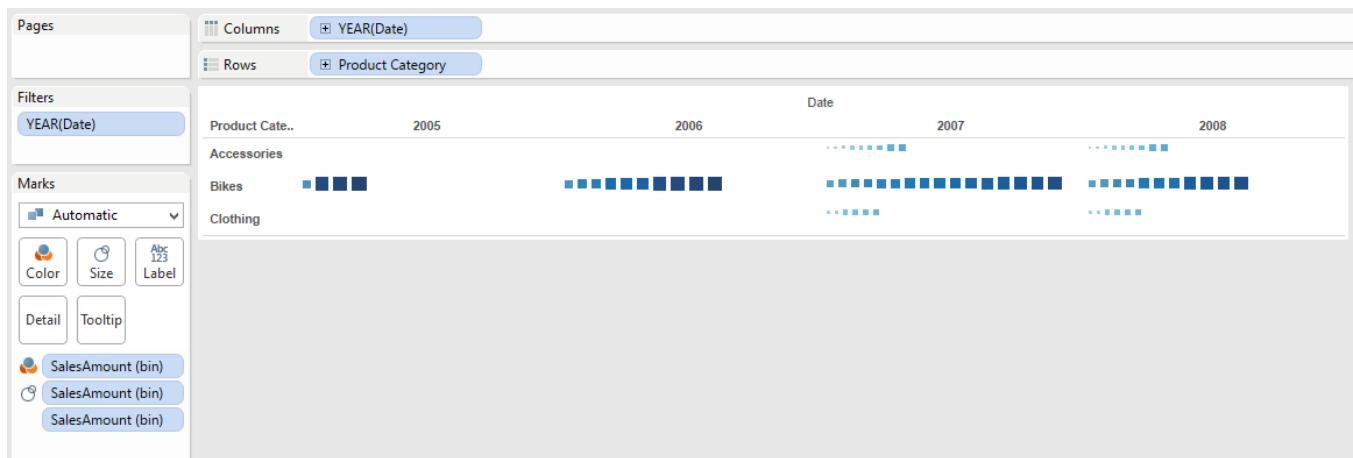


The screenshot shows the 'Calculated Field [SalesAmount Buckets]' dialog box. The 'Name' field contains 'SalesAmount Buckets'. The 'Formula' field displays the following DAX code:

```
If [SalesAmount] <= 1000 THEN "1000"  
ELSEIF [SalesAmount] <= 2000 THEN "2000"  
ELSEIF [SalesAmount] <= 3000 THEN "3000"  
ELSEIF [SalesAmount] <= 4000 THEN "4000"  
ELSEIF [SalesAmount] <= 5000 THEN "5000"  
ELSEIF [SalesAmount] <= 6000 THEN "6000"  
ELSE "7000"  
END
```

A green checkmark icon indicates that the calculation is valid. Below the formula, there are four tabs: 'Fields', 'Parameters', 'Create', and 'Help'. The 'Fields' tab shows a list of available fields, including 'CalendarQuarter' which is selected. The 'Parameters' tab shows a list of available parameters. The 'Create' tab is currently active, showing a list of available functions. A tooltip for 'CalendarQuarter' provides information about its data type (Integer). At the bottom, there is a warning message about changes to the calculation affecting the 'Bins Set Manually' worksheet.

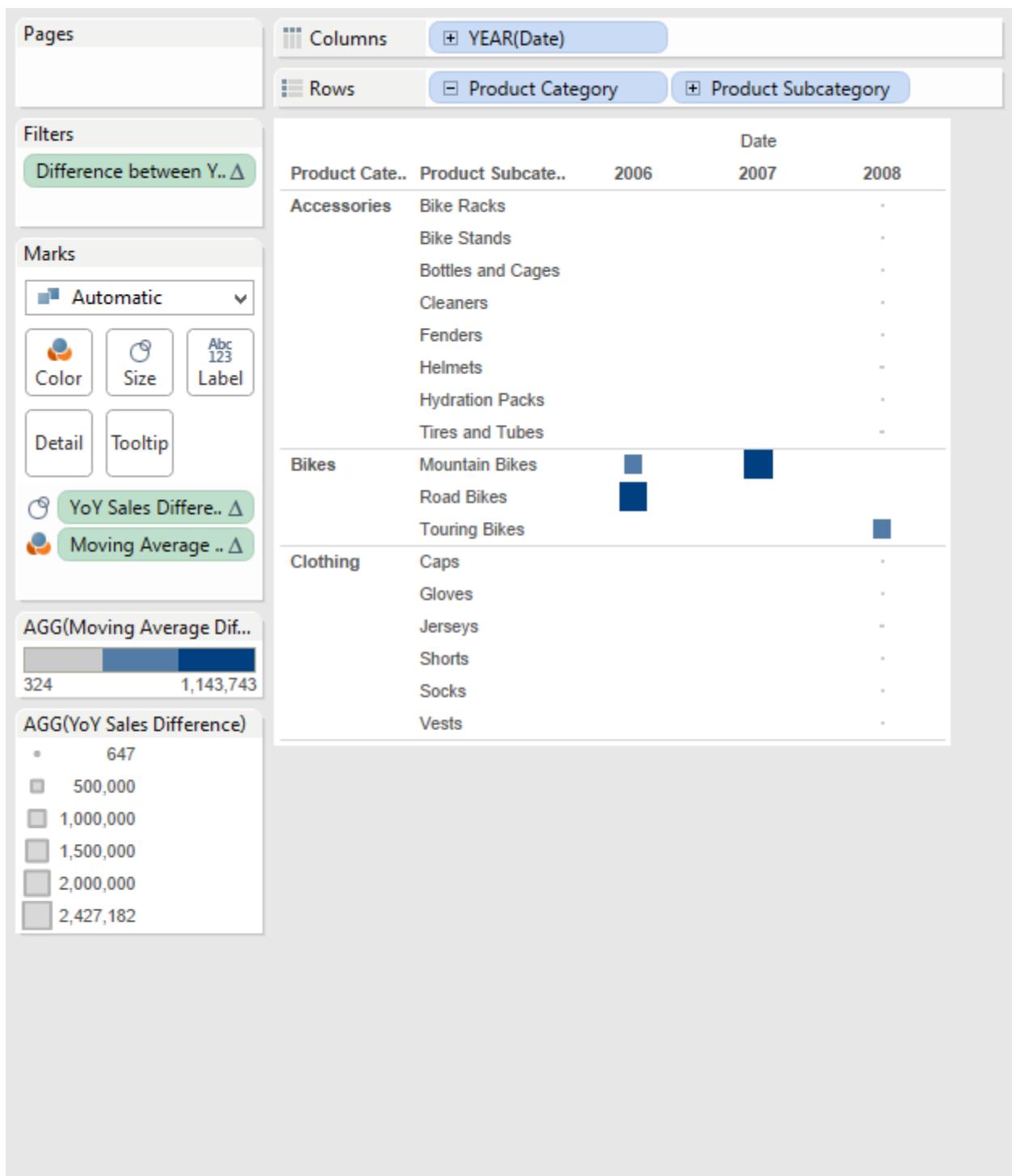




Measures

- +  DimProduct#csv
- +  DimProductCategory#csv
- +  DimProductSubcategory#csv
- FactInternetSales#csv
  - # DiscountAmount
  - # ProductStandardCost
  - # SalesAmount
  - # SalesTerritory
  - # ShipDateKey
  - # TotalProductCost
  - =# Difference between
  - =# Moving Average
  - =# Moving Average
  - =# Moving Average
  - =# YoY Sales Diff
  - =# Number of Rows
  - # Measure Value

- Add to Sheet**
- Show Quick Filter
- 
- Copy
- Paste
- 
- Duplicate
- Rename...
- Hide
- 
- Create Calculated Field...
- Create Group...
- Create Bins...**
- 
- Create Parameter...
- 
- Convert to Discrete
- Convert to Dimension
- 
- Change Data Type ▾
- Geographic Role ▾
- Default Properties ▾
- 
- Replace References...
- Describe...



**Data**

CombinedProductswithFacts

Dimensions

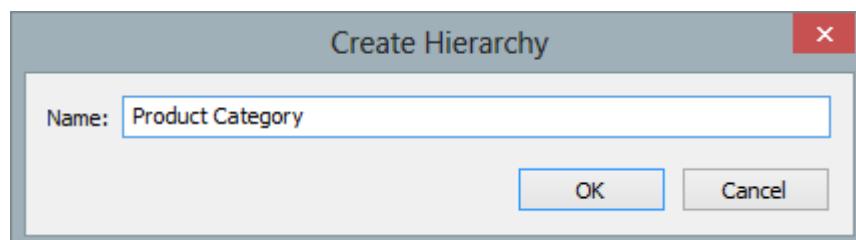
- +  DimDate#csv
- +  DimProduct#csv
- +  DimProductCategory#csv
  - DimProductSubcategory#csv
- +  FactInternetSales#csv
- Product Category
  - Abc Product Category
  - Abc Product SubCategory
  - Abc Product
- Abc Measure Names

**Data**

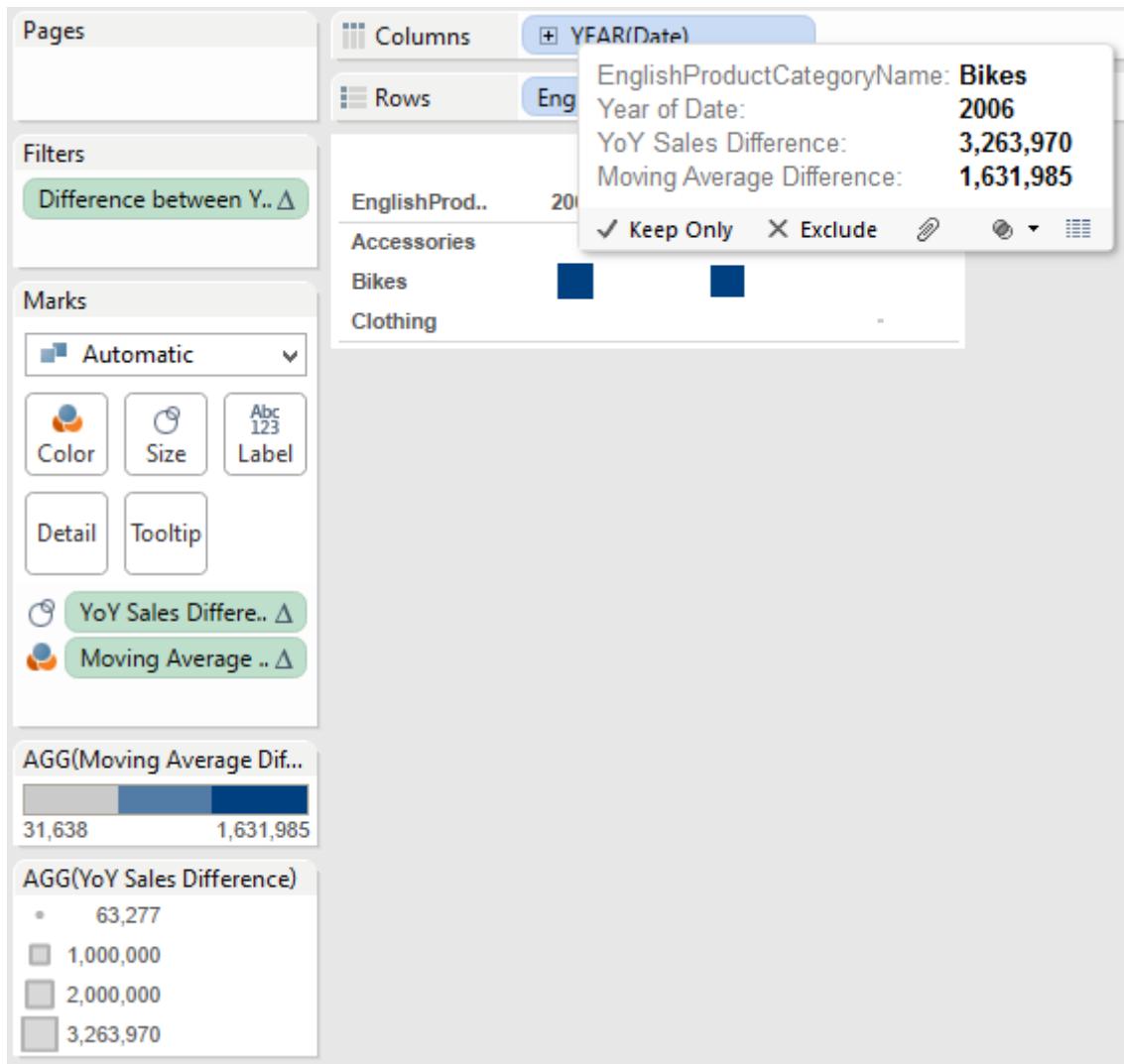
CombinedProductswithFacts

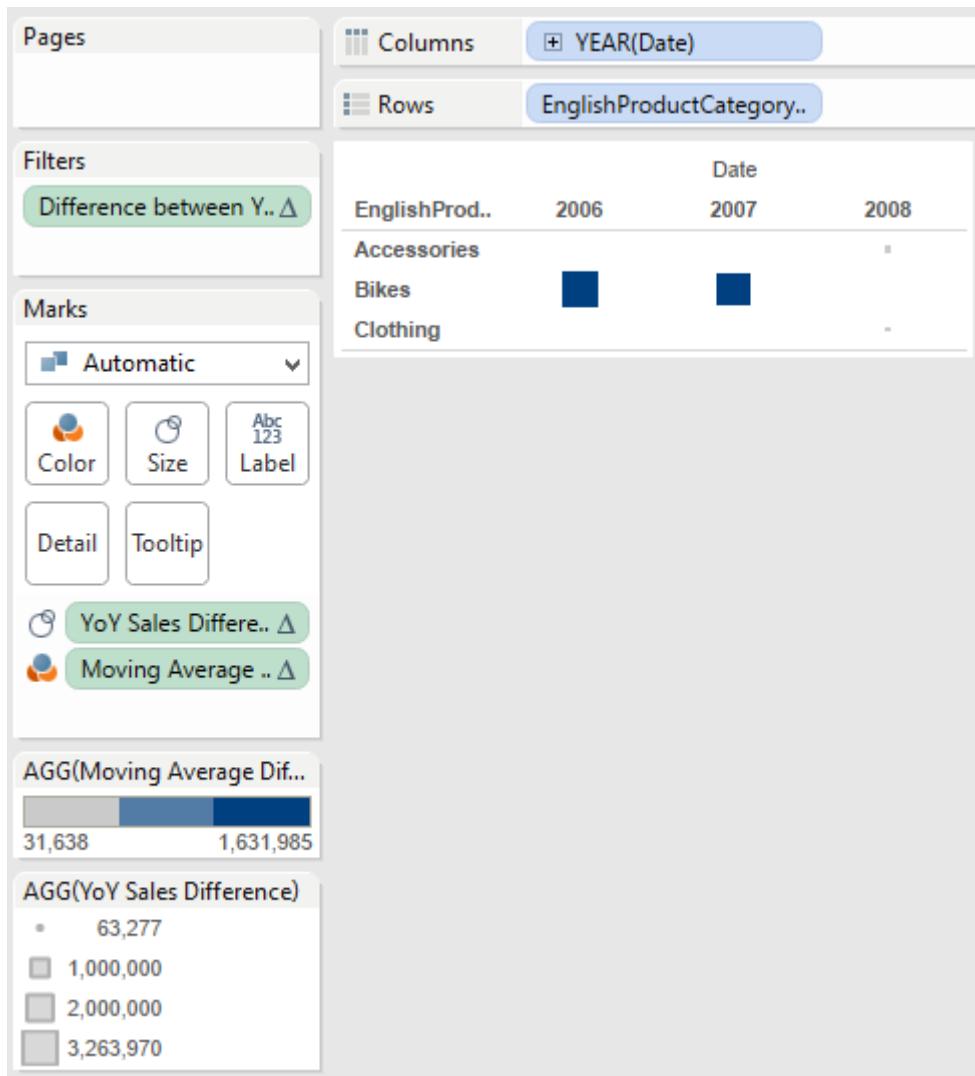
Dimensions

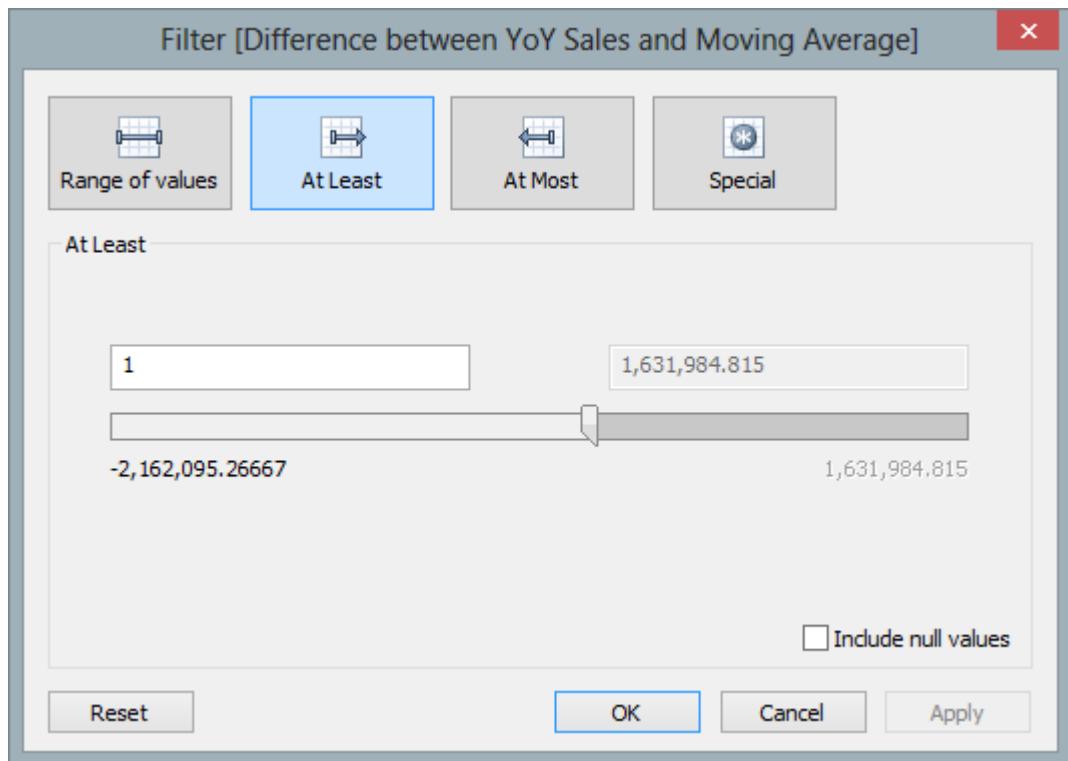
- +  DimDate#csv
- +  DimProduct#csv
- +  DimProductCategory#csv
  - DimProductSubcategory#csv
- +  FactInternetSales#csv
- Product Category
  - Abc EnglishProductCategoryName
  - Abc EnglishProductSubcategoryName
  - Abc EnglishProductName
- Abc Measure Names











Pages

Columns: YEAR(Date)

Rows: EnglishProductCategory.. Measure Names

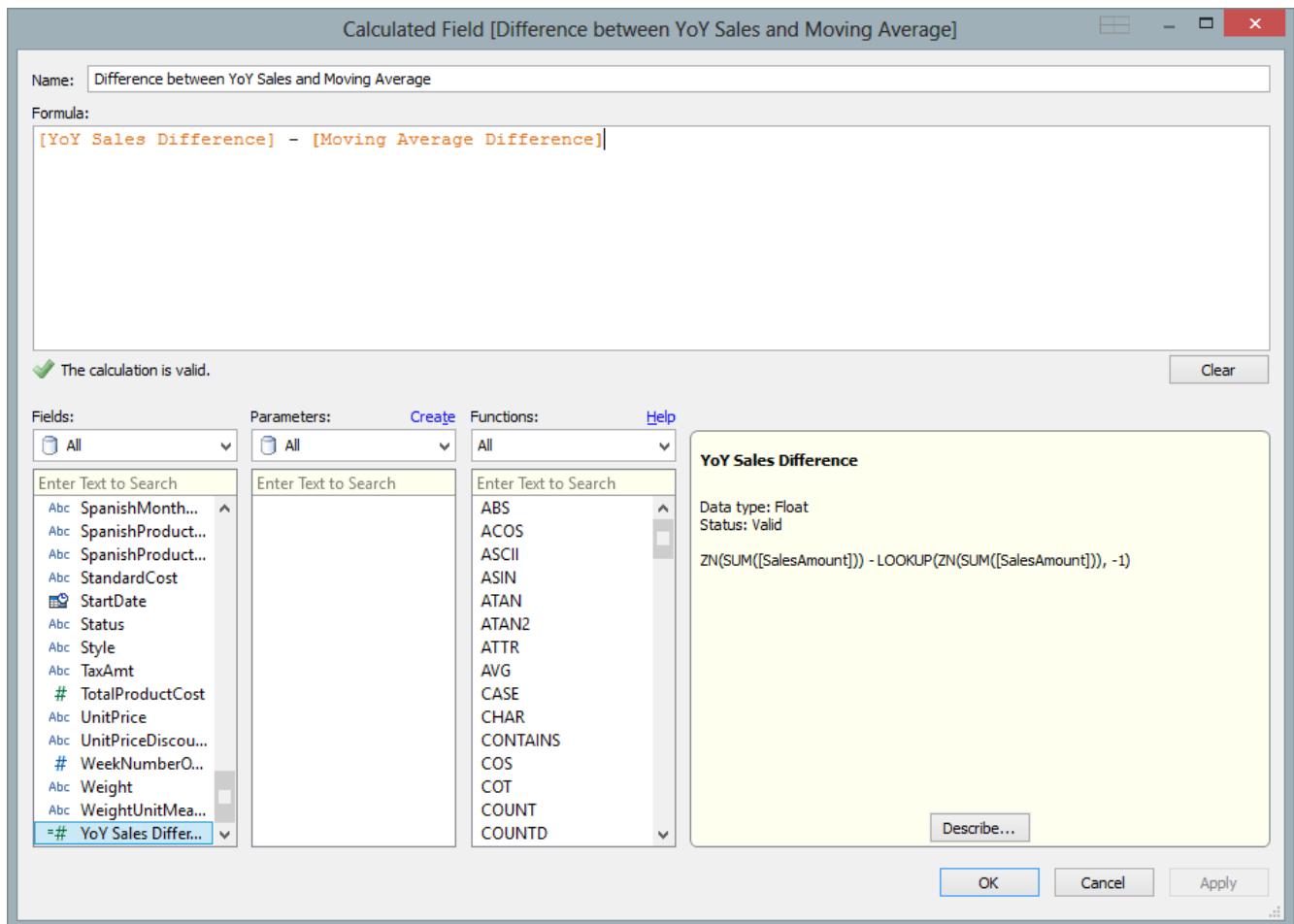
		Date				
		Null	2005	2006	2007	2008
Accessories	YoY Sales Difference along Year of Date	0	0	293,710	113,341	
	Moving Average Difference along Year of Date	0	0	293,710	56,670	
	Difference between YoY Sales and Moving Average along Year of Date	0	0	0	56,670	
Bikes	YoY Sales Difference along Year of Date	3,266,374	3,263,970	2,828,760	-196,778	
	Moving Average Difference along Year of Date	3,266,374	1,631,985	1,486,915	1,965,317	
	Difference between YoY Sales and Moving Average along Year of Date	0	1,631,985	1,341,845	-2,162,095	
Clothing	YoY Sales Difference along Year of Date	0	0	138,248	63,277	
	Moving Average Difference along Year of Date	0	0	138,248	31,638	
	Difference between YoY Sales and Moving Average along Year of Date	0	0	0	31,638	
Components	YoY Sales Difference along Year of Date	0	0	0	0	
	Moving Average Difference along Year of Date	0	0	0	0	
	Difference between YoY Sales and Moving Average along Year of Date	0	0	0	0	

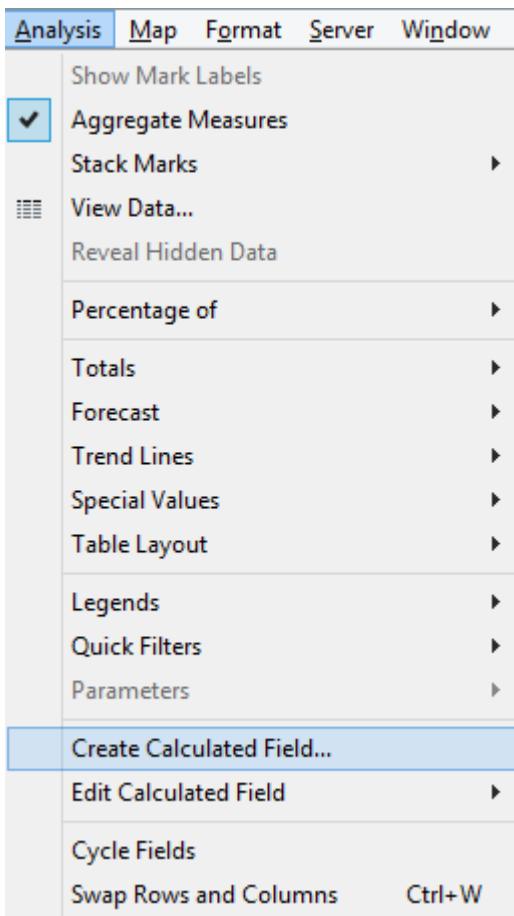
Filters

Measure Names: EnglishProd..

Marks: Automatic, Color, Size, Text, Detail, Tooltip

Measure Values: YoY Sales Difference, Moving Average Diffe., Difference between Y..





Pages

Columns

Rows EnglishProductCategory.. Measure Names

**Filters**

Measure Names

Marks

Abc Automatic

123 Measure Values

		FullDateAlternateKey				
		Null	2005	2006	2007	2008
EnglishProd..	SalesAmount			£293,709.71	£407,050.25	
	YoY Sales Difference	0	0	293,710	113,341	
Accessories	SalesAmount	£3,266,373.86	£6,530,343.49	£9,359,103.12	£9,162,324.85	
	YoY Sales Difference	3,266,374	3,263,970	2,828,760	-196,778	
Bikes	SalesAmount			£138,247.97	£201,524.64	
	YoY Sales Difference	0	0	138,248	63,277	
Clothing	SalesAmount			£138,247.97	£201,524.64	
	YoY Sales Difference	0	0	138,248	63,277	
Components	SalesAmount			£138,247.97	£201,524.64	
	YoY Sales Difference	0	0	138,248	63,277	

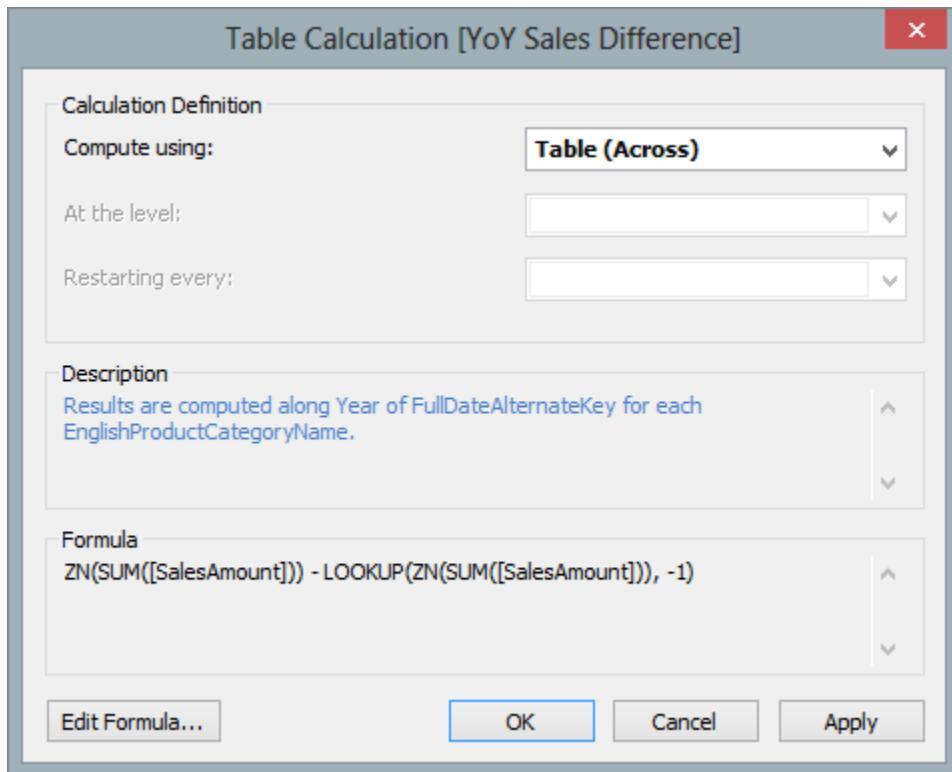
Measure Values

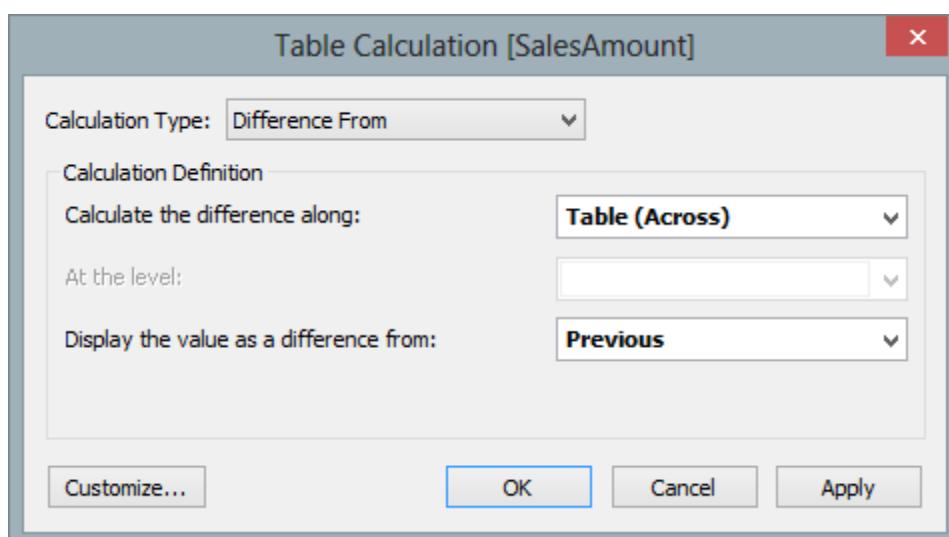
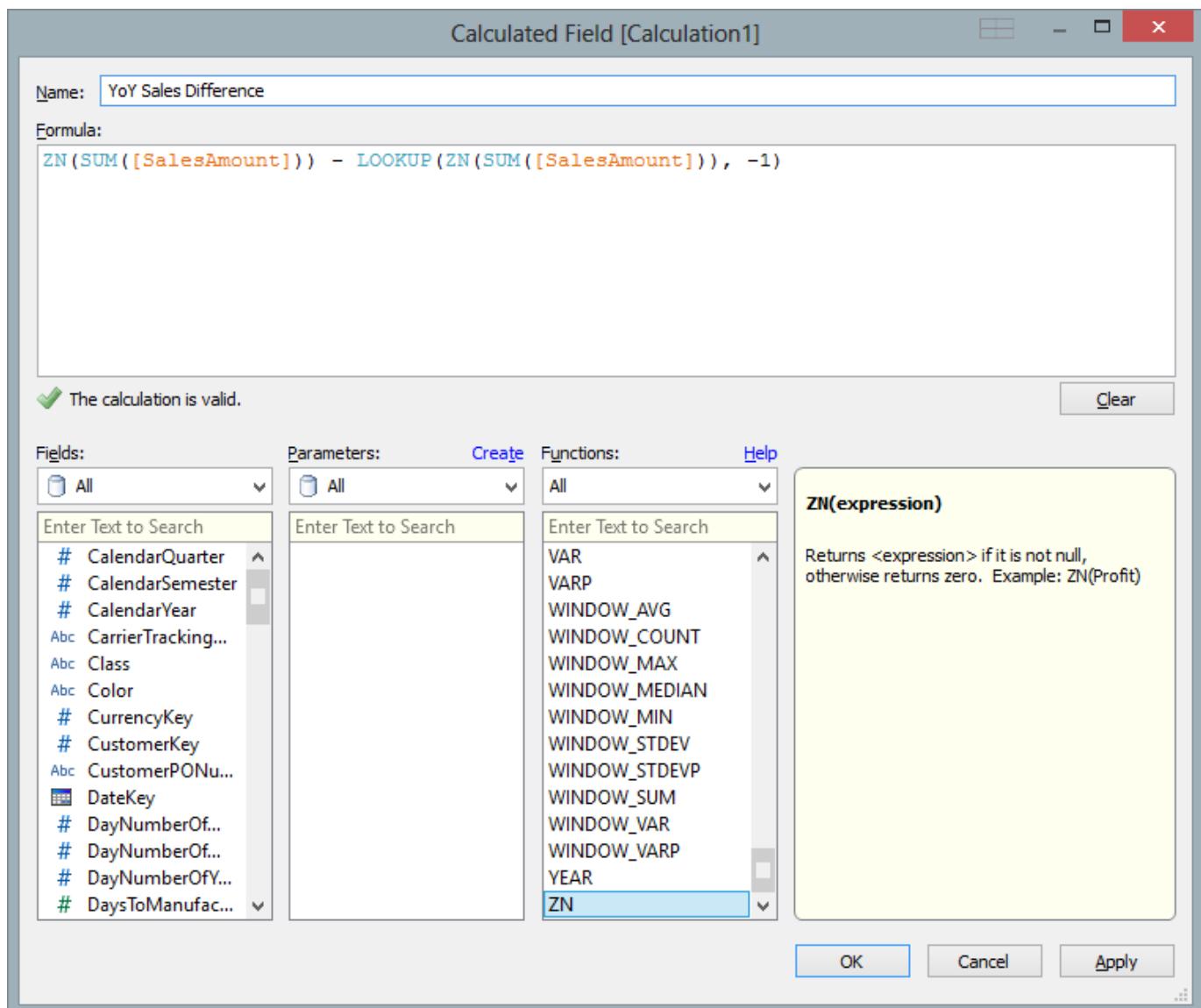
SUM(SalesAmount)

Filter... Show Quick Filter Format...  Include in Tooltip Attribute  Measure (Sum)  Discrete  Continuous Add Table Calculation... Quick Table Calculation Remove

Moving Average

- Running Total
- Difference
- Percent Difference
- Percent of Total
- Moving Average
- YTD Total
- Compound Growth Rate
- Year over Year Growth
- YTD Growth





Pages

Columns  YEAR(FullDateAlternateKey)

Rows EnglishProductCategory..

Filters

Marks

Abc Automatic

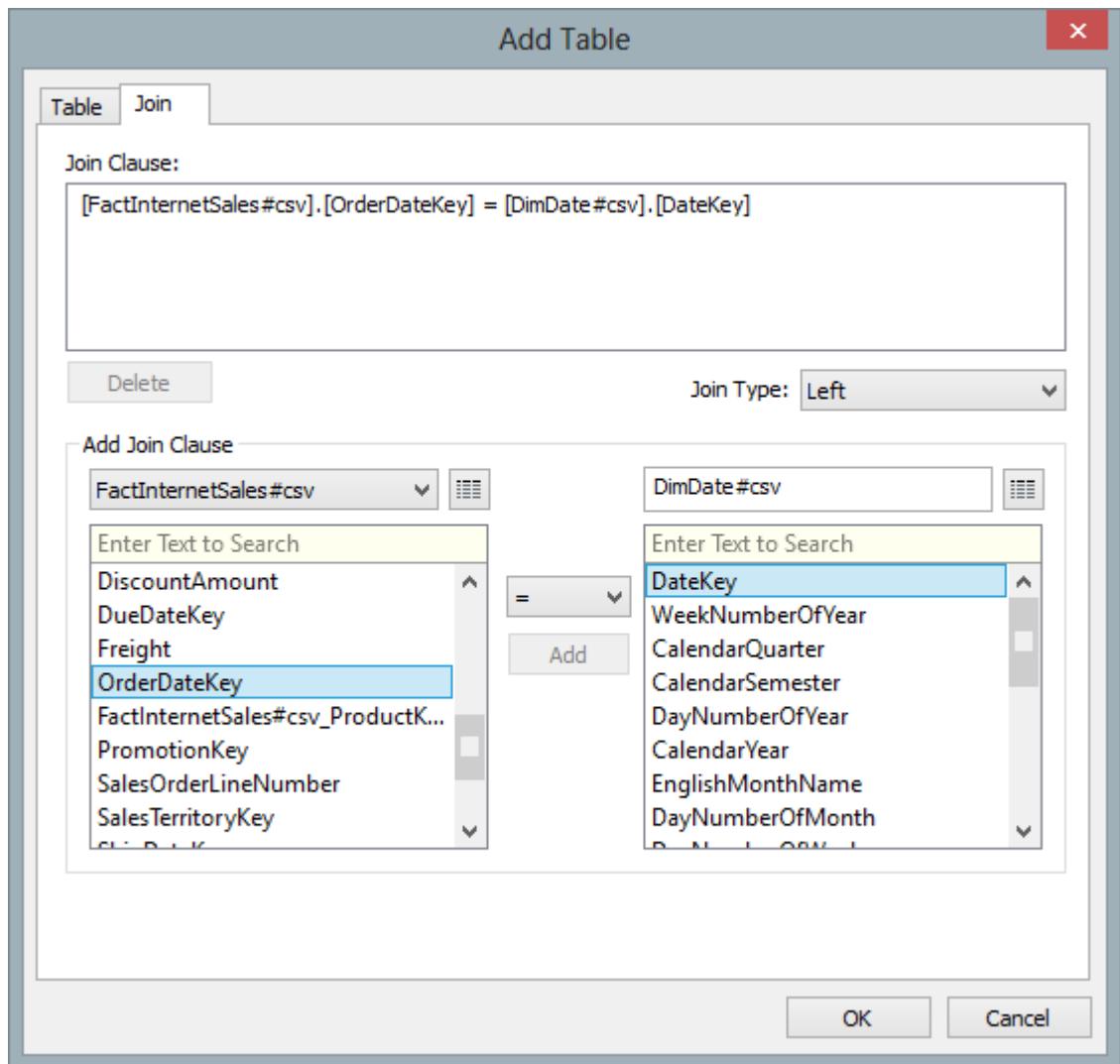
Color Size Text

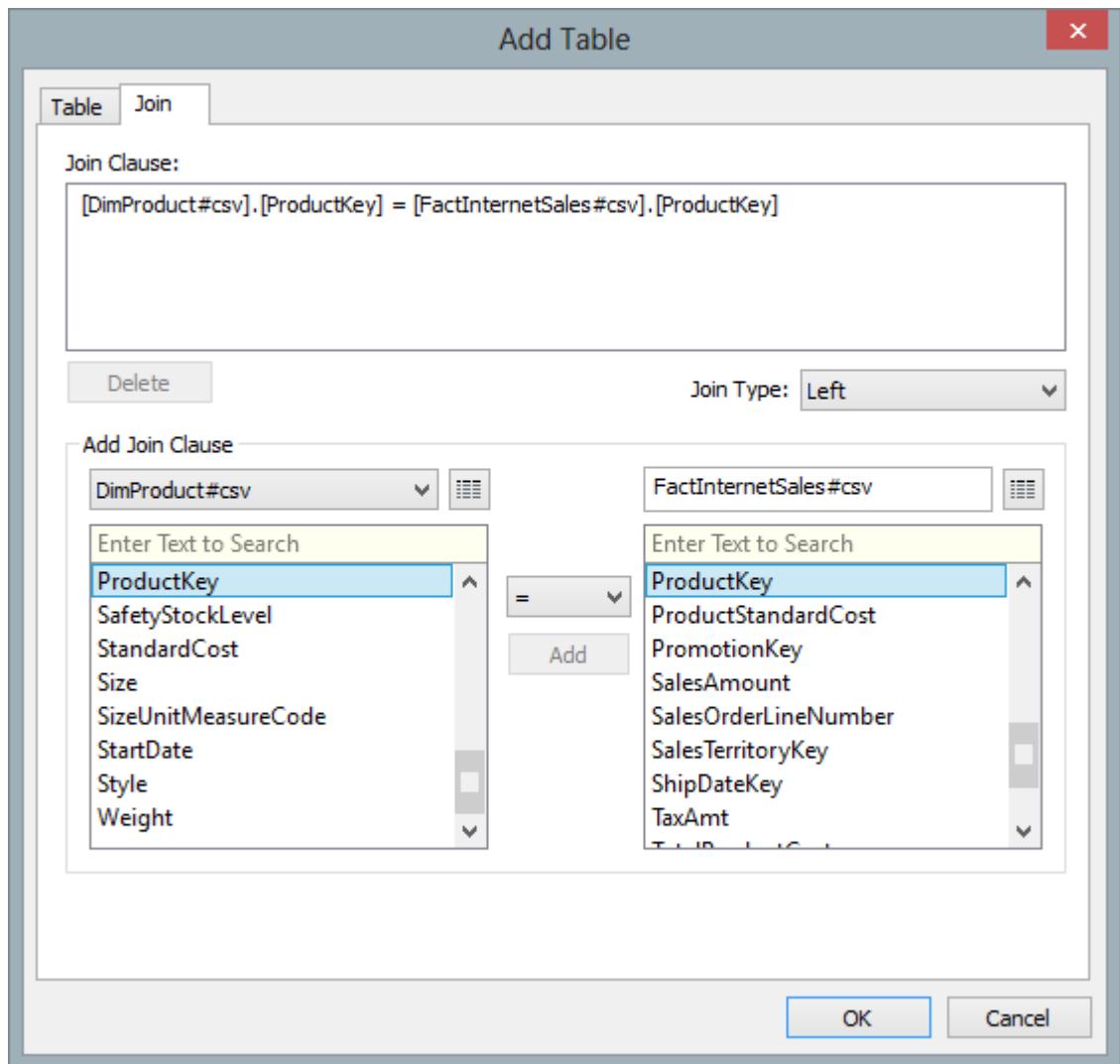
Detail Tooltip

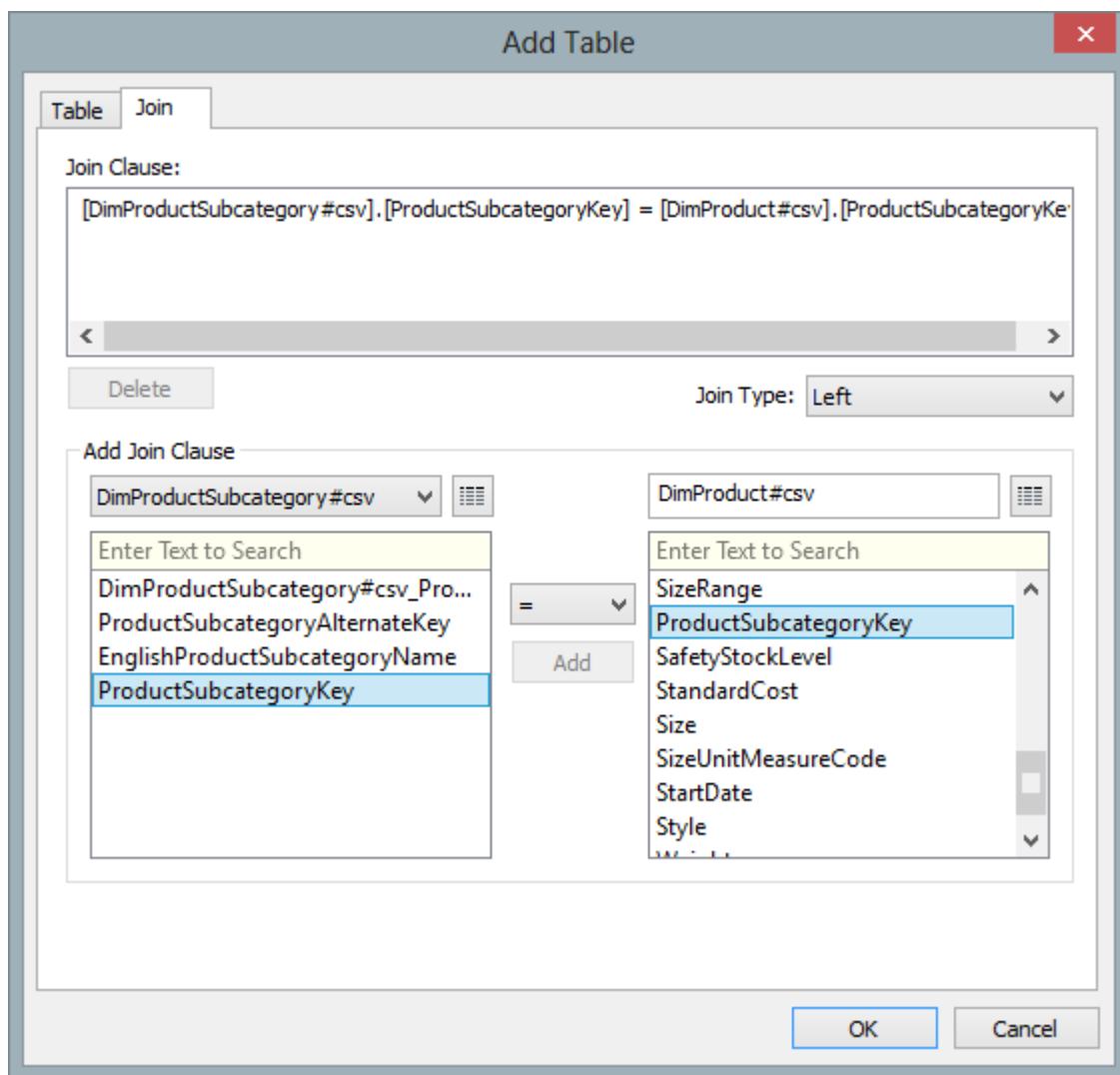
Abc 123 SUM(SalesAmount)

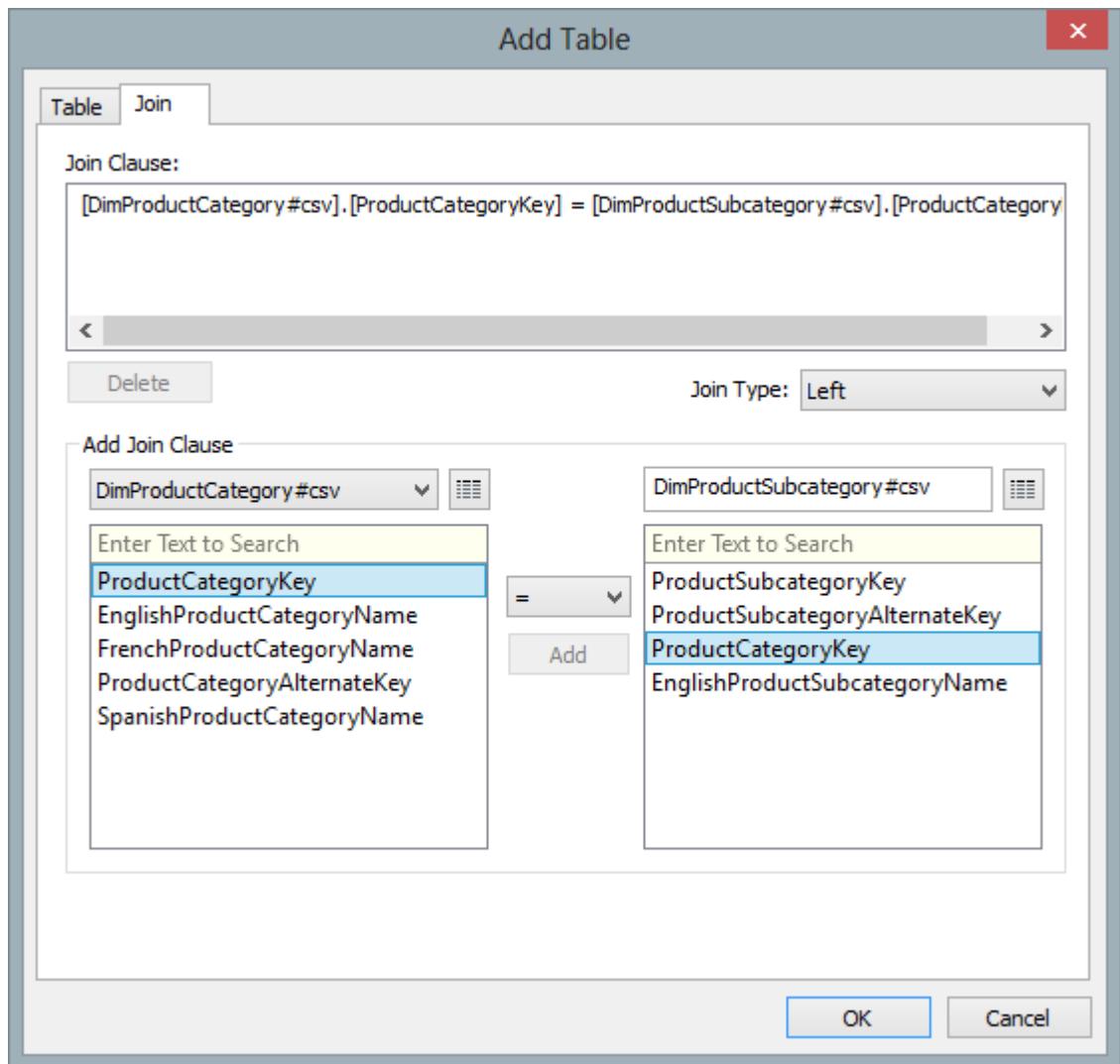
- Filter...
- Show Quick Filter
- Format...
- Include in Tooltip
- Dimension
- Attribute
- Measure (Sum) ▾
- Discrete
- Continuous
- Add Table Calculation...
- Quick Table Calculation ▾
- Remove

	Null	2005	2006	2007	2008
EnglishProd..					
Accessories				£293,709.71	£407,050.25
Bikes		£3,266,373.86	£6,530,343.49	£9,359,103.12	£9,162,324.85
Clothing					£138,247.97
Components					£201,524.64

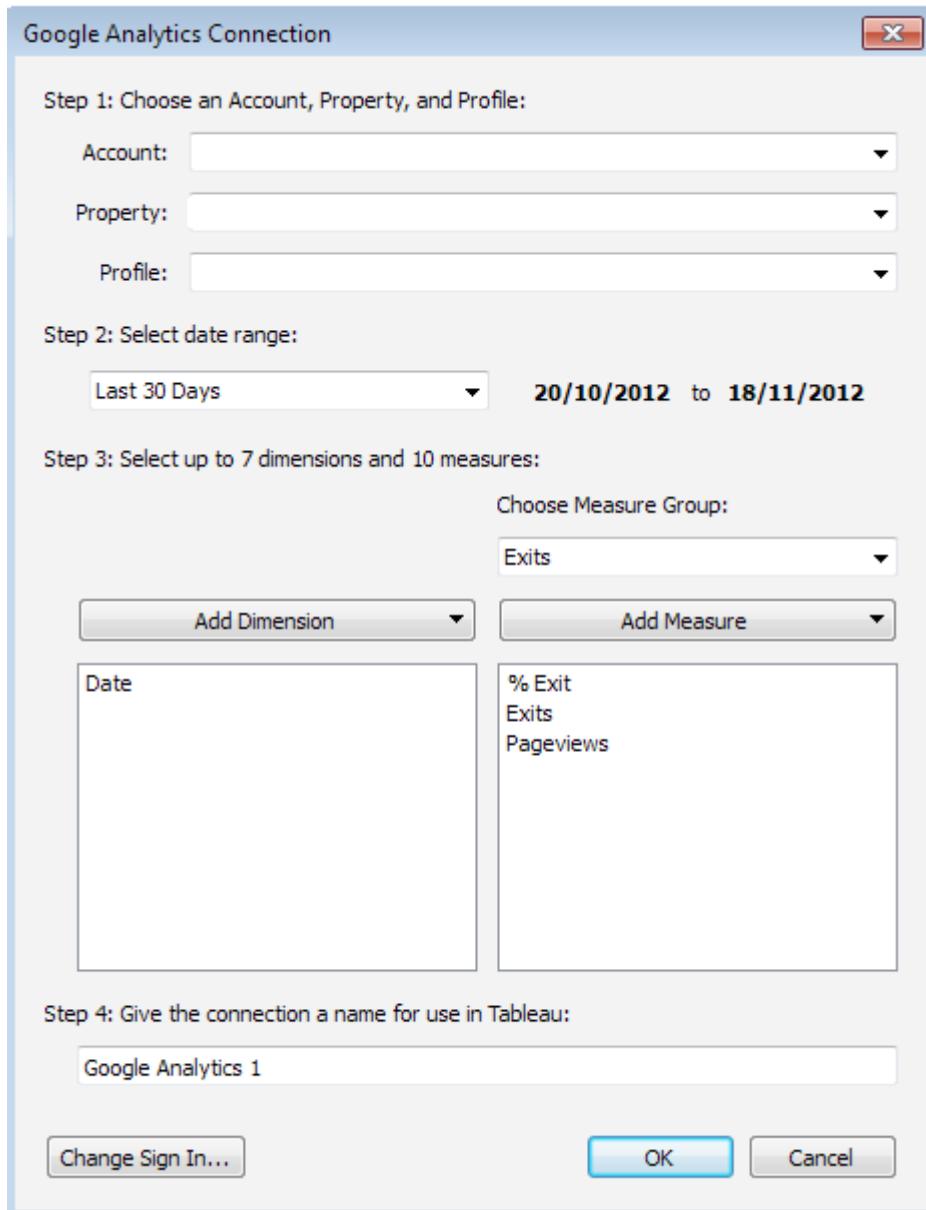








## Chapter 4





# One account. All of Google.

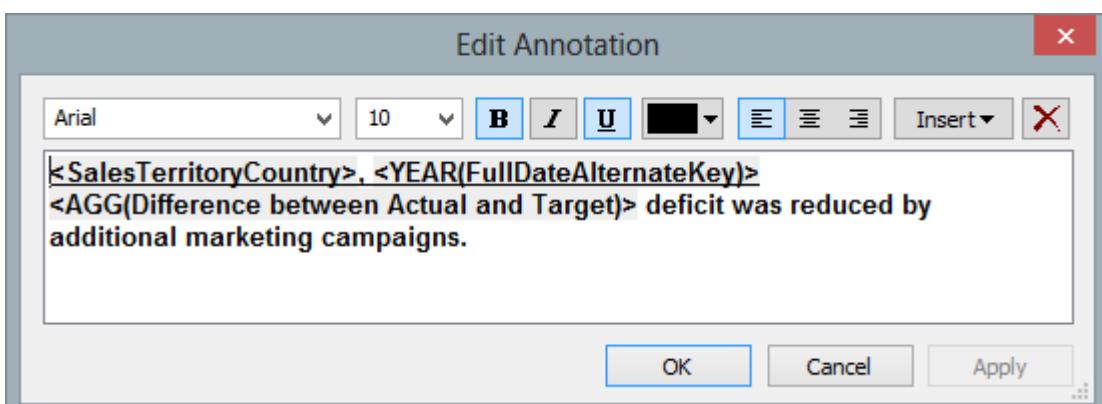
[Sign in to continue to Google Analytics](#)

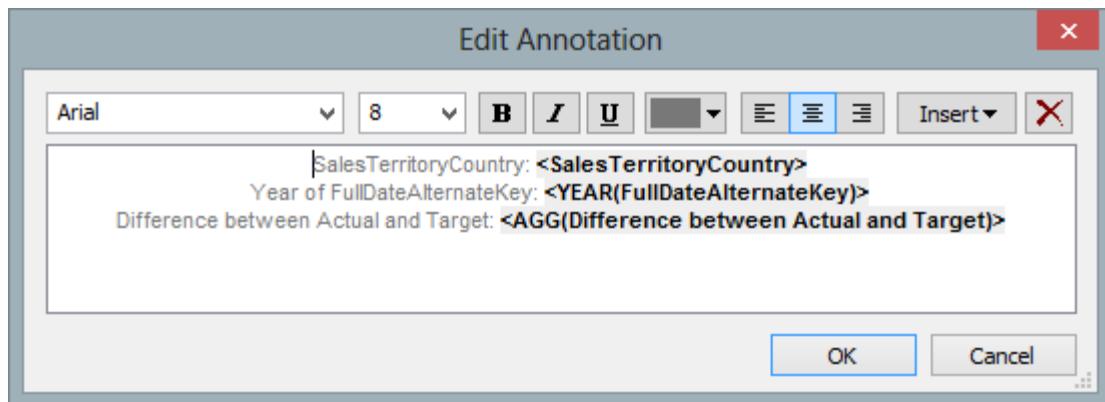
  
  
  
  
 Stay signed in      [Need help?](#)

[Create an account](#)

	2005	2006	2007	2008
Australia			£2M	£2M
Canada	-£2M	-£3M	-£3M	-£1M
France		£0M	-£2M	-£1M
Germany			-£0M	£0M
United Kingdom		-£3M	-£4M	-£1M
United States	-£6M	-£19M	-£20M	-£7M

	2005	2006	2007	2008
Australia			£2M	£2M
Canada	-£2M	-£3M	-£3M	-£1M
France			-£1M	-£0M
Germany			-£0M	-£0M
United Kingdom		-£3M	-£4M	-£1M
United States	-£6M	-£19M	-£20M	-£7M





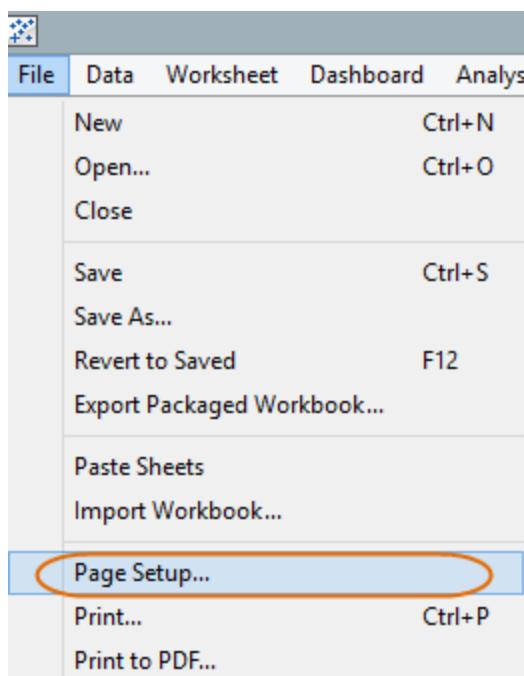
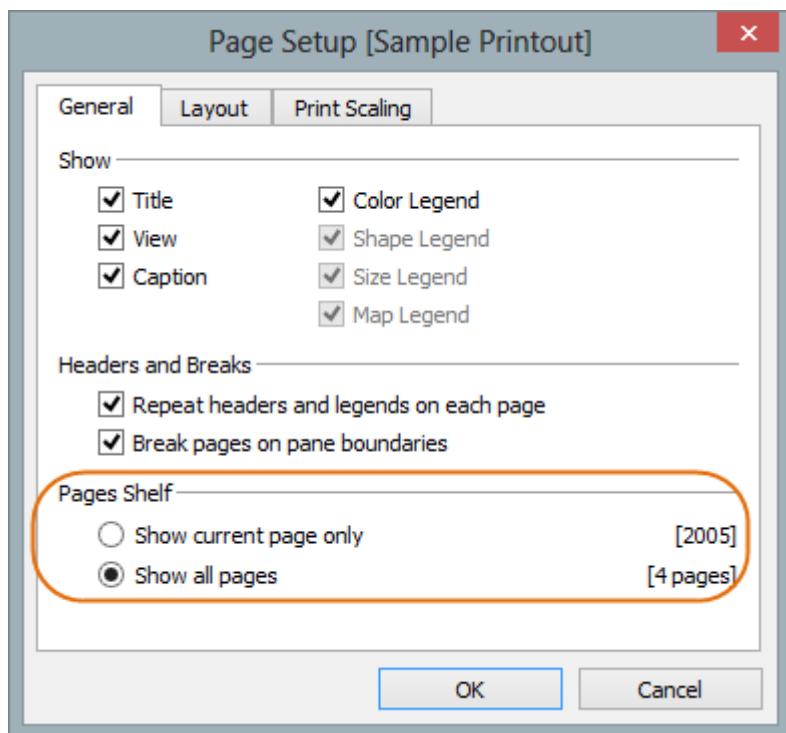
	2005	2006	2007	2008	
Australia			£2M	£2M	
Canada	-£2M	-£3M	-£3M	-£1M	
France		£0M	-£2M		
Germany			£0M		
United Kingdom		-£3M	-£4M		
United States	-£6M	-£19M	-£20M		

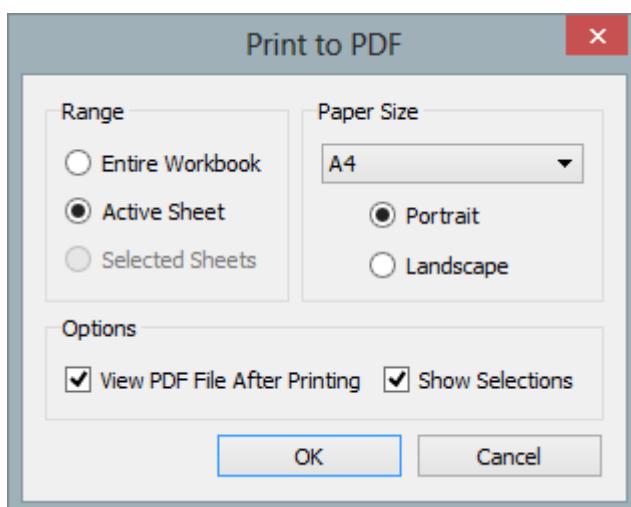
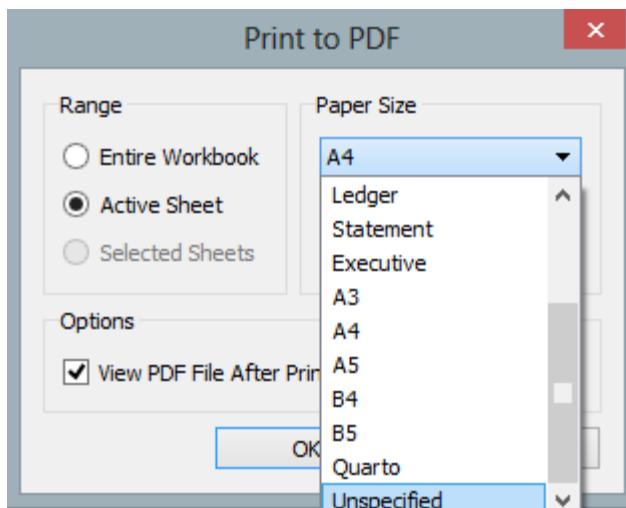
A context menu is open over the cell for Canada in 2007, containing the following options:

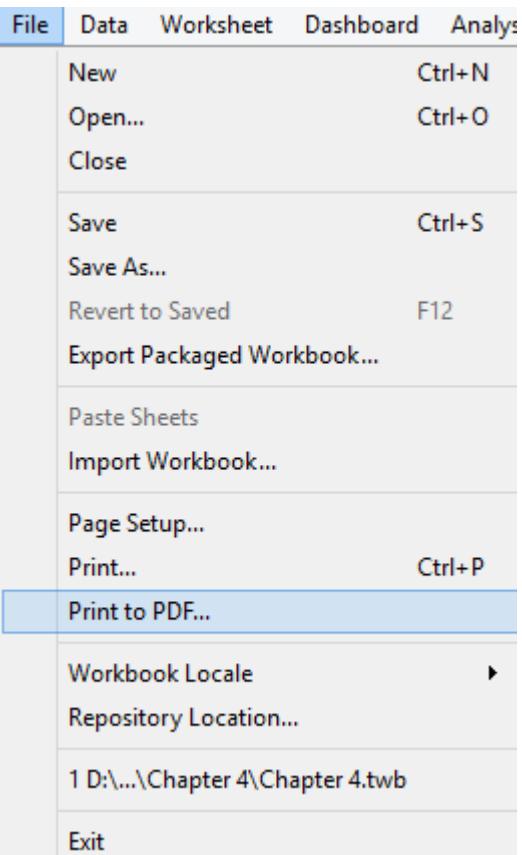
- Select All
- View Data...
- Copy
- Format...
- Clear Manual Sizing
- Edit Locations...
- Mark Label
- Annotate
- Trend Lines
- Forecast
- Drop Lines
- Keep Only
- Exclude
- Group
- Create Set...
- Filter Country from Summary to Year
- Filter Country from Year to Quarter

Annotations in the table cells:

- 2007 Australia: £2M
- 2007 Canada: -£3M
- 2007 France: £0M
- 2007 Germany: £0M
- 2007 United Kingdom: -£4M
- 2007 United States: -£20M







## Combined Tableau and SkyDrive Presentation

Microsoft PowerPoint Web App Guest Reader ?

FILE START SLIDE SHOW COMMENTS

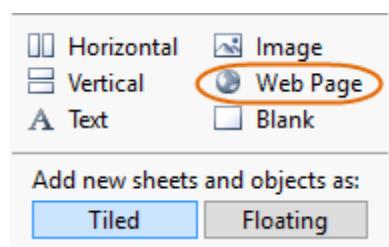
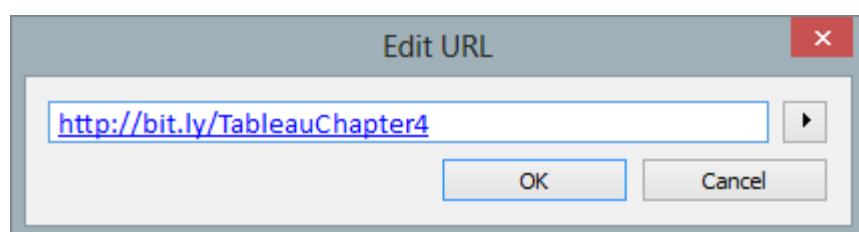
Copper Blue Consulting

# Data Visualisation

Gallery

Microsoft TechEd 2012

◀ SLIDE 1 OF 26 ▶ GIVE FEEDBACK NOTES



	FullDateAlternateKey				
	2005	2006	2007	2008	
Australia			£2M	£2M	
Canada	-£2M	-£3M	-£3M	-£1M	
France		£0M	-£2M	-£1M	
Germany			£0M	£0M	
United Kingdom		-£3M	-£4M	-£1M	
United States	✓	<a href="#">Keep Only</a> <a href="#">Exclude</a> <a href="#">Hide</a> <a href="#">Format...</a> <a href="#">Rotate Label</a> <input checked="" type="checkbox"/> <a href="#">Show Header</a> <a href="#">Edit Alias...</a> <span style="border: 1px solid #ccc; padding: 2px;">Filter Country from Summary to Year</span> <span style="border: 1px solid #ccc; padding: 2px;">Filter Country from Year to Quarter</span>			

Filters

IN/OUT(Action (Sales..))

- [Filter...](#)
- [Show Quick Filter](#)
- [Add to Context](#)
- [Apply to Worksheets ▾](#)
- [Show Members in Set](#)
- [Show In/Out of Set](#)
- [Remove](#)

### Edit Highlight Action

Name:  ▶

Source Sheets:

KPI Summary

Run action on:

▶ Hover

▶ Select

▶ Menu

Target Sheets:

KPI by Year

Target Highlighting

Selected Fields  SalesTerritoryCountry

Dates and Times

All Fields

OK Cancel

**Format Borders**

Fields ▾

Sheet Rows Columns

Default

Cell: ▾

Pane: None

Header:

Total

Pane:

Header:

Grand Total

Pane:

Header:

Row Divider

Pane:

More Colors...

Pages Columns + YEAR(FullDateAlternateKey)

Rows SalesTerritoryCountry

	2005	2006	2007	2008
Australia			£2M	£2M
Canada	-£2M	-£3M	-£3M	-£1M
France		£0M	-£2M	-£1M
Germany			£0M	£0M
United Kingdom		-£3M	-£4M	-£1M
United States	-£6M	-£19M	-£20M	-£7M

Marks

Square ▾

Color Size Label

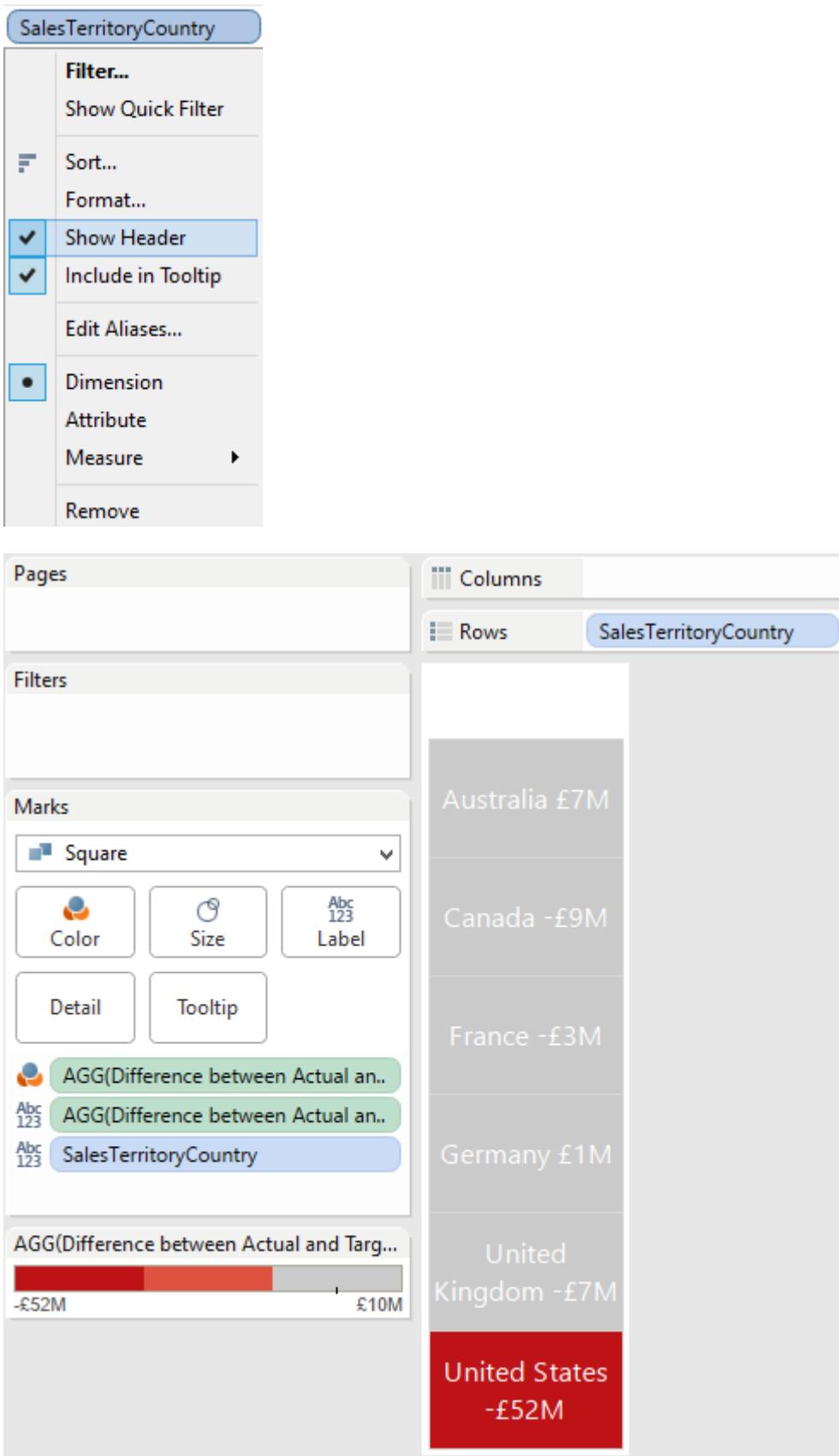
Detail Tooltip

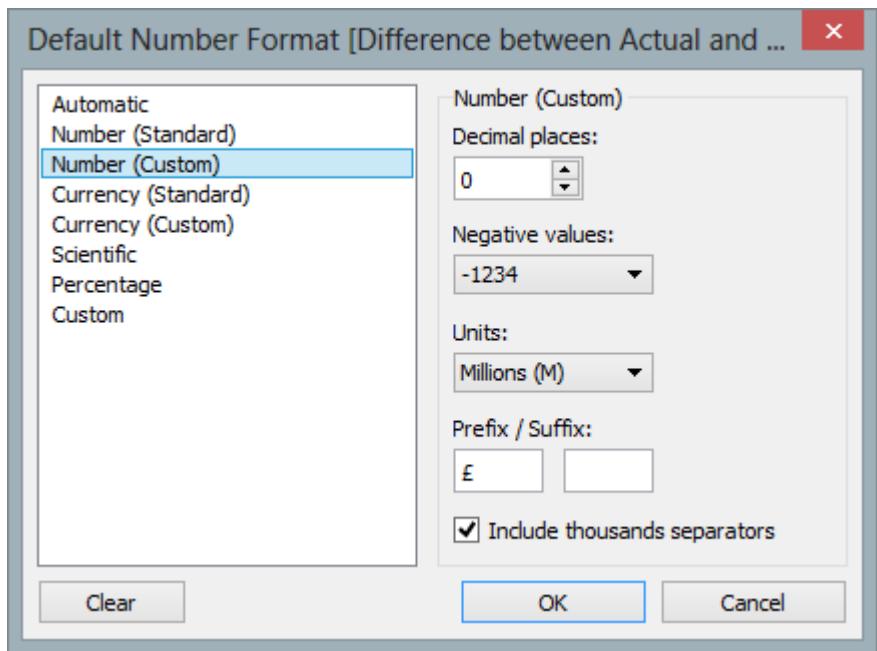
AGG(Difference bet..)

AGG(Difference bet..)

AGG(Difference between ..)

-£20M £2M





Measures

- ▷ DimDate#csv
- ▷ DimProduct#csv
- ▷ DimProductCategory#csv
- ▷ DimProductSubcategor...
- ▷ DimSalesTerritory#csv
- ▷ FactInternetSales#csv
- =# Difference between ...
- =# Sales Amount Sum
- =# Total Targets
- 🌐 Latitude (generated)
- 🌐 Longitude (generated)
- =# Number of Records
- # Measure Values

Sets

- ⌚ Action (SalesTerritoryCountry)

ABC 123 SalesTerritoryCountry

AGG(Difference between Actual and Targ...  
-£52M £10M)

Germany £1M

United Kingdom -£7M

United States  
-£52M

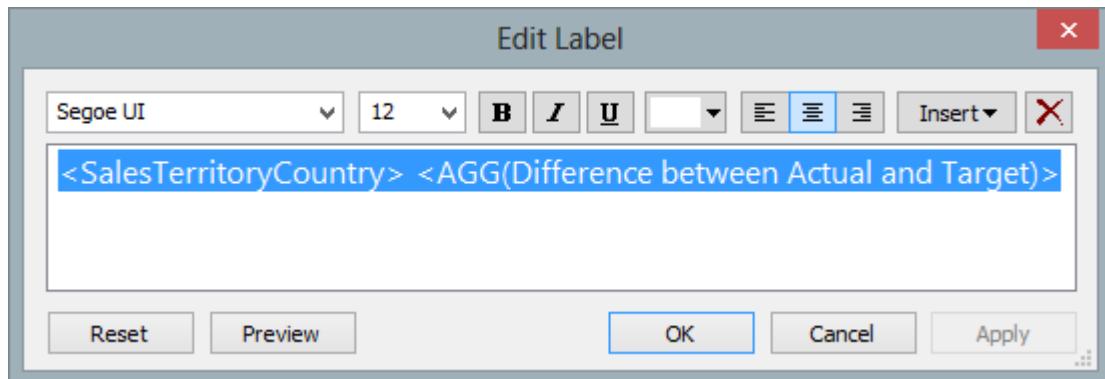
**Add to Sheet**

- Show Quick Filter
- Cut
- Copy
- Paste
- Edit...
- Duplicate
- Rename...
- Hide
- Delete
- Group by
- Create Folder (use Group by Folder)
- Create Calculated Field...
- Convert to Discrete
- Geographic Role
- Default Properties
- Replace References...
- Describe...

Comment...

Color...

**Number Format...**



Marks

Square

Color Size Label

Detail Tooltip

AGG(Difference between Actual and Target)

AGG(Difference between Actual and Target)

SalesTerritoryCountry

AGG(Difference between Actual and Target)

-£52M

Australia £7M

Canada -£9M

Show mark labels

Label Appearance

Text: <SalesTerritoryCountry>

Font:

Alignment: Custom

Marks to Label

All Selected

Min/Max Highlighted

Options

Allow labels to overlap other marks

This screenshot shows the 'Marks' shelf in Tableau. On the left, there are buttons for 'Square', 'Color', 'Size', and 'Label'. Below these are buttons for 'Detail' and 'Tooltip'. A dropdown menu is open, showing 'AGG(Difference between Actual and Target)' and 'SalesTerritoryCountry'. To the right, there's a preview of a chart with two bars: 'Australia £7M' and 'Canada -£9M'. In the center, under 'Label Appearance', the 'Text' field contains the formula '<SalesTerritoryCountry>' with an ellipsis button. There are also 'Font' and 'Alignment' dropdowns. Below this, under 'Marks to Label', the 'All' button is selected. At the bottom, there's an 'Options' section with a checkbox for 'Allow labels to overlap other marks'.

Calculated Field [Difference between Actual and Target]

Name: Difference between Actual and Target

Formula:

```
SUM([SalesAmount]) - SUM([FactSalesTargets#csv (FactSalesTargets.csv)].[SalesAmountQuote])
```

The calculation is valid.

Fields: DimDate#csv+ (Fa... ▾) Parameters: Create Functions: Help

Enter Text to Search

- 🕒 Action (SalesTer... ▾
- # CalendarQuarter
- # CalendarSemes...
- # CalendarYear
- Abc CarrierTracking...
- Abc Class
- Abc Color
- # CurrencyKey
- # CustomerKey
- Abc CustomerPONu...
- # DateKey
- # DayNumberOf...
- # DayNumberOf..
- # DayNumberOfY...
- # DaysToManufac... ▾

Enter Text to Search

- All ▾
- SCRIPT\_BOOL
- SCRIPT\_INT
- SCRIPT\_REAL
- SCRIPT\_STR
- SIGN
- SIN
- SIZE
- SPACE
- SQRT
- SQUARE
- STARTSWITH
- STDEV
- STDEVP
- STR
- SUM

**SUM(expression)**

Returns the sum of all the values in the expression. SUM can be used with numeric fields only. Null values are ignored.

Changes to this calculation might change the following:  
Worksheet "Sheet 3"

OK Cancel Apply

**Data**

- DimDate#csv+ (FactInternetS...)
- FactSalesTargets#csv (FactSal...)

**Dimensions**

- DimDate#csv
- DimProduct#csv
- DimProductCategory#csv
- DimProductSubcategory#...
- DimSalesTerritory#csv
- FactInternetSales#csv

**Measures**

- DimDate#csv
- DimProduct#csv
- DimProductCategory#csv
- DimProductSubcategory#...
- DimSalesTerritory#csv
- FactInternetSales#csv
- Latitude (generated)
- Longitude (generated)
- =# Number of Records
- # Measure Values

**Pages**

**Columns** Measure Names

**Rows** SalesTerritoryCountry

SalesTerritoryCo..	SalesAmount	SalesAmount..
Australia	9,061,001	1,687,000
Canada	1,977,845	11,463,000
France	2,644,018	5,557,000
Germany	2,894,312	2,287,000
United Kingdom	3,391,712	10,514,000
United States	9,389,790	61,820,000

**Marks**

Abc Automatic

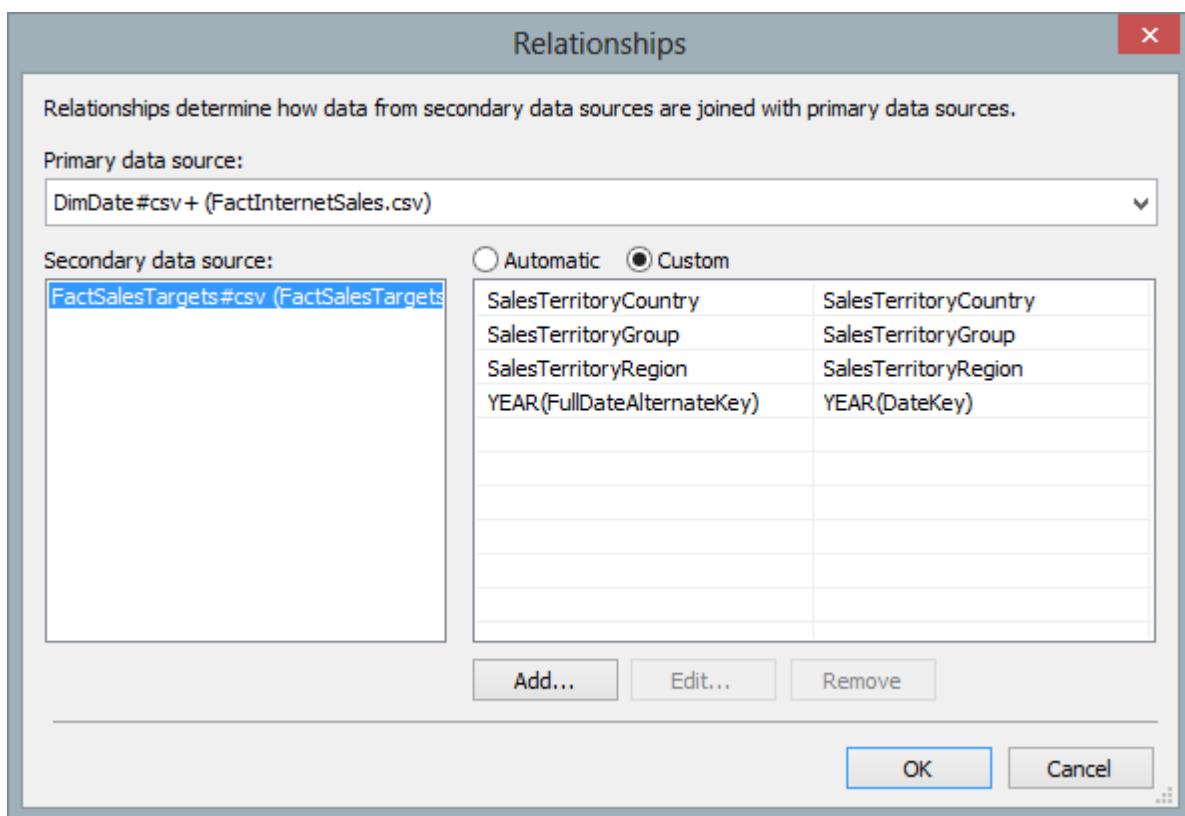
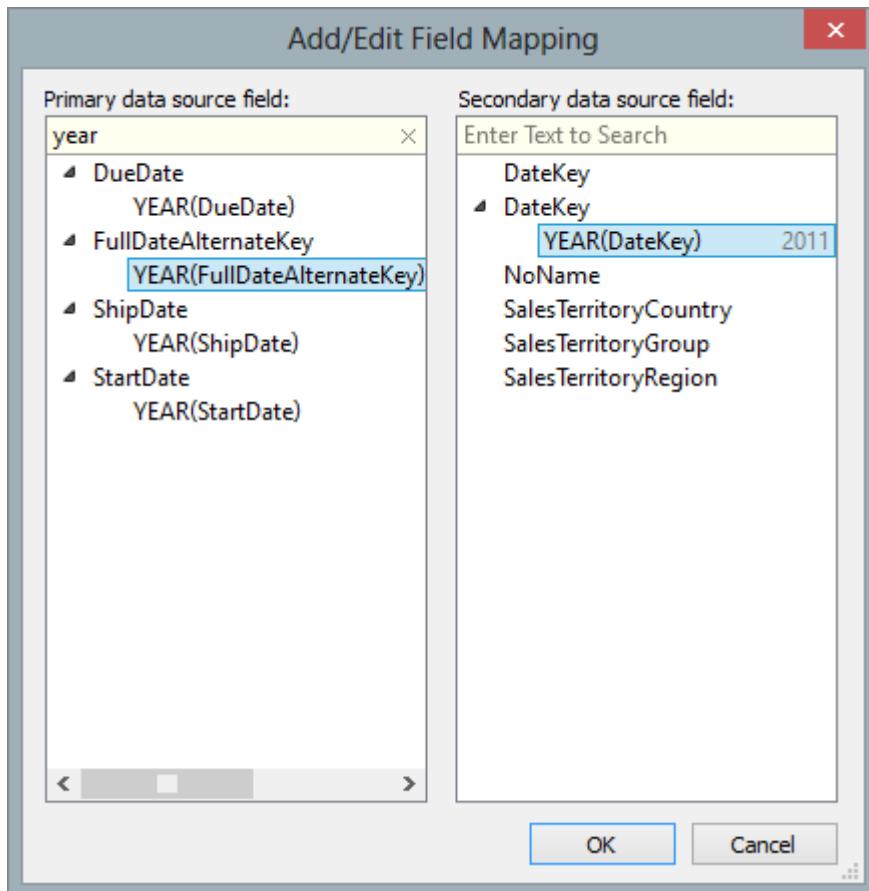
Color Size Text

Detail Tooltip

Abc 123 Measure Values

Measure Values

- SUM(SalesAmount)
- SUM(SalesAmountQ...)



EnglishProductCategoryName

---

Accessories



About Tableau maps: [www.tableausoftware.com/mapdata](http://www.tableausoftware.com/mapdata)

---

Bikes



About Tableau maps: [www.tableausoftware.com/mapdata](http://www.tableausoftware.com/mapdata)

---

Clothing



About Tableau maps: [www.tableausoftware.com/mapdata](http://www.tableausoftware.com/mapdata)

### Edit Filter Action

Name: ProductCategoryFilter

Source Sheets

Overview

Run action on:

Hover  
 Select  
 Menu

Run on single select only

Target Sheets

Product Category Detail

Clearing the selection will:

Leave the filter  
 Show all values  
 Exclude all values

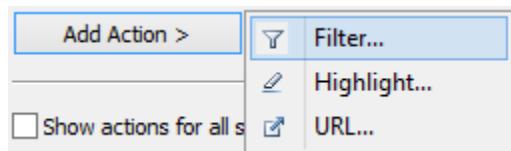
Target Filters

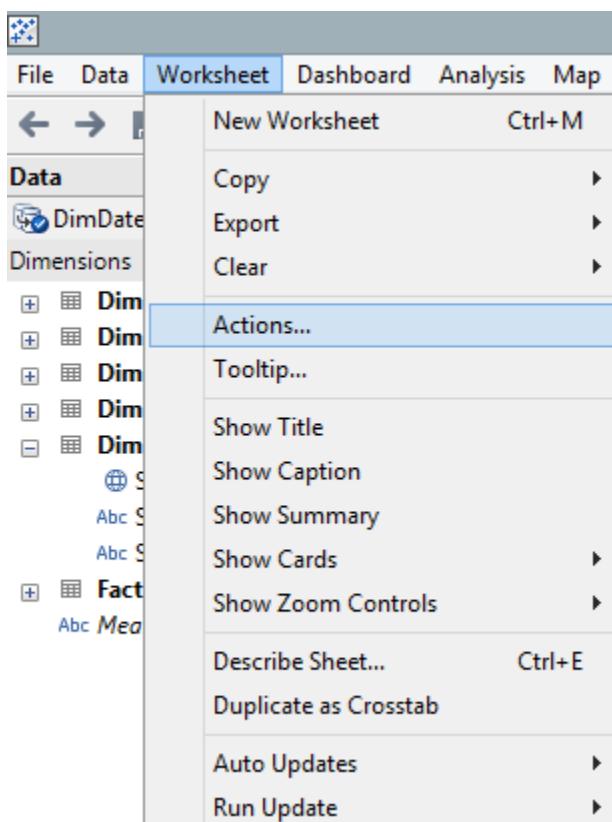
Selected Fields  All Fields

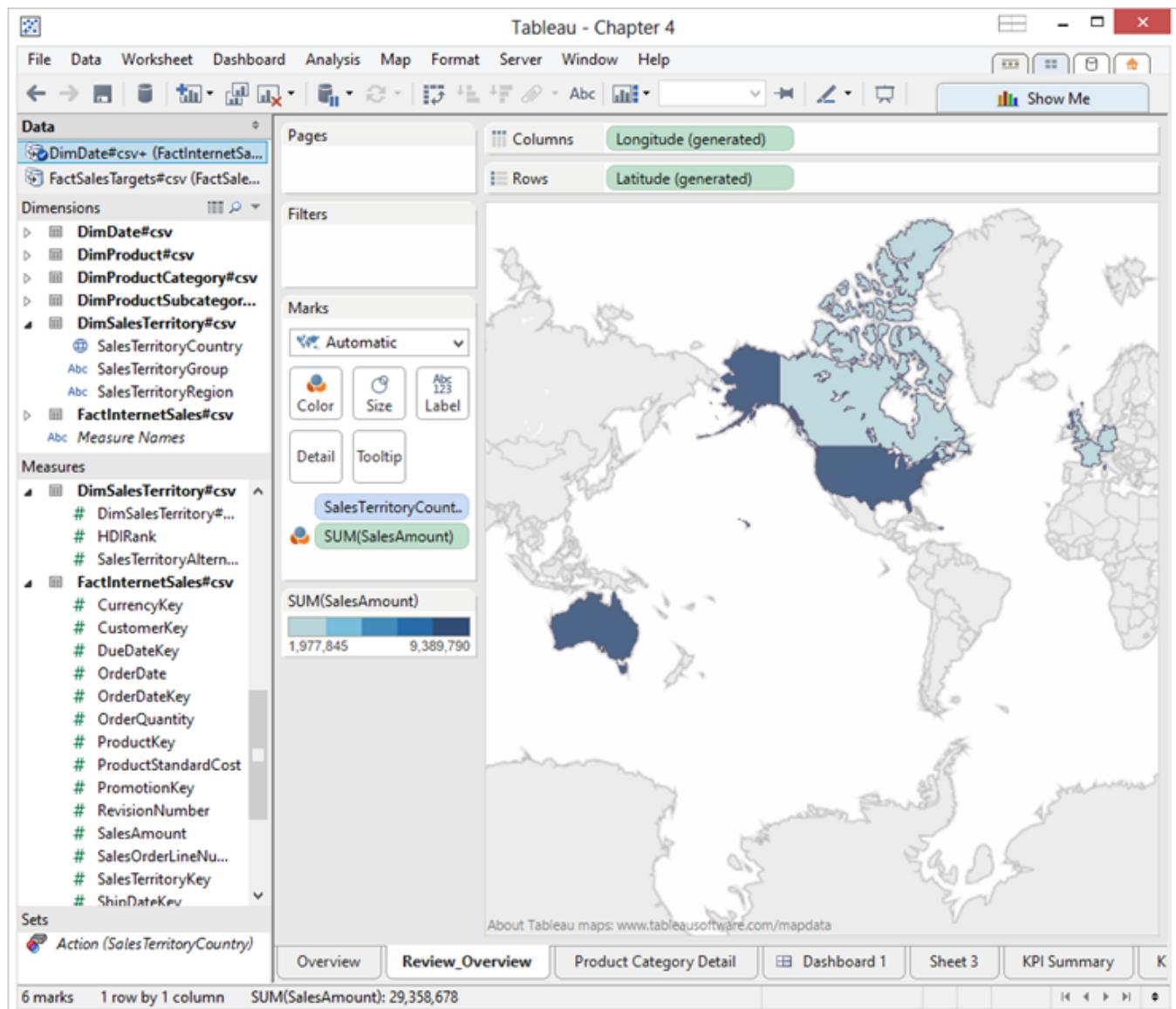
Source Field	Target Field	Target Data Source

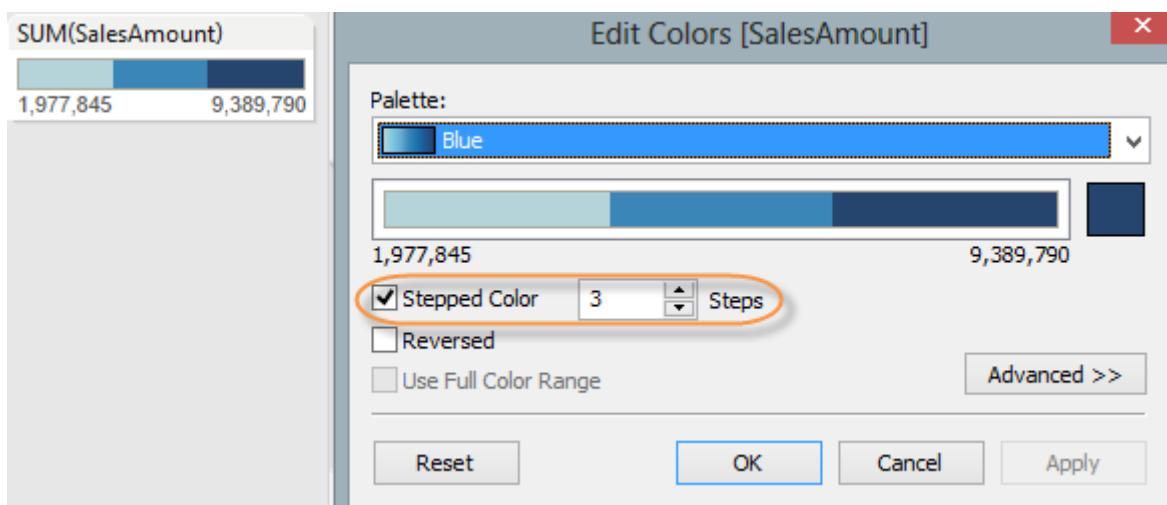
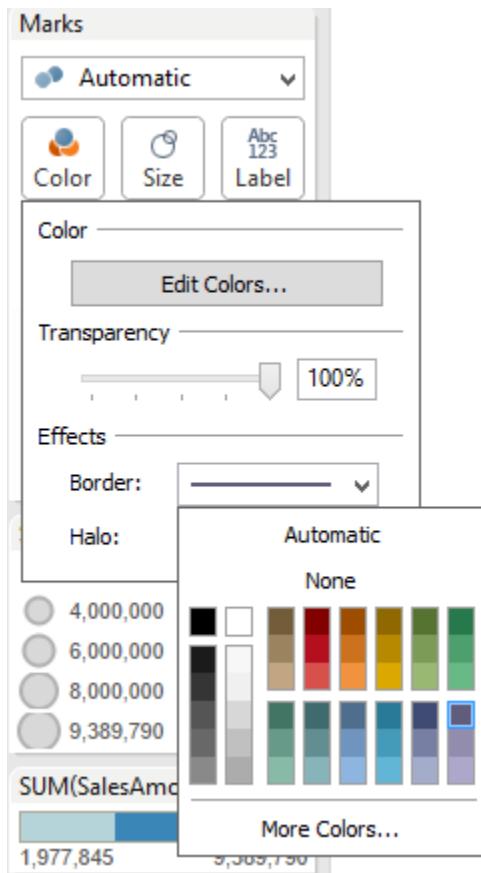
Add Filter... Edit... Remove

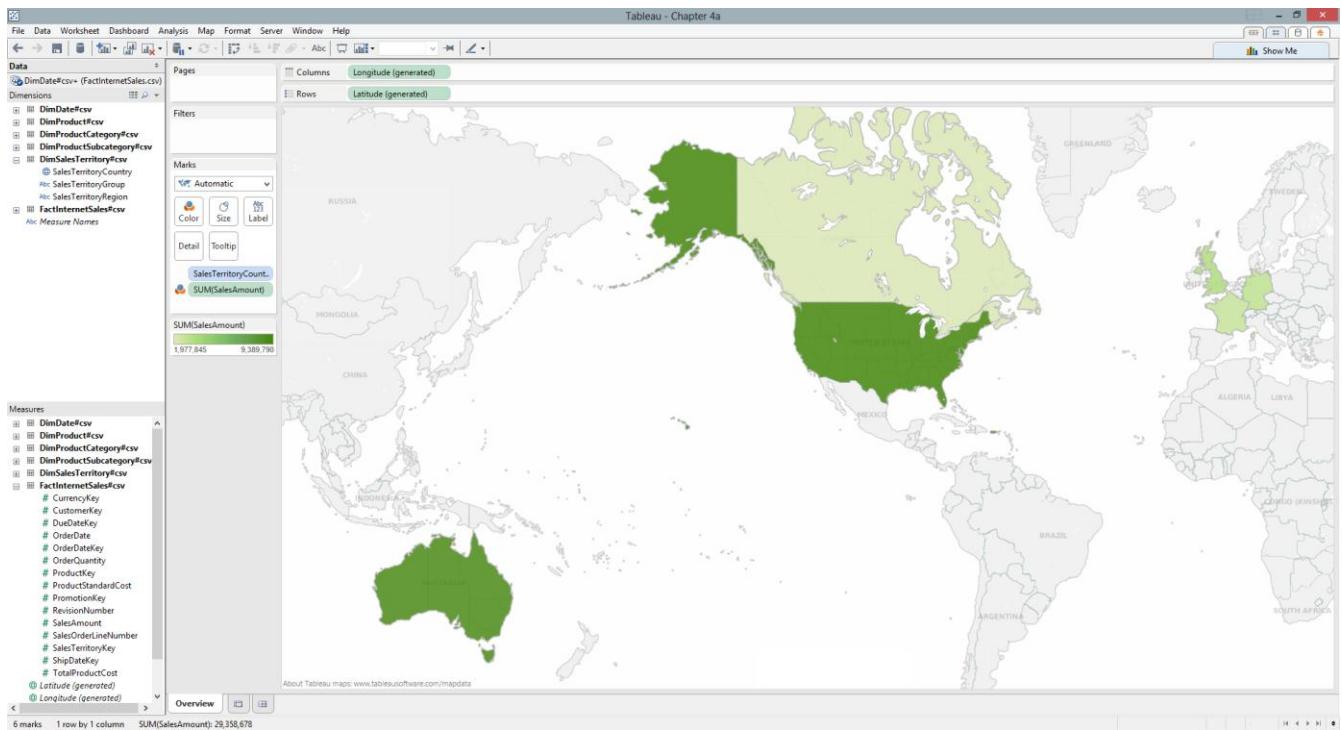
OK Cancel

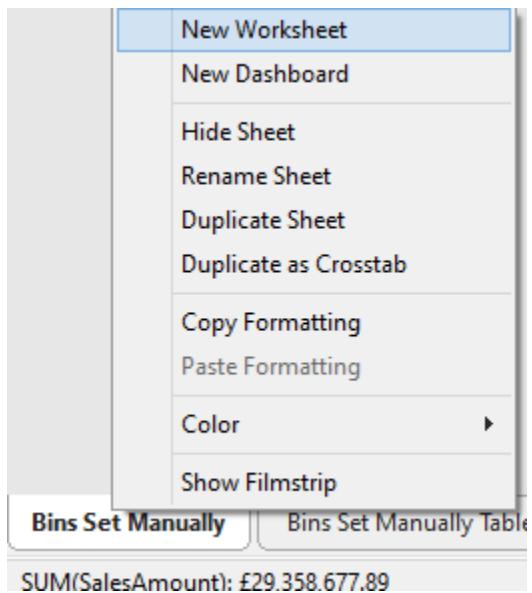












The screenshot shows the Tableau Data Editor interface. The top menu bar includes File, Data, Worksheet, Dashboard, Analysis, Map, Format, Server, Window, and Help. The toolbar below has icons for back, forward, search, and various data operations. The left sidebar lists data sources: DimDate#csv+, FactInternetSales.csv, DimProduct#csv, DimProductCategory#csv, DimProductSubcategory#csv, DimSalesTerritory#csv, and FactInternetSales#csv. Below this is a section for Dimensions and Measures. The main workspace on the right contains a 'Pages' panel with 'Columns' and 'Rows' sections, a 'Filters' section, and a 'Marks' panel with options for Color, Size, Text, Detail, and Tooltip. A specific mark is selected, labeled 'SUM(Number of Re..)'. The bottom section shows a 'Measures' list with the same items as the dimensions list, plus generated measures like Latitude and Longitude, and calculated measures like Number of Records and Measure Values.

**Data**

- DimDate#csv+ (FactInternetSales.csv)
- Dimensions
- DimDate#csv
- DimProduct#csv
- DimProductCategory#csv
- DimProductSubcategory#csv
- DimSalesTerritory#csv
- FactInternetSales#csv

Abc Measure Names

**Measures**

- DimDate#csv
- DimProduct#csv
- DimProductCategory#csv
- DimProductSubcategory#csv
- DimSalesTerritory#csv
- FactInternetSales#csv
- Latitude (generated)
- Longitude (generated)
- =# Number of Records
- # Measure Values

Pages

Columns

Rows

Filters

Marks

Abc Automatic

Color

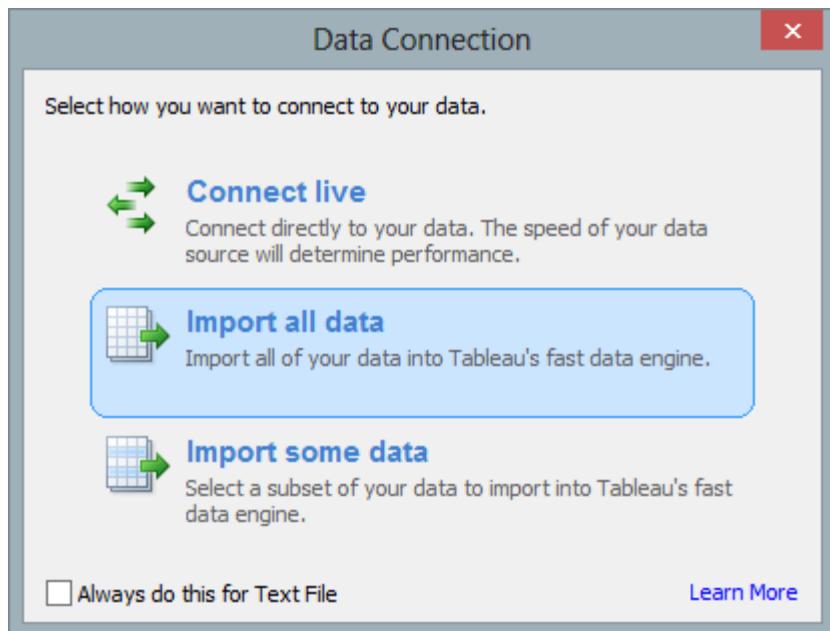
Size

Text

Detail

Tooltip

Abc 123 SUM(Number of Re..)



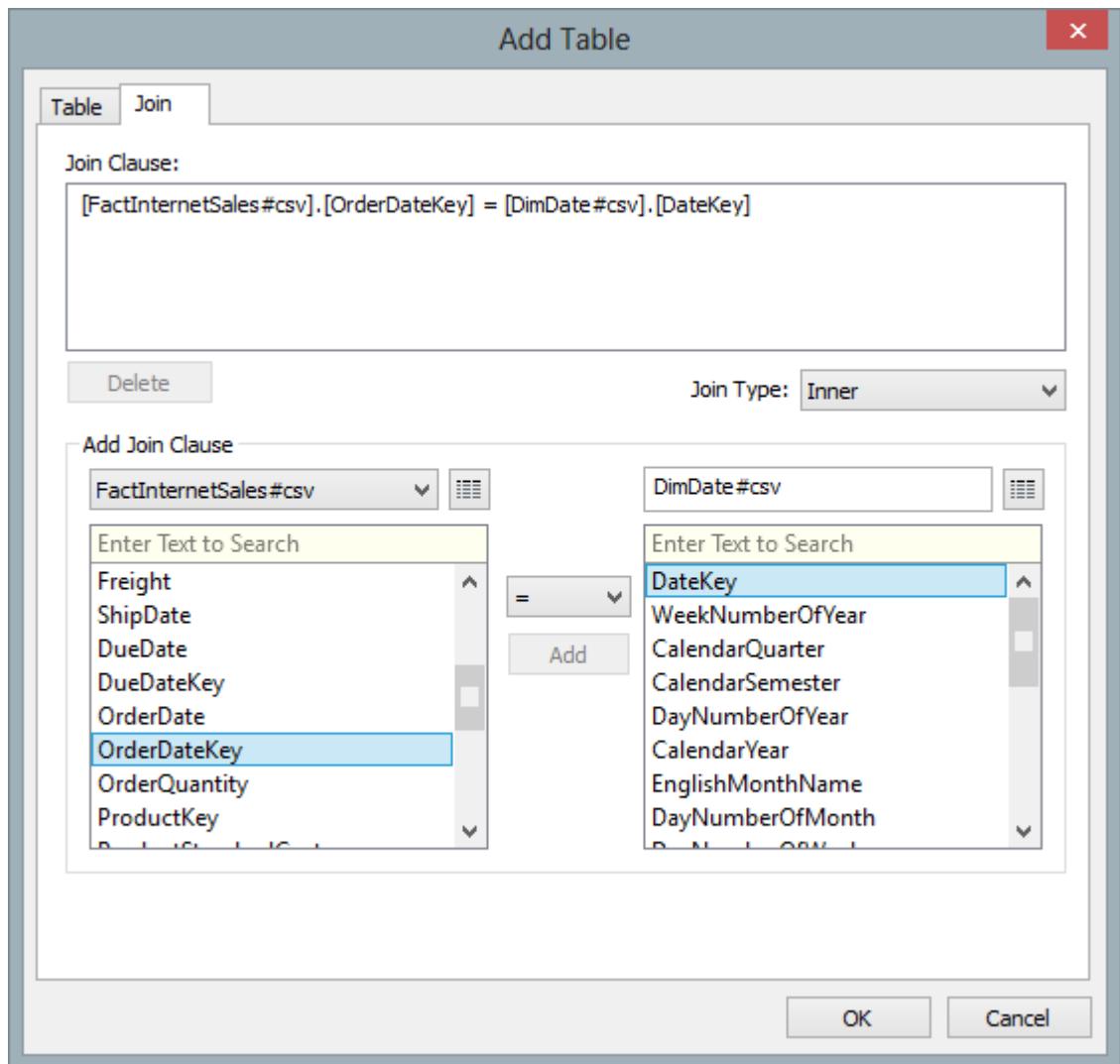
**Tables**

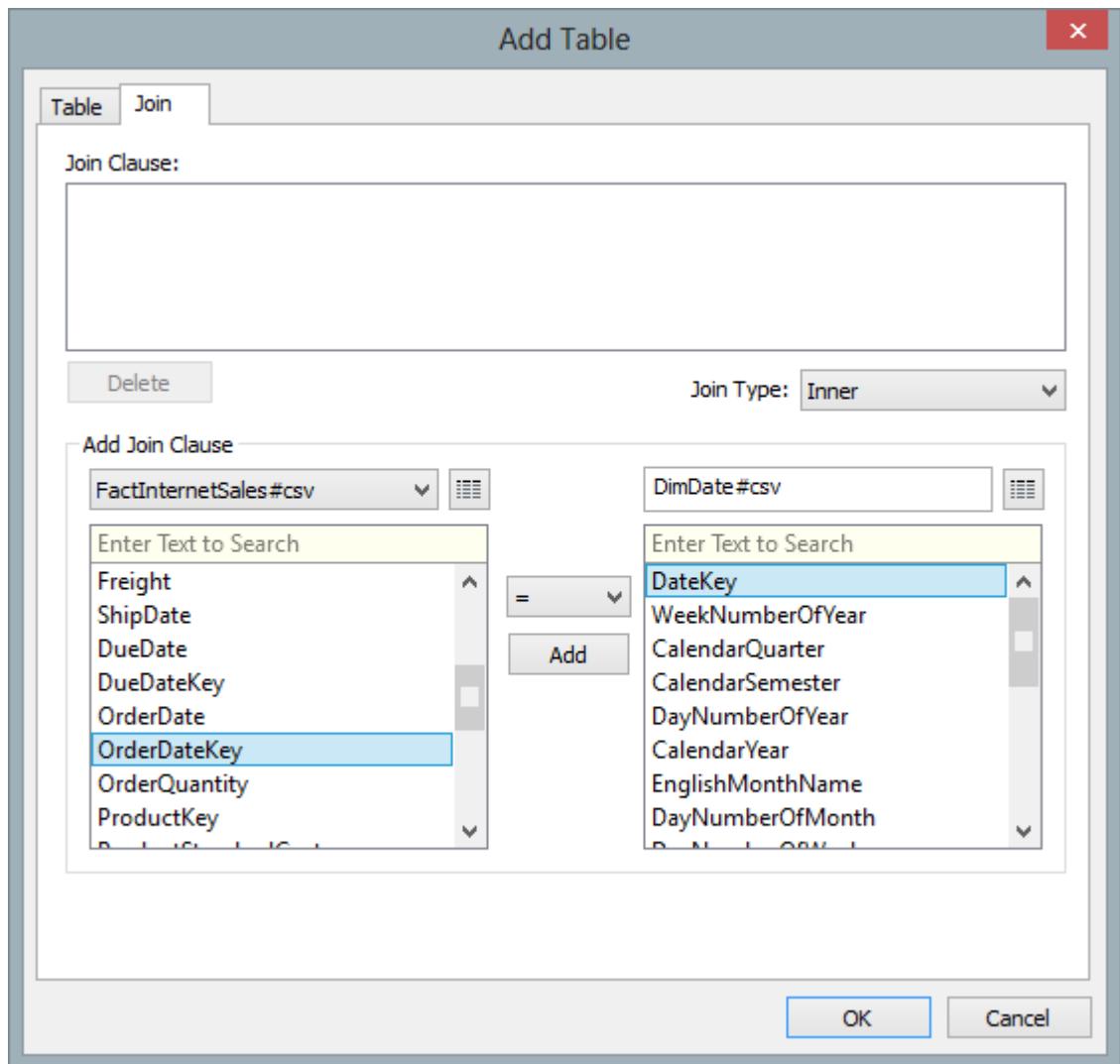
Add new tables to the connection or edit the existing tables shown in the list below.

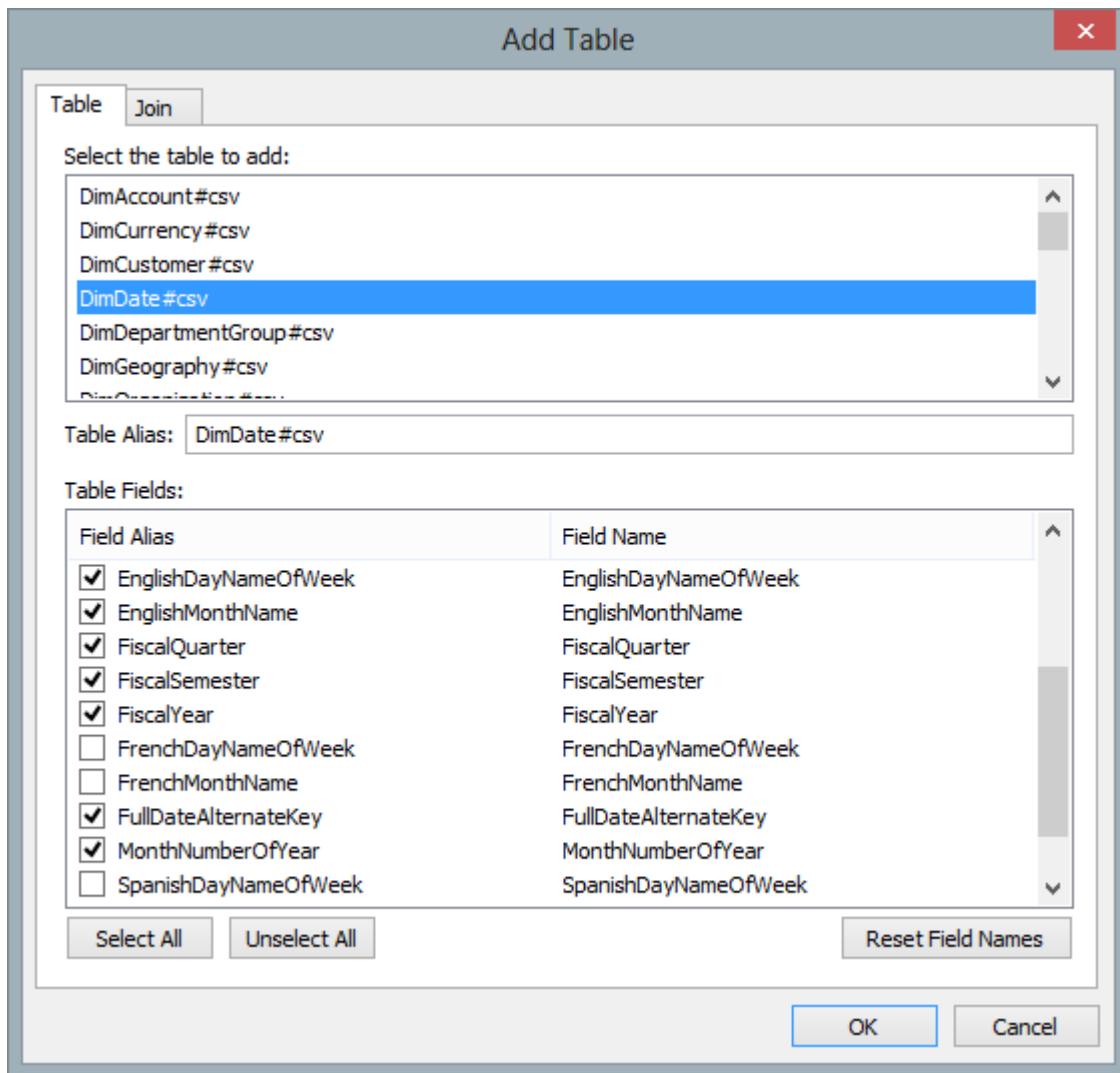
Table Alias	Foreign Key
FactInternetSales#csv	
DimDate#csv	[FactInternetSales#csv].[OrderDateKey]
DimProduct#csv	[FactInternetSales#csv].[ProductKey]
DimProductCategory#csv	[DimProductSubcategory#csv].[ProductCategoryKey]
DimProductSubcategory #csv	[DimProduct#csv].[ProductSubcategoryKey]
DimSalesTerritory#csv	[FactInternetSales#csv].[SalesTerritoryKey]

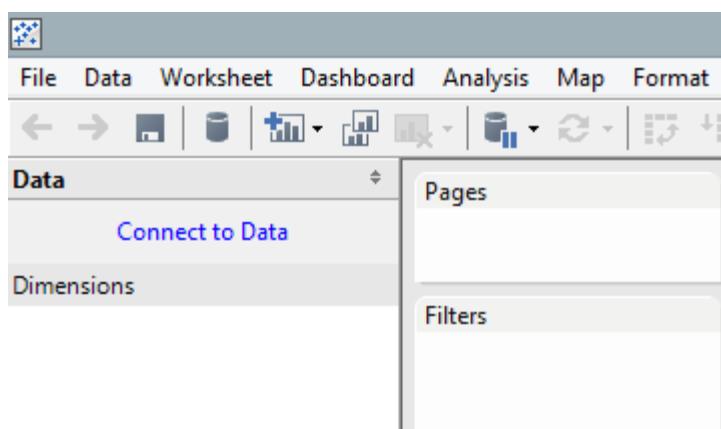
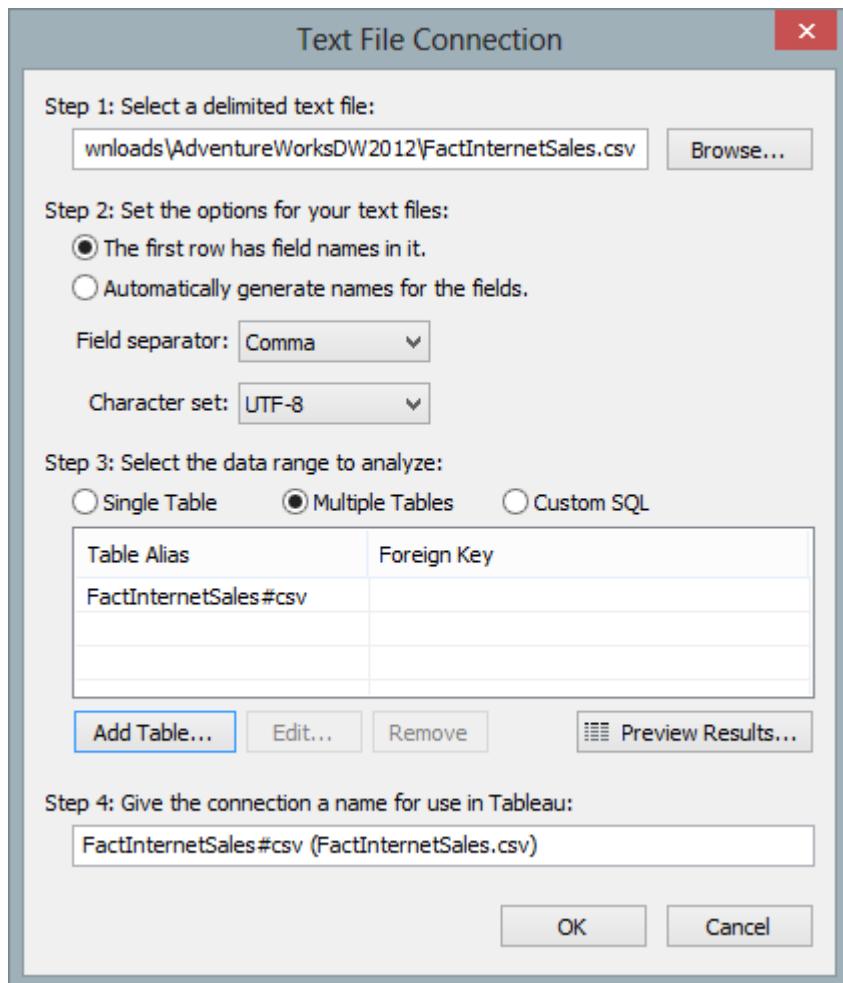
[Add Table...](#) [Edit...](#) [Remove](#) [Preview Results...](#)

[OK](#) [Cancel](#)

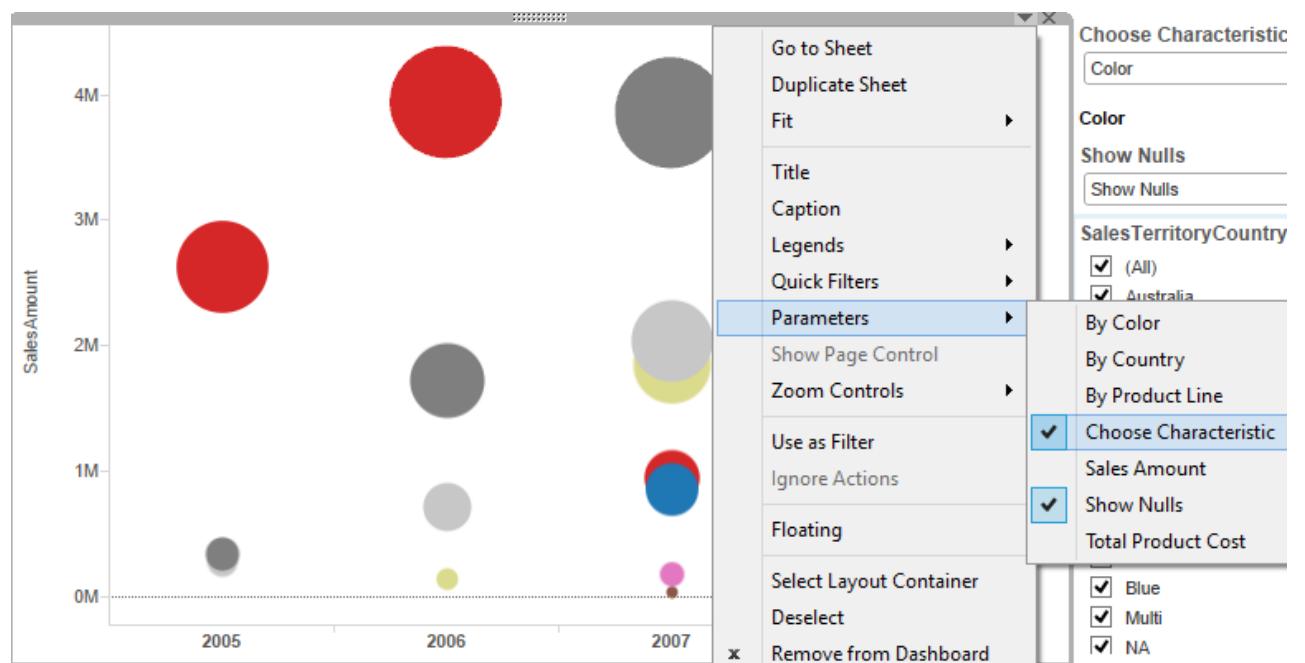
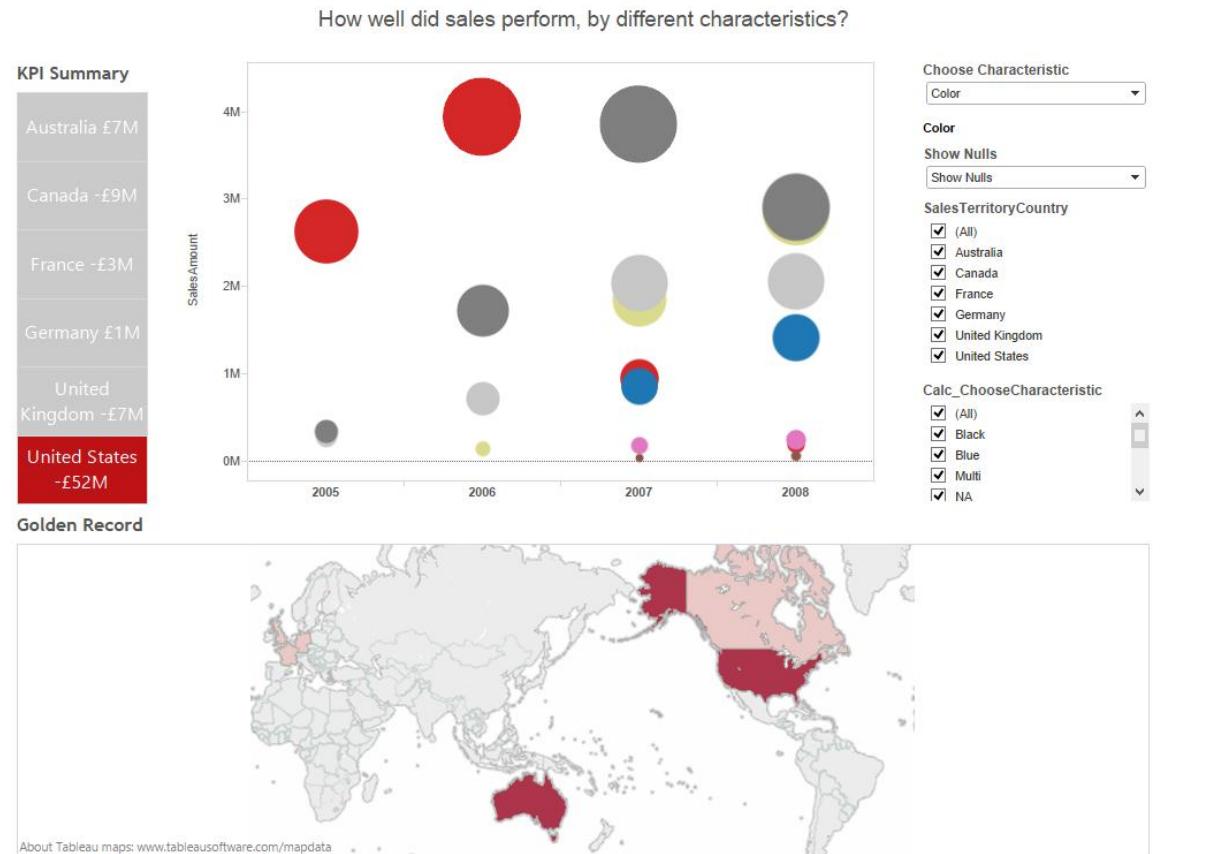


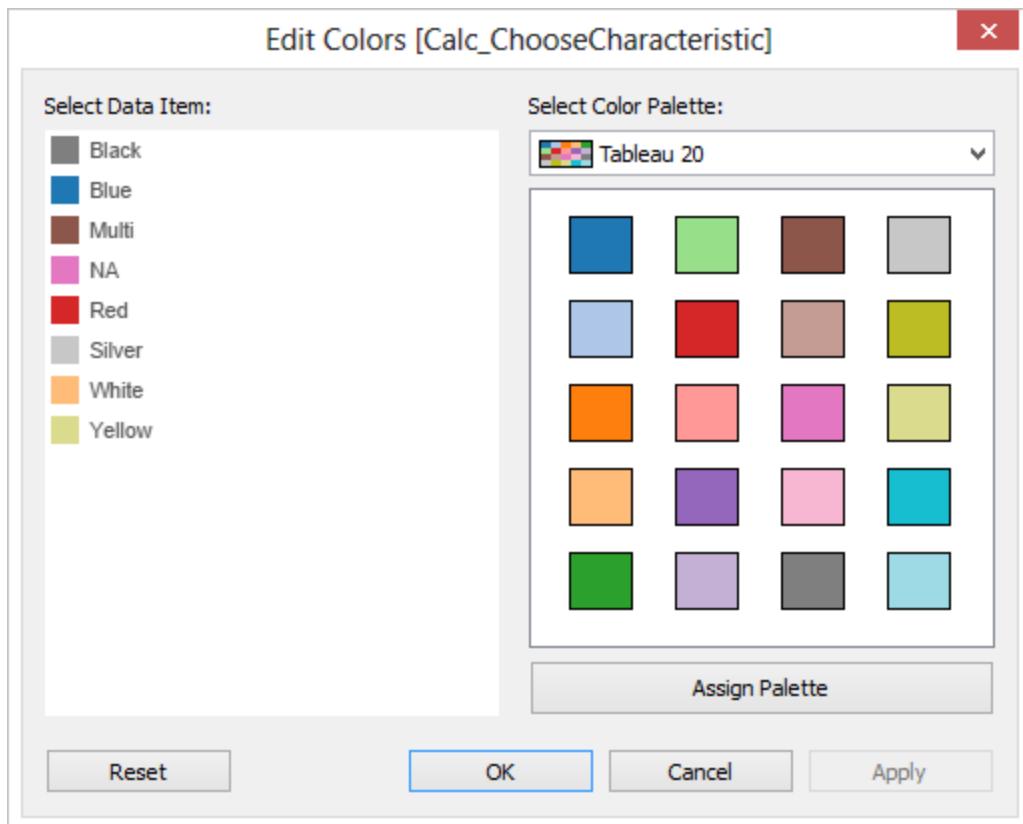






# Chapter 5





Calculated Field [Calc\_ChOOSECharacteristic]

Name: Calc\_ChOOSECharacteristic

Formula:

```
CASE [Choose Characteristic]
WHEN "All" THEN "All"
WHEN "Color" THEN [Color]
WHEN "Country" THEN [SalesTerritoryCountry]
WHEN "Product Line" THEN [ProductLine]
END
```

The calculation is valid.

Fields: DimDate#csv+ (Fa...   Parameters: Create Functions: Help

Action (SalesTer...   All   All

Enter Text to Search   Enter Text to Search   Enter Text to Search

Action (SalesTer...   By Color   ABS  
By Country   ACOS  
By Product Line   ASCII  
Choose Characteri...   ASIN  
Sales Amount   ATAN  
Show Nulls   ATAN2  
Total Product Cost   ATTR  
Data type: Set

Describe...

## Edit Parameter [Choose Characteristic]

X

Name: Choose Characteristic

[Comment >>](#)

### Properties

Data Type: String

Current value: Color

Display format:

Allowable values:  All  List  Range

### List of values

Value	Display As
All	All
Color	Color
Country	Country
Product Line	Product Line
Add	

[Add from Parameter ▶](#)

[Add from Field ▶](#)

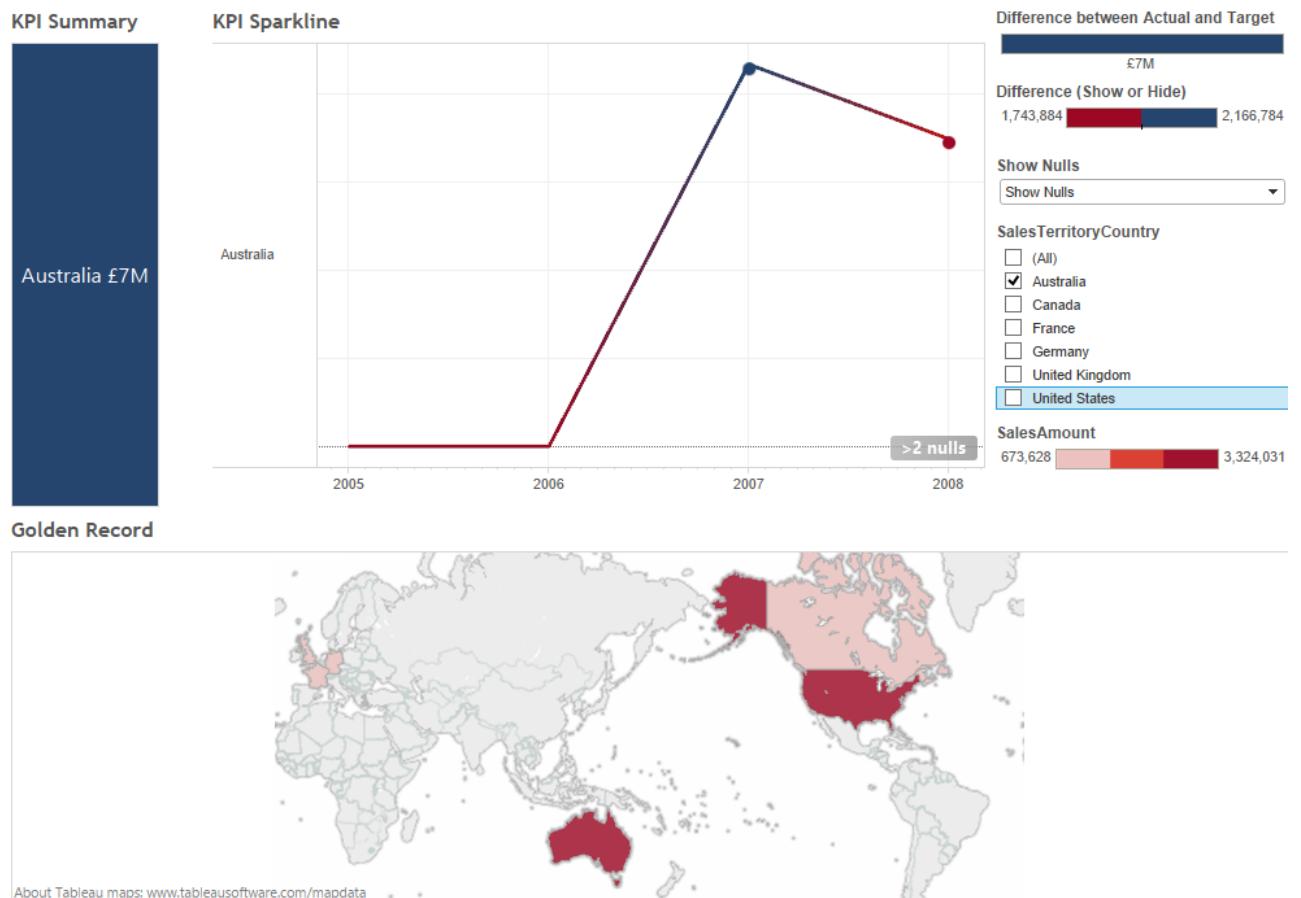
[Paste from Clipboard](#)

[Clear All](#)

[OK](#)

[Cancel](#)

How well did the countries perform?



## Filter [Year of FullDateAlternateKey]

X

General Condition Top

Select from List  Custom Value List  Use All

Enter Text to Search

- Null
- 2005
- 2006
- 2007
- 2008

All

None

Exclude

Summary

Field: [Year of FullDateAlternateKey]

Selection: Selected 1 of 5 values

Wildcard: All

Condition: None

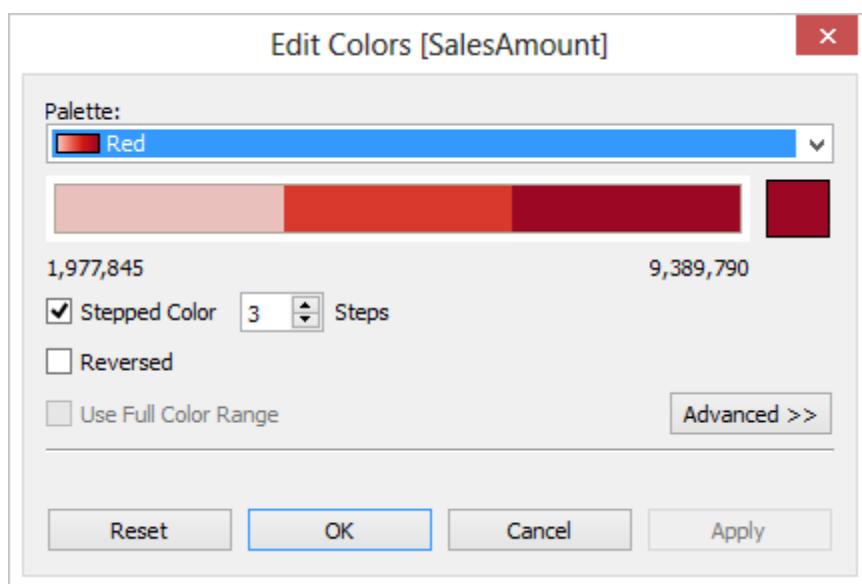
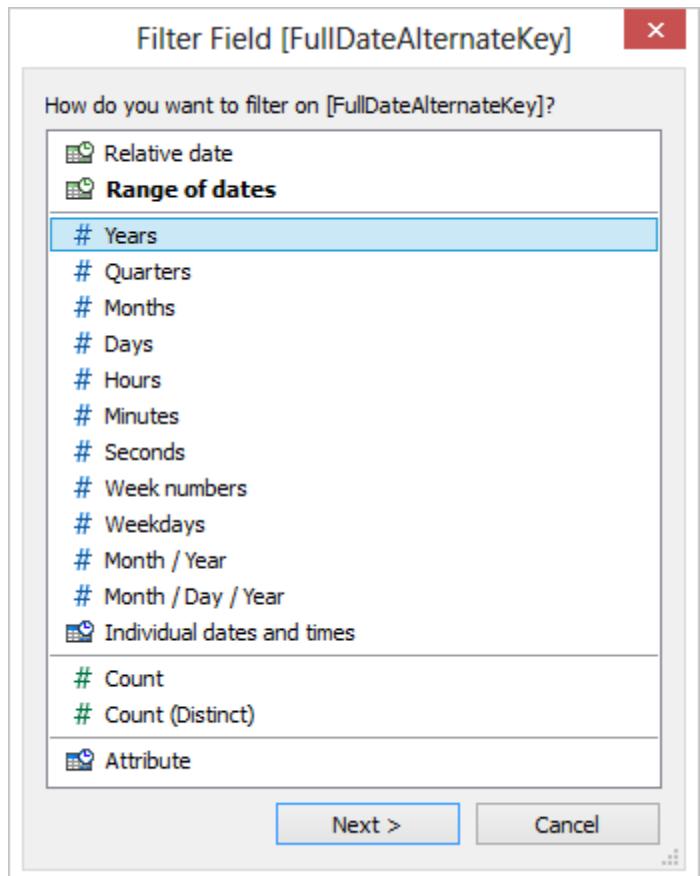
Limit: None

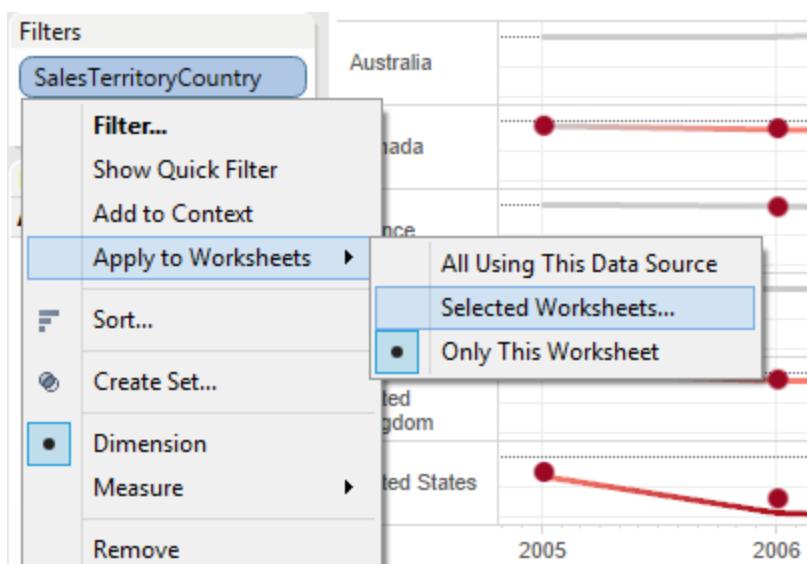
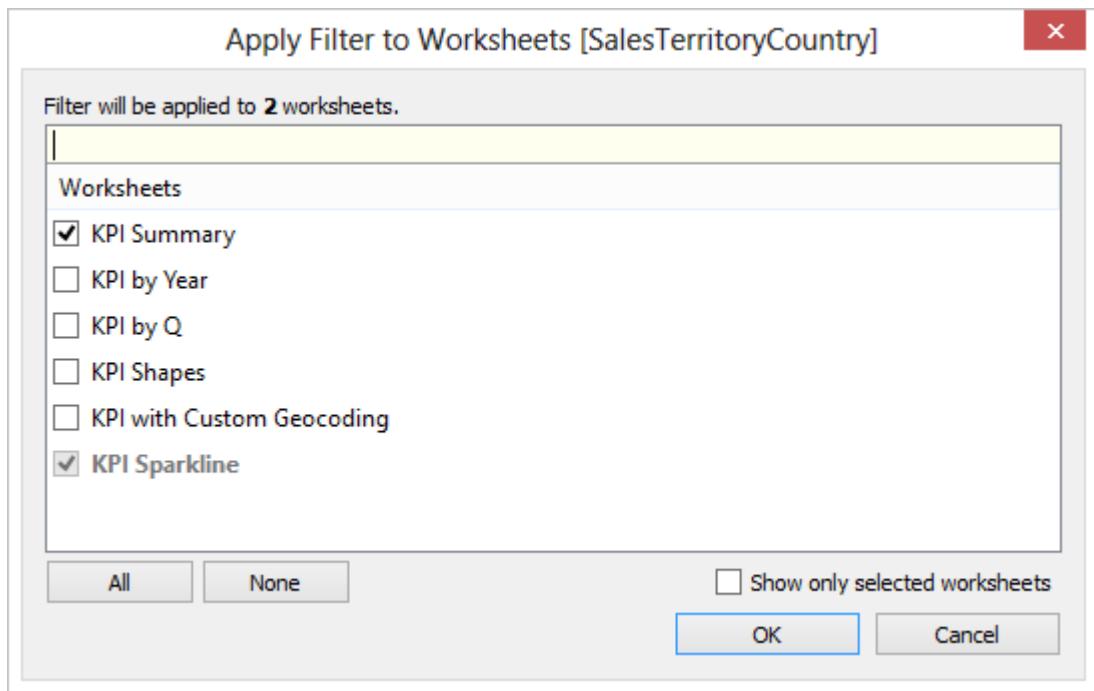
Reset

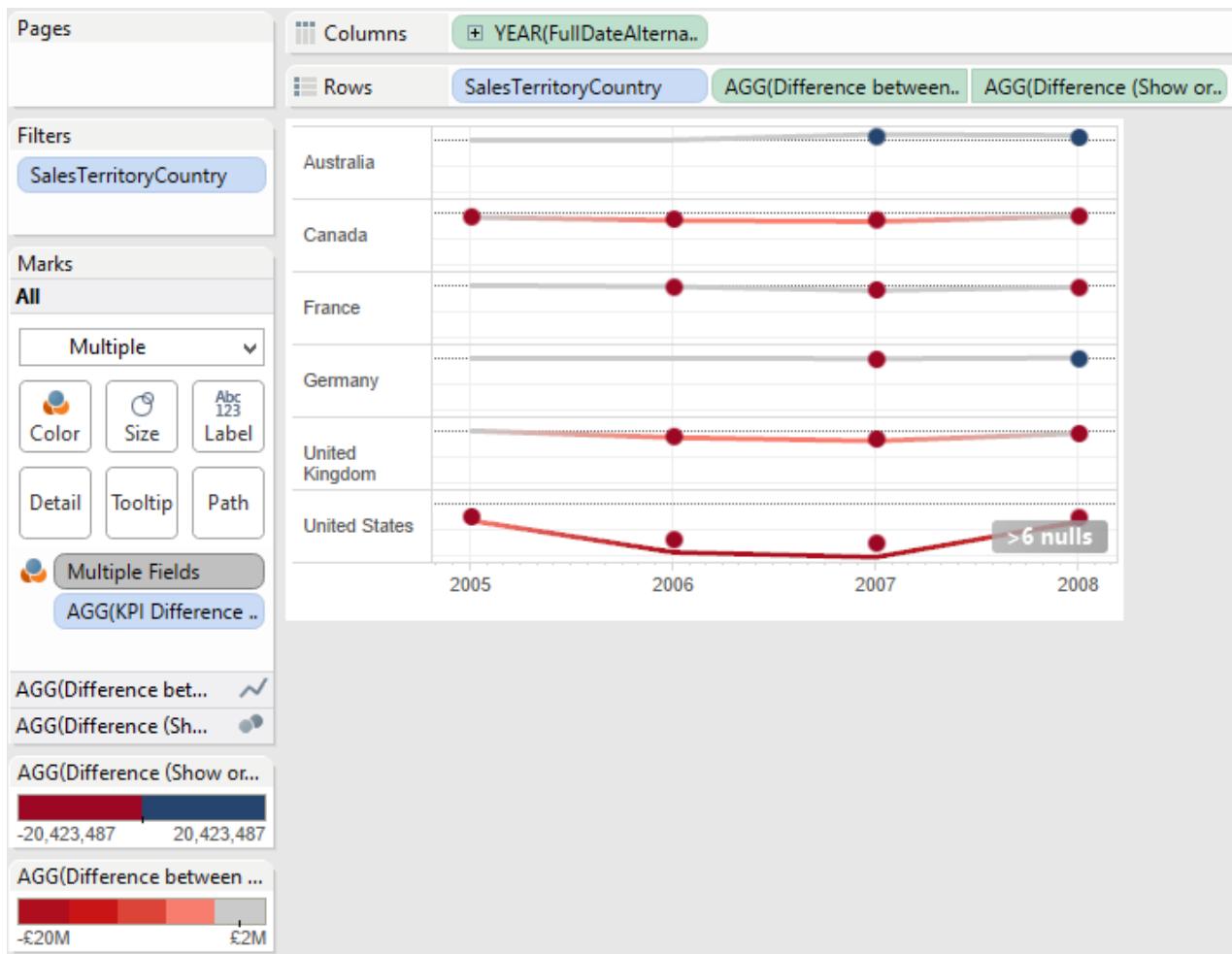
OK

Cancel

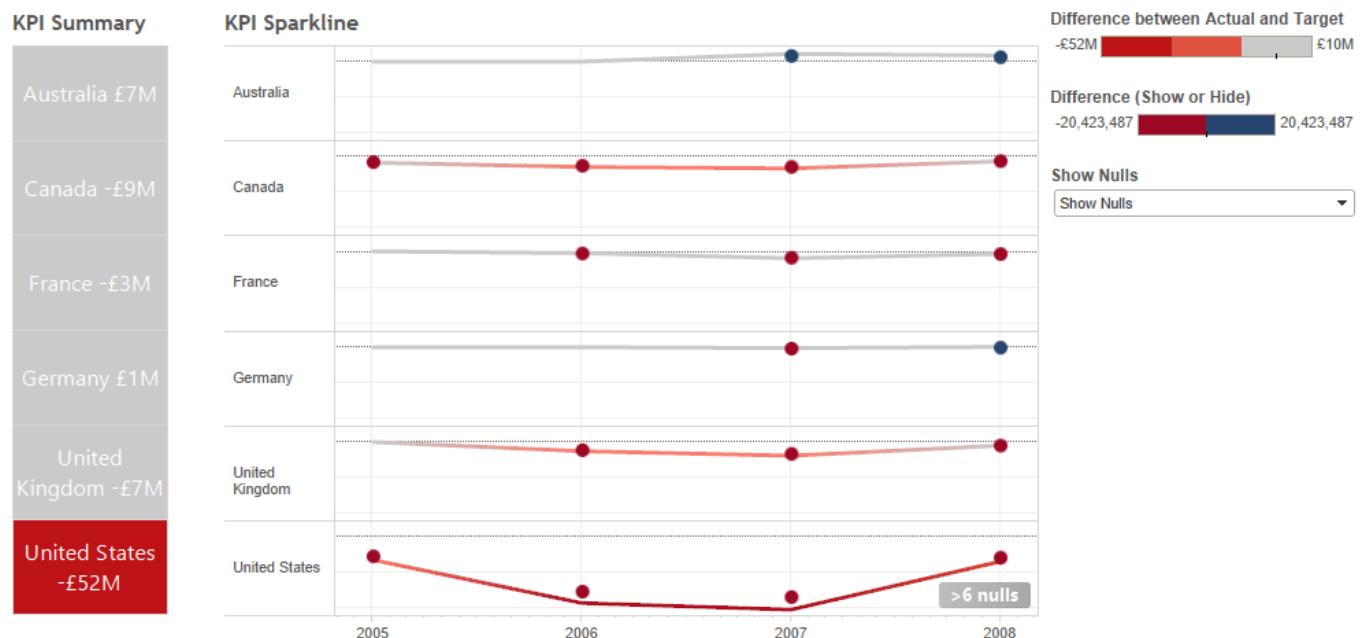
Apply







How well did the countries perform?



**Data**

- DimDate#csv+ (FactInternetSales.csv)
- FactSalesTargets#csv (FactSalesTargets.c...)
- GoldCountryCodes#csv (GoldCountryC...)

**Dimensions**

- Abc capital
- Abc continent
- 🌐 countryname
- Abc currency
- Abc fips
- Abc ioc
- Abc iso3
- Abc nato2
- Abc nato3
- Abc **Measure Names**

**Pages**

**Filters**

- Measure Names
- countryname

**Marks**

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip

**Measure Values**

- SUM(SalesAmount)
- SUM(population)

**Columns**

countryname	SalesAmount	population
United States	9,389,790	310,232,863
Australia	9,061,001	21,515,754
United Kingdom	3,391,712	62,348,447
Germany	2,894,312	81,802,257
France	2,644,018	64,768,389
Canada	1,977,845	33,679,000

**Measure Names**

- countryname

The screenshot shows the 'Relationships' dialog box. At the top, it says 'Relationships' and has a close button. Below that, a descriptive text reads: 'Relationships determine how data from secondary data sources are joined with primary data sources.' The 'Primary data source:' dropdown is set to 'GoldCountryCodes#csv (GoldCountryCodes.csv)'. The 'Secondary data source:' dropdown shows 'DimDate#csv + (FactInternetSales.csv)' and 'FactSalesTargets#csv (FactSalesTargets.csv)', with the latter being the currently selected item. There are two radio buttons: 'Automatic' (unchecked) and 'Custom' (checked). A preview grid shows a relationship between 'countryname' in the primary source and 'SalesTerritoryCountry' in the secondary source. At the bottom, there are buttons for 'Add...', 'Edit...', 'Remove', 'OK', and 'Cancel'.

Query Editor My Queries Saved Queries History Tables Settings

## Table Metadata: countryinformation

Actions													
Import Data													
Browse Data													
Drop Table													
View File Location													
Columns Sample													
countryid	countryname	iso3	isnumeric	fips	continent	currency	countrycallingcode	ioc	nato2	nato3	capital	area	population
1	Afghanistan	AFG	4	AF	AS	AFN	93	AFG	AF	AFG	Kabul	647500	29121266
2	Albania	ALB	8	AL	EU	ALL	355	ALB	AL	ALB	Tirana	28748	2986952
3	Algeria	DZA	12	AG	AF	DZD	213	ALG	AG	DZA	Algiers	2381740	34586184
4	American Samoa	ASM	16	AQ	OC	USD	683	ASA	SS	ASM	Pago Pago	199	57881
5	Andorra	AND	20	AN	EU	EUR	376	AND	AN	AND	Andorra la Vella	468	84000
6	Angola	AGO	24	AO	AF	AOA	244	ANG	AO	AGO	Luanda	1246700	13068161
7	Anguilla	AIA	660	AV	NA	XCD	-283	NULL	AV	AIA	The Valley	102	13254
8	Antigua and Barbuda	ATG	28	AC	NA	XCD	-267	ANT	AC	ATG	St. John's	443	86754
9	Argentina	ARG	32	AR	SA	ARS	54	ARG	AR	ARG	Buenos Aires	2766890	41343201
10	Armenia	ARM	51	AM	AS	AMD	374	ARM	AM	ARM	Yerevan	29800	2968000
11	Aruba	ABW	533	AA	NA	AWG	297	ARU	AA	ABW	Oranjestad	193	71566
12	Australia	AUS	36	AS	OC	AUD	61	AUS	AS	AUS	Canberra	7686850	21515754

Query Editor My Queries Saved Queries History Tables Settings

## Table Metadata: countryinformation

Actions		
Import Data		
Browse Data		
Drop Table		
View File Location		
Columns Sample		
Name	Type	Comment
area	string	Country Area in SQ M
capital	string	Capital City
continent	string	Continent
countrycallingcode	int	Country Calling Code
countryid	int	Country ID
countryname	string	Country Name
currency	string	Currency
fips	string	FIPS
ioc	string	IOC
iso3	string	ISO3 Column
isnumeric	int	ISO Numeric
nato2	string	NATO2 Classification
nato3	string	NATO3 Classification
population	string	Population

Query Editor My Queries Saved Queries History Tables Settings

## Tables

DATABASE

ACTIONS

Create a new table from a file

Create a new table manually

Search...

Table Name

countryinformation

Query Editor   My Queries   Saved Queries   History   Tables   Settings

DATABASE  
charlotte

SETTINGS

FILE RESOURCES

USER-DEFINED FUNCTIONS

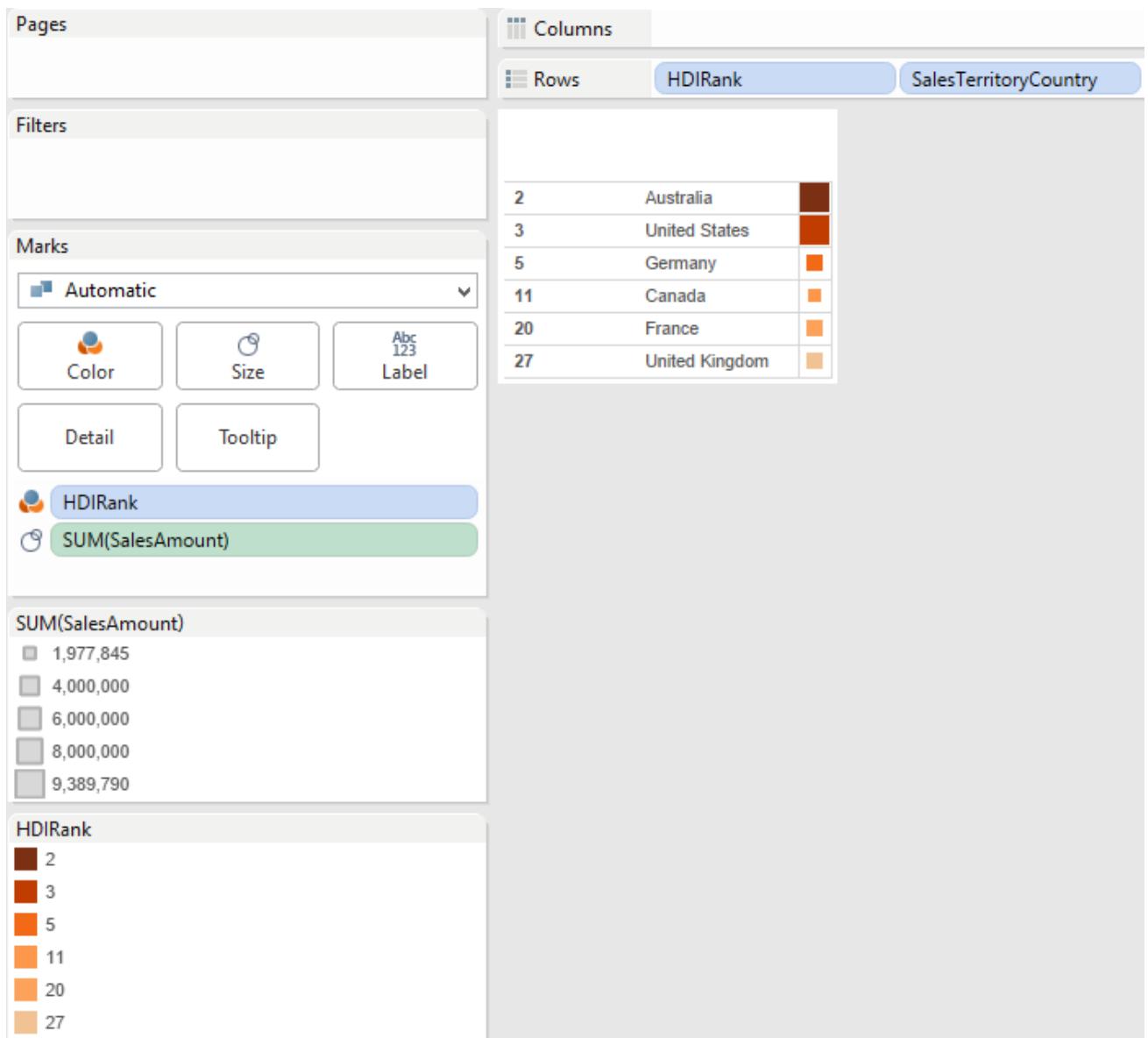
PARAMETERIZATION  
 Enable Parameterization  
 Email me on completion

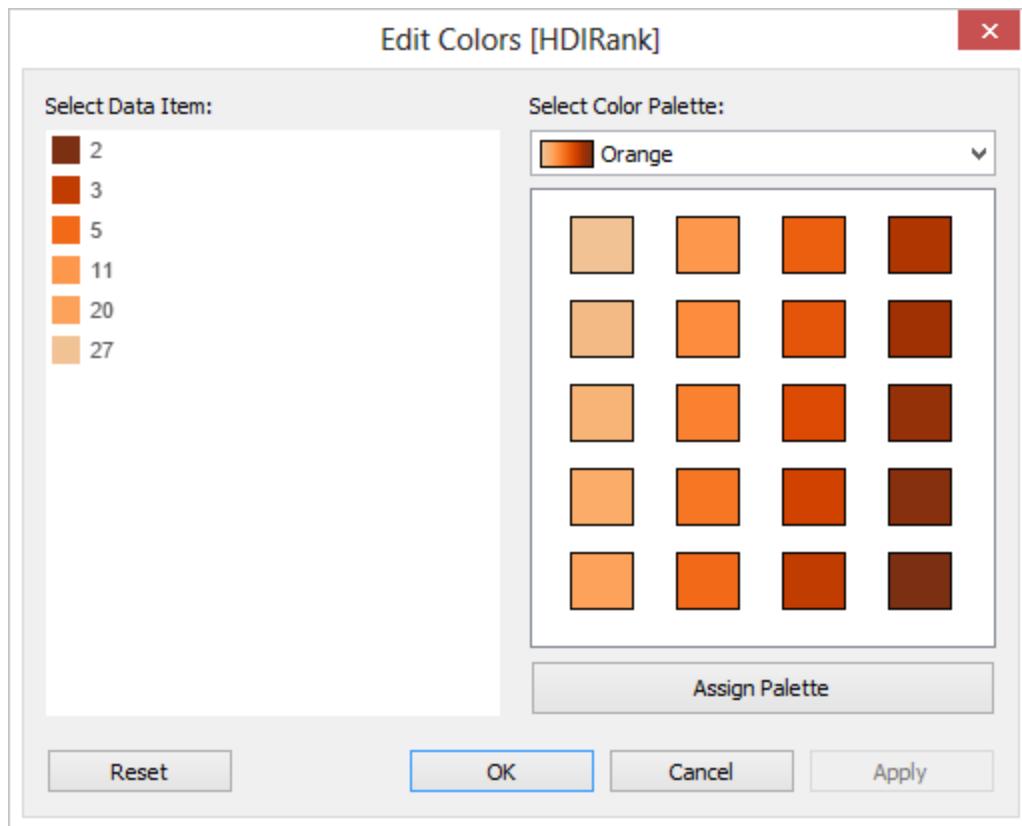
```

1 CREATE TABLE IF NOT EXISTS CountryInformation (
2   countryID INT COMMENT 'Country ID',
3   CountryName STRING COMMENT 'Country Name',
4   ISO3 STRING COMMENT 'ISO3 Column',
5   ISONumeric INT COMMENT 'ISO Numeric',
6   FIPS STRING COMMENT 'FIPS',
7   Continent STRING COMMENT 'Continent',
8   Currency STRING COMMENT 'Currency',
9   CountryCallingCode INT COMMENT 'Country Calling Code',
10  IOC STRING COMMENT 'IOC',
11  NATO2 STRING COMMENT 'NATO2 Classification',
12  NATO3 STRING COMMENT 'NATO3 Classification',
13  Capital STRING COMMENT 'Capital City',
14  Area STRING COMMENT 'Country Area in SQ M',
15  Population STRING COMMENT 'Population'
16 )
17 ROW FORMAT DELIMITED
18 FIELDS TERMINATED BY ','
19 LOCATION '/user/hue/GoldenRecord'

```

or create a





- DimSalesTerritory#csv
  - HDIRank
  - SalesTerritoryCountry
  - SalesTerritoryGroup
  - SalesTerritoryRegion

Dimensions

- DimDate#csv
- DimProduct#csv
- DimProductCategory#csv
- DimProductSubcategory#csv
- DimSalesTerritory#csv**

Marks

Add to Sheet

Show Quick Filter

Copy

Paste

Duplicate

Rename...

Hide

Group by

Create Folder (use Group by Folder)

Create Hierarchy...

Create Calculated Field...

Create Group...

Create Set...

Create Parameter...

Convert to Measure

Change Data Type

Geographic Role

- None
- Area Code
- CBSA/MSA
- City
- Congressional District
- Country/Region
- County
- HDIRank**
- State/Province
- ZIP Code/Postcode

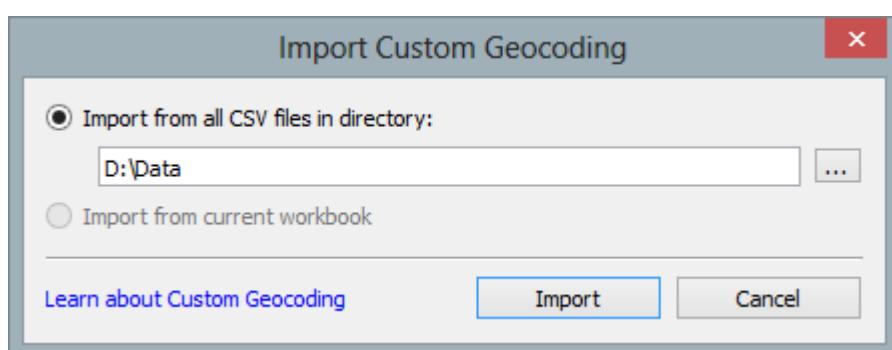
Measures

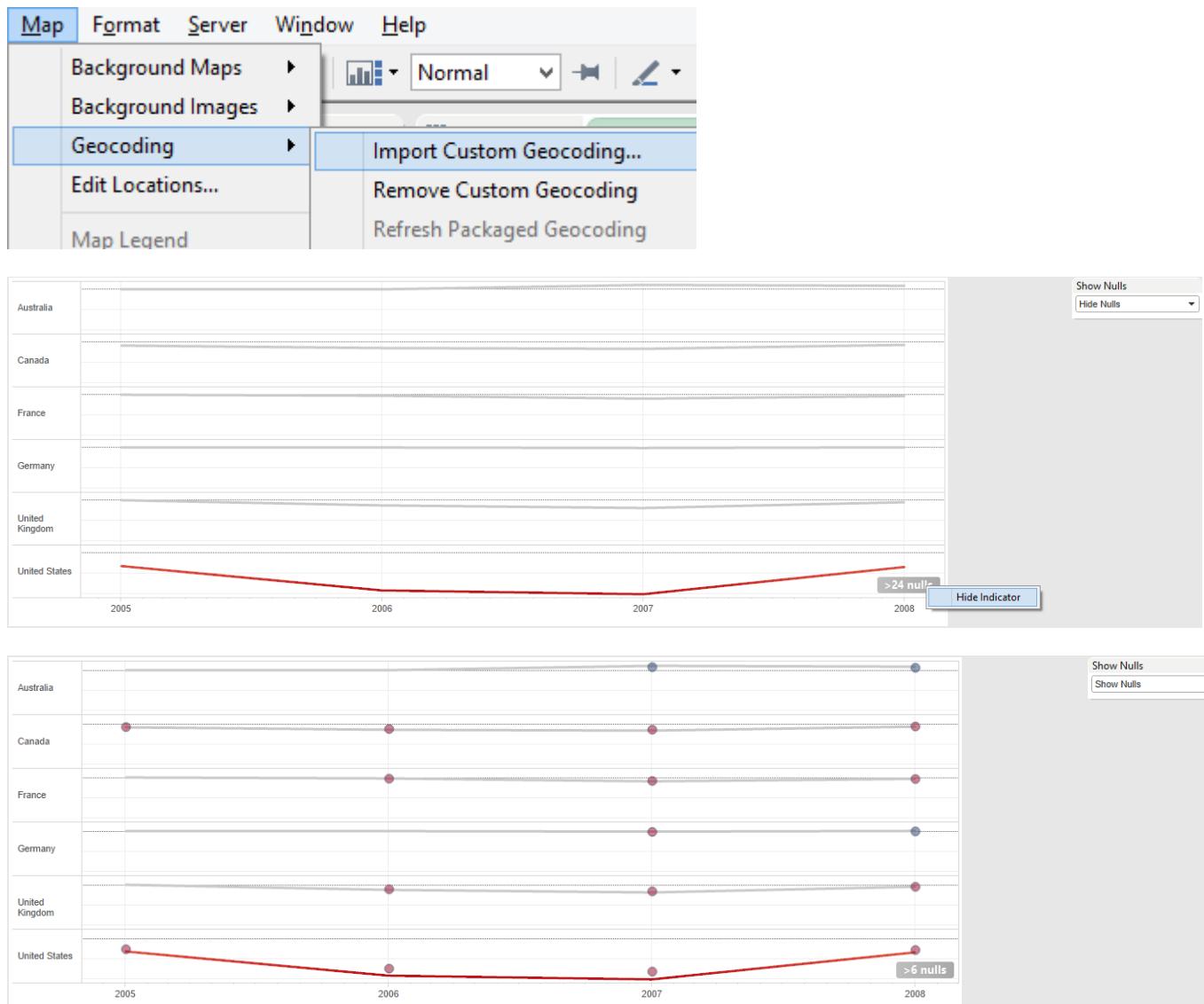
- DimDate#csv
- DimProduct#csv
- DimProductCategory#csv
- DimProductSubcategory#csv
- DimSalesTerritory#csv**
- # DimSalesTerritory#csv
- # SalesTerritory#csv
- FactInternetSales#csv**
- =# Difference
- =# Difference
- =# KPI Difference
- =# Sales Amount
- =# Total Target
- Latitude (#)
- Longitude (#)
- =# Number of Records
- # Measure Values

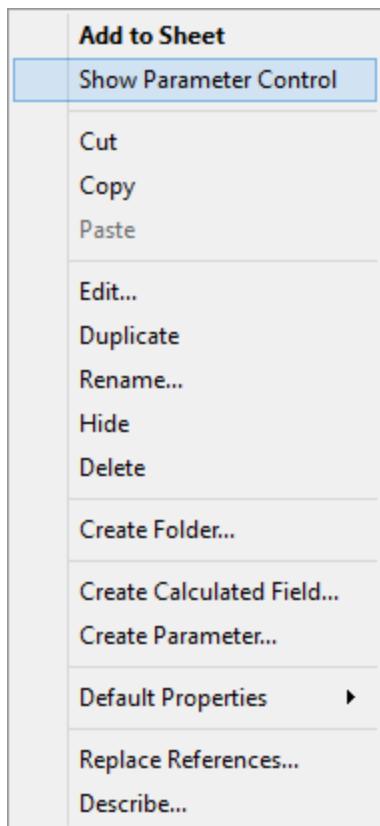
Sets

Action (SalesTerritoryCountry)

Parameters







Marks

All

AGG(Difference between Actual and Target)

AGG(Difference (Show or Hide))

Circle Color Size Label

Color

Transparency 50%

Effects

Border: Automatic 20,423,487

Halo: None -£20M

AGG(Difference between Actual and Target) £20M

Actual and Target 20,423,487

Effects

Border: Automatic 20,423,487

Halo: None -£20M

AGG(Difference between Actual and Target) £20M

Actual and Target 20,423,487

Color

Transparency

Effects

Border:

Halo:

AGG(Difference between Actual and Target)

Actual and Target

More Colors...

**AGG(Difference (Show or Hide))**

Circle

Color      Size      Label

Detail      Tooltip

Measure Names

AGG(KPI Difference between Actual and Target)

---

Marks

All

**AGG(Difference between Actual and Target)**

Line

Color      Size      Label

Detail      Tooltip      Path

Measure Names

AGG(KPI Difference between Actual and Target)

---

**AGG(Difference (Show or Hide))**

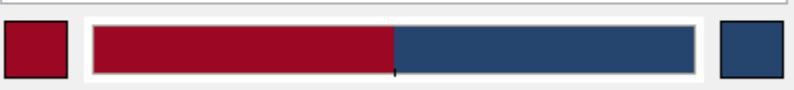
Measure Names

Difference (Show or Hide)  
Difference between Actual and Target

---

**Edit Colors [Difference (Show or Hide)]**

Palette: Red-Blue Diverging



-20,423,487      20,423,487

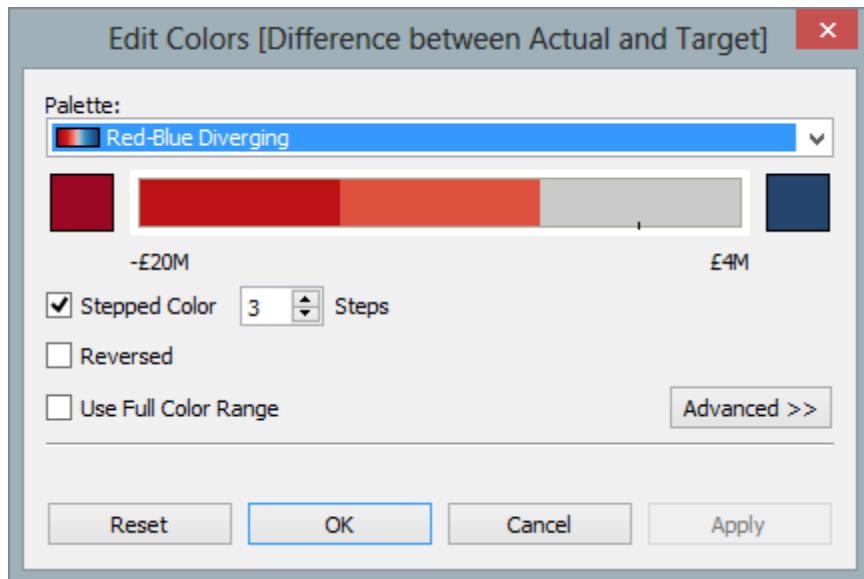
Stepped Color    2 Steps

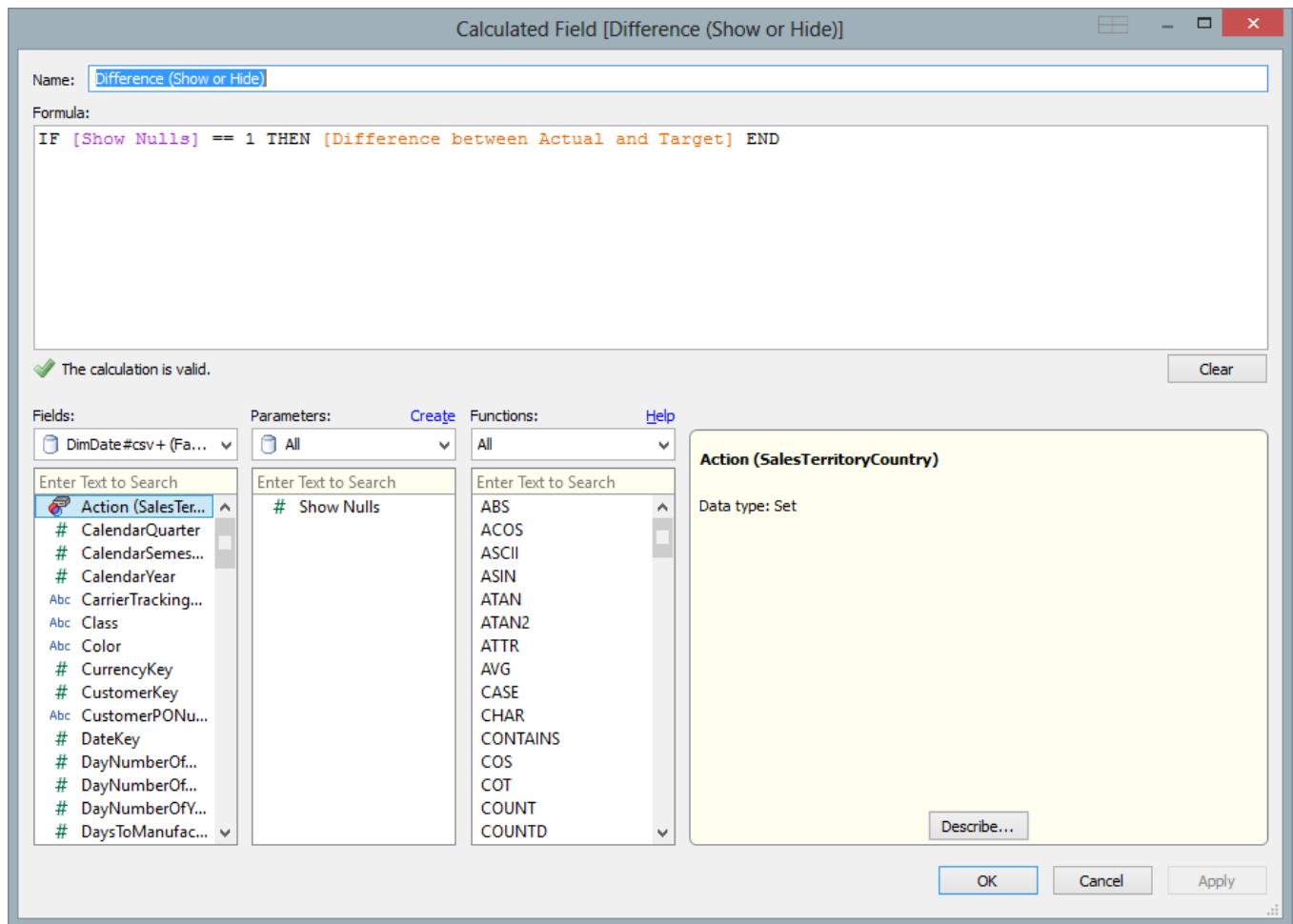
Reversed

Use Full Color Range

Advanced >>

Reset      OK      Cancel      Apply





**Create Parameter**

Name: Show Nulls [Comment >>](#)

**Properties**

Data Type: Integer ▾

Current value: Show Nulls ▾

Display format: Automatic ▾

Allowable values:  All  List  Range

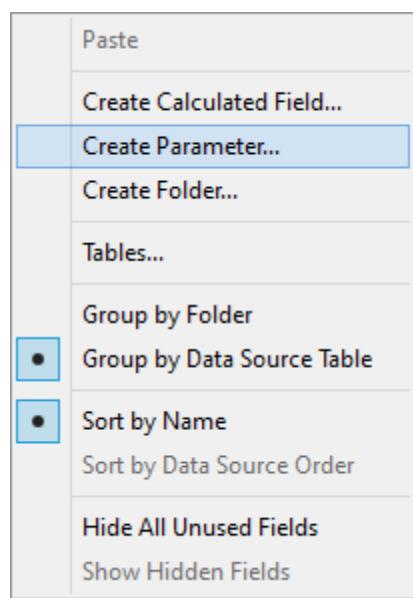
**List of values**

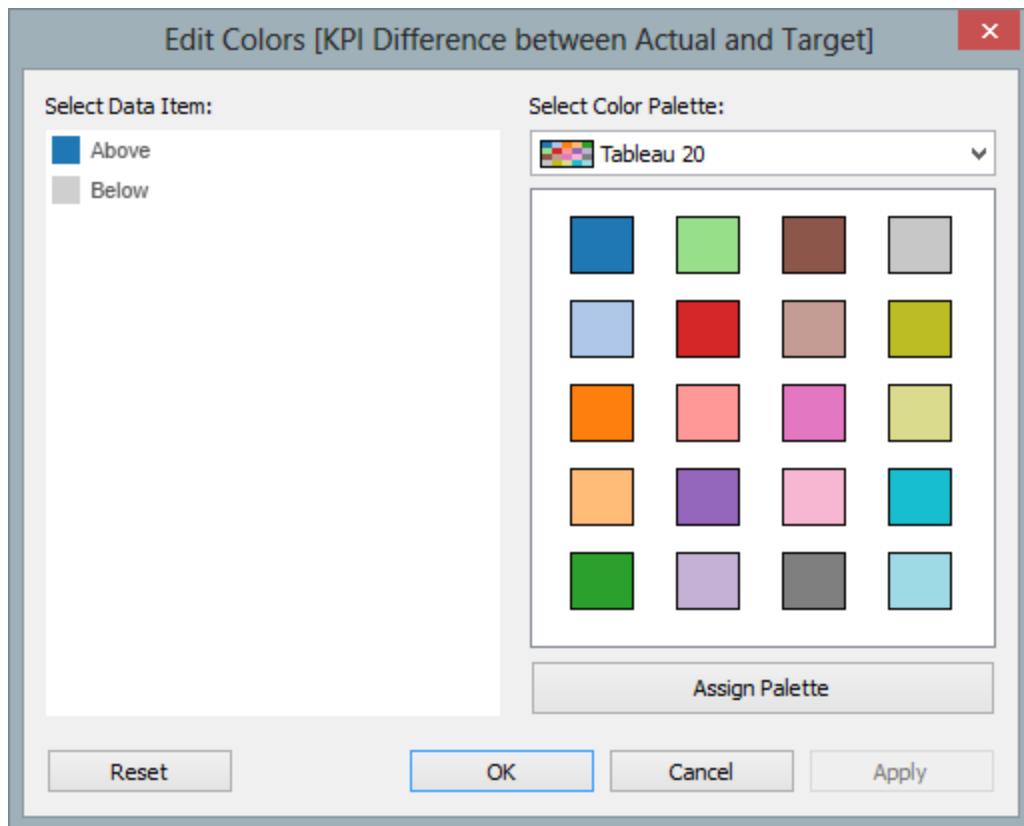
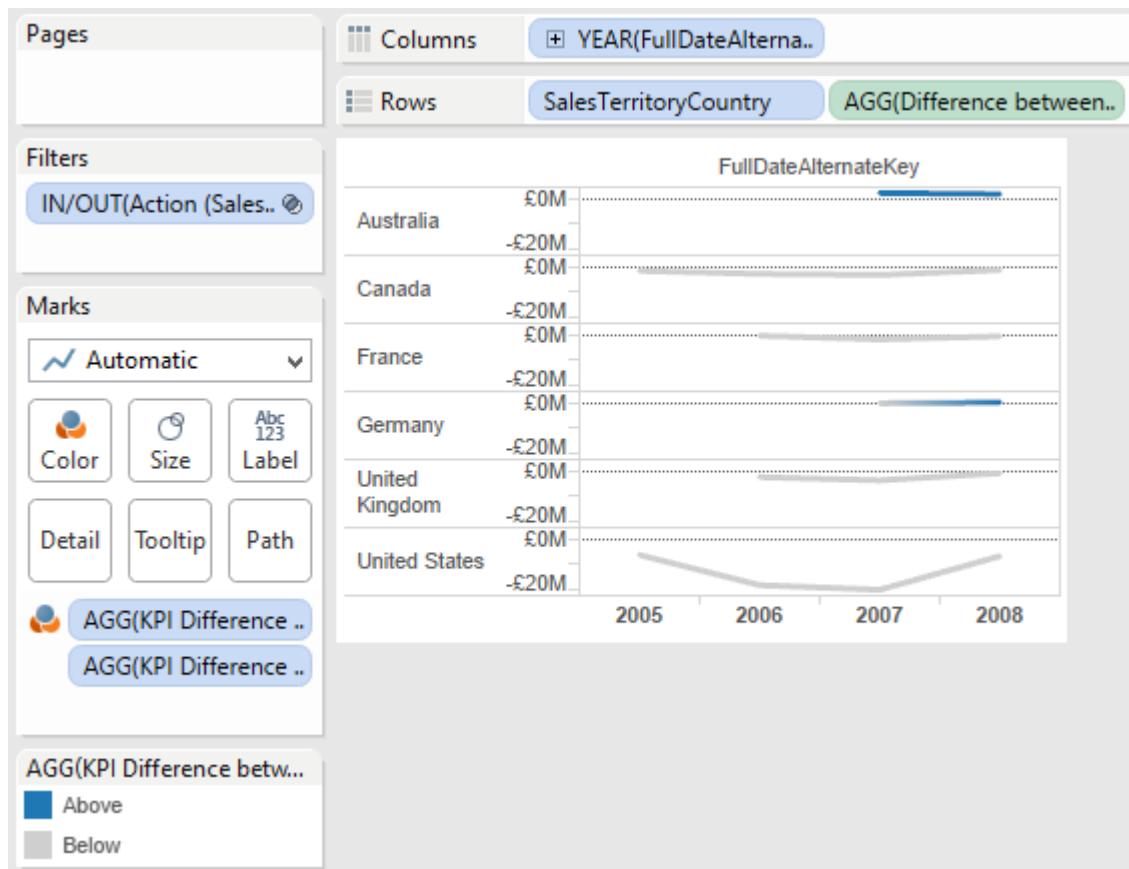
Value	Display As
1	Show Nulls
0	Hide Nulls
Add	

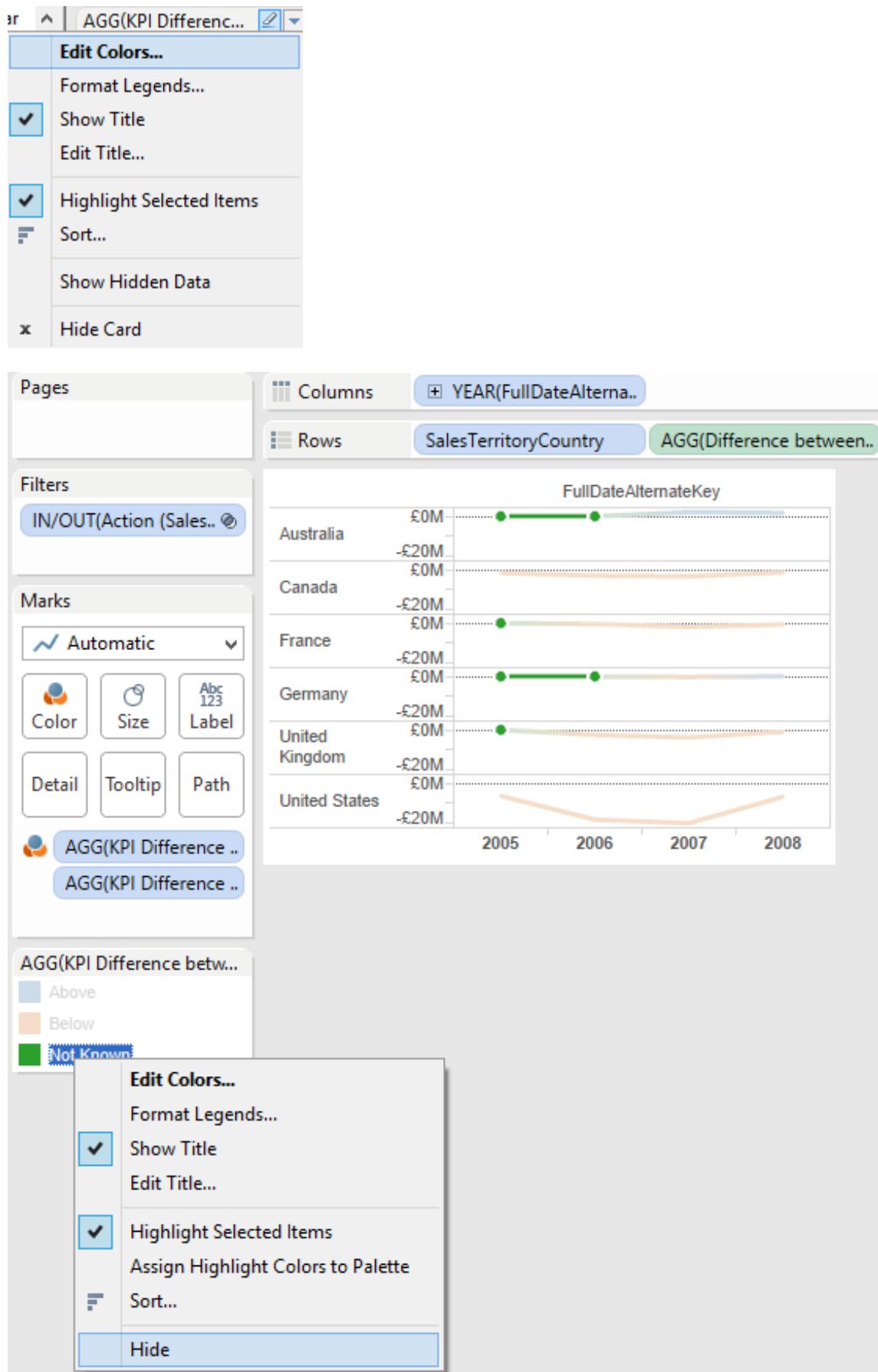
[Add from Parameter](#) ▾  
[Add from Field](#) ▾  
[Paste from Clipboard](#)  
  
[Clear All](#)

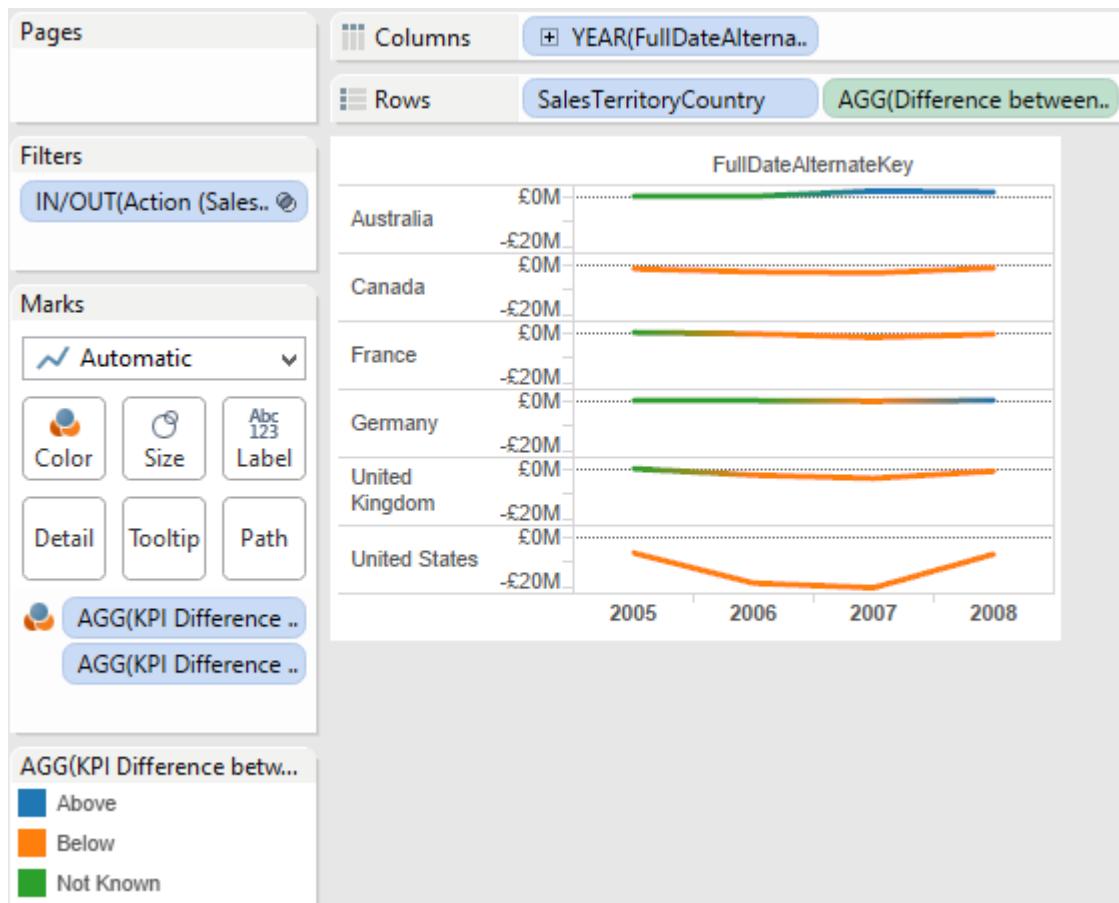
---

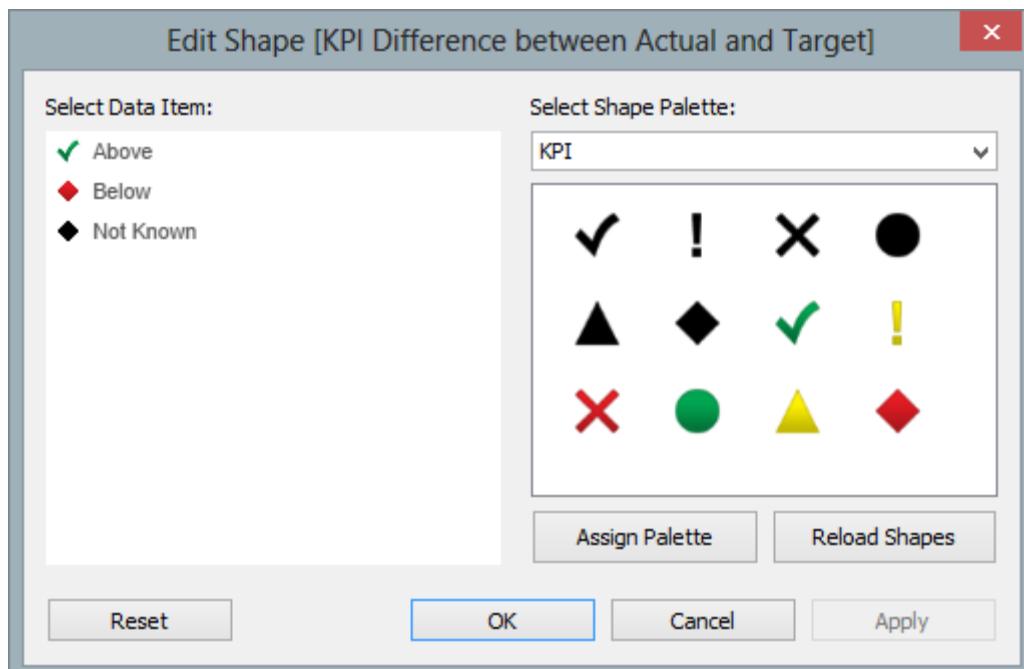
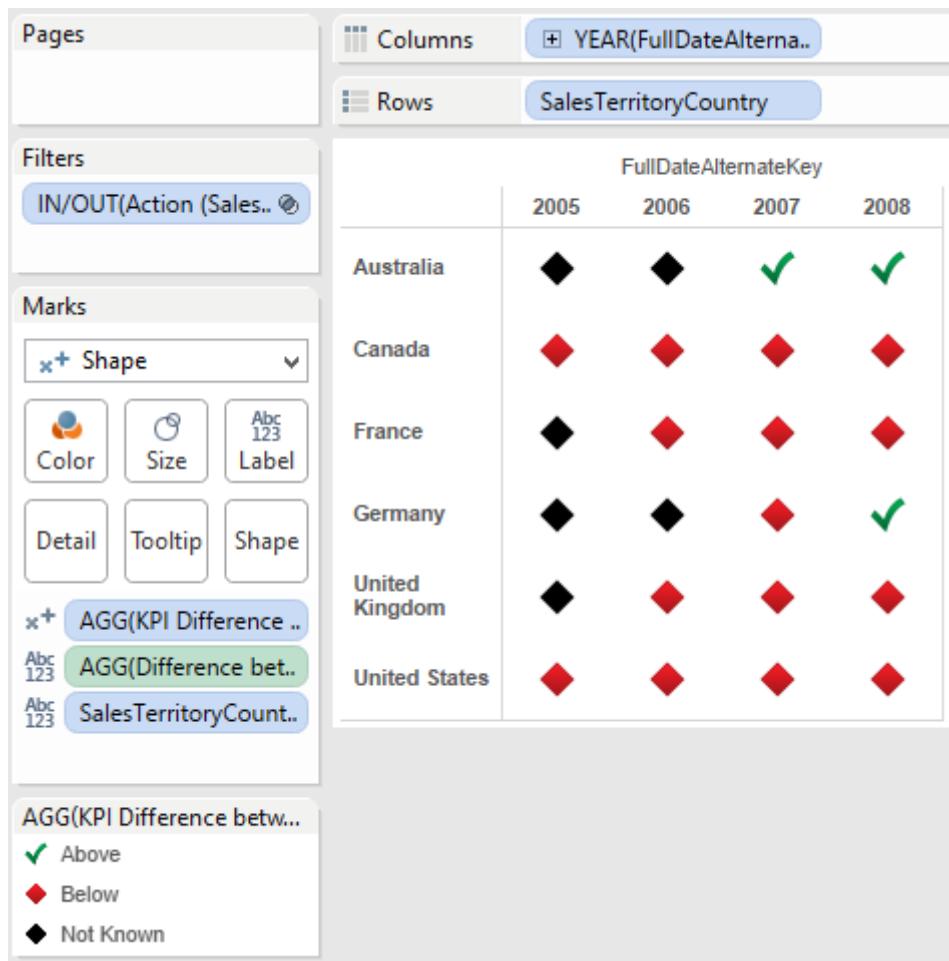
OK Cancel

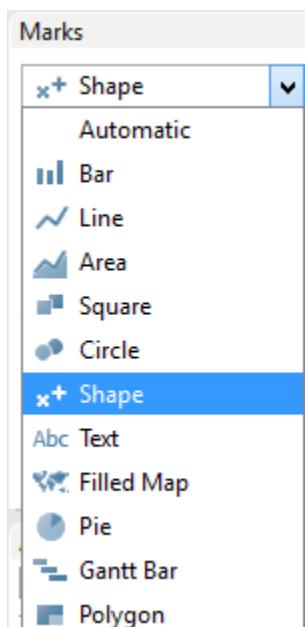
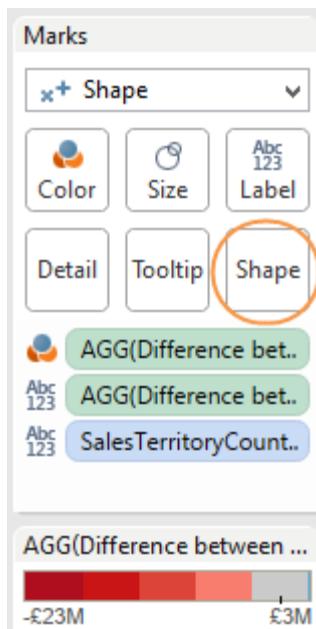












Calculated Field [KPI Difference between Actual and Target]

Name: KPI Difference between Actual and Target

Formula:

```
IF [Difference between Actual and Target] > 0 THEN "Above"
ELSEIF [Difference between Actual and Target] < 0 THEN "Below"
ELSE "Not Known"
END
```

The calculation is valid.

Fields: DimDate#csv+ (Fa... ▾ Enter Text to Search Action (SalesTer... # CalendarQuarter # CalendarSemes... # CalendarYear Abc CarrierTracking... Abc Class Abc Color # CurrencyKey # CustomerKey Abc CustomerPONu... # DateKey # DayNumberOf... # DayNumberOf... # DayNumberOfY... # DaysToManufac... ▾

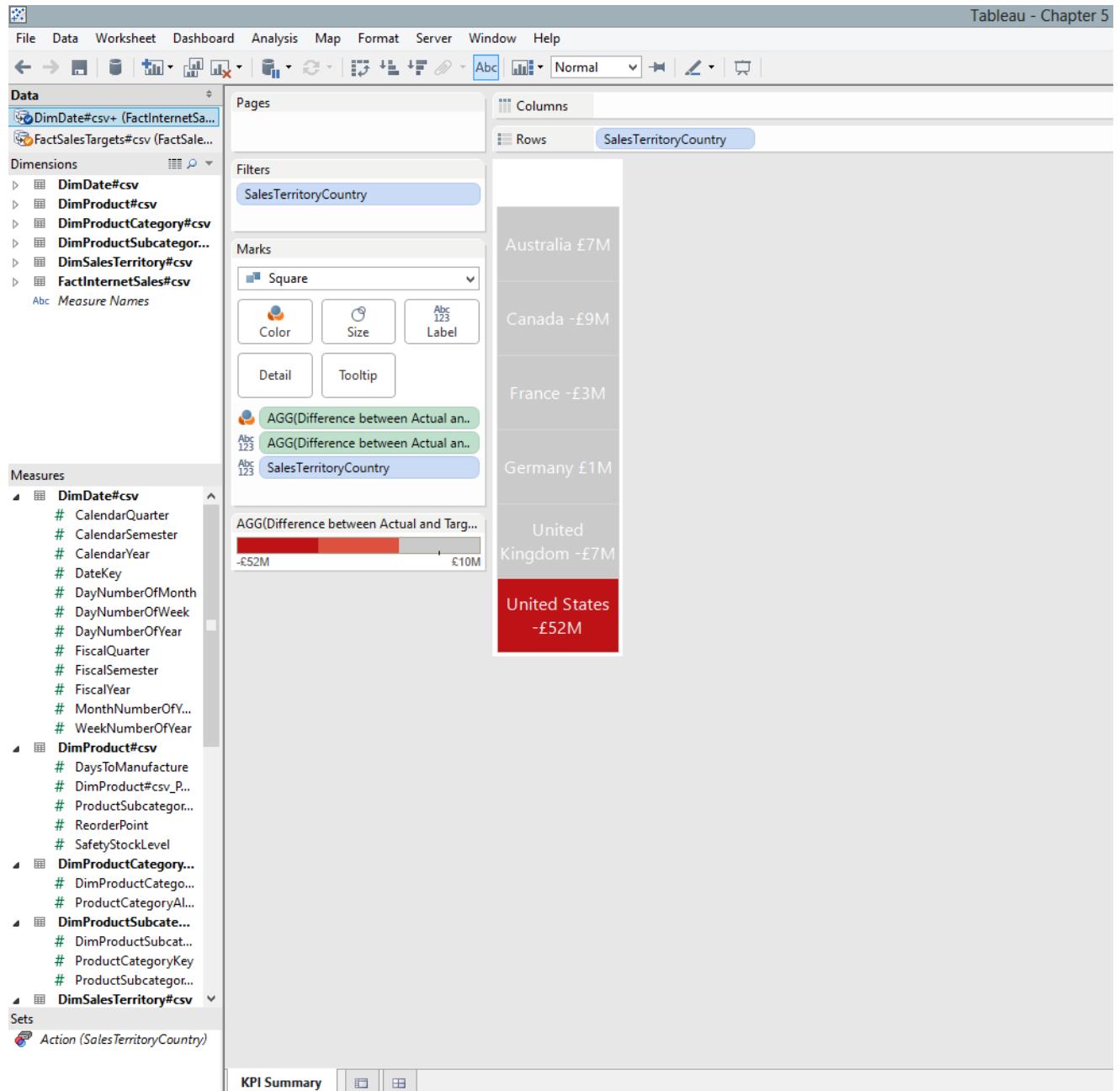
Parameters: Create All Enter Text to Search # Show Nulls

Functions: Help All Enter Text to Search ABS ACOS ASCII ASIN ATAN ATAN2 ATTR AVG CASE CHAR CONTAINS COS COT COUNT COUNTD

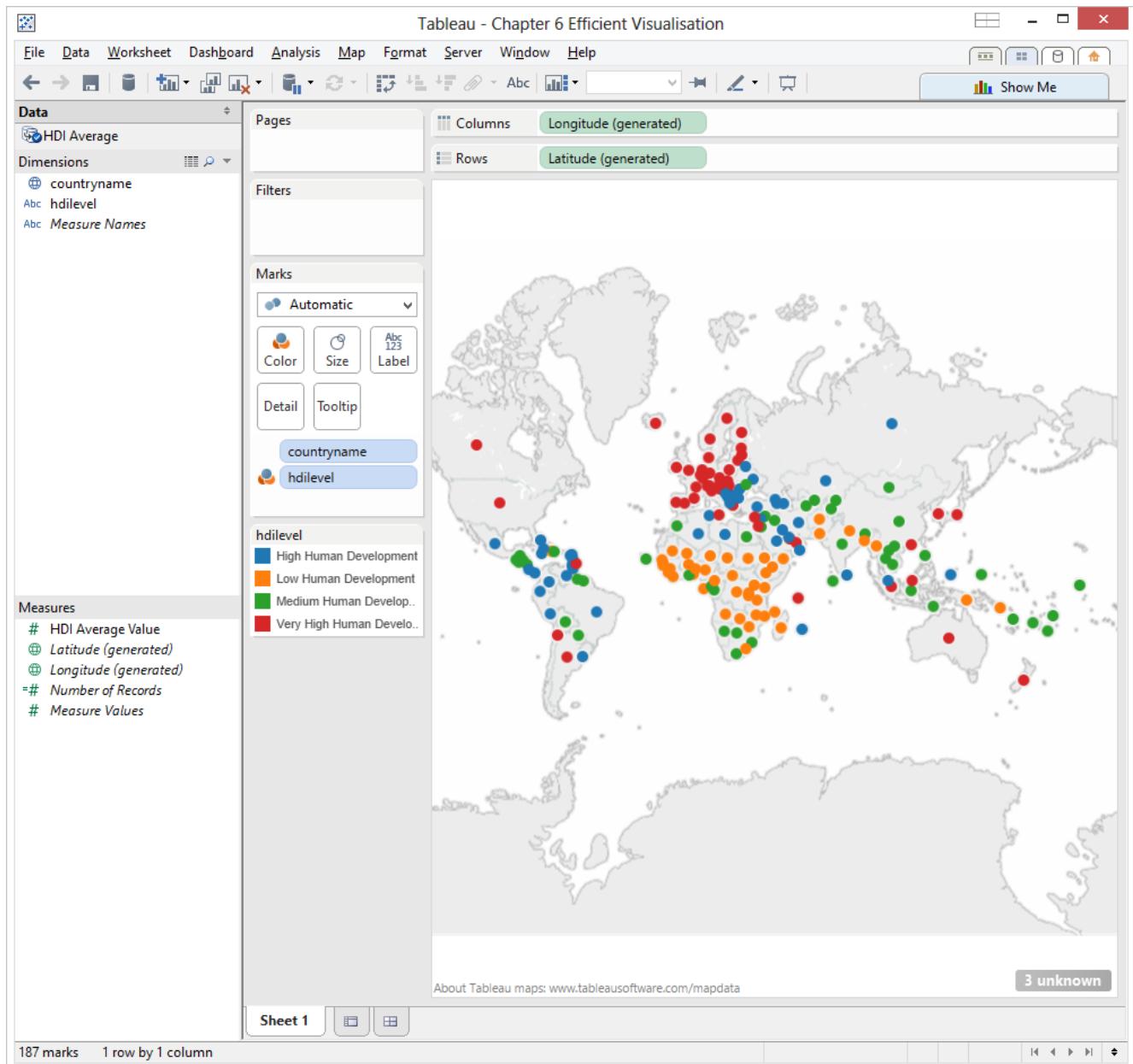
Action (SalesTerritoryCountry)  
Data type: Set

Describe... OK Cancel Apply

Changes to this calculation might change the following:  
Worksheet "KPI Shapes", Worksheet "KPI Sparkline", Worksheet "KPI by Q", Worksheet "KPI with Custom Ge..



# Chapter 6



### CNTD(HDI Average Value)

- Filter...
- Show Quick Filter
- Format...
- Show Header
- Include in Tooltip
- Dimension
- Attribute
- Measure (Count (Distinct)) ▶
  - Sum
  - Average
  - Median
  - Count
  - Count (Distinct)
  - Minimum
  - Maximum
  - Percentile ▶
  - Std. Dev
  - Std. Dev (Pop.)
  - Variance
  - Variance (Pop.)
- △ Add Table Calculation...
- Quick Table Calculation ▶
- Remove

Add to Sheet

Show Quick Filter

---

Copy

Paste

---

Duplicate

Rename...

Hide

---

Group by

Create Folder (use Group by Folder)

---

Create Calculated Field...

Create Group...

Create Bins...

Create Parameter...

---

Convert to Discrete

Convert to Dimension

---

Change Data Type

Geographic Role

Default Properties

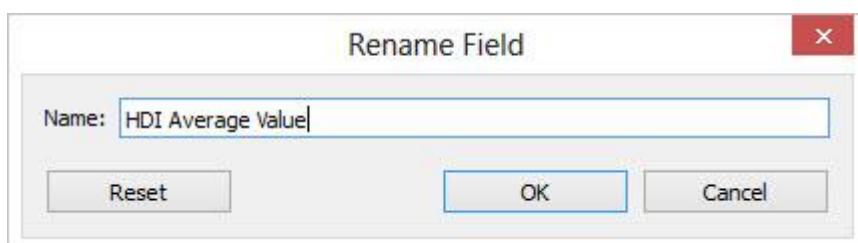
---

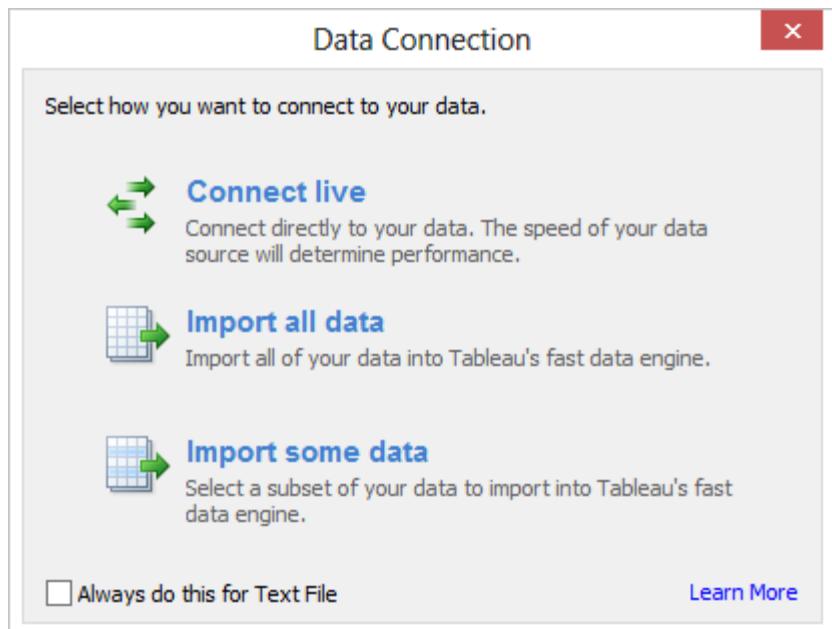
Replace References...

Describe...

hdilevel

countryname	Sum of HDI Average
Albania	0.6900000000000001
Algeria	0.6900000000000001
Antigua and Barbuda	0.8000000000000001





**Text File Connection**

Step 1: Select a delimited text file:  
 Browse...

Step 2: Set the options for your text files:

The first row has field names in it.  
 Automatically generate names for the fields.

Field separator: Comma ▾  
Character set: UTF-8 ▾

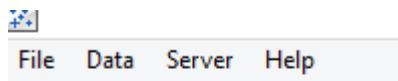
Step 3: Select the data range to analyze:

Single Table  Multiple Tables  Custom SQL

**HDI Average#csv**

Step 4: Give the connection a name for use in Tableau:

OK Cancel



## Query Results: Un

RESULTS

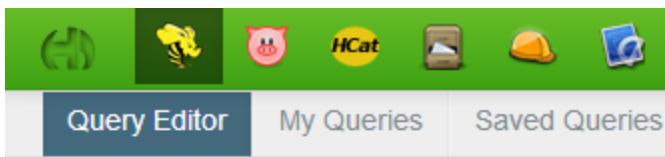
id	Category	Value
0	High	Human
1	High	Human
2	High	Human

DOWNLOADS

- [Download as CSV](#)
- [Download as XLS](#)
- [Save](#)

MR JOB (1)

[job\\_201402110339\\_0001](#)



Query Editor

My Queries

Saved Queries

## Query Results: Un

DOWNLOADS

Download as CSV

Download as XLS

Save

MR JOB (1)

[job\\_201402110339\\_0001](#)

Results

	hdile
0	High Hu
1	High Hu
2	High Hu

Query Results x

192.168.202.135:8000/beeswax/results/452/0?context=design%3A365

hue

Query Editor My Queries Saved Queries History Tables Settings

## Query Results: Unsaved Query

RESULTS

Query Log Columns Visualizations

Did you know? If the result contains a large number of columns, click a row to select a column to jump to. As you type into the field, a drop-down list displays column names that match the string.

	hdilevel	countryname	_c2
0	High Human Development	Albania	0.7240000026566642
1	High Human Development	Algeria	0.6441249959170818
2	High Human Development	Antigua and Barbuda	0.759999904632568
3	High Human Development	Armenia	0.6958571416991097
4	High Human Development	Azerbaijan	0.7333333492279053
5	High Human Development	Bahamas	0.7923333446184794
6	High Human Development	Bahrain	0.7658750042319298
7	High Human Development	Belarus	0.7705999970436096
8	High Human Development	Bosnia and Herzegovina	0.7309999942779541
9	High Human Development	Brazil	0.6717500016093254
10	High Human Development	Bulgaria	0.7449999898672104
11	High Human Development	Colombia	0.6678749993443489
12	High Human Development	Costa Rica	0.7219999954104424
13	High Human Development	Cuba	0.7292499914765358
14	High Human Development	Dominica	0.7375000019868215
15	High Human Development	Ecuador	0.6781249940395355
16	High Human Development	Georgia	0.7330000042915344

Next Page →

The screenshot shows the Apache Beeswax Query Editor interface. At the top, there is a browser-style header with back, forward, search, and refresh buttons. The URL is http://192.168.202.135:8000/beeswax/. To the right of the URL is a "Query" button and a close button. Below the header, the title bar displays "EPSON E-Web Print" and "Query". A green toolbar contains various icons for file operations like Open, Save, Print, and Clip. The main menu bar includes "Query Editor", "My Queries", "Saved Queries", "History", "Tables", and "Settings".

**Query Editor**

**DATABASE**  
default ▾

**SETTINGS**  
Add

**FILE RESOURCES**  
Add

**USER-DEFINED FUNCTIONS**  
Add

**PARAMETERIZATION**  
 Enable Parameterization

**EMAIL NOTIFICATION**  
 Email me on completion

1 **SELECT**  
2 a.hdilevel, a.countryname, avg(a.hdivalue)  
3 **from** hdi a  
4 **GROUP BY** a.hdilevel, a.countryname  
5

Execute Save as... Explain or create a New query

EPSON E-Web Print Print Clip

Query Editor My Queries Saved Queries History Tables Settings

## Query Editor : Create HDI Table

**DATABASE**  
default

**SETTINGS**

**FILE RESOURCES**

**USER-DEFINED FUNCTIONS**

**PARAMETERIZATION**  
 Enable Parameterization

**EMAIL NOTIFICATION**  
 Email me on completion

```

1 CREATE EXTERNAL TABLE IF NOT EXISTS HDI (
2 HDILevel STRING,
3 CountryName STRING,
4 Year String,
5 HDIValue FLOAT)
6 ROW FORMAT DELIMITED FIELDS TERMINATED BY ','
7 LOCATION '/user/hue/WorldBank';

```

or create a

EPSON E-Web Print Print Clip

File Browser

hue

## File Browser

Search for file name

Home / user / hue / WorldBank

<input type="checkbox"/>	Type	Name	Size	User	Group	Permissions	Date
<input type="checkbox"/>	..			hue	hue	drwx-----	February 11, 2014 11:02 am
<input type="checkbox"/>	..			hue	hue	drwxr-xr-x	February 11, 2014 10:19 am
<input type="checkbox"/>	<input type="checkbox"/>	HDI_Partition_StreamTable.csv	68.2 KB	hue	hue	-rwxr-xr-x	February 11, 2014 11:02 am

**Data**

- DimDate#csv+ (FactInternetSa...)
- FactSalesTargets#csv (FactSale...)
- GoldCountryCodes#csv (Gold...)
- HDI**
- TableauImage

**Dimensions**

- countryname
- # HDI rank
- Abc Level of Human Development
- Abc Measure Names

### Warning

In order to use fields from HDI, a relationship needs to be created with GoldCountryCodes#csv (GoldCountryCodes.csv). Select Data > Edit Relationships to open the Relationships dialog box.

**OK**

Do not show again

**Data**

- DimDate#csv+ (FactInternetSa...)
- FactSalesTargets#csv (FactSale...)
- GoldCountryCodes#csv (Gold...)
- HDI**
- TableauImage

**Dimensions**

- countryname
- # HDI rank
- Abc Level of Human Development
- Abc Measure Names

**Pages**

**Filters**

YEAR(FullDateAlterna...)

**Marks**

Automatic

Color      Size      Label

Detail      Tooltip

View Data: KPI Shapes Crosstab

Show Aliases

Measure Names	SalesTerritoryCountry	Year of FullDateAlternateKey	Measure Values	KPI Difference between Actual and Target
Difference between Actual and Target	Australia	2008	1,743,884.29	Above
Difference (Show or Hide)	Australia	2008	1,743,884.29	Above
Difference between Actual and Target	Australia	2007	2,166,784.37	Above
Difference (Show or Hide)	Australia	2007	2,166,784.37	Above

Summary Underlying 4 rows

Analysis Map Format Server Window Help

Normal

Pages Columns Rows

Above

Filter Country from Summary to Year  
Filter Country from Year to Quarter

4 items selected · SUM of Measure Values: 7,821,337

Keep Only Exclude

	2006	2007	2008
Australia	2,166,784	1,743,884	View Data... £2M £2M
United Kingdom	-2,568,413	-3,843,751	-1,001,714
	-£3M	-£4M	-£1M

Marks

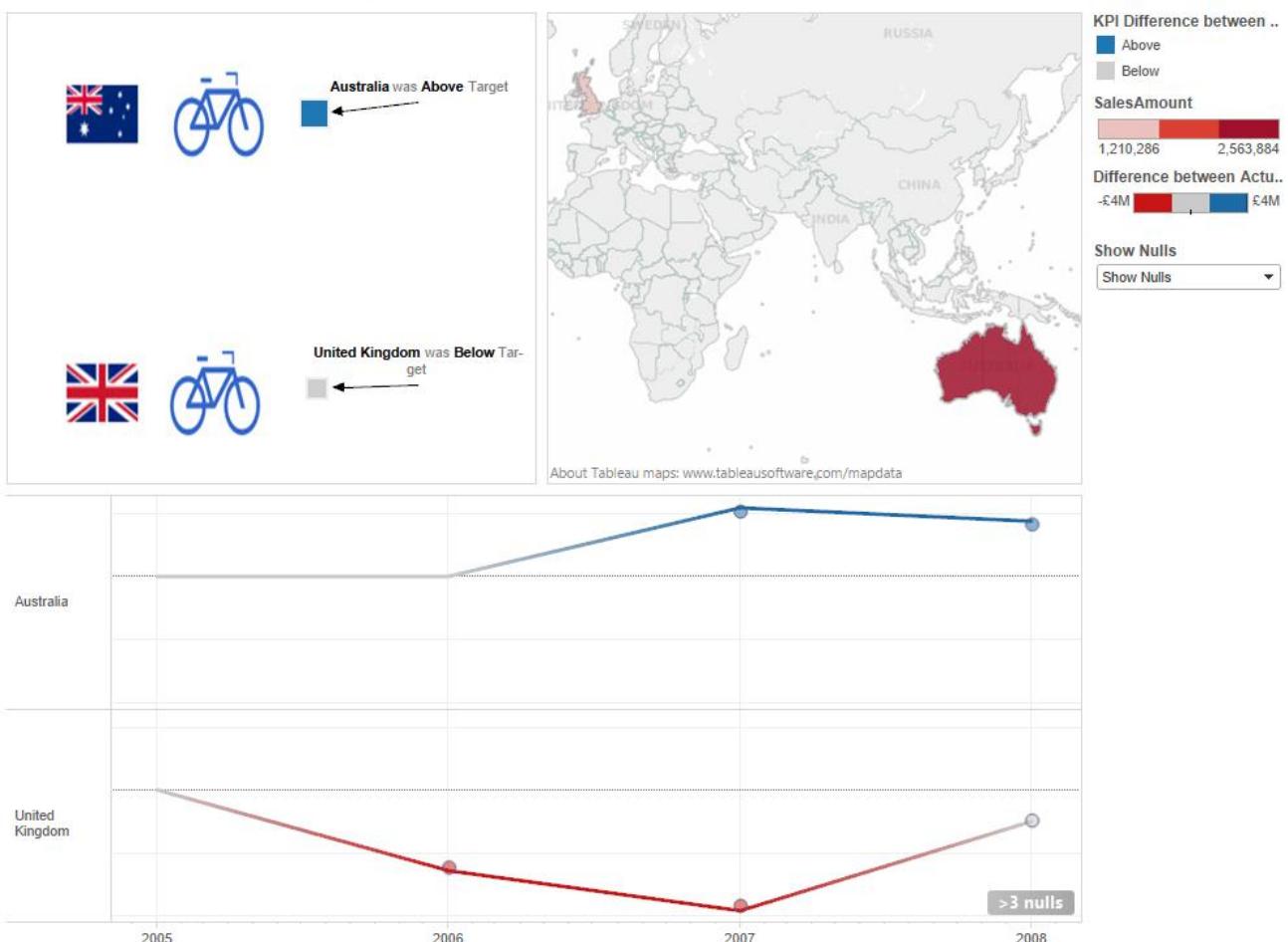
Color Size Text

Detail Tooltip

Measure Values

AGG(Difference (Show o..)  
AGG(Difference betwee..)

How does Australia compare to the United Kingdom overall?



Edit Annotation

Arial 8 **I** **U** **Insert** **X**

<F1> was <DimDate#csv+ (FactInternetSales.csv).AGG(KPI Difference between Target)> Target

OK Cancel

Data Connection Name

- Data Update Time
- Sheet Name
- Workbook Name
- Page Count
- Page Name
- Page Number
- Default Caption
- Default Title
- Full Name
- User Name
- Parameters.By Color
- Parameters.By Country
- Parameters.By Product Line
- Parameters.Choose Characteristic
- Parameters.CountryAboveOrBelow
- Parameters.Sales Amount
- Parameters.Show Nulls
- Parameters.Total Product Cost
- DimDate#csv+ (FactInternetSales.csv).AGG(KPI Difference between Actual and Target)
- DimDate#csv+ (FactInternetSales.csv).AGG(Sales Amount Sum)
- F1
- SUM(X)
- SUM(Y)
- system:visual.pane\_index
- system:visual.tuple\_id
- All Fields



United Kingdom was Below Target

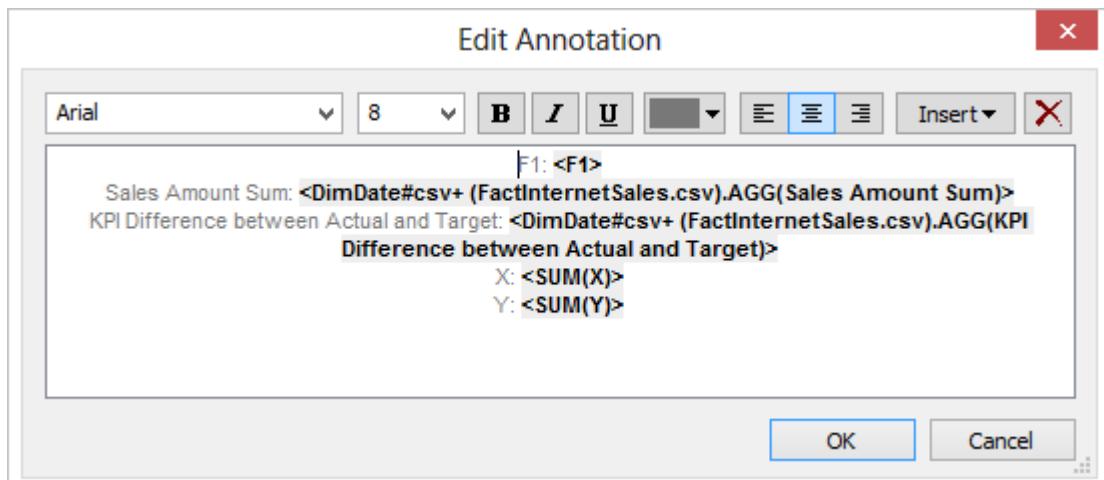
Open Record KPI Analysis Dashboard 2 KPI Poster String

Edit Annotation

Arial 8 **I** **U** **Insert** **X**

<F1> was <DimDate#csv+ (FactInternetSales.csv).AGG(KPI Difference between Actual and Target)> Target

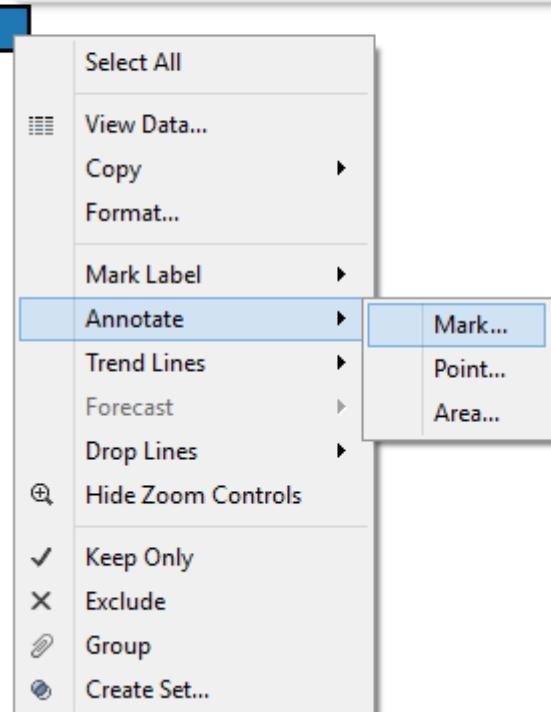
OK Cancel Apply



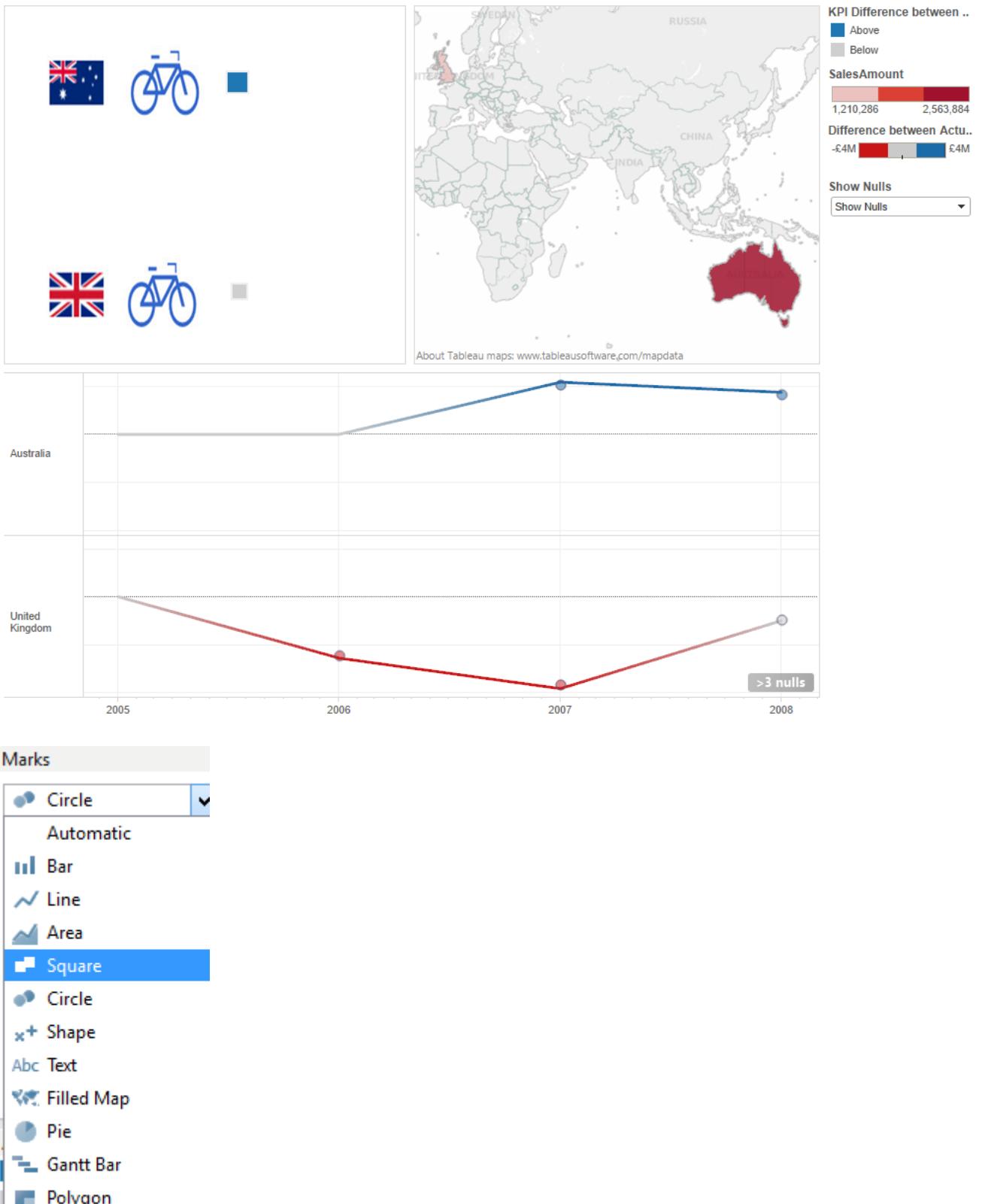
F1: **Australia**  
Sales Amount Sum: 2,563,884  
KPI Difference between Actual and Target: **Above**  
X: 307.100  
Y: 223.4

Keep Only  Exclude

This screenshot shows a tooltip or context menu for a data point. It displays the same annotation details as the dialog box above. Below the details are filtering options: 'Keep Only' (checked) and 'Exclude'.



How does Australia compare to the United Kingdom overall?



FILE    HOME    INSERT    PAGE LAYOUT

Font: Calibri 11pt, Bold, Underline, Italic, A<sup>+</sup>, A<sup>-</sup>

Clipboard: E5

	A	B	C
1		X	Y
2	Australia	307.1	223.4
3	United Kingdom	309.1	57.6
4			

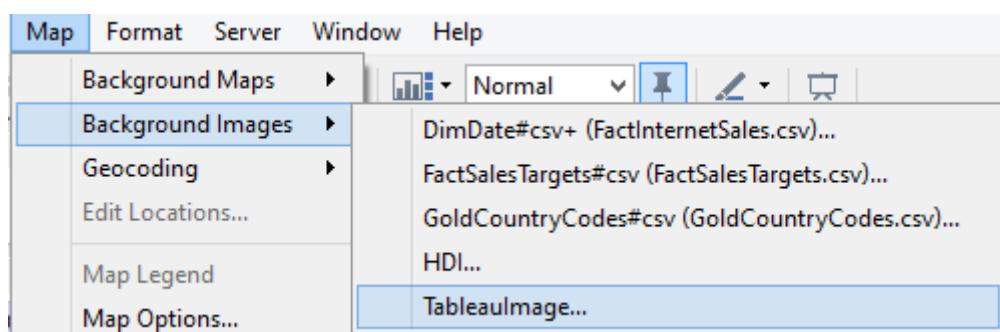
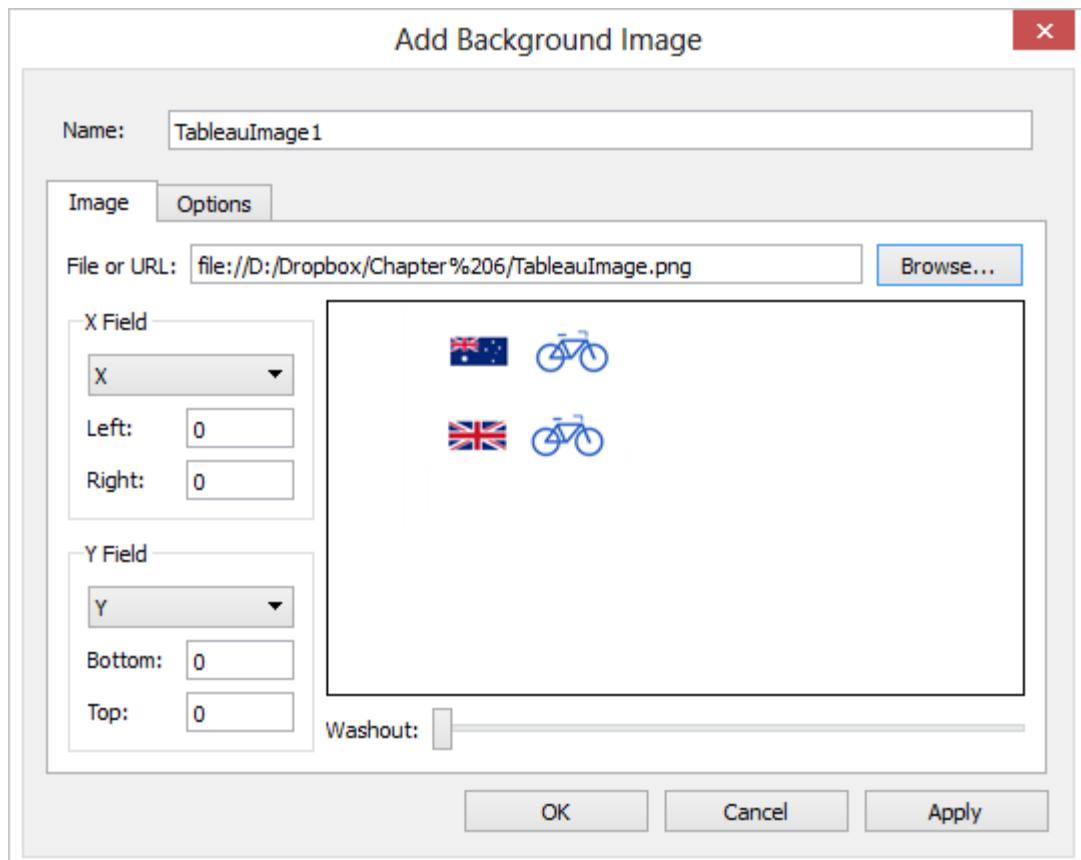
Pages: Columns X, Rows SUM(Y)

Filters:

Marks: Square (Color, Size, Label), Detail, Tooltip

The visualization displays four data points corresponding to the countries in the table:

- Australia: X=307.1, Y=223.4. Represented by the Australian flag and a blue bicycle icon.
- United Kingdom: X=309.1, Y=57.6. Represented by the Union Jack flag and a blue bicycle icon.
- Other two points: X values are 200 and 220, Y values are 200 and 220. Represented by blue squares.



TableauImage - Excel

FILE HO INSE PAG FOR DAT REVI VIE PO

Clipboard	Font	Alignment	Number	Conditional Fc	Format as Tab	Cell Styles
						Styles

D2

	A	B	C	D
1	Country	X	Y	
2	Country	527	285	

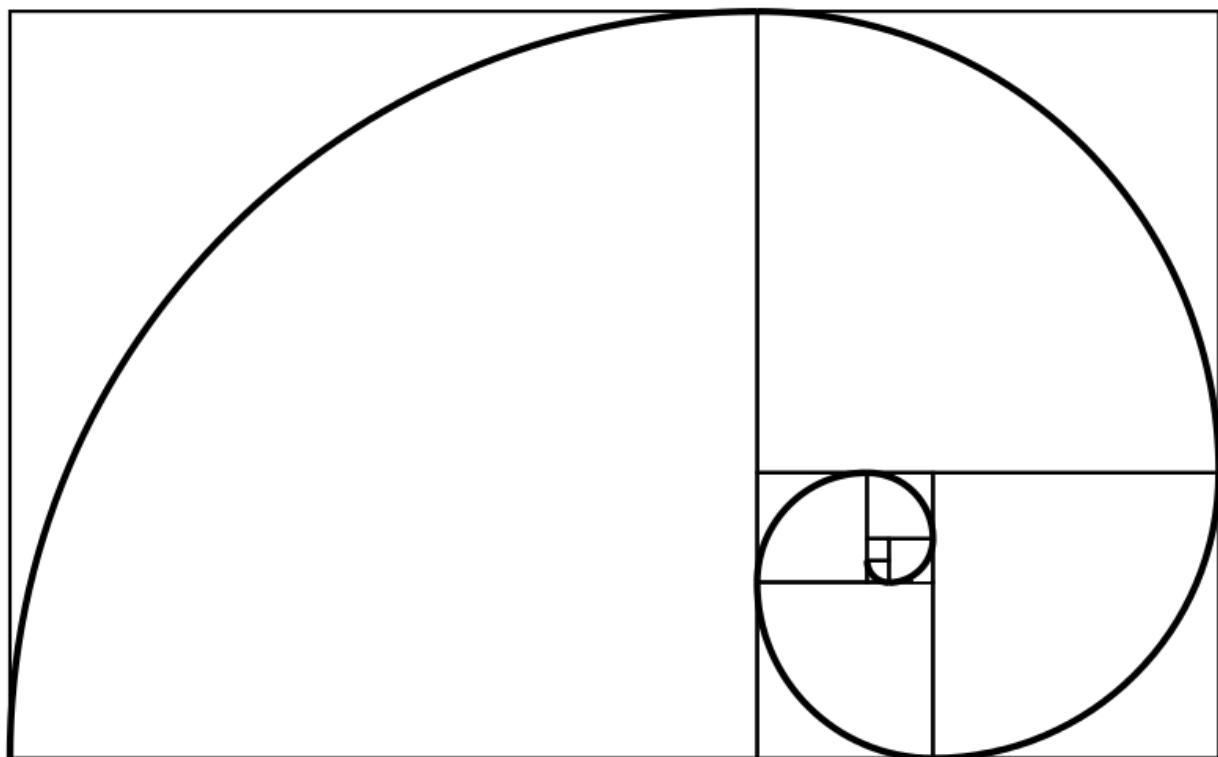
Chapter 7

## What is my Sales Performance over time?



The screenshot shows a Microsoft Excel interface with the following details:

- Clipboard:** Contains "P11".
- Font:** Calibri, Size 11.
- Font Style:** B, I, U.
- Font Color:** Red.
- Font Effects:** Italic.
- Font Alignment:** Center.
- Table Structure:**
  - Rows 1-5: Empty cells.
  - Cell A6 contains the value 8.
  - Cell H6 contains the formula =A6+B6+C6, resulting in 5.
  - Cell H7 contains the formula =A7+B7+C7, resulting in 3.
  - Cell H8 contains the formula =A8+B8+C8, resulting in 2.
  - Cells A6, B6, C6, A7, B7, C7, and A8 are highlighted in blue.



## Edit Colors [Year of FullDateAlternateKey]

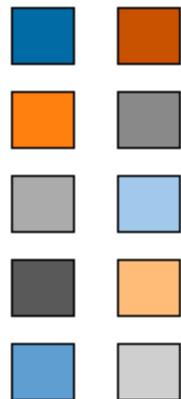


### Select Data Item:

- █ 2005
- █ 2006
- █ 2007
- █ 2008

### Select Color Palette:

█ █ Color Blind 10 ▼



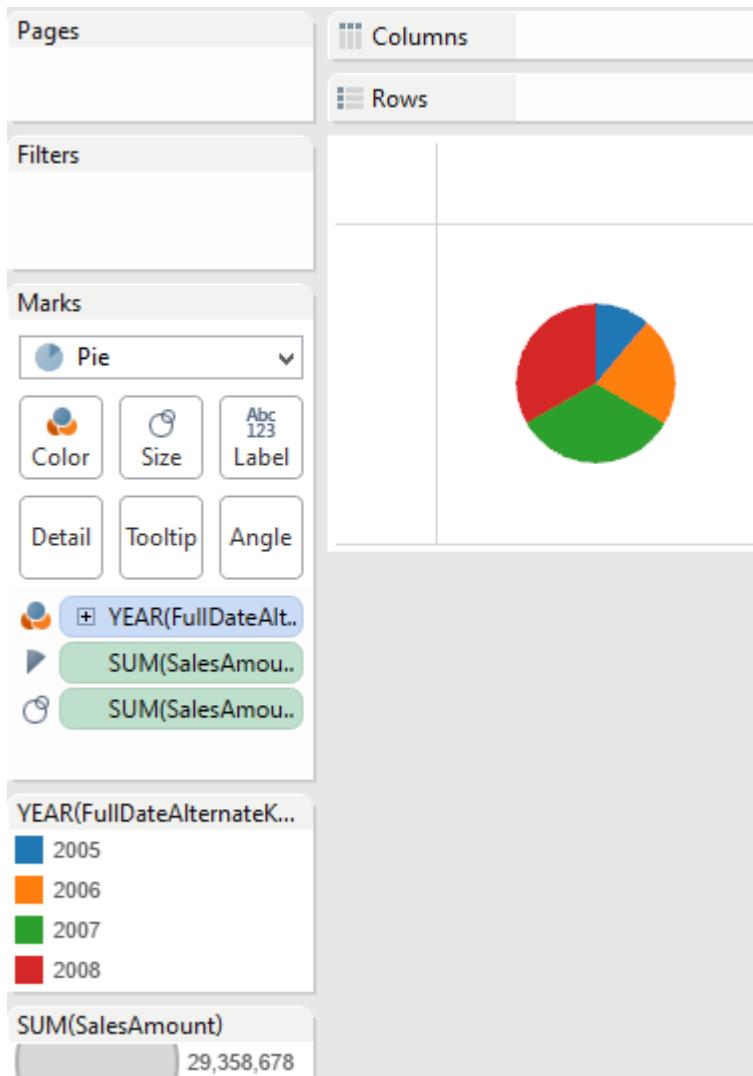
Assign Palette

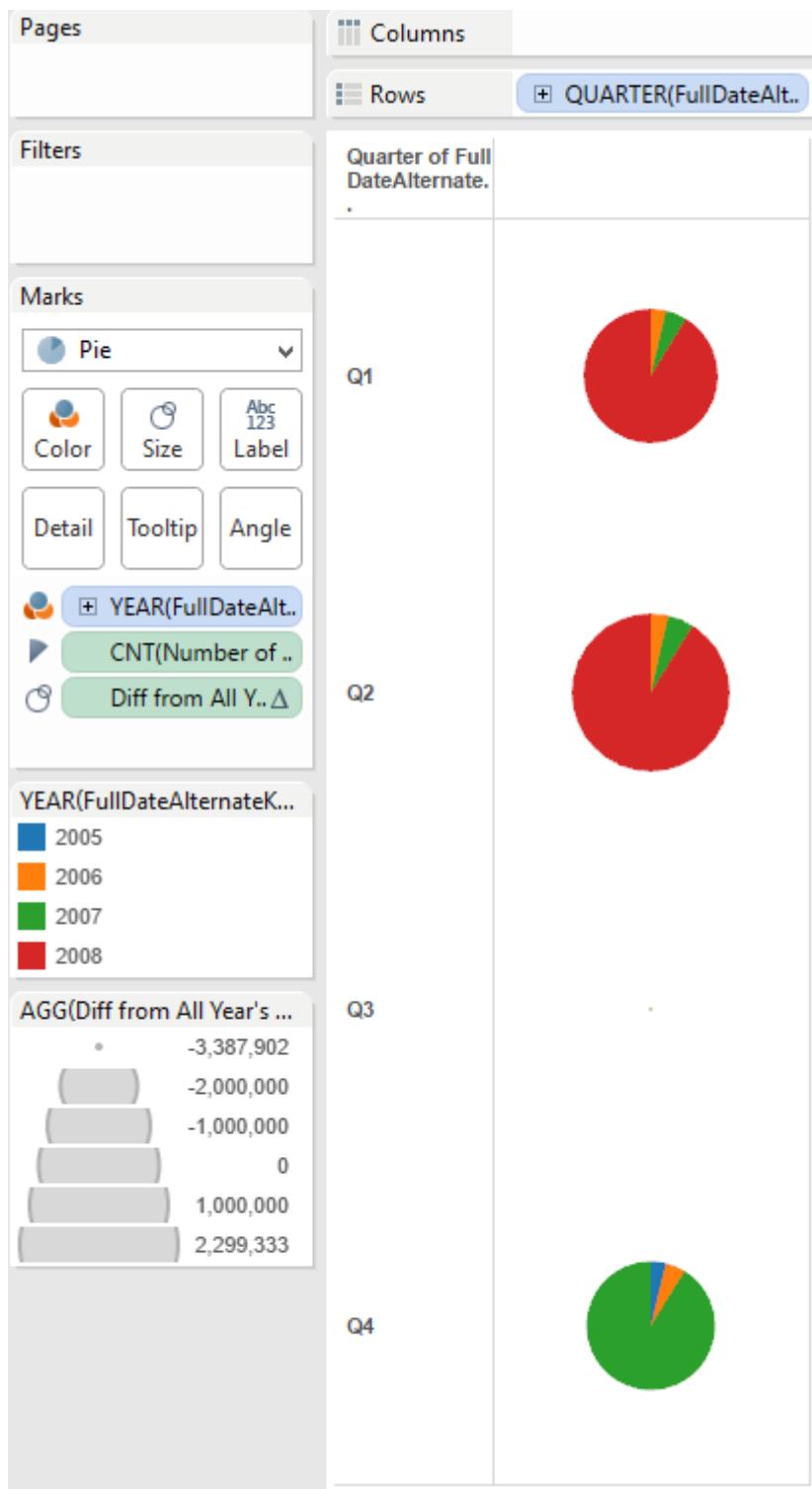
Reset

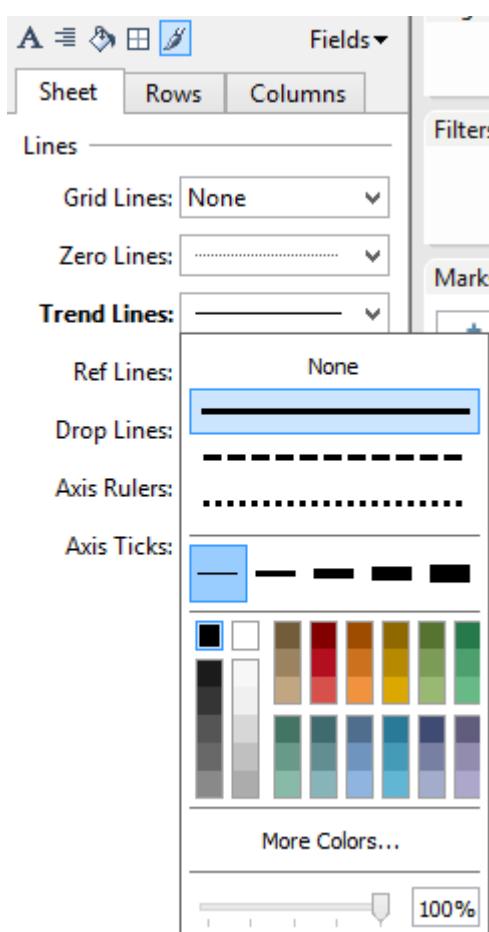
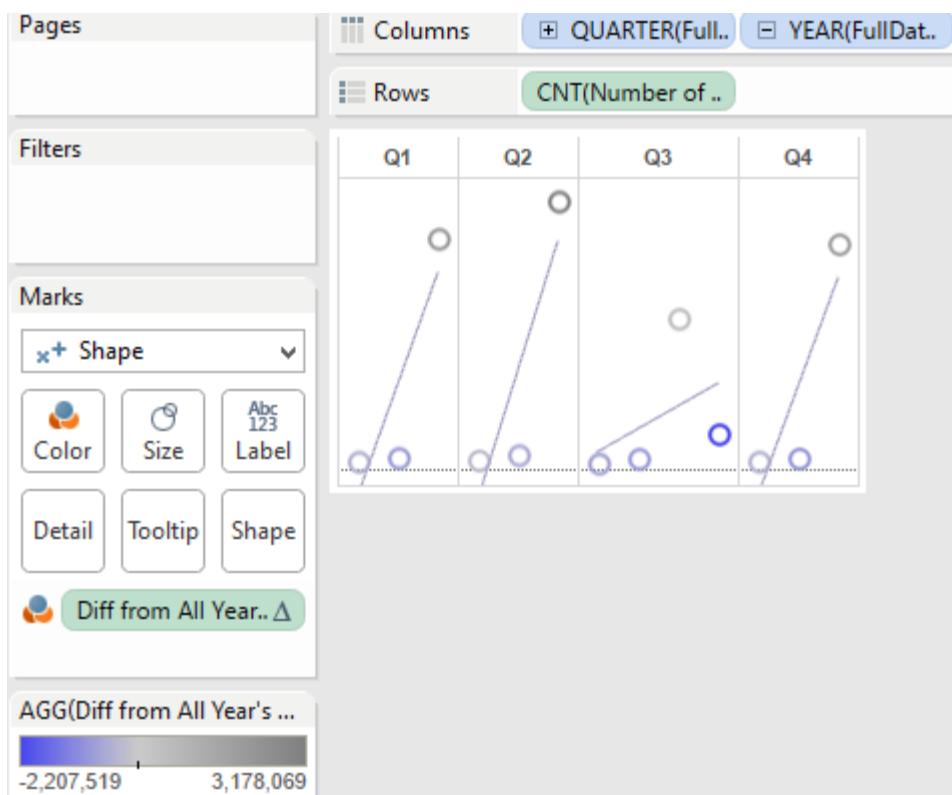
OK

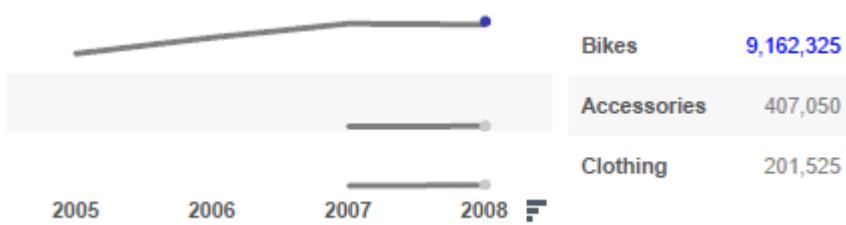
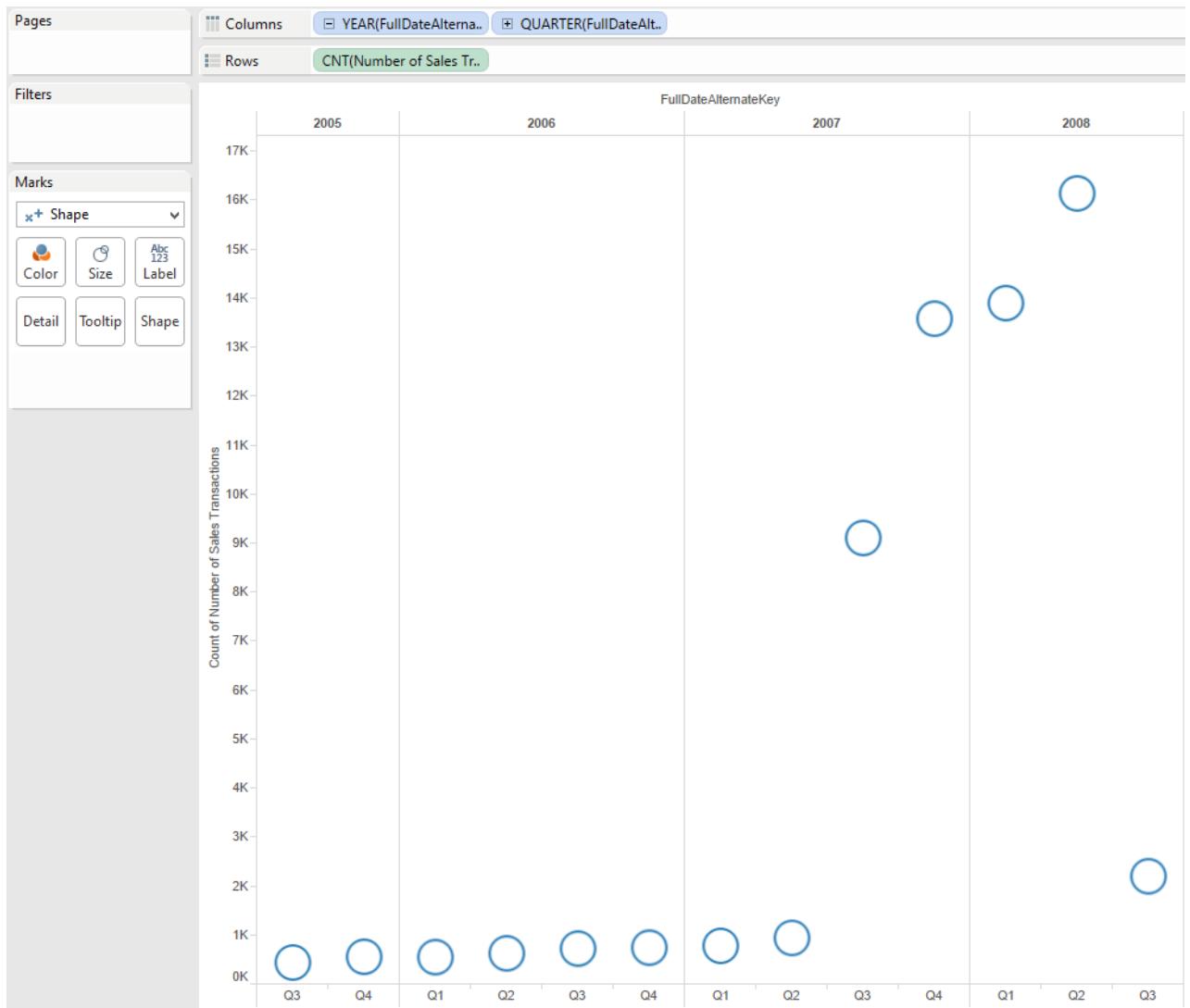
Cancel

Apply









Pages

Filters

YEAR(FullDateAlternateKey): 2008

Marks

Abc Automatic

Color      Size      Text

Detail      Tooltip

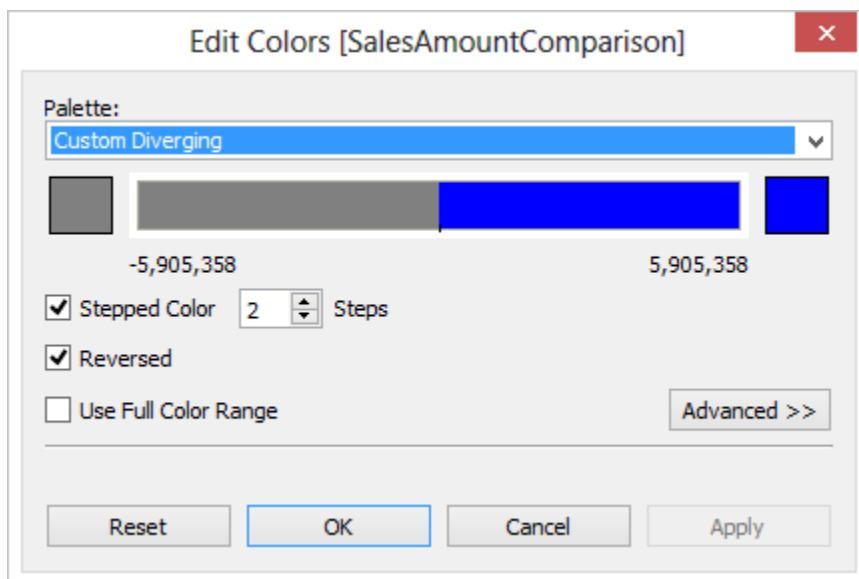
SalesAmountComparison

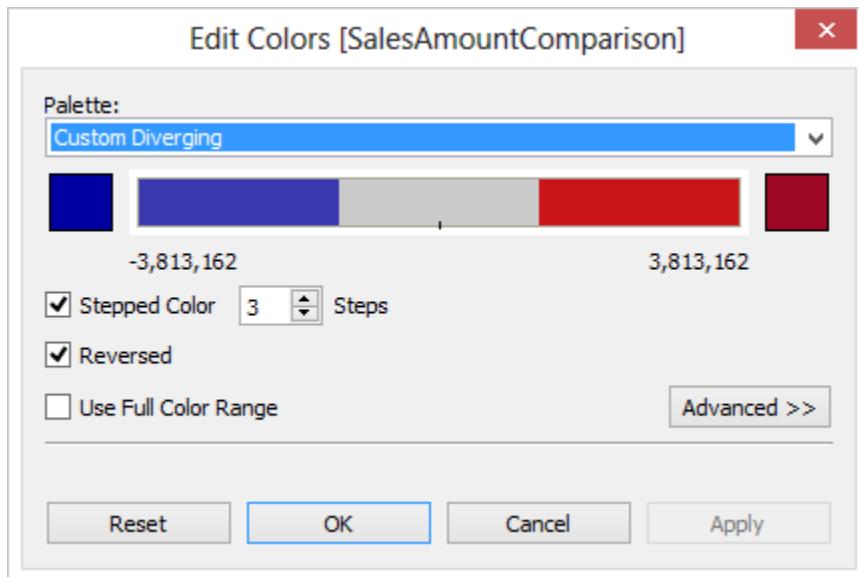
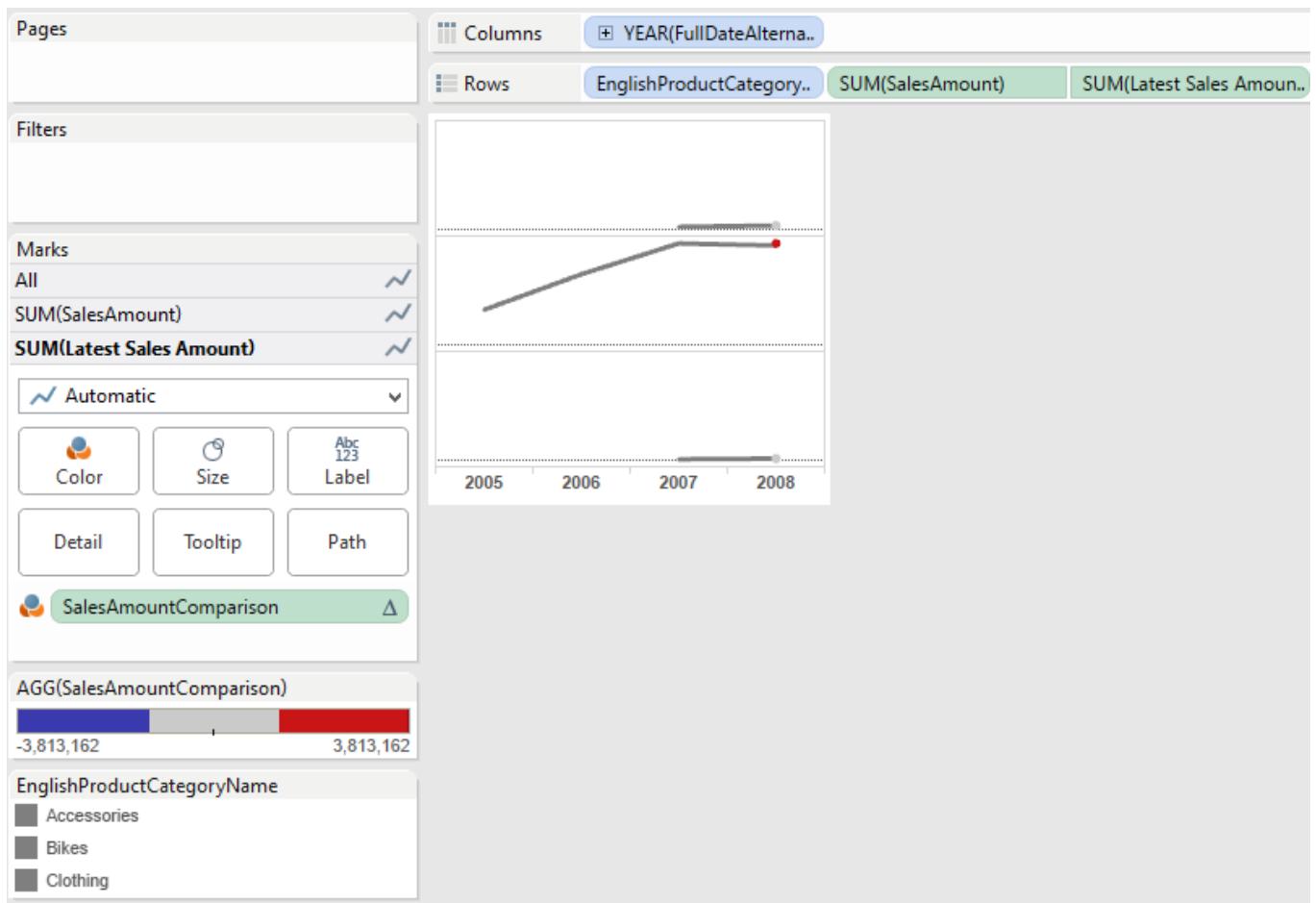
123 SUM(Latest Sales Amount)

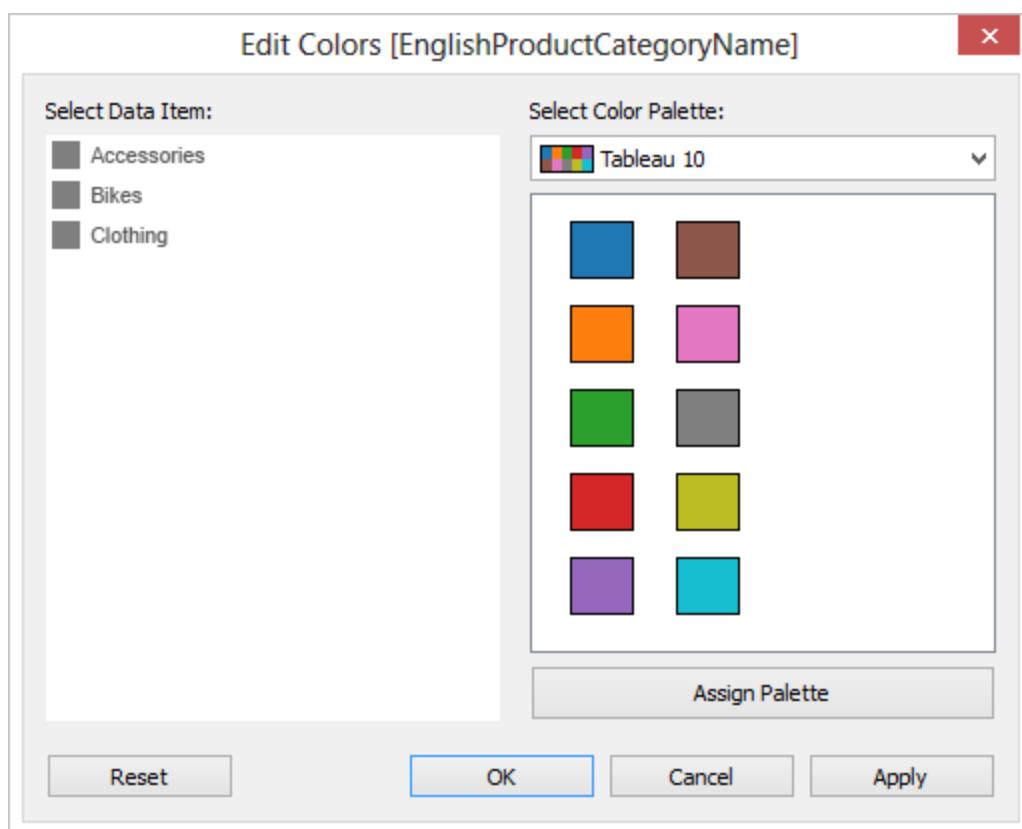
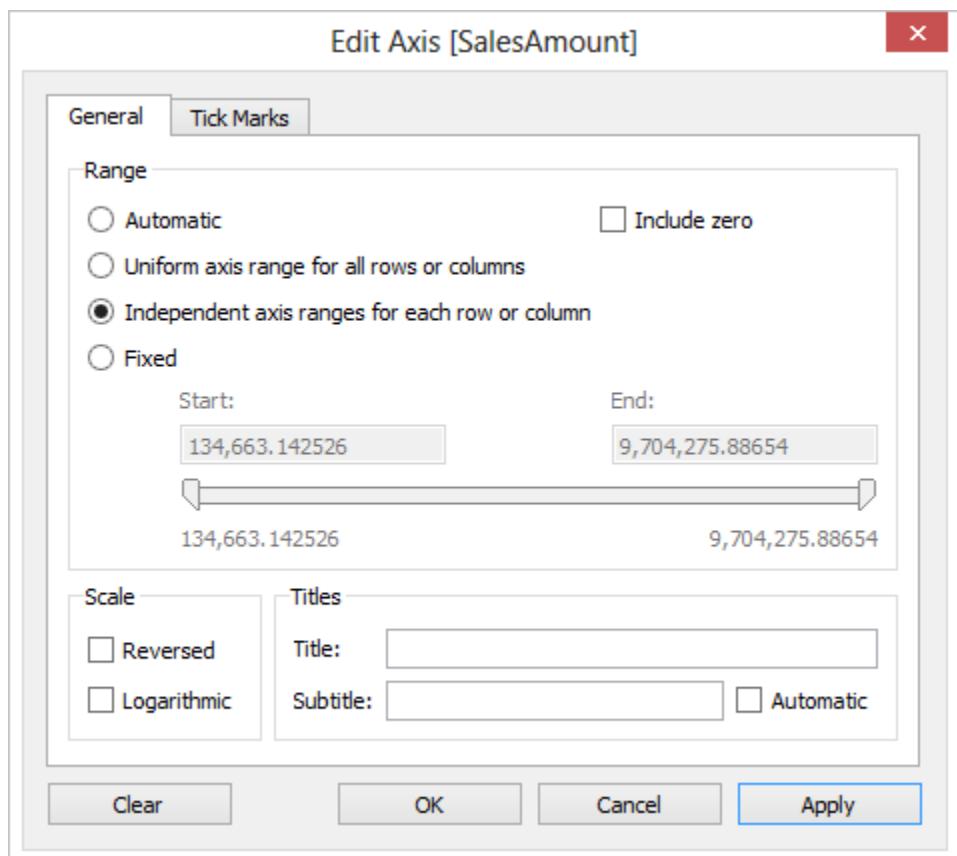
AGG(SalesAmountComparison)

-5,905,358      5,905,358

Columns	
Rows	EnglishProductCatego..
Bikes	9,162,325
Accessories	407,050
Clothing	201,525







Chapter Seven

Dimensions

- DimDate#csv
  - # FiscalQuarter
  - # FiscalYear
  - FullDateAlternateKey
  - Max Year
- DimProduct#csv
  - Abc EnglishProductName
  - # ProductKey
- DimProductCategory#csv
  - Abc EnglishProductCatego...
  - Abc FrenchProductCatego...
  - # ProductCategoryAlter...
  - # ProductCategoryKey
  - Abc SpanishProductCateg...
- DimProductSubcategory#csv
  - # DimProductSubcatego...
  - Abc EnglishProductSubcat...
  - # ProductSubcategory
- FactInternetSales#cs
  - # FactInternetSales#c
  - Abc Measure Names

Marks

- Automatic
- Color
- Size
- Label
- Detail
- Tooltip
- Path

EnglishProductCat...

- Edit Colors...
- Format Legends...
- Show Title
- Edit Title...
- Highlight Selected Items
- Sort...
- Hide Card

Columns

+ YEAR(FullDateAltera..)

Rows

Filter...

Show Quick Filter

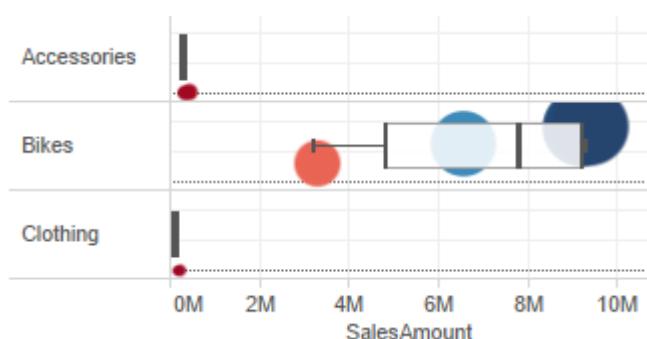
Sort...

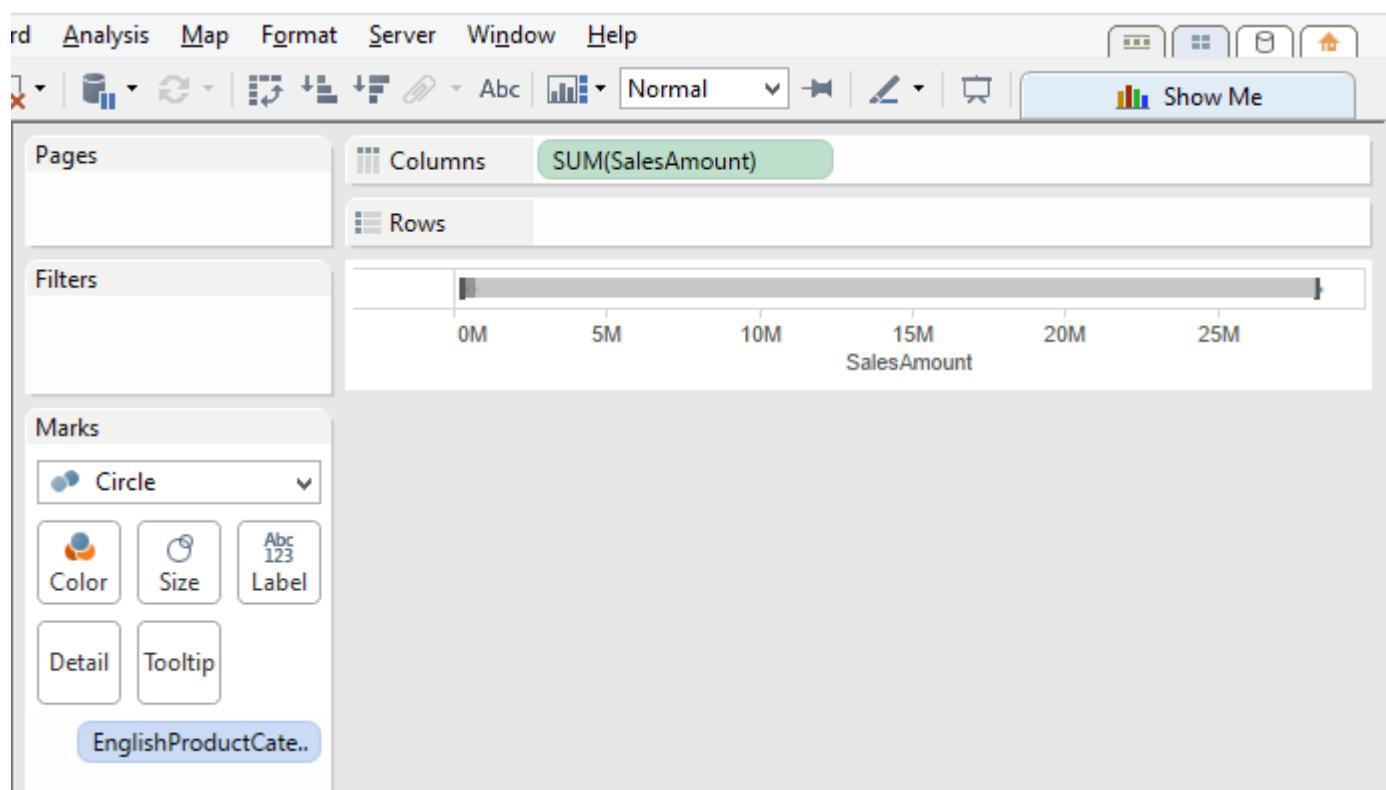
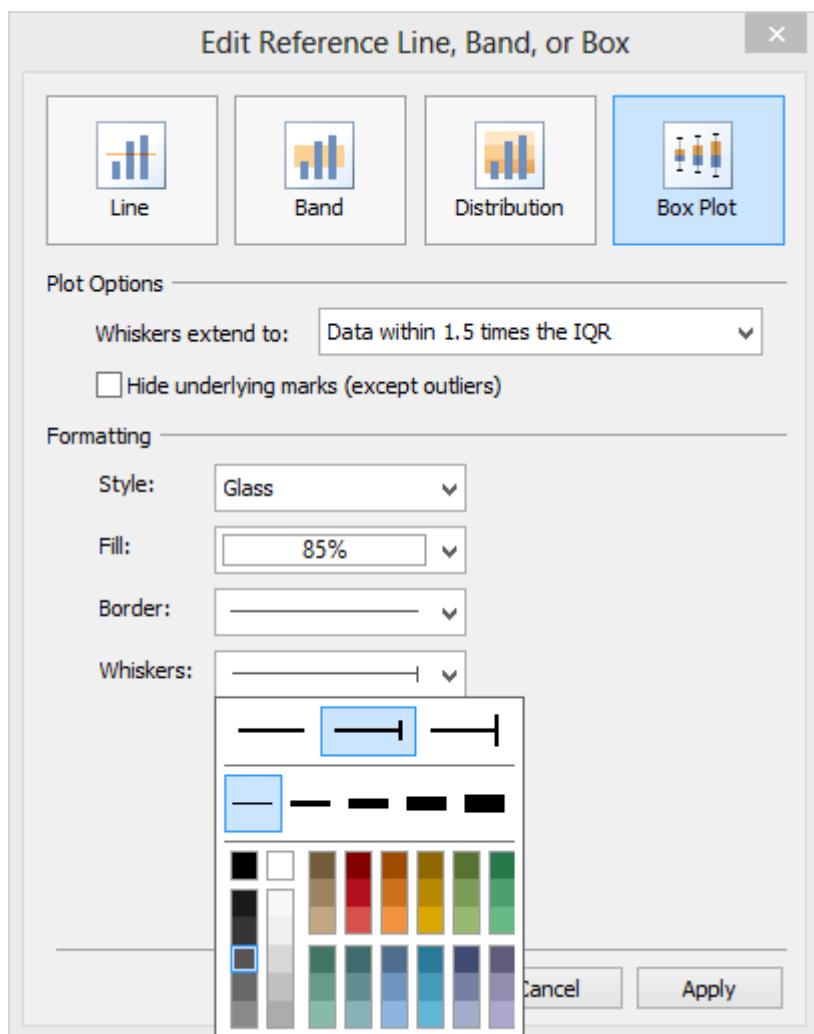
Format...

Show Header

Include in Tooltip

Show Missing Values









### Add Table

Join Clause:  
[DimProductCategory #csv].[ProductCategoryKey] = [DimProductSubcategory #csv].[ProductCategoryKey]

Delete Join Type: Inner

Add Join Clause

DimProductCategory #csv	=	DimProductSubcategory #csv
Enter Text to Search ProductCategoryKey		Enter Text to Search ProductSubcategoryKey
EnglishProductName FrenchProductName ProductCategoryAlternateKey SpanishProductName		ProductSubcategoryAlternateKey ProductCategoryKey EnglishProductSubcategoryName

OK Cancel

### Relationships

Relationships determine how data from secondary data sources are joined with primary data sources.

Primary data source:  
FactInternetSales

Secondary data source:  
 Automatic  Custom

DimDate	ProductKey	ProductKey
DimProduct		

Add... Edit... Remove

OK Cancel

## Add Table

Table    Join

Select the table to add:

- DimOrganization#csv
- DimProduct#csv
- DimProductCategory#csv
- DimProductSubcategory#csv**
- DimPromotion#csv
- DimReseller #csv
- DimSalesPerson #csv

Table Alias: DimProductSubcategory#csv

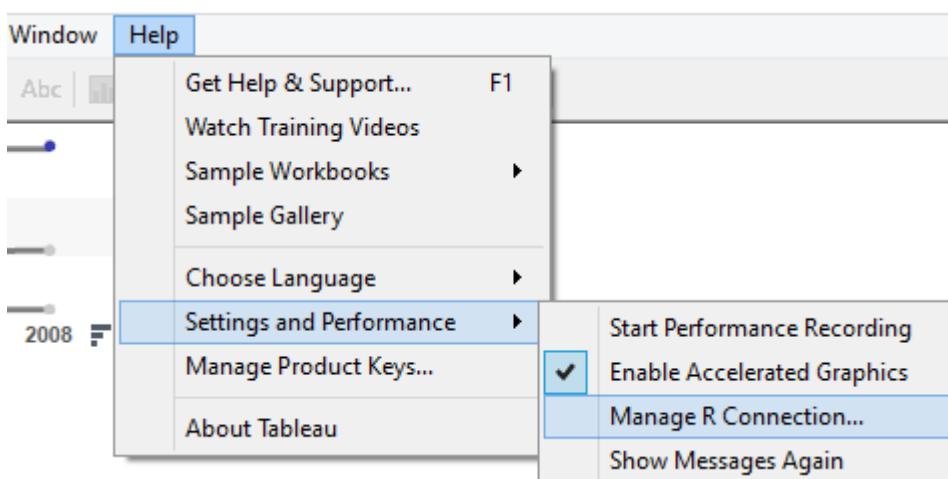
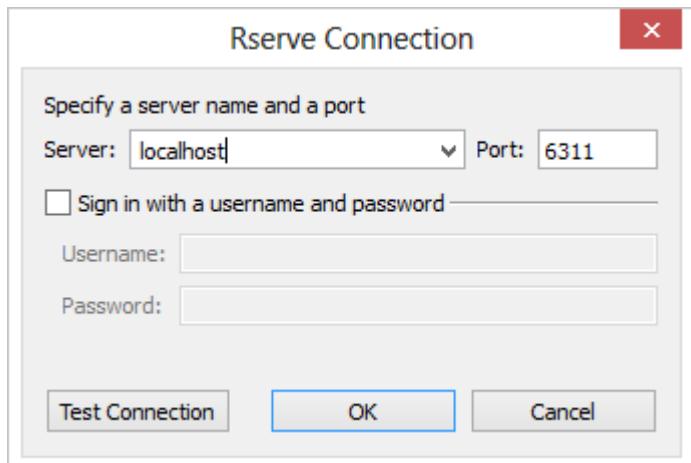
Table Fields:

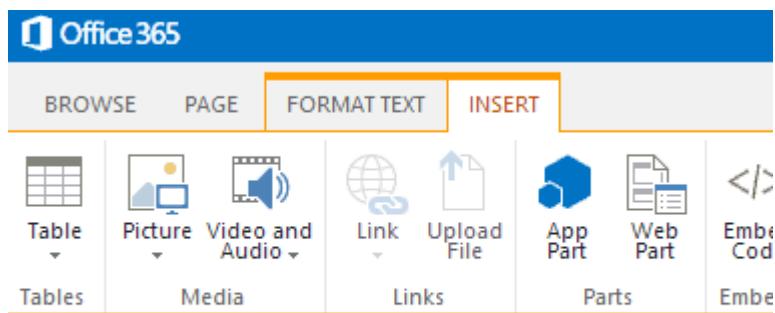
Field Alias	Field Name
<input checked="" type="checkbox"/> EnglishProductSubcategoryName	EnglishProductSubcategoryName
<input checked="" type="checkbox"/> DimProductSubcategory#csv_ProductCategoryKey	ProductCategoryKey
<input type="checkbox"/> ProductSubcategoryAlternateKey	ProductSubcategoryAlternateKey
<input checked="" type="checkbox"/> ProductSubcategoryKey	ProductSubcategoryKey

**Select All** **Unselect All** **Reset Field Names**

**OK** **Cancel**

## Chapter 8





Categories

- Content Rollup
- Document Sets
- Filters
- Forms
- Media and Content
- Search
- Social Collaboration

Upload a Web Part ▾

Parts

- Content Editor
- Get started with your site
- Image Viewer
- Media Web Part
- Page Viewer
- Picture Library Slideshow Web P..
- Script Editor
- Silverlight Web Part

Files Plots Packages Help Viewer

Install Packages Check for Updates

<input checked="" type="checkbox"/>	<a href="#">datasets</a>	The R Datasets Package
<input type="checkbox"/>	<a href="#">foreign</a>	Read Data Stored by Minitab, S, SAS, SPSS, Stata, Systat, Weka, dBase, ...
<input checked="" type="checkbox"/>	<a href="#">graphics</a>	The R Graphics Package
<input checked="" type="checkbox"/>	<a href="#">grDevices</a>	The R Graphics Devices and Support for Colours and Fonts
<input type="checkbox"/>	<a href="#">grid</a>	The Grid Graphics Package
<input type="checkbox"/>	<a href="#">KernSmooth</a>	Functions for kernel smoothing for Wand & Jones (1995)
<input type="checkbox"/>	<a href="#">lattice</a>	Lattice Graphics
<input type="checkbox"/>	<a href="#">manipulate</a>	Interactive Plots for RStudio
<input type="checkbox"/>	<a href="#">MASS</a>	Support Functions and Datasets for Venables and Ripley's MASS
<input type="checkbox"/>	<a href="#">Matrix</a>	Sparse and Dense Matrix Classes and Methods
<input checked="" type="checkbox"/>	<a href="#">methods</a>	Formal Methods and Classes
<input type="checkbox"/>	<a href="#">mgcv</a>	Mixed GAM Computation Vehicle with GCV/AIC/REML smoothness estimation
<input type="checkbox"/>	<a href="#">nlme</a>	Linear and Nonlinear Mixed Effects Models
<input type="checkbox"/>	<a href="#">nnet</a>	Feed-forward Neural Networks and Multinomial Log-Linear Models
<input type="checkbox"/>	<a href="#">parallel</a>	Support for Parallel computation in R
<input type="checkbox"/>	<a href="#">rpart</a>	Recursive Partitioning and Regression Trees
<input checked="" type="checkbox"/>	<a href="#">Rserve</a>	Binary R server
<input checked="" type="checkbox"/>	<a href="#">rstudio</a>	Tools and Utilities for RStudio

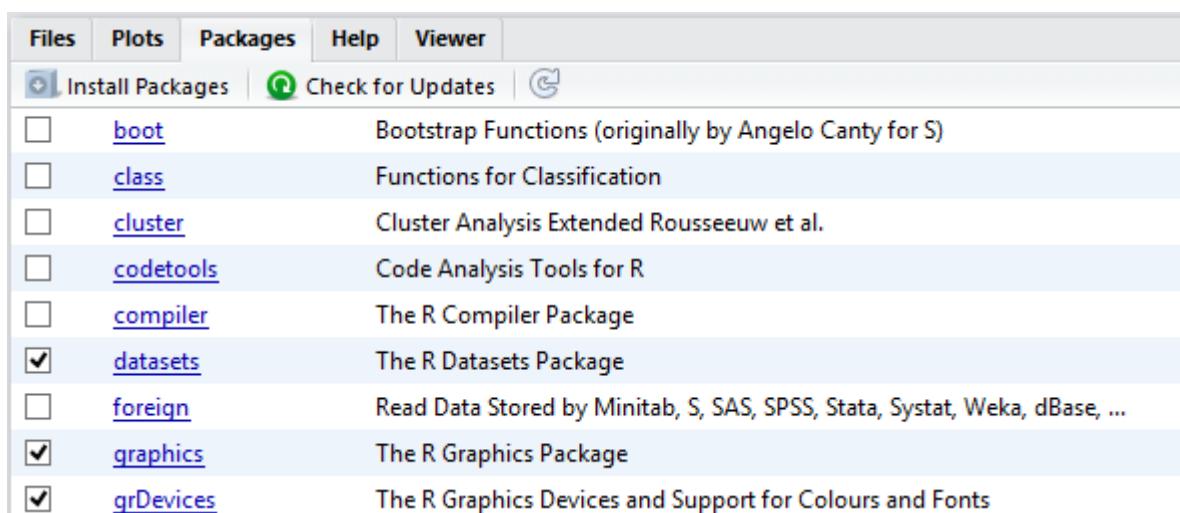
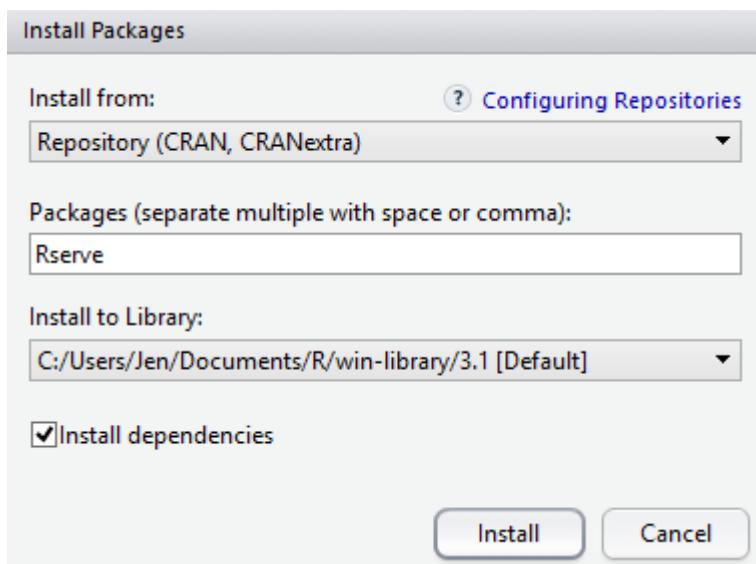
```

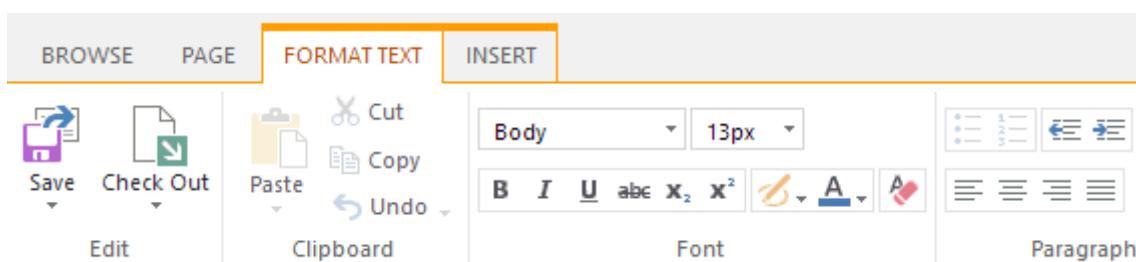
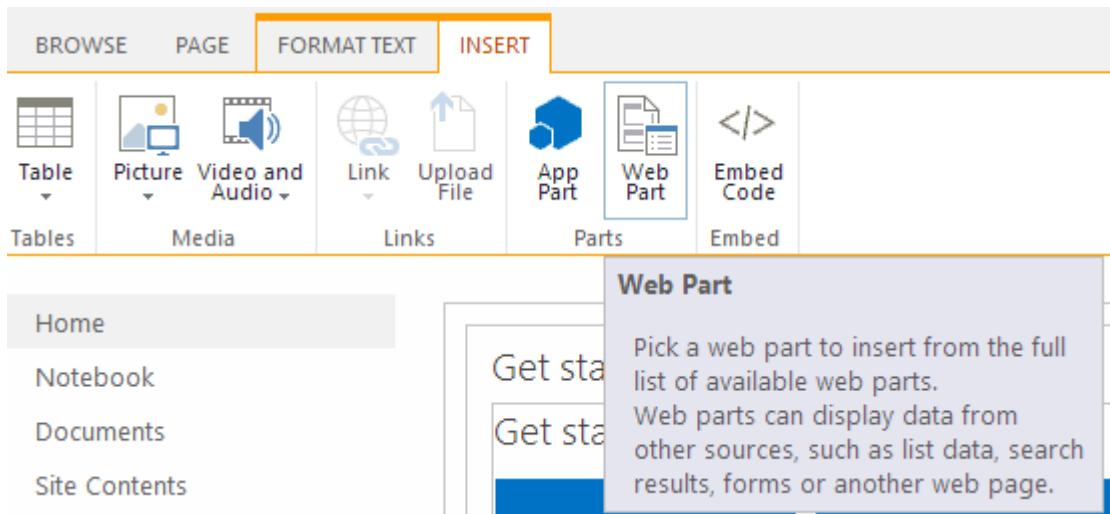
> install.packages("Rserve")
Installing package into 'C:/Users/Jen/Documents/R/win-library/3.1'
(as 'lib' is unspecified)
trying URL 'http://cran.rstudio.com/bin/windows/contrib/3.1/Rserve_1.7-3.zip'
Content type 'application/zip' length 713148 bytes (696 kb)
opened URL
downloaded 696 kb

package 'Rserve' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
  C:\Users\Jen\AppData\Local\Temp\RtmpgdQJEa\downloaded_packages

```





## Preview

Copy and Paste link into your email message

<http://public.tableausoftware.com/views/C> Copy

Copy and Paste html code to embed the Viz in your website

<script type='text/javascript' src='http://pu Copy

Save To Web Results

Chapter 8 successfully saved to Tableau Public

**Views**  
This workbook contains the following 7 views

- Topic 2 Dual Axes Box Whiskers
- Topic 2
- Topic 2
- Topic 2 Dual Axes Box Whiskers
- Topic 3 Splom Number of Records
- Topic 3 Splom Sales Amount
- Chapter Eight Dashboard

**Preview**

Copy and Paste link into your email message      Copy and Paste html code to embed the Viz in your website

<http://public.tableausoftware.com/views/C> Copy      <script type='text/javascript' src='http://pu Copy

**Topic 2 Dual Axes Box Whiskers**

Bikes      9,162,325  
Accessories      407,050  
Clothing      201,525

2005      2006      2007      2008

**Topic 3 Splom Number of Records**

**Topic 3 Splom Sales Amount**

**Chapter Eight Dashboard**

Diff from All Year's Ave...  
-3,813,162      3,813,162  
EnglishProductCategory  
Bikes  
Accessories  
Clothing  
Diff from All Year's Ave...  
-5,905,358      5,905,358

[Open in browser window](#)  
[Learn how to share](#)

Saving workbook to Tableau Public...

Sending data to server

 Transferred 8.2 KB of 21.9 KB

[Cancel](#)

**Tableau Public Sign In**

**Logon** 

Enter your Tableau Public email address and password to log on.

Email:

Password:

[Login](#) [Forgot your password?](#)

No account? [Create one for FREE!](#)

## Create an Account



Required information for your Tableau Public account.

**Valid email address:** jen.stirrup@copper-blue.com

**Choose a display name:** Jen Stirrup

**Choose a password:** ••••••

**Confirm your password:** ••••••

**Word verification:** Type the characters you see in the picture below. Letters are not case-sensitive



6365%84

Enter the words above: 63659684

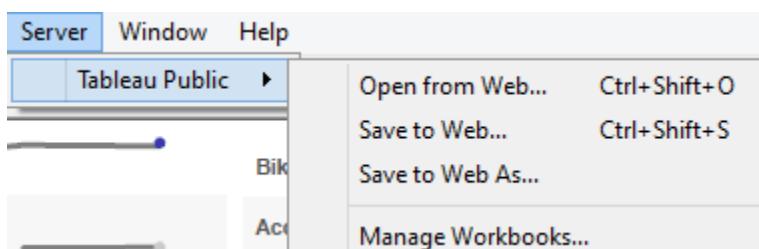
[Get another CAPTCHA](#)

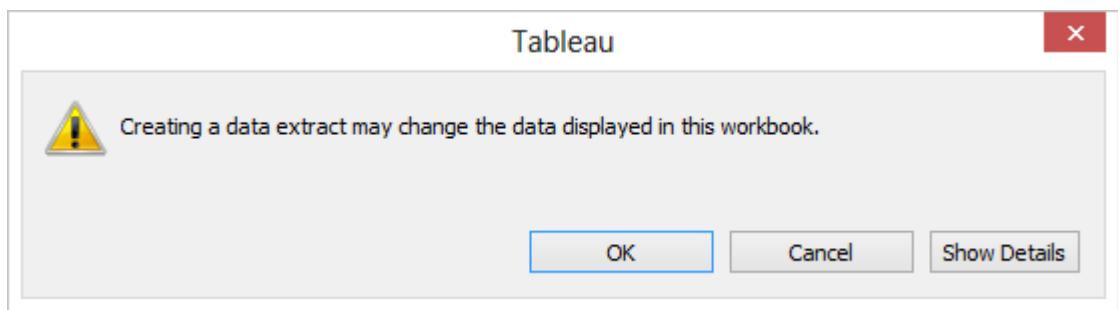
[Get an audio CAPTCHA](#)

[Help](#)

**Terms of Service:**  I accept the [Terms of Service](#)

**Create My Account**





Add/Edit Permissions

User/Group:

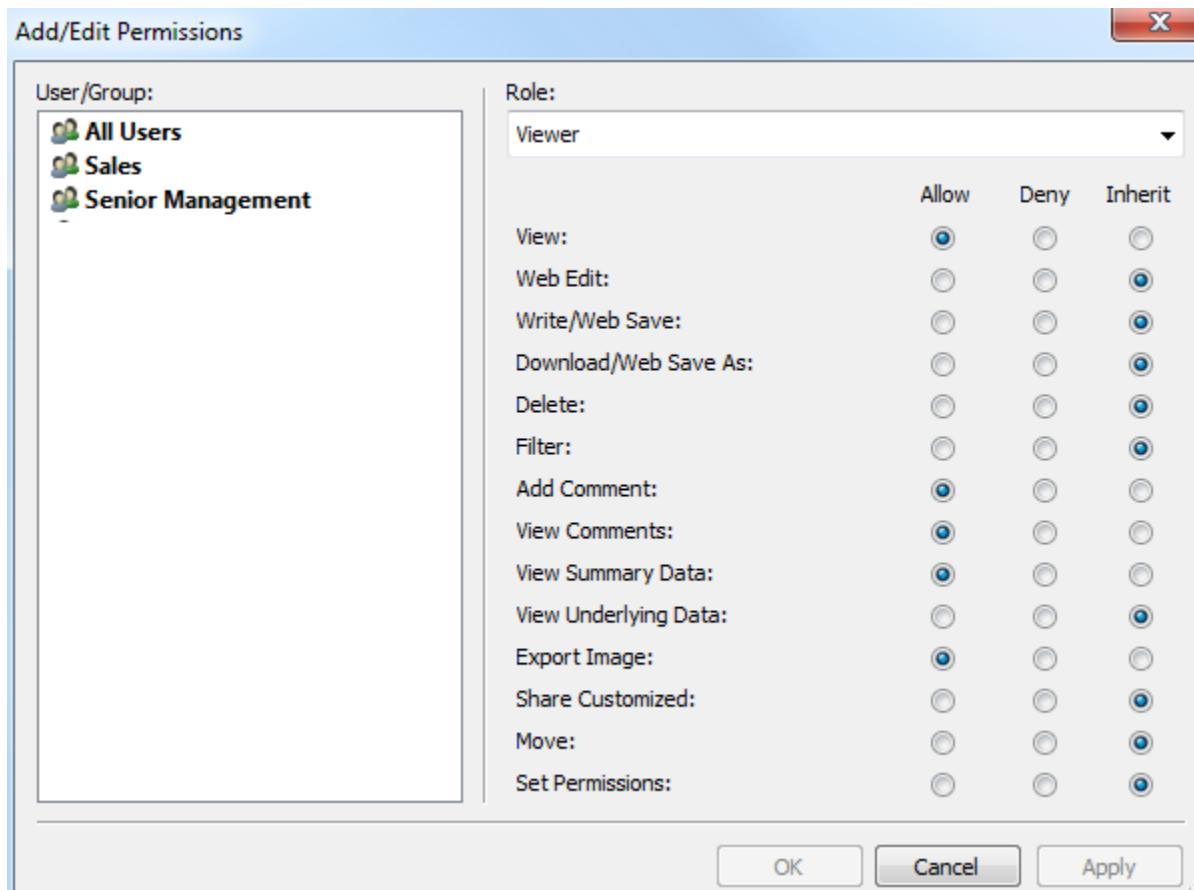
- All Users
- Sales
- Senior Management

Role:

Viewer

|                       | Allow                            | Deny                  | Inherit                          |
|-----------------------|----------------------------------|-----------------------|----------------------------------|
| View:                 | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/>            |
| Web Edit:             | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Write/Web Save:       | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Download/Web Save As: | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Delete:               | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Filter:               | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Add Comment:          | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/>            |
| View Comments:        | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/>            |
| View Summary Data:    | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/>            |
| View Underlying Data: | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Export Image:         | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/>            |
| Share Customized:     | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Move:                 | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |
| Set Permissions:      | <input type="radio"/>            | <input type="radio"/> | <input checked="" type="radio"/> |

OK Cancel Apply

A dialog box titled "Add/Edit Permissions". It has two main sections: "User/Group" containing "All Users", "Sales", and "Senior Management"; and "Role" set to "Viewer". Below is a table of permissions with radio buttons for "Allow", "Deny", and "Inherit". The "Allow" column is checked for most actions except "Delete", "Move", and "Set Permissions". The "Inherit" column is checked for "Delete", "Move", and "Set Permissions". At the bottom are "OK", "Cancel", and "Apply" buttons.

Publish Workbook to Tableau Server

Project: default

Name:

Add Tags:

View Permissions

| User/Group | Role       |
|------------|------------|
| All Users  | Interactor |
| Publisher  | Editor     |

Add... Edit... Remove... All None

Views to Share

| Sheet                                       |
|---|
| <input checked="" type="checkbox"/> Sheet 1 |

Show Sheets as Tabs   
Show Selections   
Include External Files

Generate Thumbnails As User:

Publish Cancel

Tableau Server Login

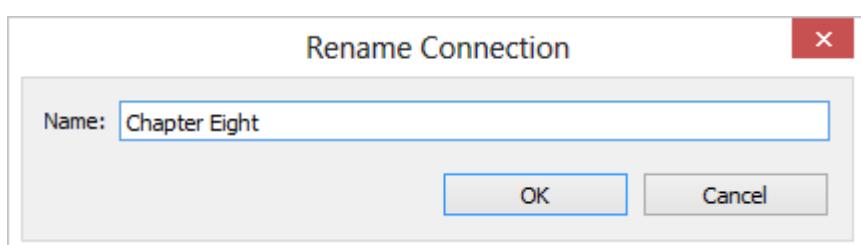
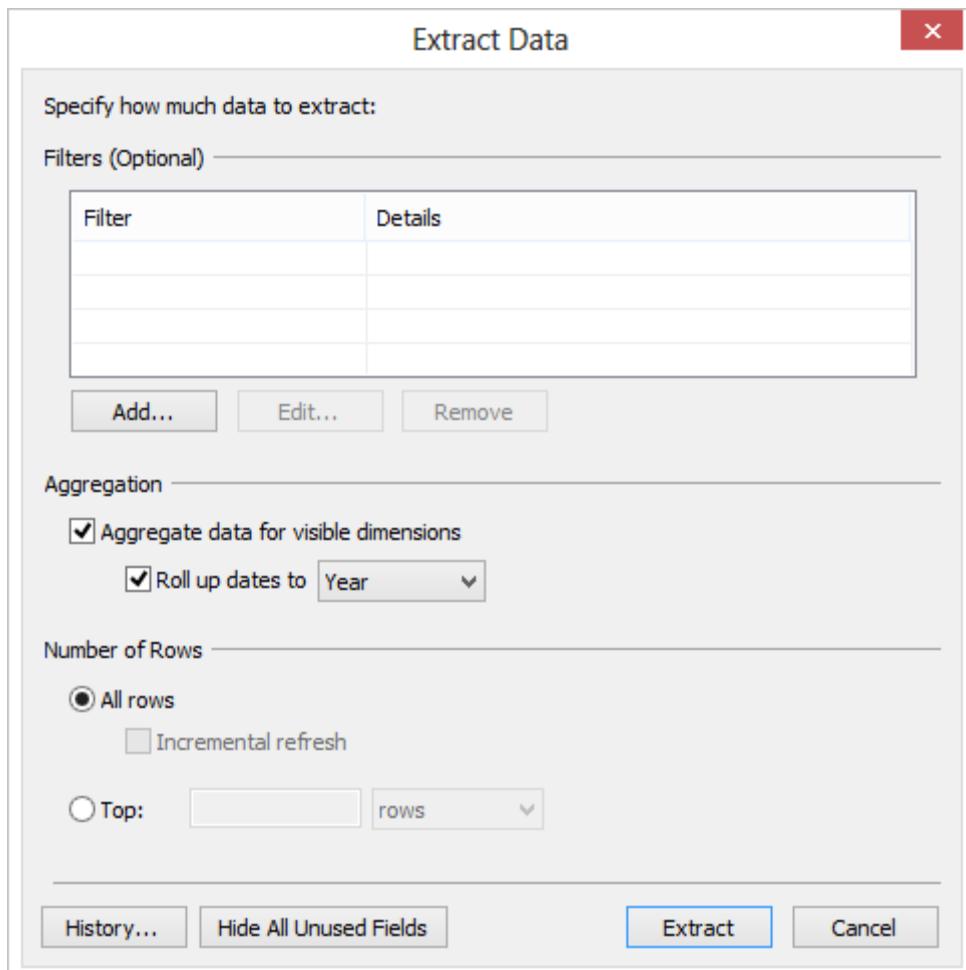
Server: yourserver

User Name: username

Password: \*\*\*\*\*

[Learn about Tableau Server](#)

OK Cancel



A screenshot of the Microsoft Power BI ribbon. The 'Data' tab is highlighted in blue, indicating it is the active tab. Other tabs include 'File', 'Data', 'Worksheet', 'Dashboard', 'Analysis', and 'Map'. Below the ribbon, the 'Data' pane is open, showing a list of data sources. A context menu is open over the 'DimDate#csv' entry, listing options like 'Refresh', 'View Data...', 'Extract Data...', 'Use Extract', 'Extract', and 'Rename...'. The 'DimProduct#csv' entry is also visible in the list.

