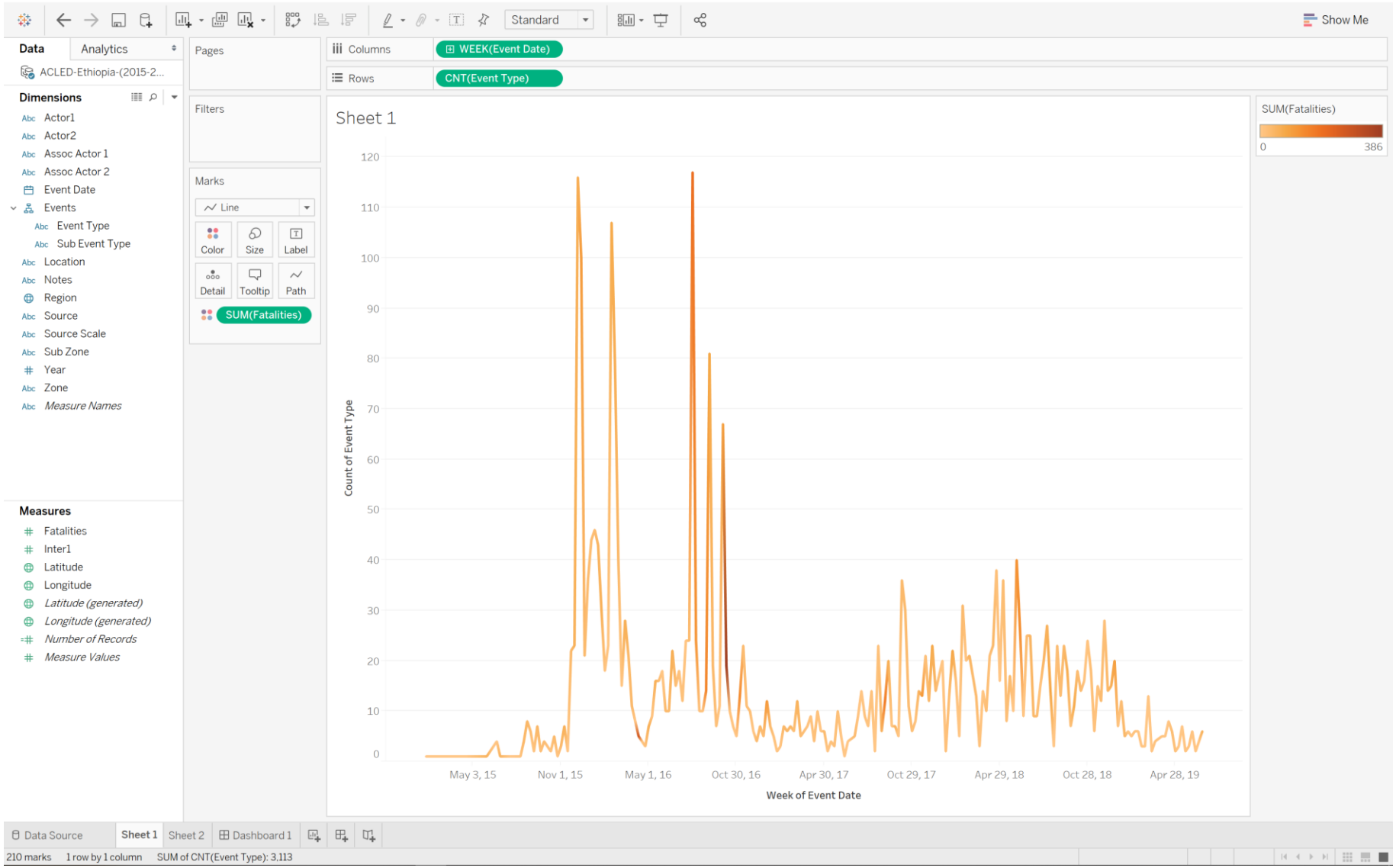
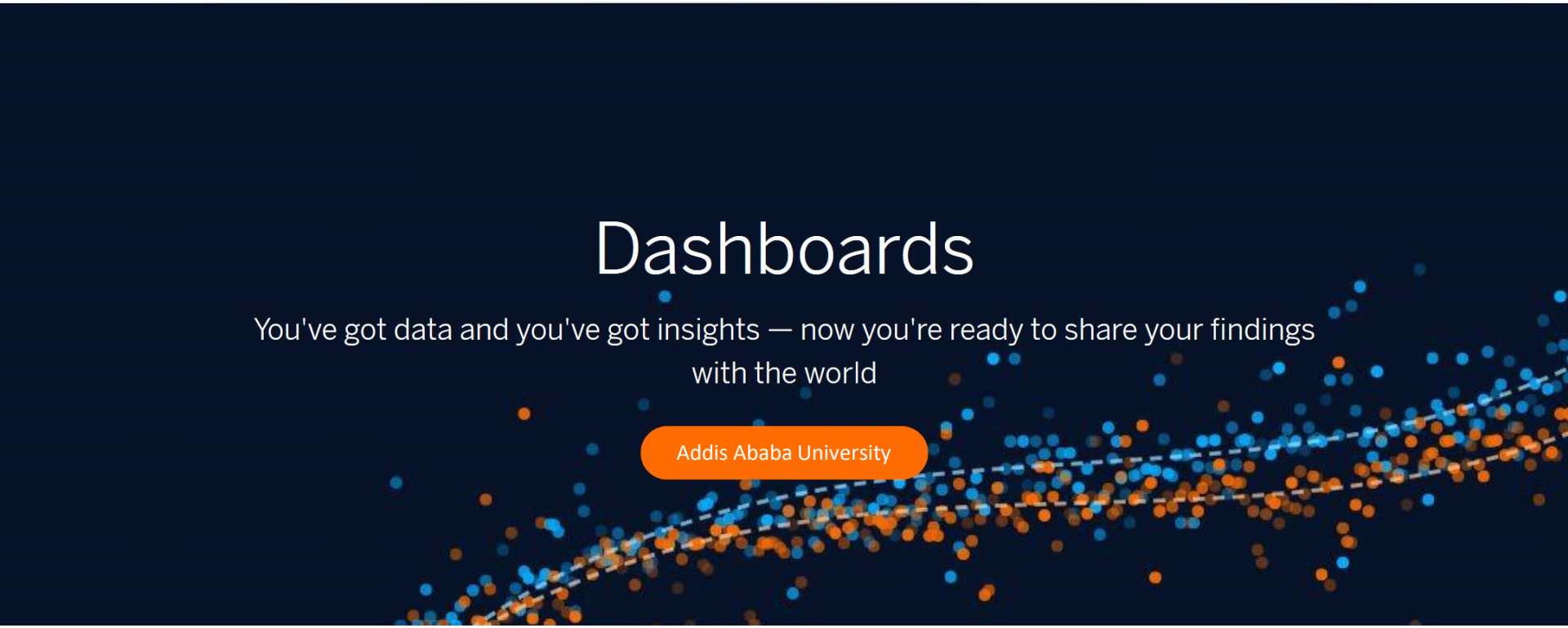
Dashboards, Formatting, and Publishing Online

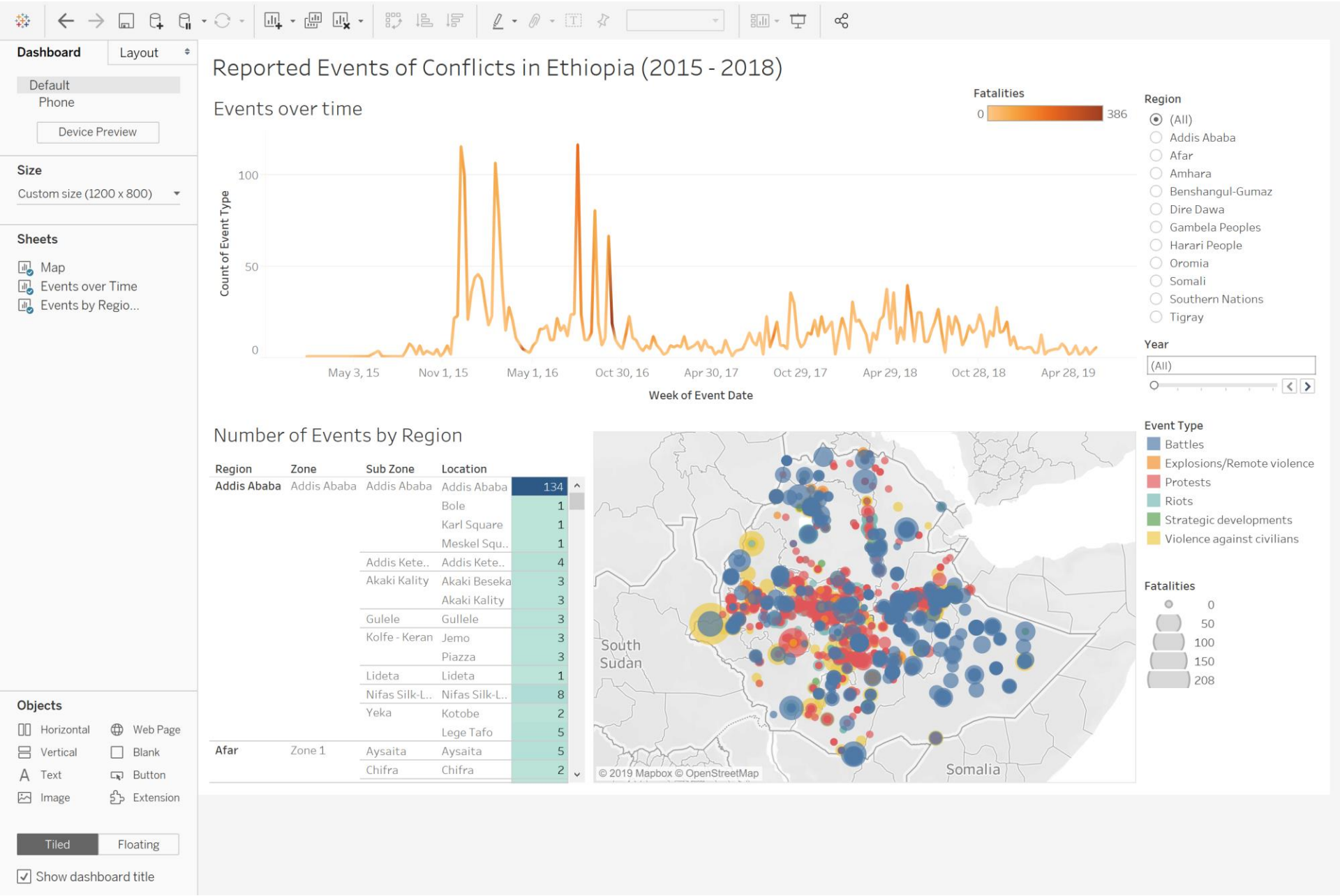
MODULE 4

Make a Line Graph

- Lets continue with the ACLED workbook from the last module
- Using the line graph, add the following filters here:
  - Region
  - Year (Slider)
  - Give it a title (e.g. “Events Over Time”)

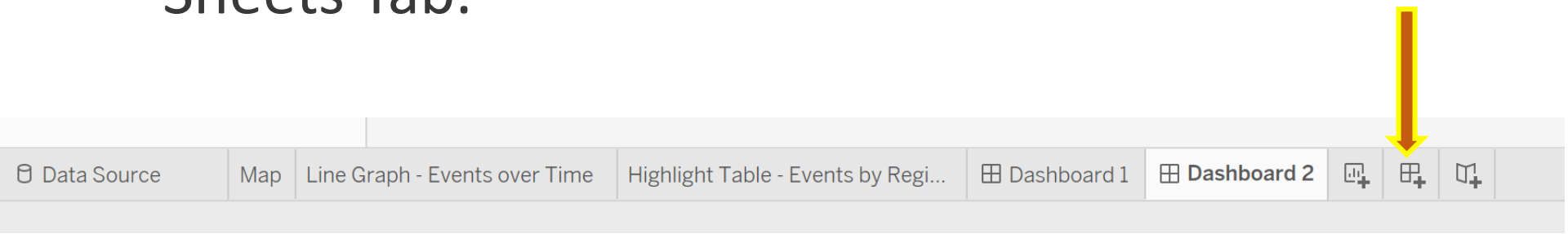

Standard
Show Me
Data
Analytics
ACLED-Ethiopia-(2015-2...
Dimensions
Abc Actor1
Abc Actor2
Abc Assoc Actor 1
Abc Assoc Actor 2
Event Date
Events
Abc Event Type
Abc Sub Event Type
Abc Location
Abc Notes
Region
Abc Source
Abc Source Scale
Abc Sub Zone
Year
Abc Zone
Abc Measure Names
Measures
Fatalities
Inter1
Latitude
Longitude
Latitude (generated)
Longitude (generated)
Number of Records
Measure Values
Pages
Filters
Marks
Line
Color
Size
Label
Detail
Tooltip
Path
SUM(Fatalities)
Columns
WEEK(Event Date)
Rows
CNT(Event Type)
Sheet 1
SUM(Fatalities)
0
386
120
110
100
90
80
70
60
50
40
30
20
10
0
Count of Event Type
May 3, 15
Nov 1, 15
May 1, 16
Oct 30, 16
Apr 30, 17
Oct 29, 17
Apr 29, 18
Oct 28, 18
Apr 28, 19
Week of Event Date
Data Source
Sheet 1
Sheet 2
Dashboard 1
210 marks
1 row by 1 column
SUM of CNT(Event Type): 3,113

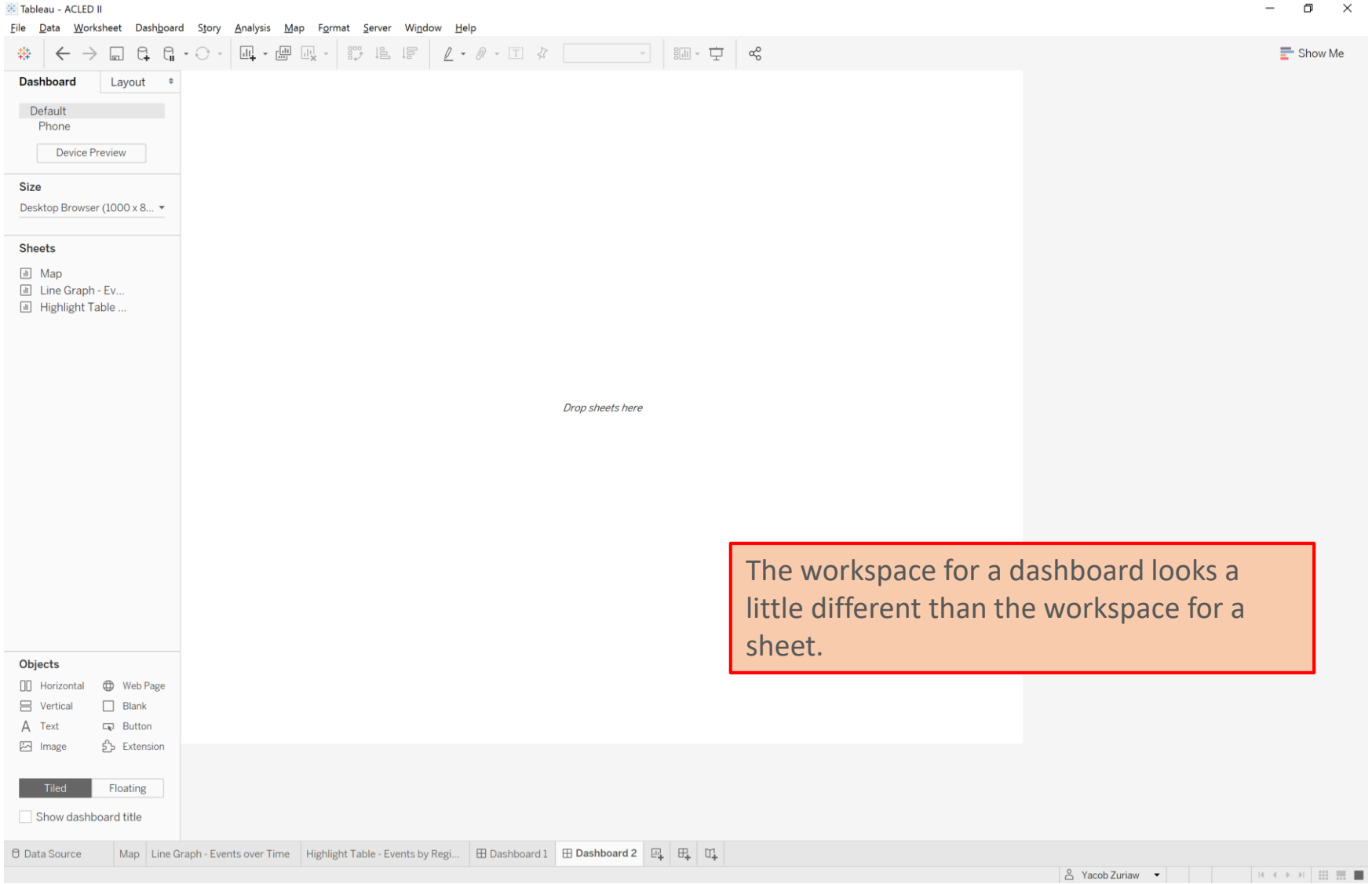

Dashboards
You've got data and you've got insights — now you're ready to share your findings with the world
Addis Ababa University


Dashboard
Layout
Default
Phone
Device Preview
Size
Custom size (1200 x 800)
Sheets
Map
Events over Time
Events by Regio...
Objects
Horizontal
Web Page
Vertical
Blank
Text
Button
Image
Extension
Tiled
Floating
Show dashboard title
Reported Events of Conflicts in Ethiopia (2015 - 2018)
Events over time
Fatalities
0
386
Count of Event Type
100
50
0
May 3, 15
Nov 1, 15
May 1, 16
Oct 30, 16
Apr 30, 17
Oct 29, 17
Apr 29, 18
Oct 28, 18
Apr 28, 19
Week of Event Date
Region
(All)
Addis Ababa
Afar
Amhara
Benshangul-Gumaz
Dire Dawa
Gambela Peoples
Harari People
Oromia
Somali
Southern Nations
Tigray
Year
(All)
Number of Events by Region
Region
Zone
Sub Zone
Location
Addis Ababa
Addis Ababa
Addis Ababa
Addis Ababa
134
Bole
1
Karl Square
1
Meskel Squ..
1
Addis Kete..
Addis Kete..
4
Akaki Kality
Akaki Beseka
3
Akaki Kality
3
Gulele
Gullele
3
Kolfe - Keran
Jemo
3
Piazza
3
Lideta
Lideta
1
Nifas Silk-L..
Nifas Silk-L..
8
Yeka
Kotobe
2
Lege Tafo
5
Afar
Zone 1
Aysaita
Aysaita
5
Chifra
Chifra
2
South Sudan
Somalia
© 2019 Mapbox © OpenStreetMap
Event Type
Battles
Explosions/Remote violence
Protests
Riots
Strategic developments
Violence against civilians
Fatalities
0
50
100
150
208

Dashboards

- Dashboards can be created by clicking on the Dashboard button, at the bottom on the Sheets Tab.





The workspace for a dashboard looks a little different than the workspace for a sheet.

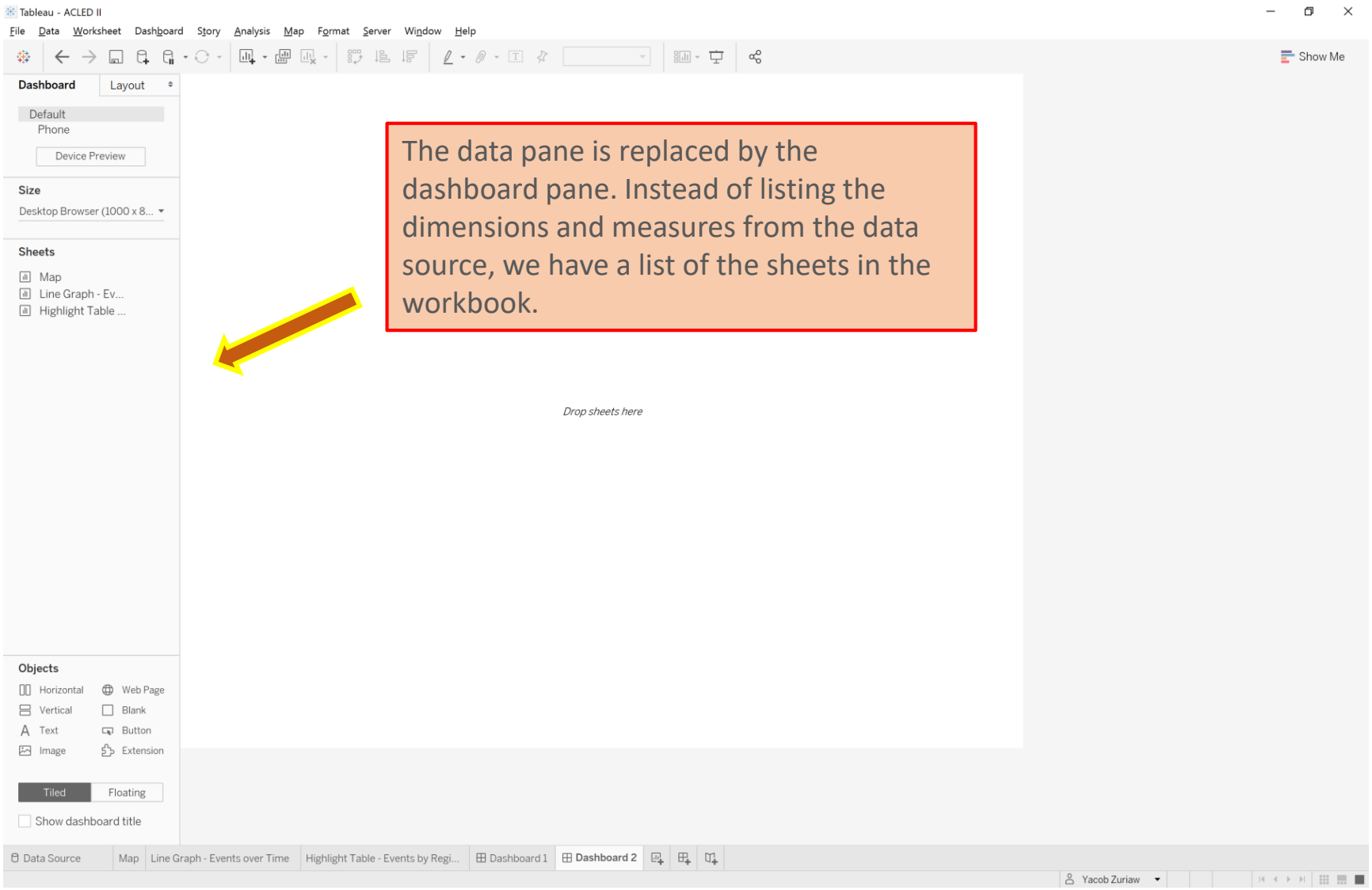


Tableau - ACLED II
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Show Me
Dashboard
Layout
Default
Phone
Device Preview
Size
Desktop Browser (1000 x 8...
Sheets
Map
Line Graph - Ev...
Highlight Table ...
The data pane is replaced by the dashboard pane. Instead of listing the dimensions and measures from the data source, we have a list of the sheets in the workbook.
Drop sheets here
Objects
Horizontal
Web Page
Vertical
Blank
Text
Button
Image
Extension
Tiled
Floating
Show dashboard title
Data Source
Map
Line Graph - Events over Time
Highlight Table - Events by Regi...
Dashboard 1
Dashboard 2
Yacob Zuriaw

Determining Layout Size

- It’s very important to consider the destination of a dashboard from the beginning
- In the size area, we have three main options: fixed size, automatic, and range.
- A lot of effort goes into designing the layout and visual of a dashboard – you can save headache and time by considering things like size and devices from the beginning.
- You should design with mobile devices in mind.

Adding Views to a Dashboard

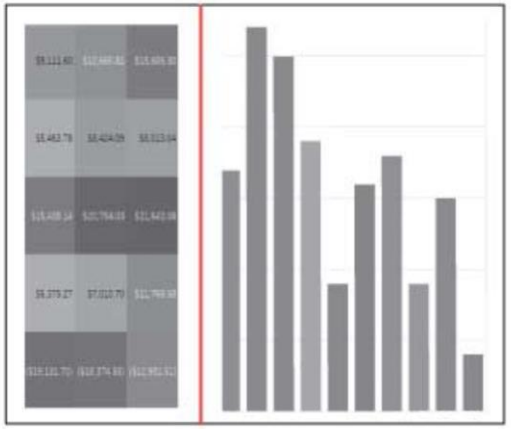
- Adding views to a Dashboard is very easy! Just like we drag fields into a view, we can drag views onto a dashboard!
- Any related legends will also come out – unless they've been hidden on the original sheet.
- The first view will automatically take up the whole dashboard. Any subsequent views, though, can be placed in specific areas of the screen. Holding down the mouse button as you move your mouse around the dashboard shows grey areas indicating where this view will be placed when you let go of the mouse.
- If we bring it all the way to the very bottom, it will fill across the entire width, including the side panel with legends.

Layout Containers

- Tableau organizes dashboards into pieces called containers.
- Containers hold sheets within them, and can be either structured to carry sheets **horizontally, vertically**, or a **tiled** combination of the two.

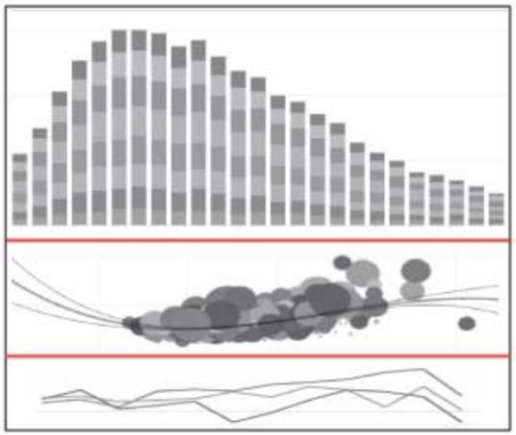
Horizontal layout container

The two views below are arranged in a horizontal layout container.



Vertical layout container

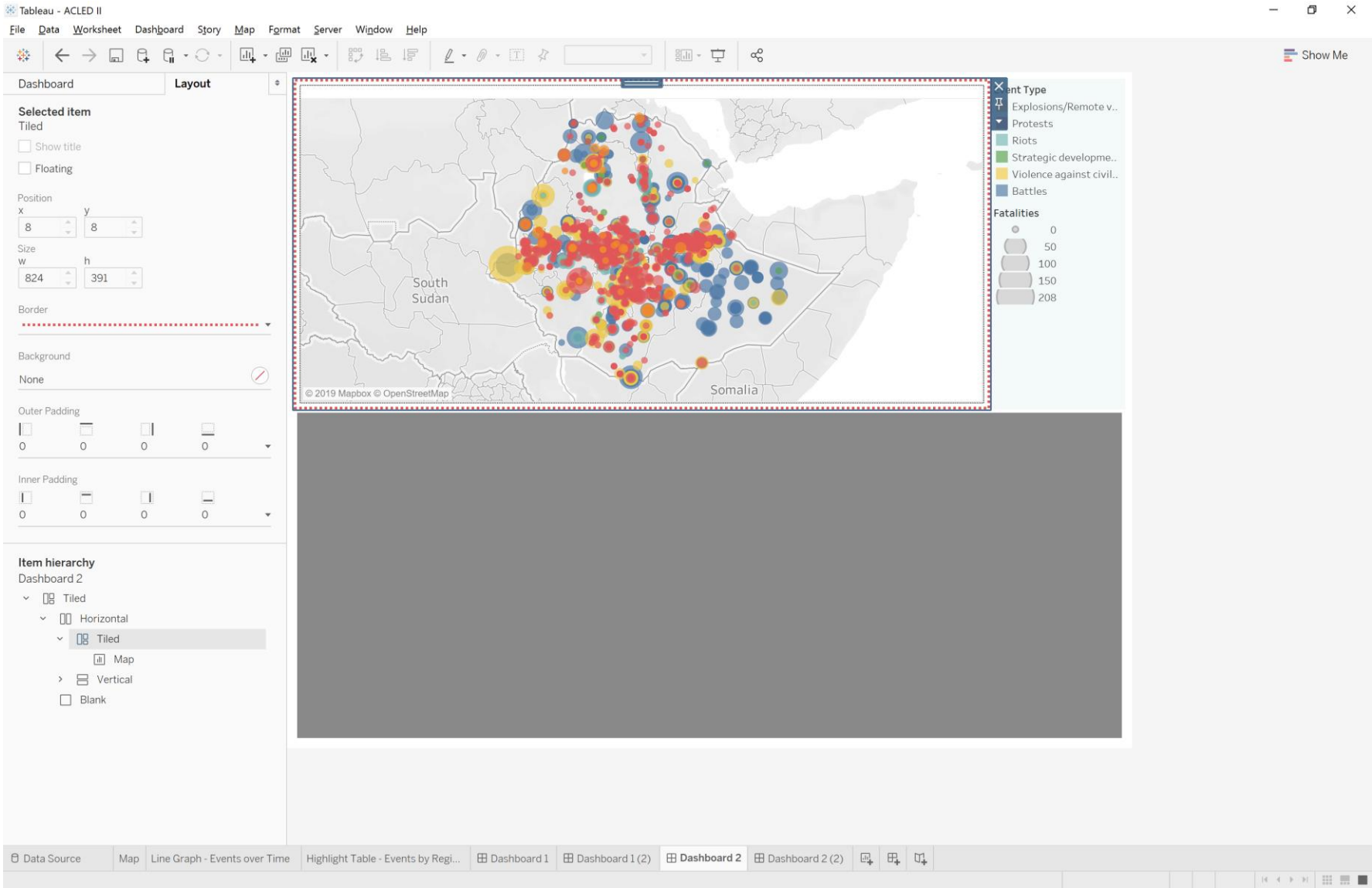
The three views below are stacked in a vertical layout container.



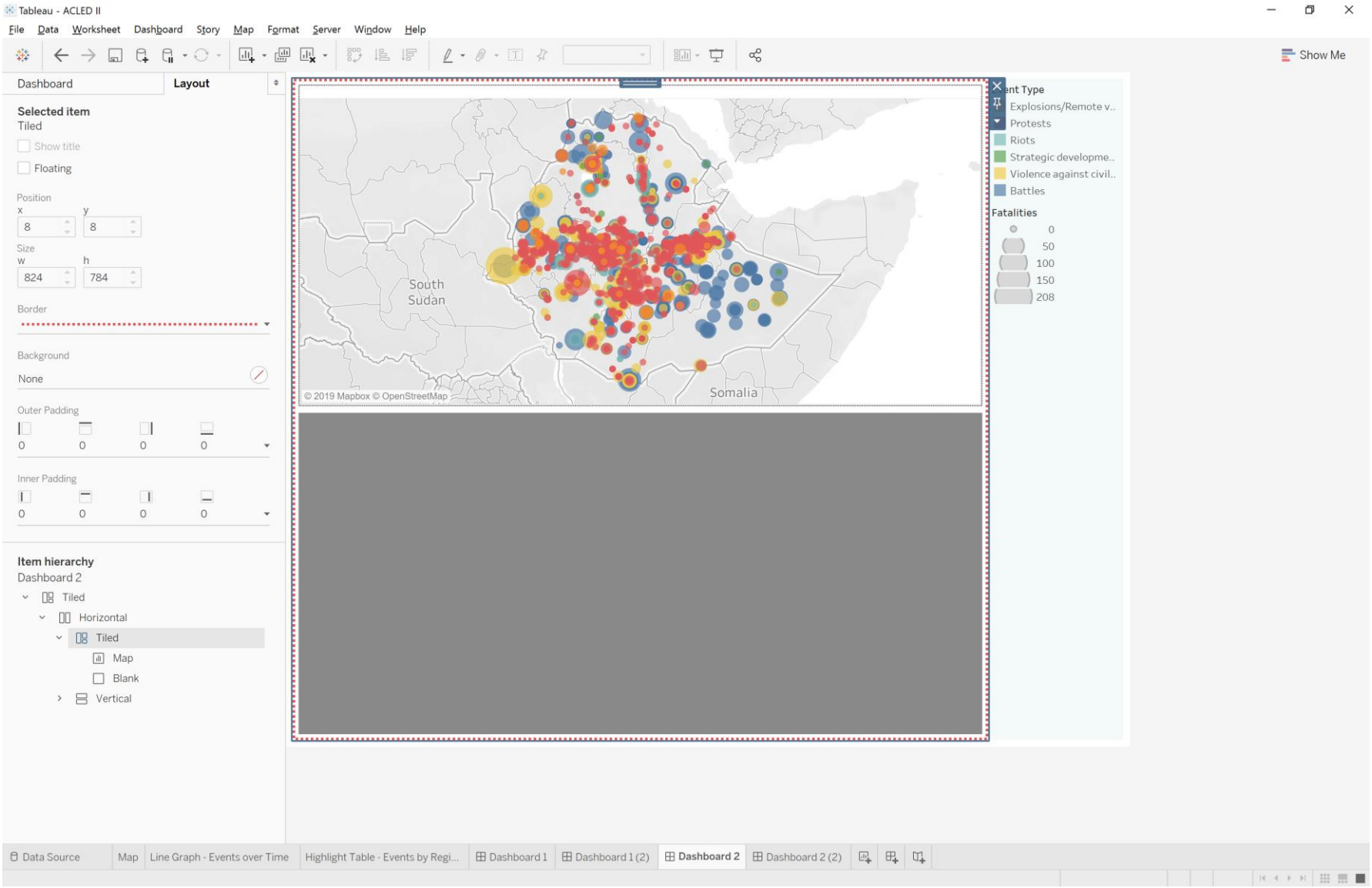
Layout Containers

- By default, nothing is present on a dashboard.
- Adding further tiled objects will allow for the option to place them either in or around what is already present on a dashboard.
- When adding objects to a dashboard, it is important to be mindful of dashboard **item hierarchy**.
- Paying attention to the hierarchy of items on the dashboard will make for a smoother dashboard building experience.

UNDER the Horizontal Container



WITHIN the Horizontal Container



Legends and Filters

- Drag the Line Graph, Map, and Highlight Table sheets onto a blank Dashboard
- Legends and filters appear automatically on the right within their own vertical container
- Accompanying filters however only work for the sheet they were initially assigned to.
- This however, can be easily remedied by applying a filter to other worksheets
- Right+click on a filter, hover over Apply to Worksheets, and click “Selected Worksheets” to extend a filter to work for other sheets

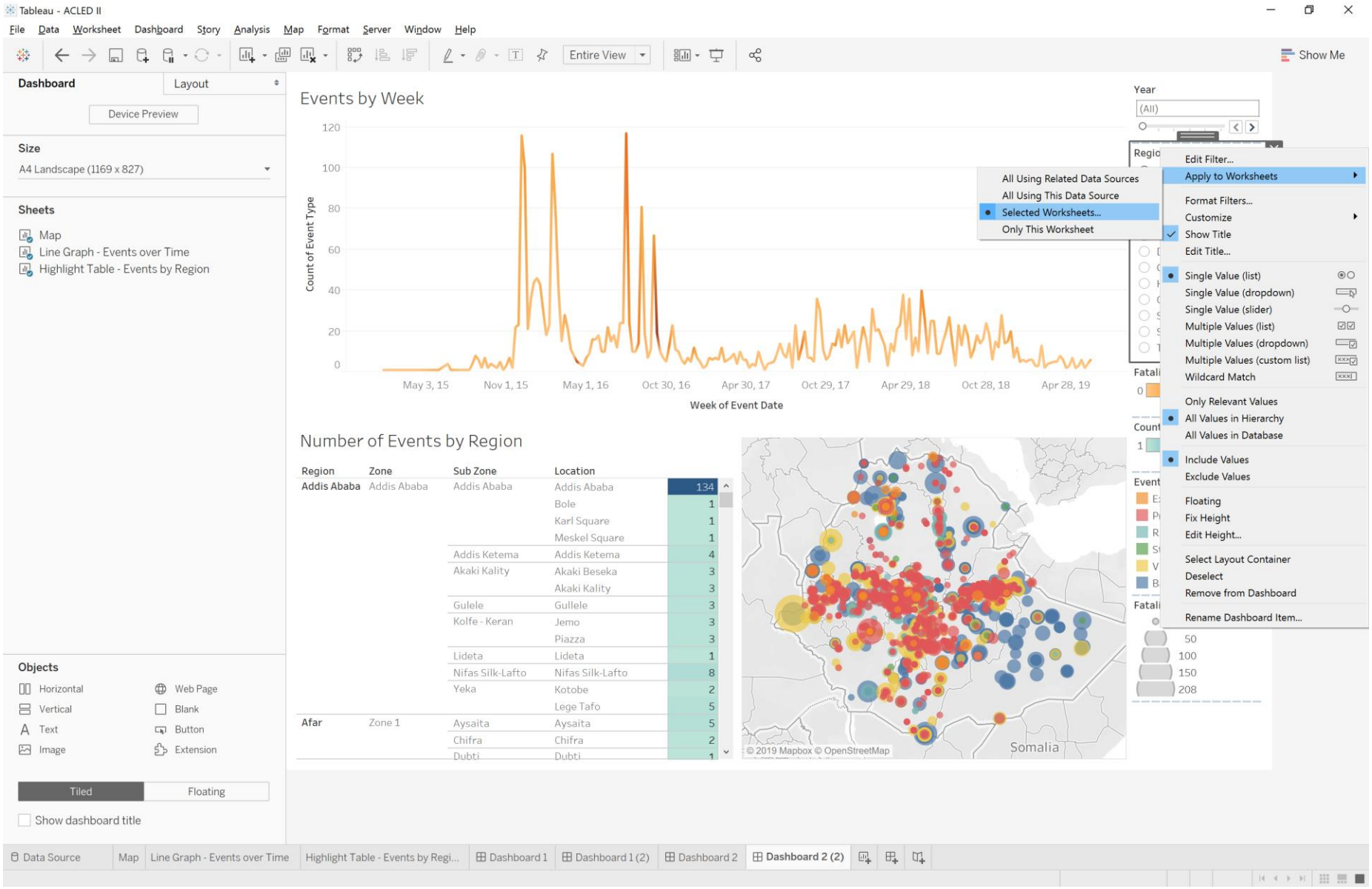


Tableau - ACLED II
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Entire View
Show Me
Dashboard
Layout
Device Preview
Size
A4 Landscape (1169 x 827)
Sheets
Map
Line Graph - Events over Time
Highlight Table - Events by Region
Objects
Horizontal
Vertical
Text
Image
Web Page
Blank
Button
Extension
Tiled
Floating
Show dashboard title
Events by Week
Count of Event Type
Week of Event Date
May 3, 15
Nov 1, 15
May 1, 16
Oct 30, 16
Apr 30, 17
Oct 29, 17
Apr 29, 18
Oct 28, 18
Apr 28, 19
Year
(All)
All Using Related Data Sources
All Using This Data Source
Selected Worksheets...
Only This Worksheet
Edit Filter...
Apply to Worksheets
Format Filters...
Customize
Show Title
Edit Title...
Single Value (list)
Single Value (dropdown)
Single Value (slider)
Multiple Values (list)
Multiple Values (dropdown)
Multiple Values (custom list)
Wildcard Match
Only Relevant Values
All Values in Hierarchy
All Values in Database
Include Values
Exclude Values
Floating
Fix Height
Edit Height...
Select Layout Container
Deselect
Remove from Dashboard
Rename Dashboard Item...
Number of Events by Region
Region Zone Sub Zone Location
Addis Ababa Addis Ababa Addis Ababa Addis Ababa 134
Bole 1
Karl Square 1
Meskel Square 1
Addis Ketema Addis Ketema 4
Akaki Kality Akaki Beseka 3
Akaki Kality 3
Gulele Gullele 3
Kolfe - Keran Jemo 3
Piazza 3
Lideta Lideta 1
Nifas Silk-Lafto Nifas Silk-Lafto 8
Yeka Kotobe 2
Lege Tafo 5
Afar Zone 1 Aysaita Aysaita 5
Chifra Chifra 2
Dubti Dubti 1
© 2019 Mapbox © OpenStreetMap
Somalia
50
100
150
208
Data Source
Map
Line Graph - Events over Time
Highlight Table - Events by Regi...
Dashboard 1
Dashboard 1 (2)
Dashboard 2
Dashboard 2 (2)

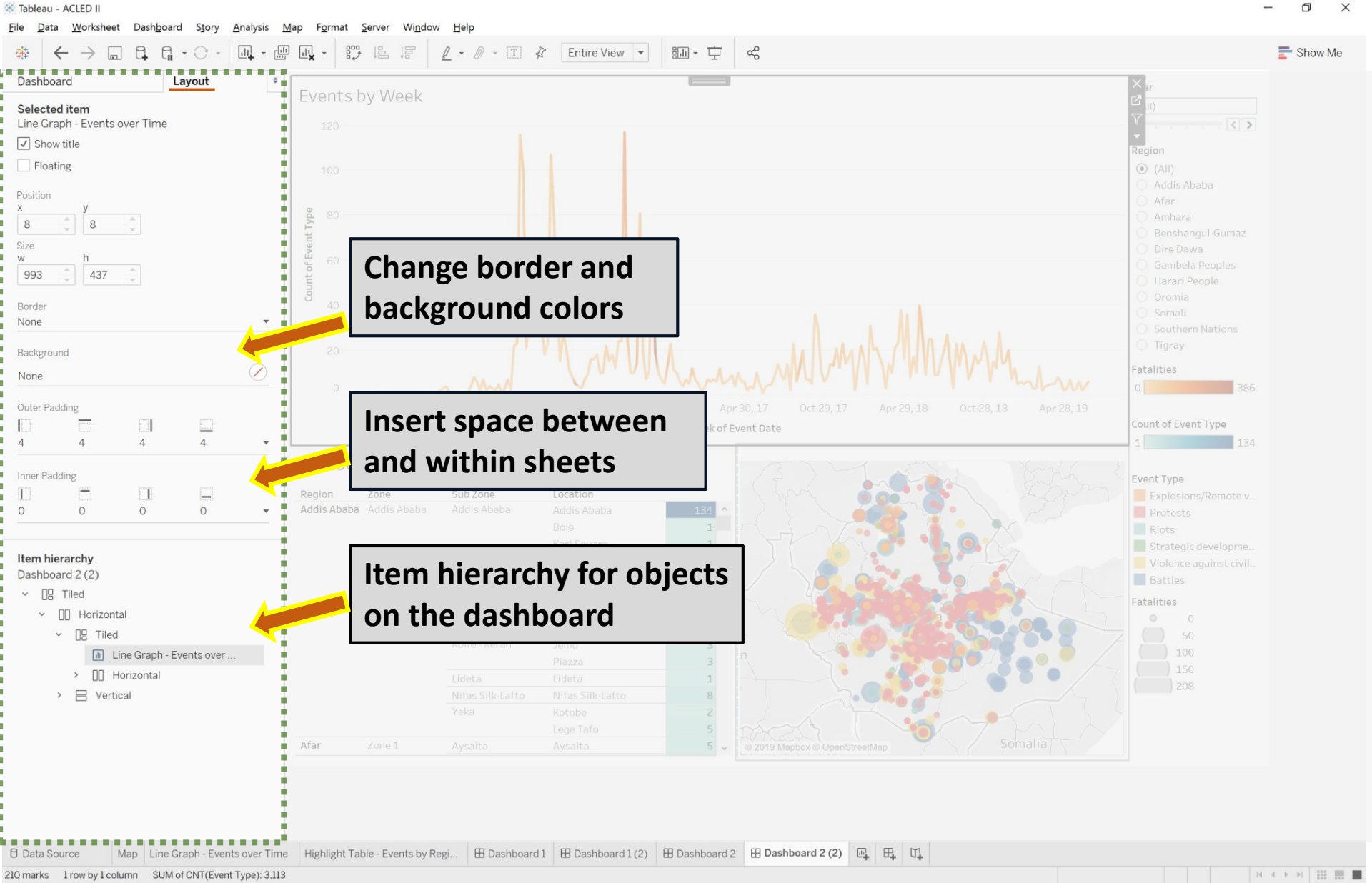


Tableau - ACLED II
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Entire View
Show Me
Dashboard
Layout
Selected item
Line Graph - Events over Time
Show title
Floating
Position
x 8
y 8
Size
w 993
h 437
Border
None
Background
None
Outer Padding
4 4 4 4
Inner Padding
0 0 0 0
Item hierarchy
Dashboard 2 (2)
Tiled
Horizontal
Tiled
Line Graph - Events over ...
Horizontal
Vertical
Events by Week
Count of Event Type
Change border and background colors
Insert space between and within sheets
Item hierarchy for objects on the dashboard
Region
Zone
Sub Zone
Location
Addis Ababa
Afar
Zone 1
Aysaita
Somalia
© 2019 Mapbox © OpenStreetMap
Region
(All)
Addis Ababa
Afar
Amhara
Benshangul-Gumaz
Dire Dawa
Gambela Peoples
Harari People
Oromia
Somali
Southern Nations
Tigray
Fatalities
Count of Event Type
Event Type
Explosions/Remote v..
Protests
Riots
Strategic developme..
Violence against civil..
Battles
Data Source
Map
Line Graph - Events over Time
Highlight Table - Events by Regi...
Dashboard 1
Dashboard 1 (2)
Dashboard 2
Dashboard 2 (2)
210 marks
1 row by 1 column
SUM of CNT(Event Type): 3.113

Using the DHS or ACLED data, Make a Dashboard of Your Own Choosing

The DHS Program
Demographic and Health Surveys

ACLED
Bringing clarity to crisis

Save your dashboard to Tableau Public

(you may have to create a Tableau Public account)

Create Your CGDV Profile!

CENTER FOR GLOBAL DATA VISUALIZATION – User Profiles

Create a profile on the CGDV website:

- https://www.centerforglobaldata.org/authentication/signup
- Sign up for an account
- Add a headshot
- **Submit your Dashboard**

Yacob Zuriaw

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Mobile:

Country: United States

Organization: Emory University

Biography:

Hi, I'm Yacob! I am a recent grad of the Master's in Development Practice program at Emory University. I have a background in Microeconomics and International Relations, and am interested in applying data insights to aid the path of progress in Ethiopia and beyond.

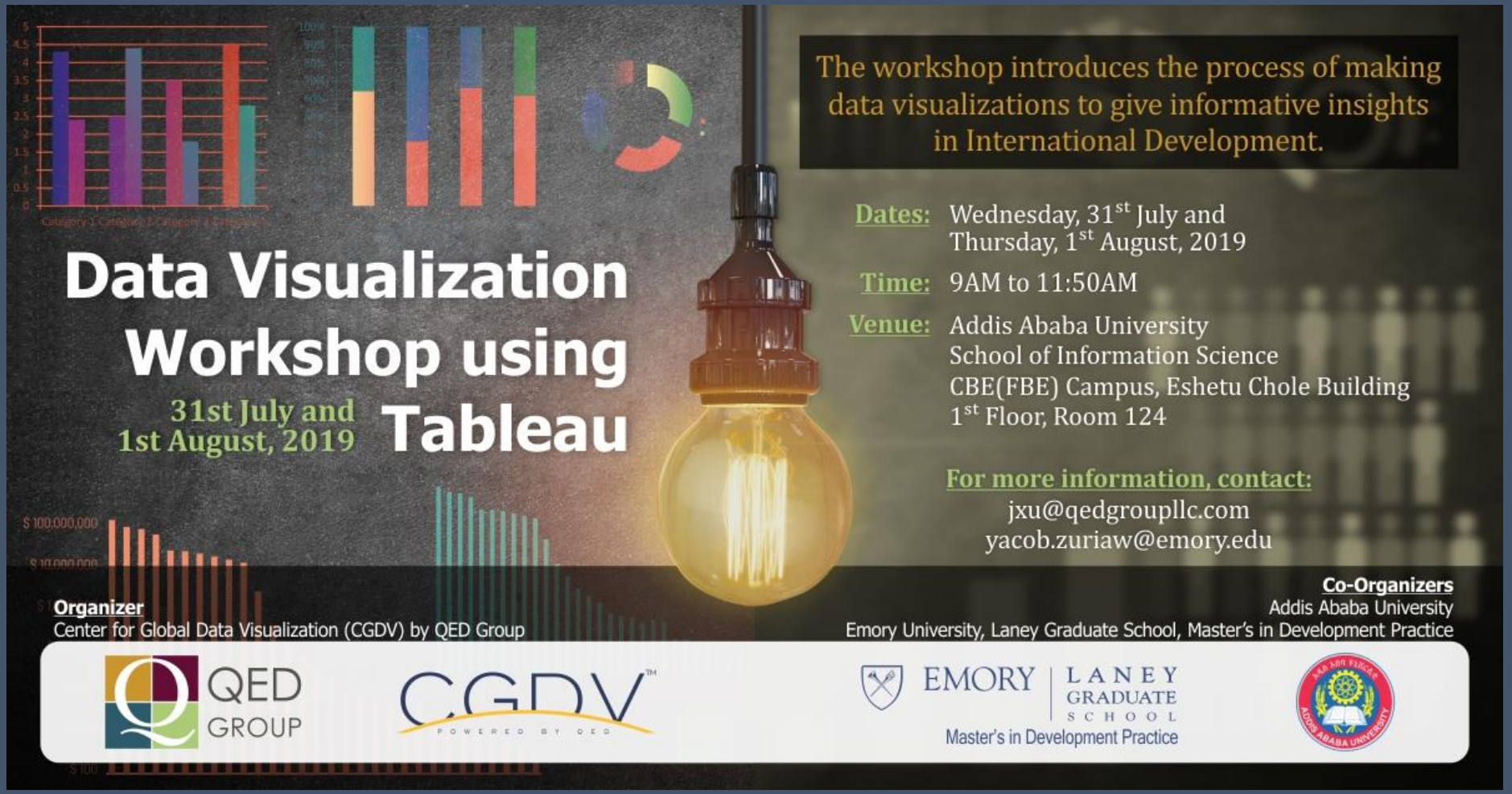
What to Explore Beyond this Workshop

- Sets
- Calculated Fields
- Parameters
- All can be found on online video training provided for free by Tableau:
  - https://www.tableau.com/learn/training?signin=30d1294b968d36b72592974a1f87c933

End of Module 4

End of Day 2

Thank You!


Data Visualization Workshop using Tableau
31st July and 1st August, 2019
The workshop introduces the process of making data visualizations to give informative insights in International Development.
Dates: Wednesday, 31st July and Thursday, 1st August, 2019
Time: 9AM to 11:50AM
Venue: Addis Ababa University
School of Information Science
CBE(FBE) Campus, Eshetu Chole Building
1st Floor, Room 124
For more information, contact:
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Organizer
Center for Global Data Visualization (CGDV) by QED Group
Co-Organizers
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Emory University, Laney Graduate School, Master's in Development Practice
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CGDV
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Master's in Development Practice