

GLOBAL AFFAIR EXPLORATION

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BACKGROUND



CRISIS DATASET

Country	Year	Month	ins	...	ic
Iran	200	1	1	...	0
	5				
Iran	200	2	0	...	0
	5				
...
Turkey	201	12	1	...	1
	5				

Aggregate(sum)

Country	Year	Month	sum
Iran	2005	1	3
Iran	2005	2	2
...
Turkey	2015	12	0

EVENT DATASET

Construct Graph-based data

Source	Target	Event.Date	Intensity
Iraq	Iraq	2005-01	6
Hamas	Australia	2005-01	-2.3
...	
Turkey	outside	2015-02	-9

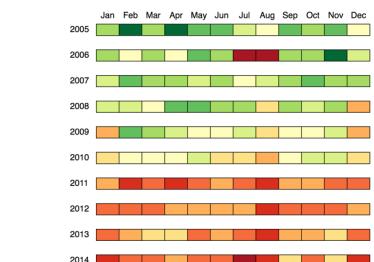
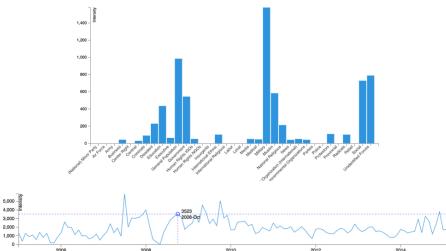
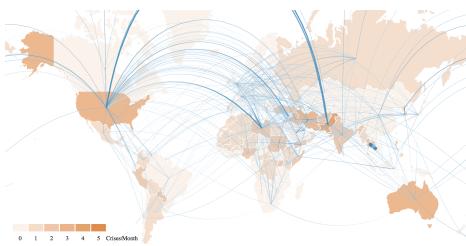
Intensity<0

Aggregate(sum)

Source.Name	Target.Name	Year	Month	Sum
Iraq	Iraq	2005	1	-612
Hamas	Australia	2005	1	-1251
...
Turkey	outside	2015	2	-9912

Edge

VISUALIZATION DESIGN



Integrated
together

- Choropleth Map

show **global** crises variation by country and by month

- Arc Map

show country relations in **international** events

- Barchart

show **domestic** events in a certain month by initial organization

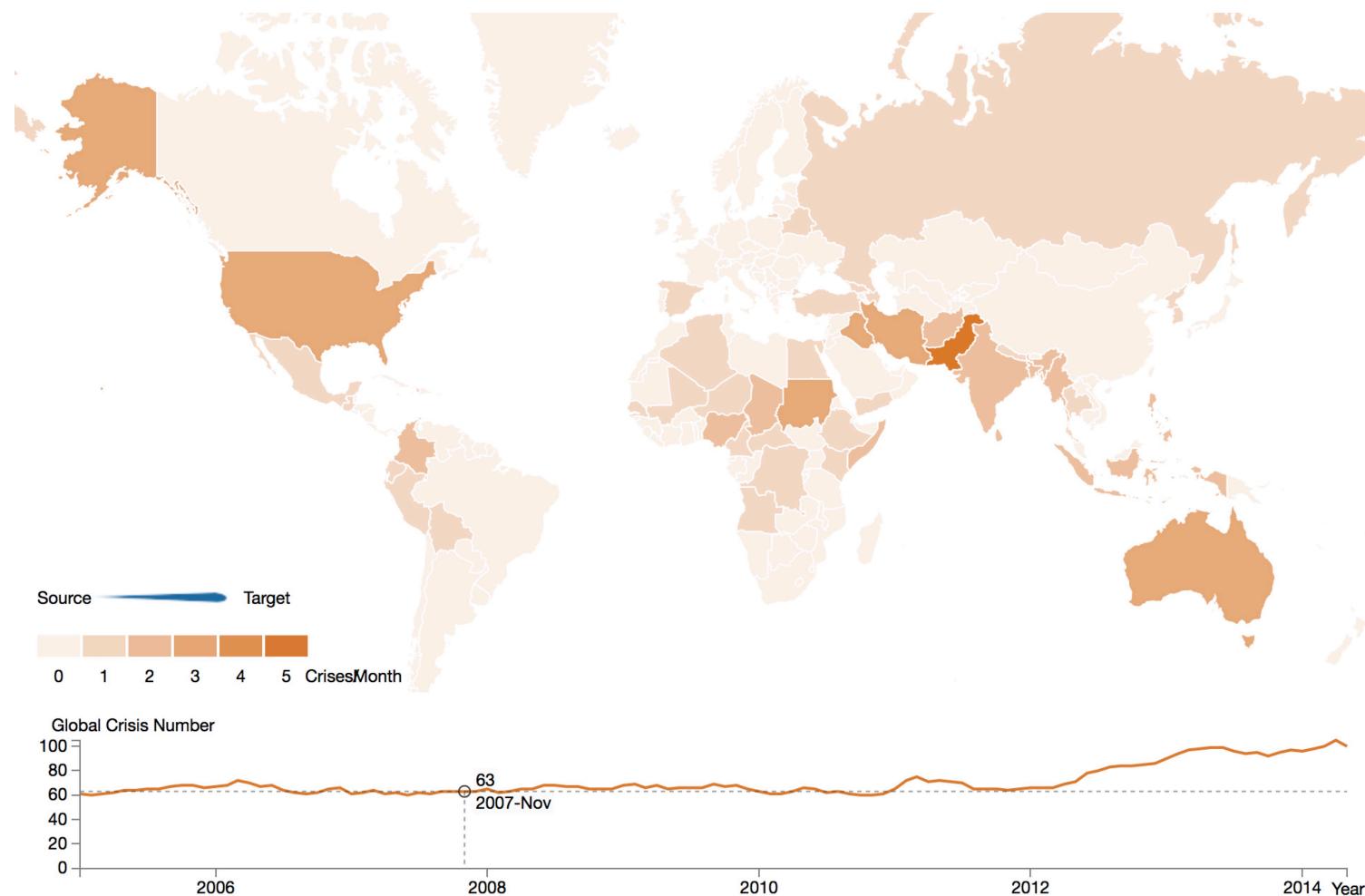
- Heatmap

global crises heatmap

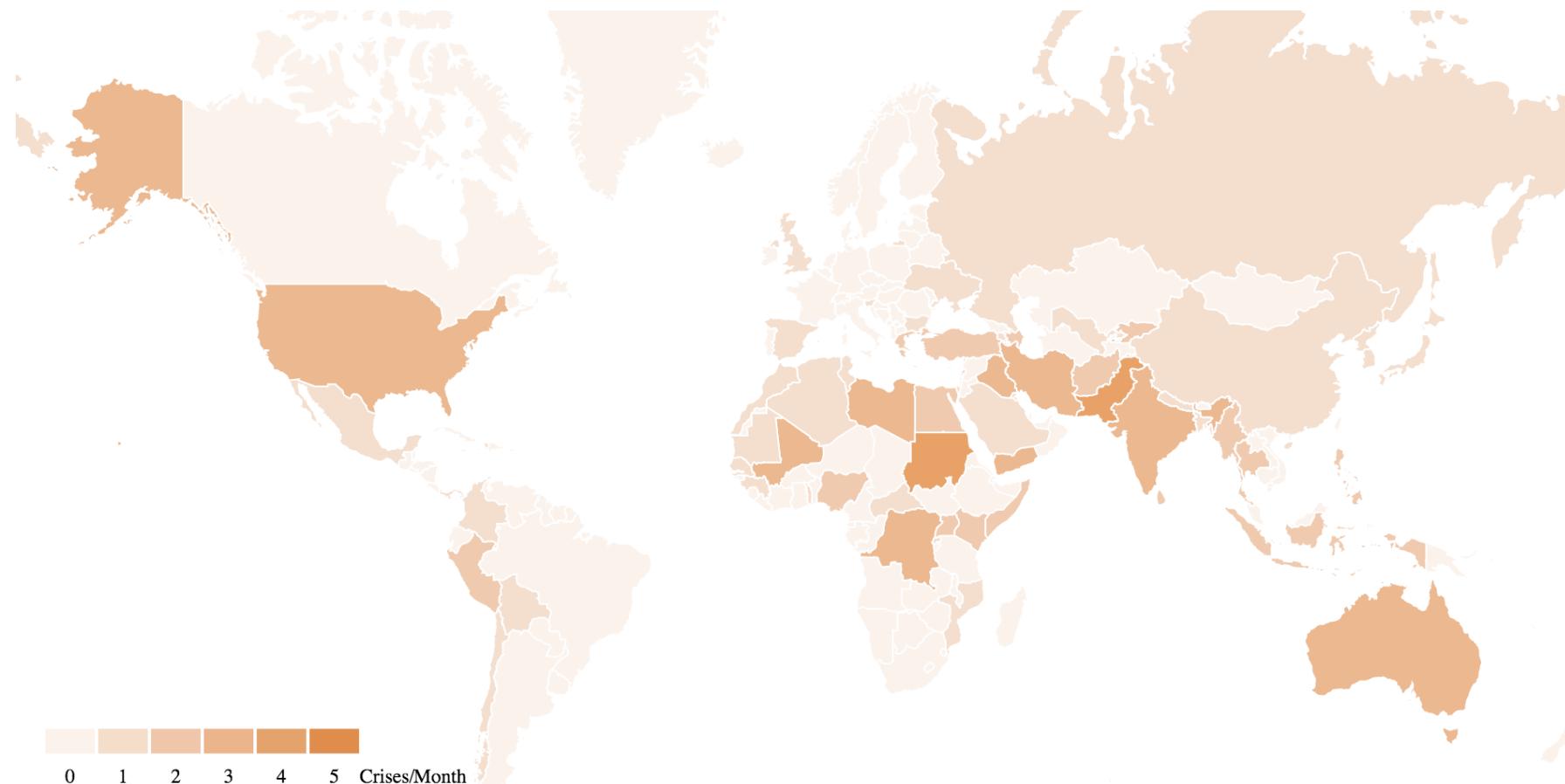
Compare

global events heatmap

PART 1 CHOROPLETH MAP



1.1 COLOR BASED ON CRISIS

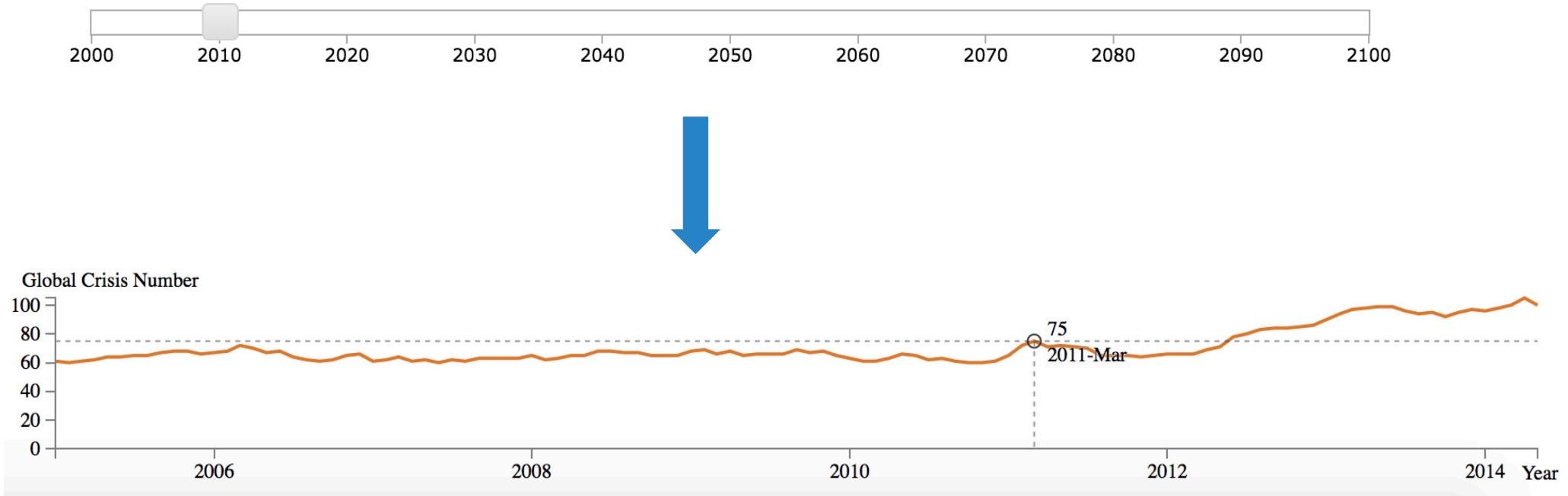


1.2 INTERACTIVE



1.3 LINE CHART (SLIDER BAR)

Replace traditional slider with line chart.

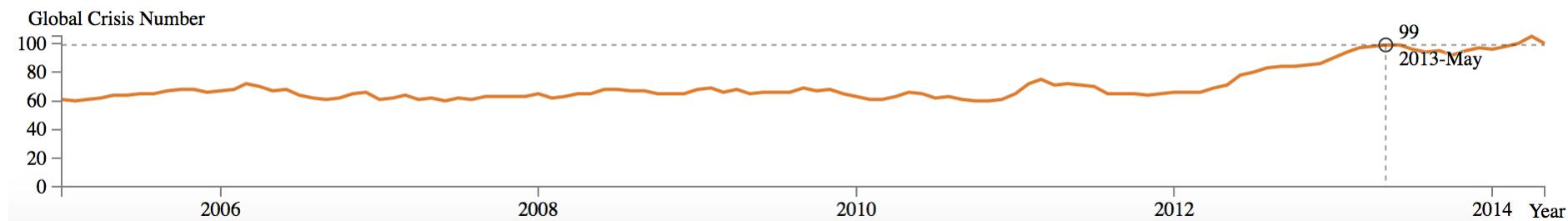
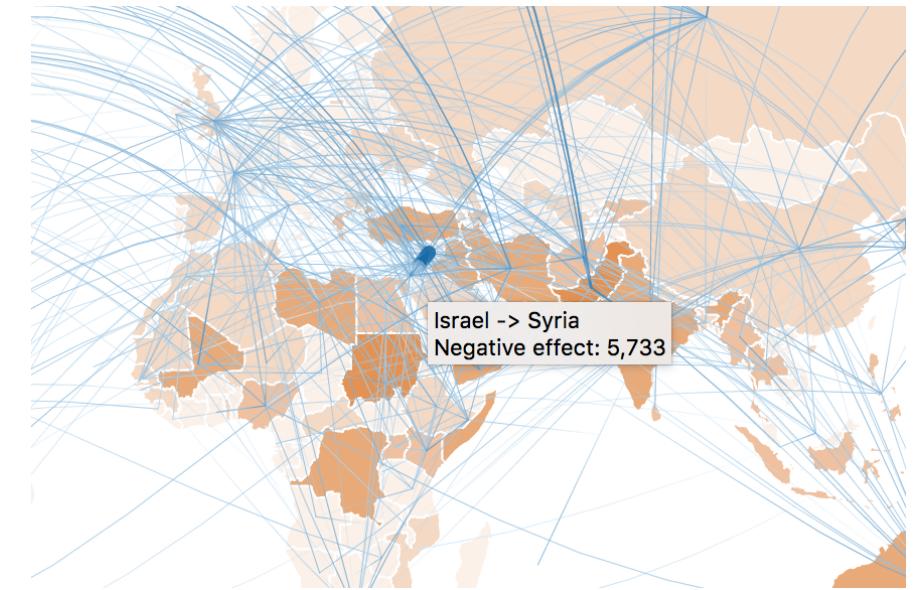


1.4 LINE CHART (SLIDER BAR)

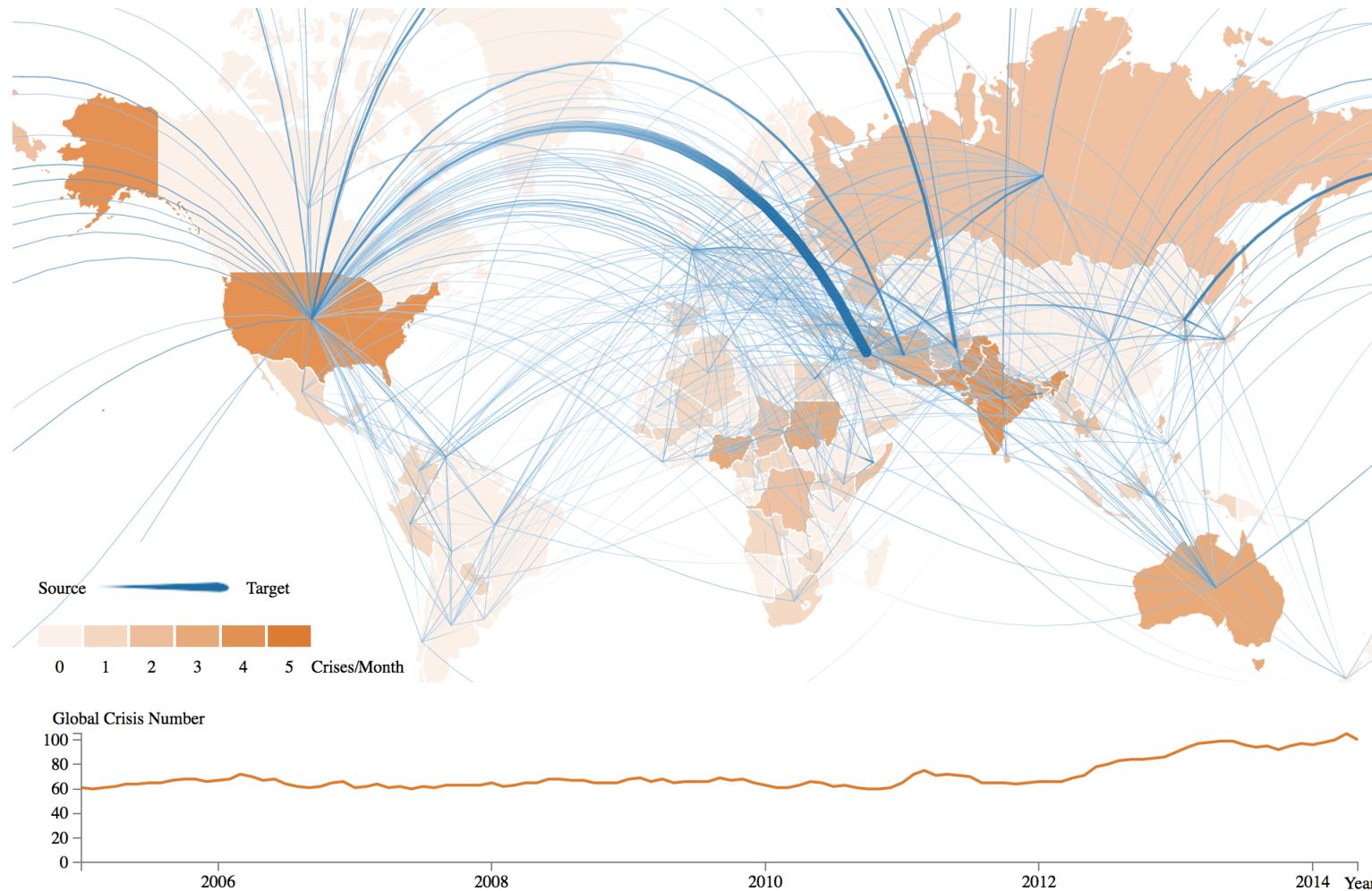
Benefits:

Show overall trends

Easier to find out special point(month with peak value)



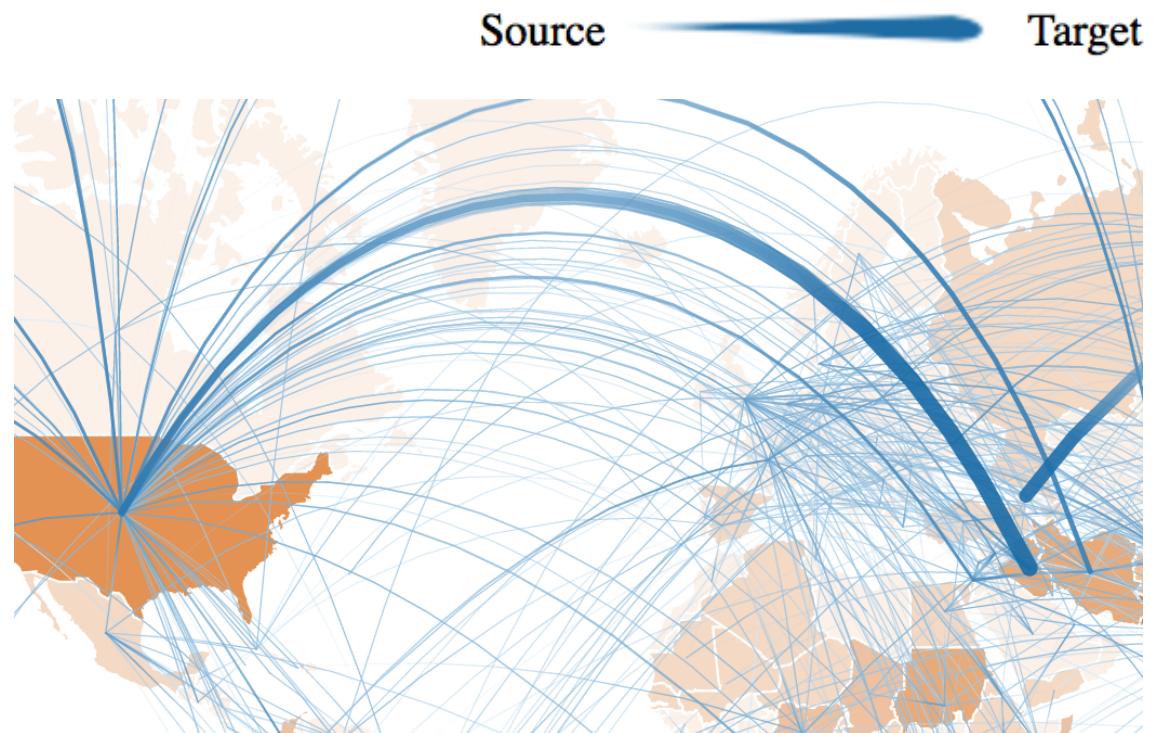
PART 2 EVENT ARCS



2.1 EVENT ARCS

- Narrow side represents source country, wide side represents target county

- Arc width represents effect intensity



2.2 EVENT ARCS

Interaction — click on particular country:

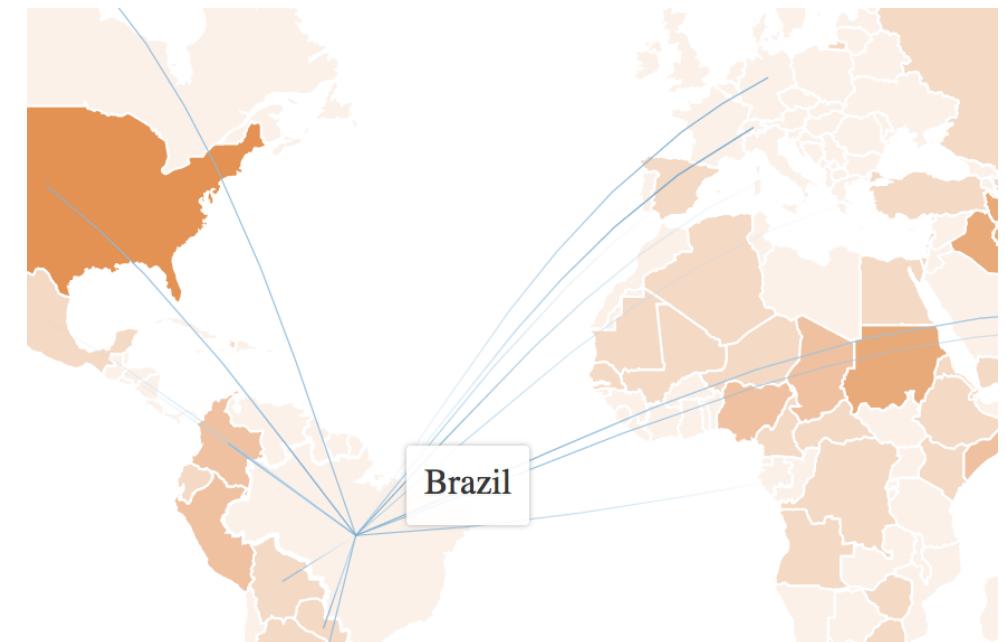
- Hidden unconnected arcs
- Show connected arcs information

selected country name

top connected countries

intensities

Negative Events		
Brazil		
received events from	Intensity	
#1 United States	24	
#2 Italy	20	
#3 India	18	
initiated events to		
#1 Switzerland	35	
#2 Germany	20	
#3 Japan	18	



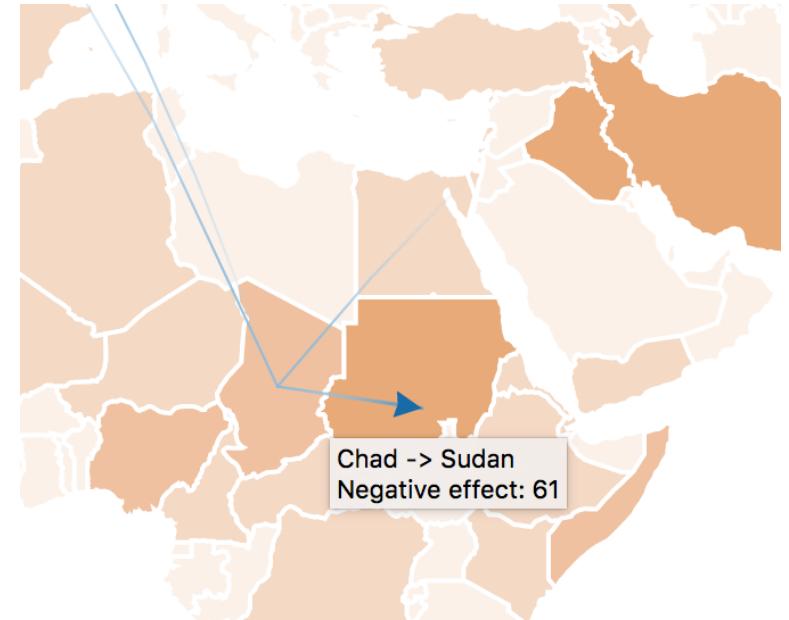
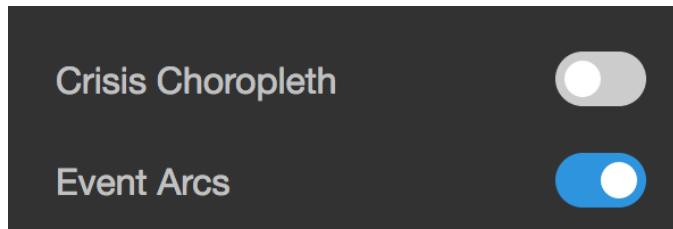
2.3 EVENT ARCS

Interaction — Mouse over and hide

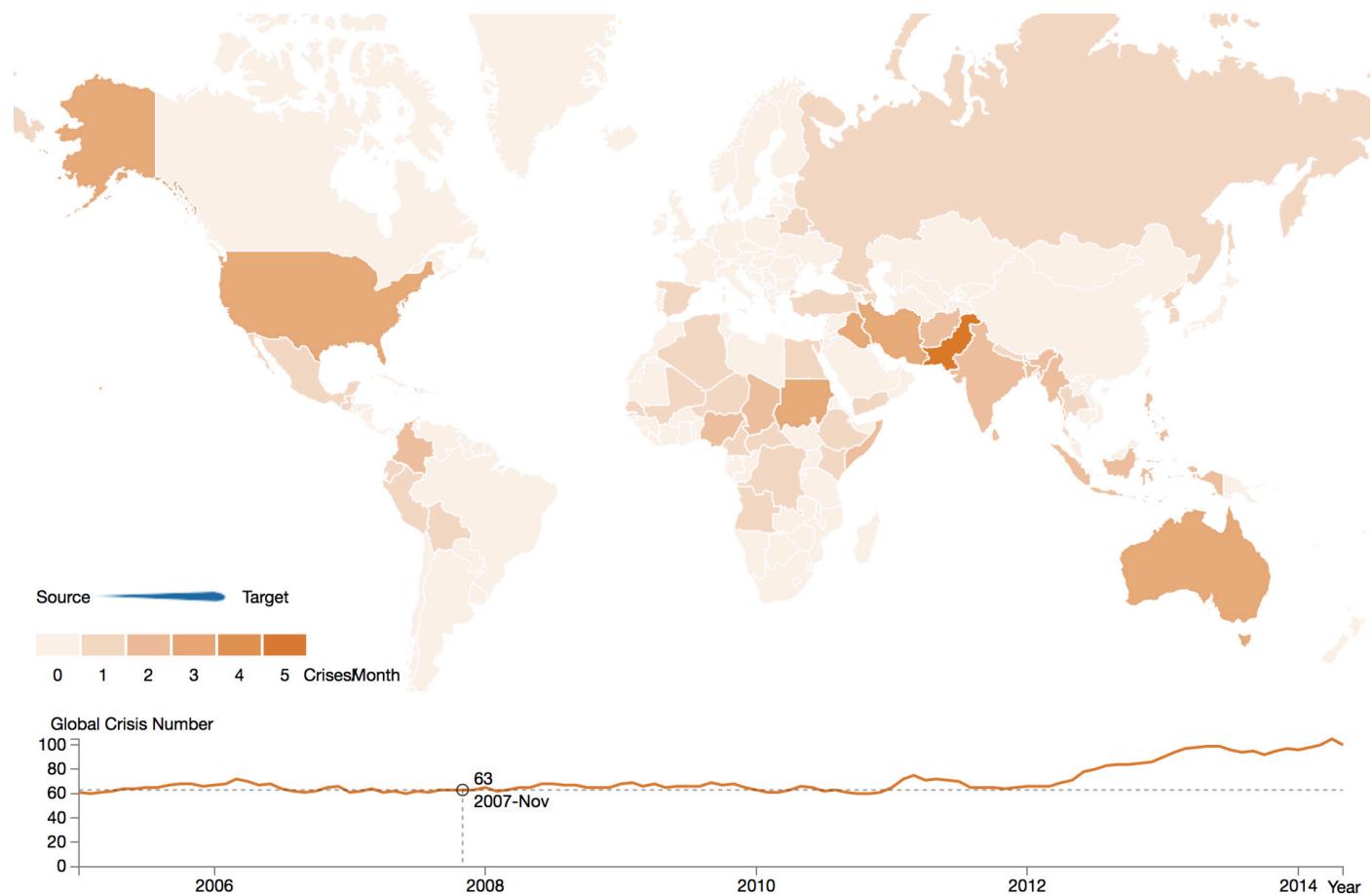
Mouse over :

show arrow and event details

Hide button:



PART 3 DOMESTIC EVENTS

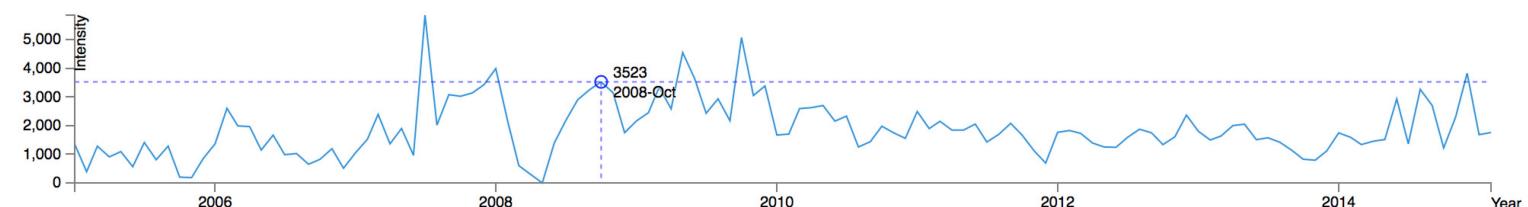
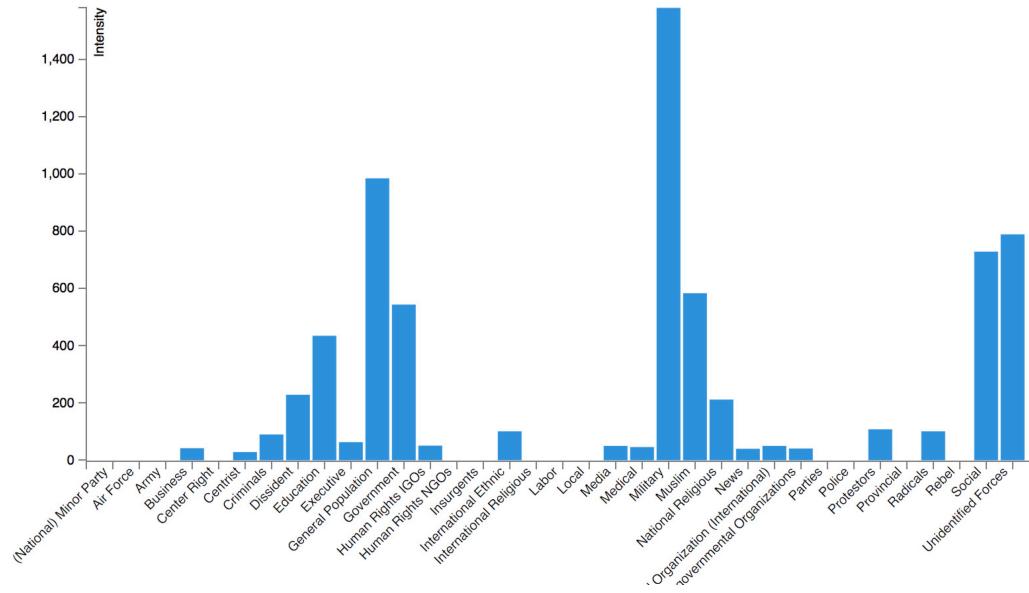


3.1 BAR CHART – DOMESTIC EVENTS

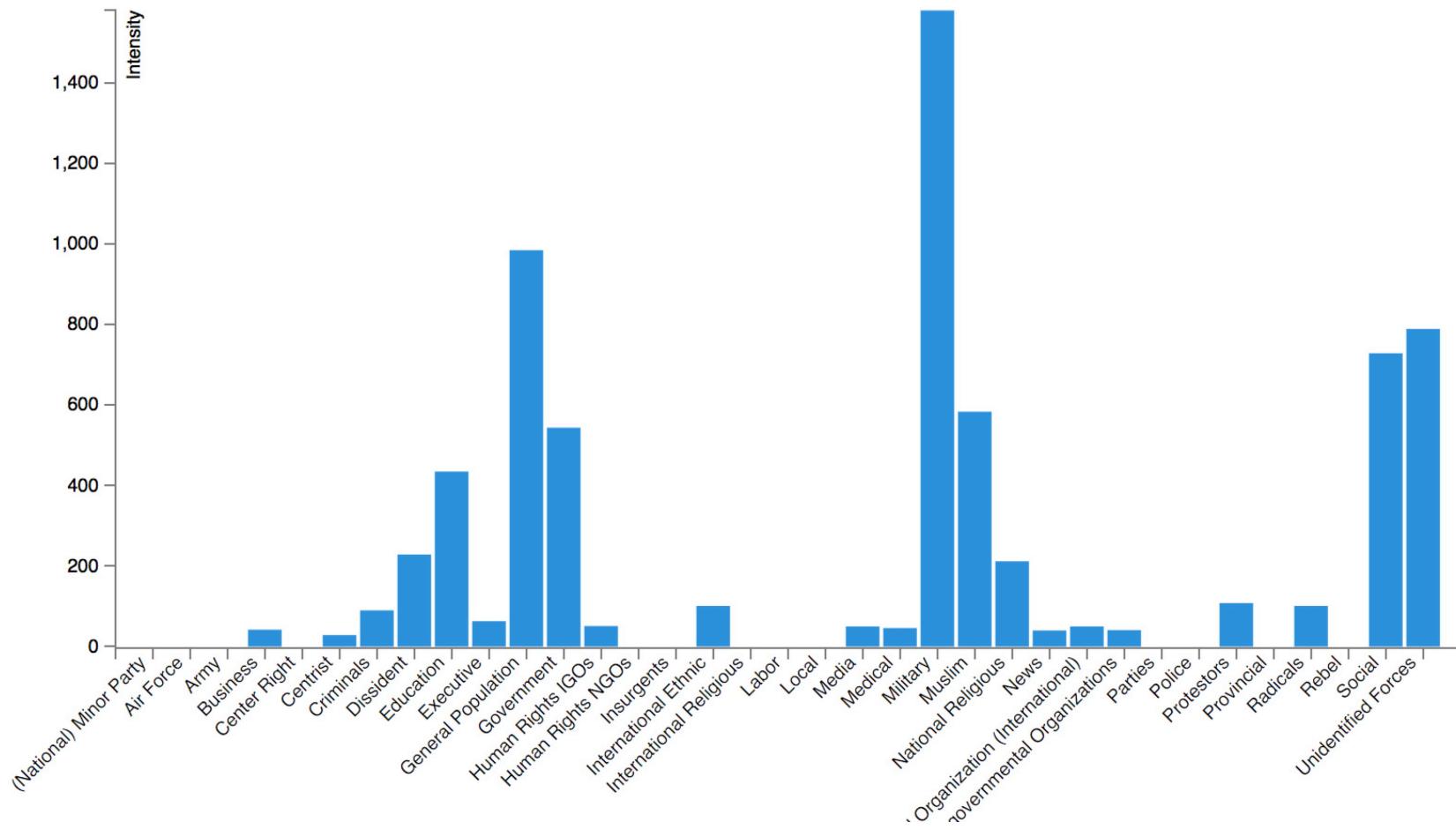
- Line chart:
show domestic events by year
as a slider bar
- Interaction: Mouse over and hide



- Bar chart:
show domestic events in one month by department



3.2 BAR CHART – DOMESTIC EVENTS



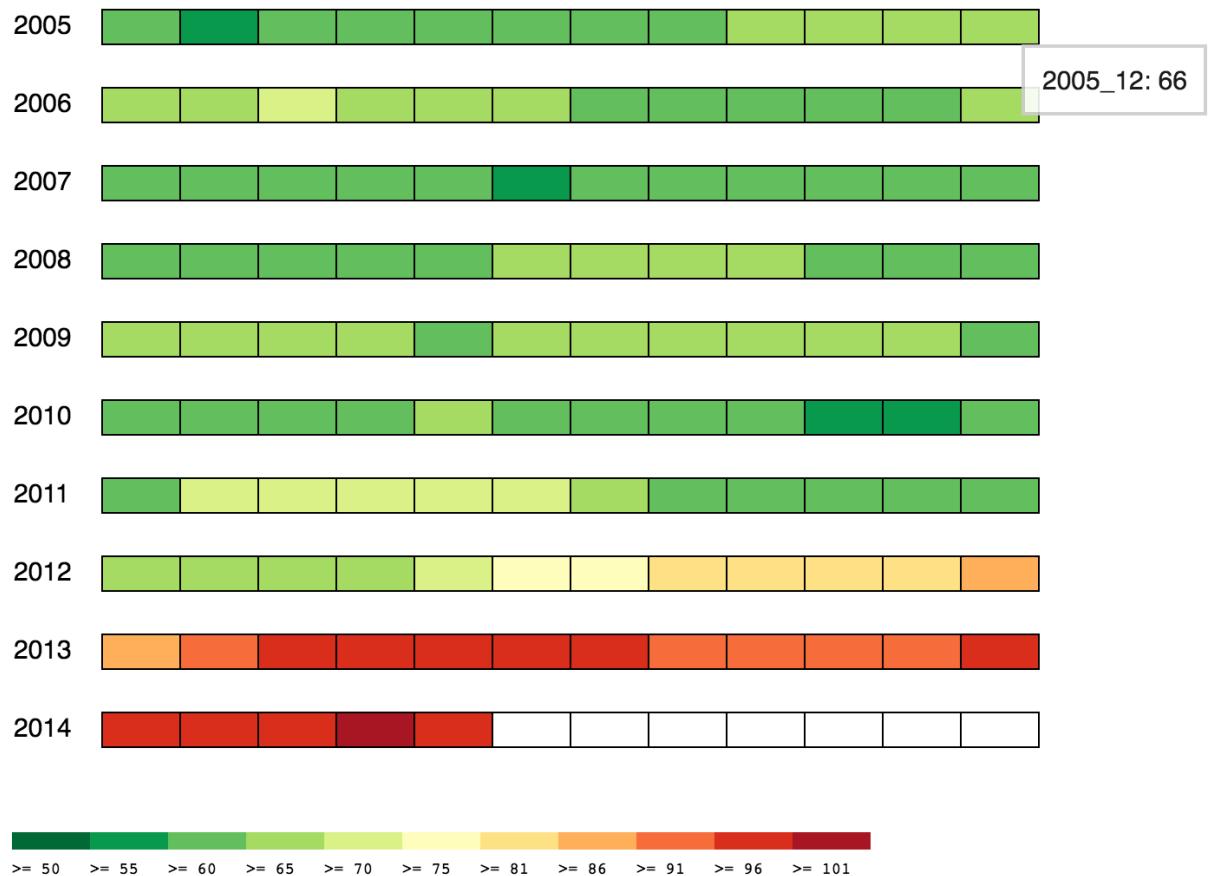
PART 4 CALENDAR HEATMAP

Calendar form is easy for users to observe the variation trends of data.

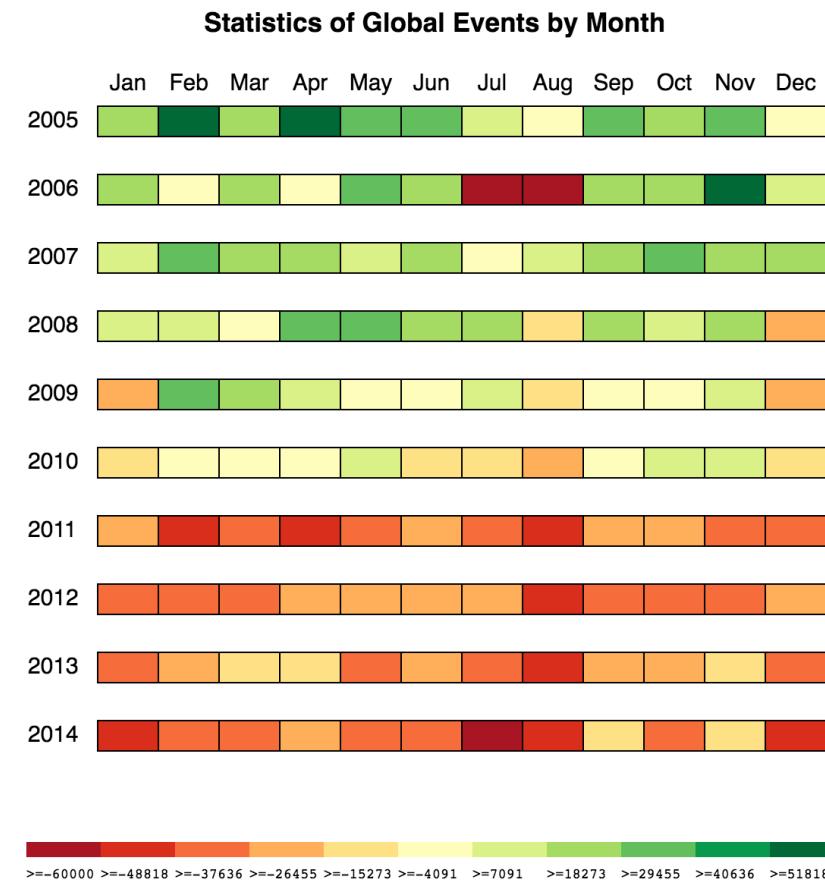
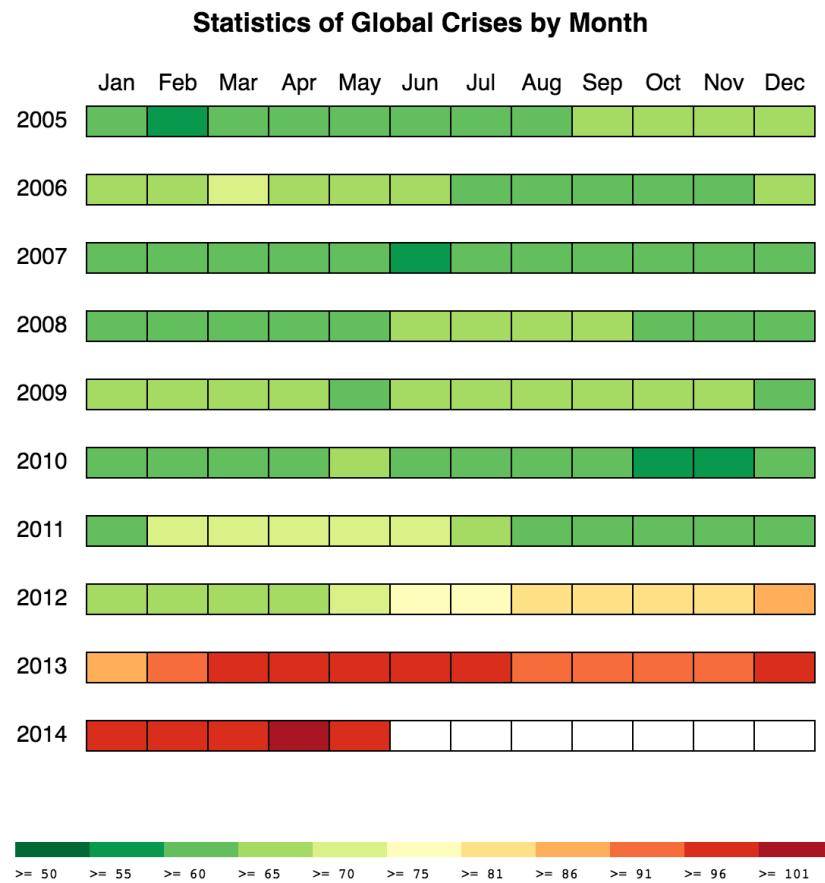
The “statistics of global crisis by month” map shows how the number of global crises change by month and by year.

The “statistics of global event by month” map shows how the number of global events change by month and by year.

Statistics of Global Crisis by Month



4.1 COMPARISON

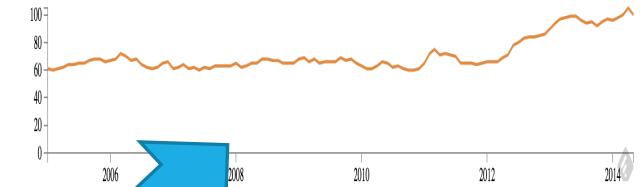
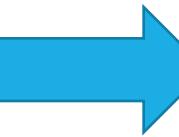
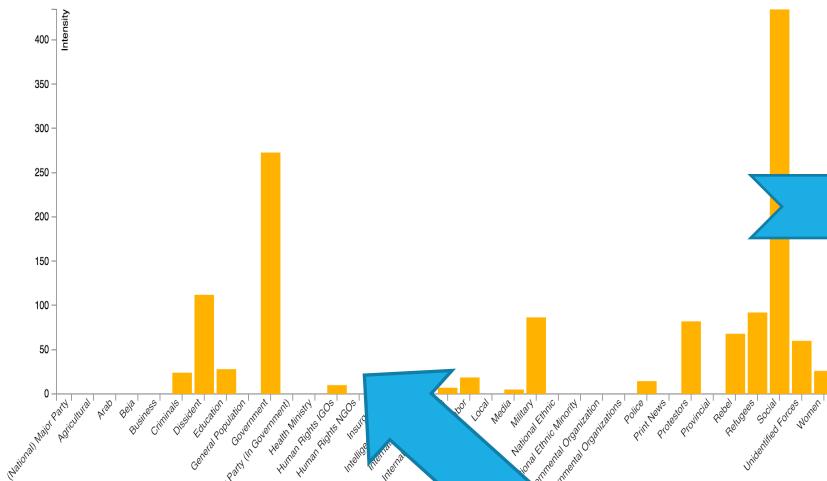


CHALLENGE

Data process

Code immigration

Code Integration



Source	Target	Event.Date	Intensity
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Hamas	Australia	2005-01	-2.3
...
	outside	2015-02	-9

