Storm Events 2017 Analysis

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Background and Scope

Import the Data

You may use an import function. If not using an import function, include the code used to import the data (it may be generated from the Import Tool)

```
events = importfile("StormEvents_2017_finalProject.csv")
```

```
events = 57005×24 table
```

...

	EpisodeID	Event_ID	State	Year	Month	Event_Type
1	113355	678791	NEW JERSEY	2017	April	Thunderstorm Wind
2	113459	679228	FLORIDA	2017	April	Tornado
3	113448	679268	OHIO	2017	April	Thunderstorm Wind
4	113697	682042	OHIO	2017	April	Flood
5	113683	682062	NEBRASKA	2017	April	Hail
6	114718	688082	INDIANA	2017	April	Flash Flood
7	114834	688895	VIRGINIA	2017	April	Thunderstorm Wind
8	121068	724772	GULF OF ME...	2017	October	Marine Thunderstorm Wind
9	114489	686560	OHIO	2017	April	Flash Flood
10	113683	682156	NEBRASKA	2017	April	Thunderstorm Wind
11	115066	690966	ARKANSAS	2017	April	Hail
12	121162	725317	OKLAHOMA	2017	October	Hail
13	120474	721817	ATLANTIC N...	2017	October	Marine Strong Wind

	EpisodeID	Event_ID	State	Year	Month	Event_Type
14	120474	721818	ATLANTIC N...	2017	October	Marine High Wind
15	112855	675876	PENNSYLVANIA	2017	March	Winter Weather
16	112855	675879	PENNSYLVANIA	2017	March	Winter Weather
17	112855	675877	PENNSYLVANIA	2017	March	Winter Weather
18	113797	681330	WISCONSIN	2017	February	Winter Weather
19	113797	681332	WISCONSIN	2017	February	Winter Weather
20	115634	694778	GULF OF ME...	2017	June	Marine Thunderstorm Wind
21	115688	695188	FLORIDA	2017	June	Thunderstorm Wind
22	115811	696020	GULF OF ME...	2017	June	Marine Thunderstorm Wind
23	115811	696023	GULF OF ME...	2017	June	Marine Thunderstorm Wind
24	115752	695727	MONTANA	2017	June	Hail
25	115752	695729	MONTANA	2017	June	Hail
26	115752	695740	MONTANA	2017	June	Thunderstorm Wind
27	113797	681331	WISCONSIN	2017	February	Winter Weather
28	113797	681333	WISCONSIN	2017	February	Winter Weather
29	113797	681334	WISCONSIN	2017	February	Winter Weather
30	113797	681336	WISCONSIN	2017	February	Winter Weather
31	115176	691471	GULF OF ME...	2017	June	Waterspout
32	115176	691472	GULF OF ME...	2017	June	Waterspout
33	115634	694777	GULF OF ME...	2017	June	Marine Thunderstorm Wind
34	112855	675883	PENNSYLVANIA	2017	March	Winter Weather
35	113797	681282	WISCONSIN	2017	February	Winter Weather
36	115811	696124	GULF OF ME...	2017	June	Marine Thunderstorm Wind
37	115811	696134	GULF OF ME...	2017	June	Marine Thunderstorm Wind
38	115811	696176	GULF OF ME...	2017	June	Marine Thunderstorm Wind
39	115811	696179	GULF OF ME...	2017	June	Marine Thunderstorm Wind
40	115902	696463	FLORIDA	2017	June	Thunderstorm Wind
41	115904	696474	GULF OF ME...	2017	June	Marine Thunderstorm Wind
42	115940	696653	GULF OF ME...	2017	June	Marine Thunderstorm Wind
43	116635	701349	FLORIDA	2017	June	Flash Flood
44	116635	701350	FLORIDA	2017	June	Flash Flood
45	116635	701351	FLORIDA	2017	June	Flash Flood
46	116636	701352	FLORIDA	2017	June	Flash Flood

	EpisodeID	Event_ID	State	Year	Month	Event_Type
47	116636	701353	FLORIDA	2017	June	Flash Flood
48	116636	701354	FLORIDA	2017	June	Flood
49	116636	701355	FLORIDA	2017	June	Flood
50	115691	698754	MISSOURI	2017	June	Thunderstorm Wind
51	115691	698756	MISSOURI	2017	June	Thunderstorm Wind
52	116224	698777	KANSAS	2017	June	Hail
53	116224	698778	KANSAS	2017	June	Hail
54	116224	698779	KANSAS	2017	June	Thunderstorm Wind
55	116224	698780	KANSAS	2017	June	Thunderstorm Wind
56	116224	698781	KANSAS	2017	June	Thunderstorm Wind
57	116224	698782	KANSAS	2017	June	Hail
58	115691	698760	MISSOURI	2017	June	Thunderstorm Wind
59	115691	698761	MISSOURI	2017	June	Thunderstorm Wind
60	115691	698762	MISSOURI	2017	June	Thunderstorm Wind
61	115691	698763	MISSOURI	2017	June	Thunderstorm Wind
62	115691	698764	MISSOURI	2017	June	Thunderstorm Wind
63	115691	698765	MISSOURI	2017	June	Heavy Rain
64	115691	698766	MISSOURI	2017	June	Heavy Rain
65	116222	698768	MISSOURI	2017	June	Flash Flood
66	116222	698769	MISSOURI	2017	June	Flash Flood
67	116222	698770	MISSOURI	2017	June	Hail
68	116636	701356	FLORIDA	2017	June	Flood
69	116636	701357	FLORIDA	2017	June	Flood
70	115330	692444	ATLANTIC S...	2017	June	Marine Thunderstorm Wind
71	115330	692448	ATLANTIC S...	2017	June	Marine Thunderstorm Wind
72	115330	692453	ATLANTIC S...	2017	June	Marine Thunderstorm Wind
73	115691	698751	MISSOURI	2017	June	Lightning
74	115691	698752	MISSOURI	2017	June	Thunderstorm Wind
75	115691	698753	MISSOURI	2017	June	Thunderstorm Wind
76	115691	698757	MISSOURI	2017	June	Thunderstorm Wind
77	115691	698758	MISSOURI	2017	June	Thunderstorm Wind
78	115691	698759	MISSOURI	2017	June	Thunderstorm Wind
79	116222	698771	MISSOURI	2017	June	Thunderstorm Wind

	EpisodeID	Event_ID	State	Year	Month	Event_Type
80	116222	698772	MISSOURI	2017	June	Thunderstorm Wind
81	116222	698773	MISSOURI	2017	June	Thunderstorm Wind
82	116222	698774	MISSOURI	2017	June	Thunderstorm Wind
83	116224	698775	KANSAS	2017	June	Hail
84	116224	698776	KANSAS	2017	June	Hail
85	116224	698783	KANSAS	2017	June	Thunderstorm Wind
86	116224	698784	KANSAS	2017	June	Thunderstorm Wind
87	116224	698785	KANSAS	2017	June	Thunderstorm Wind
88	115940	696657	GULF OF ME...	2017	June	Waterspout
89	115968	696991	FLORIDA	2017	June	Thunderstorm Wind
90	115966	697003	GULF OF ME...	2017	June	Marine Thunderstorm Wind
91	115966	697015	GULF OF ME...	2017	June	Marine Thunderstorm Wind
92	115992	697128	GULF OF ME...	2017	June	Waterspout
93	116634	701344	ALABAMA	2017	June	Thunderstorm Wind
94	116632	701345	ALABAMA	2017	June	Thunderstorm Wind
95	116224	698786	KANSAS	2017	June	Thunderstorm Wind
96	116224	698787	KANSAS	2017	June	Thunderstorm Wind
97	116224	698788	KANSAS	2017	June	Thunderstorm Wind
98	116224	698789	KANSAS	2017	June	Thunderstorm Wind
99	116224	698790	KANSAS	2017	June	Thunderstorm Wind
100	116225	698801	MISSOURI	2017	June	Thunderstorm Wind

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Two States Most Impacted by Harvey

Clearly state the two states in order

```
%Two States Most impacted by Harvey
data2 = events;
AugSepData = data2(ismember(data2.Month,{'August','September'}),:);
AugSepData.Property_Cost(ismissing(AugSepData.Property_Cost)) = 0;

HarveyData = AugSepData(AugSepData.Begin_Date_Time >= '2017-08-17 00:00:00'...
    & AugSepData.End_Date_Time <= '2017-09-03 23:59:00',:);

statePropertyCost = groupsummary(HarveyData,"State","sum","Property_Cost");
statePropertyCost = sortrows(statePropertyCost,'sum_Property_Cost','descend')
```

```
statePropertyCost = 57×3 table
```

	State	GroupCount	sum_Property_Cost
1	TEXAS	272	7.7427e+10
2	LOUISIANA	85	75277000
3	NORTH CARO...	59	12338500
4	WASHINGTON	2	4000000
5	FLORIDA	68	2237000
6	MINNESOTA	24	1375000
7	NEBRASKA	62	1054000
8	MISSISSIPPI	39	915000
9	NEW YORK	109	641000
10	TENNESSEE	46	504000
11	PENNSYLVANIA	203	491630
12	KENTUCKY	20	435000
13	CALIFORNIA	74	329000
14	IOWA	54	321000
15	INDIANA	6	300000
16	NORTH DAKOTA	17	141000
17	OHIO	48	112500
18	IDAHO	11	111000
19	MASSACHUSE...	17	92700
20	VERMONT	9	67000
21	ARKANSAS	52	61000
22	SOUTH CARO...	42	54000
23	MISSOURI	78	49000
24	MICHIGAN	5	45000
25	GEORGIA	34	36000
26	ARIZONA	12	26000
27	VIRGINIA	64	23000
28	WEST VIRGI...	9	20100
29	SOUTH DAKOTA	89	12000
30	HAWAII	28	10000
31	LAKE SUPER...	1	10000
32	ALABAMA	16	5000
33	NEVADA	11	5000

	State	GroupCount	sum_Property_Cost
34	OKLAHOMA	34	2000
35	NEW MEXICO	15	800
36	AMERICAN S...	1	0
37	ATLANTIC N...	62	0
38	ATLANTIC S...	32	0
39	COLORADO	7	0
40	DELAWARE	4	0
41	DISTRICT O...	4	0
42	E PACIFIC	1	0
43	GULF OF ME...	64	0
44	ILLINOIS	30	0
45	KANSAS	64	0
46	LAKE ERIE	5	0
47	LAKE MICHI...	5	0
48	LAKE ONTARIO	1	0
49	MAINE	3	0
50	MARYLAND	64	0
51	MONTANA	6	0
52	NEW HAMPSH...	21	0
53	NEW JERSEY	27	0
54	OREGON	3	0
55	PUERTO RICO	33	0
56	UTAH	2	0
57	WISCONSIN	6	0

```
% TEXAS , LOUISIANA (Top 2)

TopTwoStates = HarveyData(ismember(HarveyData.State,{'LOUISIANA','TEXAS'}),:);
```

Top two states impaced by Hurricane Harvey are:

- Texas
- Louisiana

Table of Events for Two Most Impacted States

Create and display a few rows of events that include only the two most affected states

```
EventsTopTwoStates = table(TopTwoStates.State, TopTwoStates.Event_Type);

% renaming variables
EventsTopTwoStates.Properties.VariableNames{'Var1'} = 'state';
EventsTopTwoStates.Properties.VariableNames{'Var2'} = 'event_Type';
EventsTopTwoStates
```

EventsTopTwoStates = 357×2 table

	state	event_Type
1	TEXAS	Tropical Storm
2	TEXAS	Tropical Storm
3	TEXAS	Tropical Storm
4	TEXAS	Tropical Storm
5	TEXAS	Tropical Storm
6	TEXAS	Tropical Storm
7	TEXAS	Flash Flood
8	TEXAS	Thunderstorm Wind
9	TEXAS	Flash Flood
10	TEXAS	Flash Flood
11	TEXAS	Flash Flood
12	TEXAS	Flash Flood
13	TEXAS	Flash Flood
14	TEXAS	Thunderstorm Wind
15	TEXAS	Thunderstorm Wind
16	TEXAS	Thunderstorm Wind
17	TEXAS	Flood
18	TEXAS	Flash Flood
19	TEXAS	Thunderstorm Wind
20	TEXAS	Flash Flood
21	TEXAS	Flash Flood
22	LOUISIANA	Heat
23	LOUISIANA	Heat
24	LOUISIANA	Heat
25	LOUISIANA	Heat
26	TEXAS	Thunderstorm Wind
27	LOUISIANA	Tropical Storm

	state	event_Type
28	TEXAS	Flash Flood
29	TEXAS	Flash Flood
30	TEXAS	Flash Flood
31	TEXAS	Flash Flood
32	TEXAS	Flash Flood
33	TEXAS	Flash Flood
34	LOUISIANA	Heat
35	LOUISIANA	Heat
36	LOUISIANA	Heat
37	LOUISIANA	Heat
38	LOUISIANA	Heat
39	TEXAS	Thunderstorm Wind
40	LOUISIANA	Tropical Storm
41	LOUISIANA	Tropical Storm
42	TEXAS	Flash Flood
43	TEXAS	Flash Flood
44	TEXAS	Thunderstorm Wind
45	TEXAS	Thunderstorm Wind
46	TEXAS	Flash Flood
47	LOUISIANA	Heat
48	LOUISIANA	Heat
49	LOUISIANA	Heat
50	LOUISIANA	Heat
51	LOUISIANA	Heat
52	TEXAS	Tropical Storm
53	TEXAS	Flash Flood
54	TEXAS	Thunderstorm Wind
55	TEXAS	Heavy Rain
56	TEXAS	Flash Flood
57	TEXAS	Flash Flood
58	TEXAS	Flash Flood
59	TEXAS	Flash Flood
60	TEXAS	Flash Flood

	state	event_Type
61	TEXAS	Flash Flood
62	TEXAS	Flash Flood
63	TEXAS	Flash Flood
64	TEXAS	Flash Flood
65	TEXAS	Flash Flood
66	TEXAS	Flash Flood
67	TEXAS	Flash Flood
68	TEXAS	Flash Flood
69	TEXAS	Hail
70	TEXAS	Flash Flood
71	TEXAS	Flash Flood
72	LOUISIANA	Heat
73	LOUISIANA	Heat
74	LOUISIANA	Heat
75	TEXAS	Heat
76	TEXAS	Flash Flood
77	TEXAS	Flash Flood
78	TEXAS	Flash Flood
79	LOUISIANA	Flash Flood
80	LOUISIANA	Flash Flood
81	LOUISIANA	Flash Flood
82	LOUISIANA	Flash Flood
83	LOUISIANA	Flash Flood
84	LOUISIANA	Flash Flood
85	LOUISIANA	Flash Flood
86	LOUISIANA	Flash Flood
87	LOUISIANA	Flash Flood
88	TEXAS	Hail
89	TEXAS	Thunderstorm Wind
90	TEXAS	Thunderstorm Wind
91	TEXAS	Flash Flood
92	TEXAS	Heat
93	TEXAS	Heat

	state	event_Type
94	TEXAS	Heat
95	TEXAS	Heat
96	LOUISIANA	Flash Flood
97	LOUISIANA	Flash Flood
98	LOUISIANA	Flash Flood
99	LOUISIANA	Flash Flood
100	LOUISIANA	Flash Flood

⋮

Visualizations

Figure of Event Types

Create a figure showing the type and number of occurances for events related to Harvey in the two states

```
groupcounts(EventsTopTwoStates,"event_Type");

% This removes all categories with 0 occurrences from the state variable and event_type variabl
EventsTopTwoStates.state = removecats(EventsTopTwoStates.state);
EventsTopTwoStates.event_Type = removecats(EventsTopTwoStates.event_Type);

heatmap(EventsTopTwoStates,"state","event_Type")
```

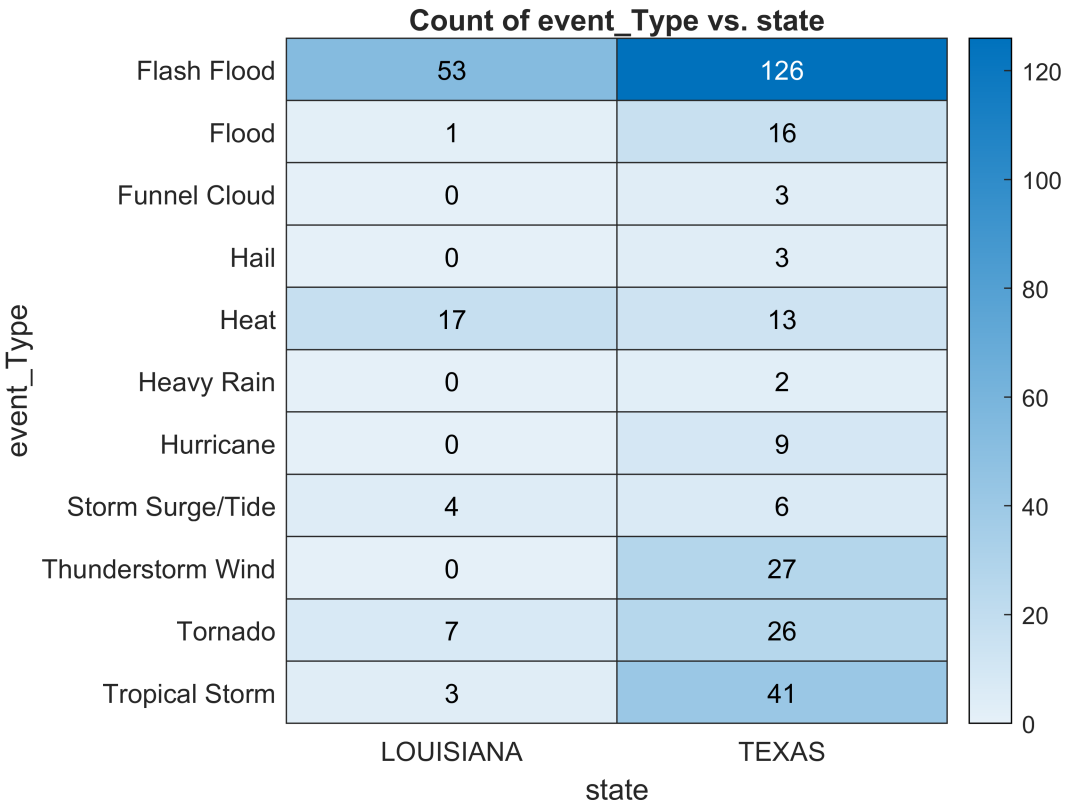


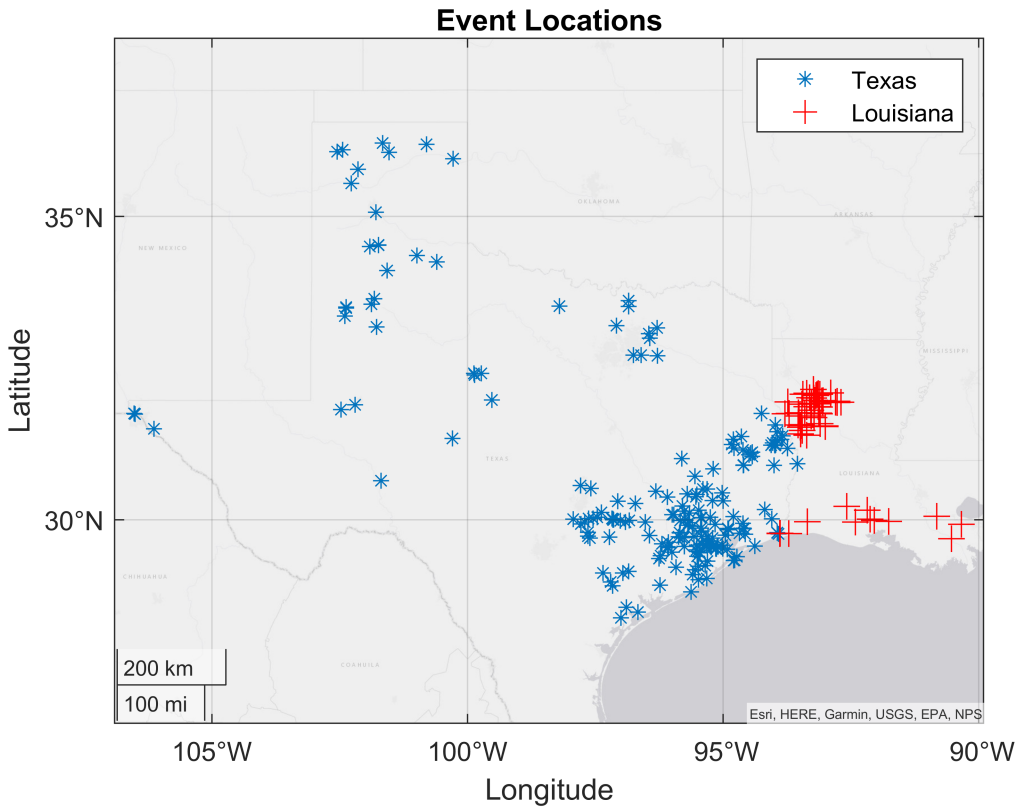
Figure of Event Locations

Show the location of events in the two states. Be sure to use different markers for the two states

```
eventTexas = TopTwoStates(TopTwoStates.State=="TEXAS" , :);
eventLouisiana = TopTwoStates(TopTwoStates.State=="LOUISIANA", :);

geoplot(eventTexas.Begin_Lat,eventTexas.Begin_Lon,'*');
hold on
geoplot(eventLouisiana.Begin_Lat,eventLouisiana.Begin_Lon,...
    "Color","red","LineStyle","none","Marker","+","MarkerSize",10);
hold off
legend('Texas','Louisiana');

geolimits([26.5 37.8],[-106.9 -89.9]);
title('Event Locations');
```



Analysis

Three Counties with Most Events in State 1

Either type out, show in a table, or show in a clear visualization the three counties with the most events in state 1.

```
%mode(HarveyData.CZ_Name);
%heatmap(TopTwoStates, "CZ_Name","Event_Type")
TopTwoStates;

Texas = TopTwoStates(TopTwoStates.State == 'TEXAS',:);
%summary(Texas);

Texas.State = removecats(Texas.State);
Texas.CZ_Name = removecats(Texas.CZ_Name);

mode(Texas.CZ_Name);
county = groupsummary(Texas,"CZ_Name");

county = sortrows(county,'GroupCount','descend')
```

```
county = 95×2 table
```

	CZ_Name	GroupCount
1	HARRIS	21
2	GALVESTON	17
3	FORT BEND	13
4	ANGELINA	12
5	BRAZORIA	12
6	SABINE	12
7	BASTROP	9
8	CHAMBERS	8
9	CALDWELL	7
10	MONTGOMERY	6
11	MATAGORDA	5
12	WHARTON	5
13	CALHOUN	4
14	FAYETTE	4
15	JEFFERSON	4
16	LIBERTY	4
17	WALKER	4
18	WALLER	4
19	AUSTIN	3
20	EL PASO	3
21	GRIMES	3
22	HOCKLEY	3
23	JACKSON	3
24	REFUGIO	3
25	SAN AUGUS...	3
26	SAN JACINTO	3
27	SHELBY	3
28	SWISHER	3
29	TAYLOR	3
30	VICTORIA	3
31	ARANSAS	2
32	BRAZOS	2
33	COLLIN	2

	CZ_Name	GroupCount
34	DALLAS	2
35	DE WITT	2
36	GONZALES	2
37	GRAYSON	2
38	HAYS	2
39	JASPER	2
40	LEE	2
41	LUBBOCK	2
42	MADISON	2
43	NACOGDOCHES	2
44	NUECES	2
45	OCHILTREE	2
46	ORANGE	2
47	POLK	2
48	SAN PATRI...	2
49	WASHINGTON	2
50	WILLIAMSON	2
51	BEE	1
52	BEXAR	1
53	BOWIE	1
54	BRISCOE	1
55	BURLESON	1
56	CASS	1
57	CLAY	1
58	COLEMAN	1
59	COLORADO	1
60	COMAL	1
61	CROCKETT	1
62	DALLAM	1
63	DENTON	1
64	ECTOR	1
65	GOLIAD	1
66	GREGG	1

	CZ_Name	GroupCount
67	GUADALUPE	1
68	HALE	1
69	HARDIN	1
70	HARRISON	1
71	HARTLEY	1
72	HEMPHILL	1
73	HUNT	1
74	HUTCHINSON	1
75	JIM WELLS	1
76	KARNES	1
77	KAUFMAN	1
78	KENEDY	1
79	KLEBERG	1
80	LAVACA	1
81	LIVE OAK	1
82	LYNN	1
83	MARION	1
84	MIDLAND	1
85	MOORE	1
86	MOTLEY	1
87	NEWTON	1
88	OLDHAM	1
89	PANOLA	1
90	RANDALL	1
91	RUSK	1
92	SHERMAN	1
93	TOM GREEN	1
94	TYLER	1
95	WILSON	1

```
% Top 3 counties - HARRIS, GALVESTON and FORT BEND
```

Top 3 counties are:

- HARRIS

- GALVESTON
- FORT BEND

Three Counties with Most Events in State 2

Either type out, show in a table, or show in a clear visualization the three counties with the most events in state 2.

```
Louisiana = TopTwoStates(TopTwoStates.State == 'LOUISIANA',:);
%summary(Louisiana);

Louisiana.State = removecats(Louisiana.State);
Louisina.CZ_Name = removecats(Louisiana.CZ_Name);

county2 = groupsummary(Louisiana,"CZ_Name");

county2 = sortrows(county2,'GroupCount','descend')
```

county2 = 30×2 table

	CZ_Name	GroupCount
1	NATCHITOC...	21
2	SABINE	15
3	RED RIVER	9
4	WINN	6
5	VERMILION	4
6	CAMERON	3
7	DE SOTO	3
8	UNION	2
9	ACADIA	1
10	BEAUREGARD	1
11	BIENVILLE	1
12	BOSSIER	1
13	CADDO	1
14	CALCASIEU	1
15	CALDWELL	1
16	CLAIBORNE	1
17	EAST CAME...	1
18	GRANT	1
19	IBERIA	1

	CZ_Name	GroupCount
20	JACKSON	1
21	LA SALLE	1
22	LAFAYETTE	1
23	LAFOURCHE	1
24	LINCOLN	1
25	OUACHITA	1
26	ST. CHARLES	1
27	ST. JAMES	1
28	ST. MARY	1
29	WEBSTER	1
30	WEST CAME...	1

```
% Top 3 counties - NATCHITOCHES, SABINE and RED RIVER
```

Top 3 counties are:

- NATCHITOCHES
- SABINE
- RED RIVER

Three Counties with Highest Property Cost in State 1

Either type out, show in a table, or show in a clear visualization the three counties with the highest reported property cost in state 1. *Be sure to include the dollar amount*.

```
TexasPropertyCost = groupsummary(Texas,"CZ_Name","sum","Property_Cost");
TexasPropertyCost = sortrows(TexasPropertyCost,'sum_Property_Cost','descend')
```

`TexasPropertyCost = 95×3 table`

	CZ_Name	GroupCount	sum_Property_Cost
1	GALVESTON	17	2.0000e+10
2	FORT BEND	13	1.6004e+10
3	MONTGOMERY	6	1.4000e+10
4	HARRIS	21	1.0001e+10
5	JEFFERSON	4	3.0000e+09
6	BRAZORIA	12	2.0008e+09
7	ARANSAS	2	1.9500e+09
8	ORANGE	2	1.5000e+09

	CZ_Name	GroupCount	sum_Property_Cost
9	NUECES	2	1.3000e+09
10	WALKER	4	1.2000e+09
11	LIBERTY	4	1.0000e+09
12	SAN JACINTO	3	700000000
13	HARDIN	1	600000000
14	POLK	2	600000000
15	SAN PATRI...	2	502000000
16	MATAGORDA	5	500500000
17	JACKSON	3	500200000
18	REFUGIO	3	500020000
19	WALLER	4	350700000
20	CALHOUN	4	281010000
21	WHARTON	5	200350000
22	VICTORIA	3	160000000
23	WASHINGTON	2	150000000
24	JASPER	2	85005000
25	MADISON	2	80000000
26	TYLER	1	60000000
27	FAYETTE	4	50000000
28	GRIMES	3	50000000
29	NEWTON	1	45000000
30	BURLESON	1	20000000
31	BRAZOS	2	15000000
32	CALDWELL	7	12850000
33	DE WITT	2	3100000
34	BASTROP	9	1500000
35	CHAMBERS	8	1000000
36	COMAL	1	1000000
37	GOLIAD	1	1000000
38	LEE	2	350000
39	AUSTIN	3	100000
40	BEXAR	1	100000
41	GONZALES	2	100000

	CZ_Name	GroupCount	sum_Property_Cost
42	HAYS	2	100000
43	LAVACA	1	100000
44	GUADALUPE	1	50000
45	HOCKLEY	3	42000
46	BEE	1	10000
47	BRISCOE	1	10000
48	KLEBERG	1	10000
49	LIVE OAK	1	10000
50	ECTOR	1	8000
51	JIM WELLS	1	1000
52	LUBBOCK	2	500
53	ANGELINA	12	0
54	BOWIE	1	0
55	CASS	1	0
56	CLAY	1	0
57	COLEMAN	1	0
58	COLLIN	2	0
59	COLORADO	1	0
60	CROCKETT	1	0
61	DALLAM	1	0
62	DALLAS	2	0
63	DENTON	1	0
64	EL PASO	3	0
65	GRAYSON	2	0
66	GREGG	1	0
67	HALE	1	0
68	HARRISON	1	0
69	HARTLEY	1	0
70	HEMPHILL	1	0
71	HUNT	1	0
72	HUTCHINSON	1	0
73	KARNES	1	0
74	KAUFMAN	1	0

	CZ_Name	GroupCount	sum_Property_Cost
75	KENEDY	1	0
76	LYNN	1	0
77	MARION	1	0
78	MIDLAND	1	0
79	MOORE	1	0
80	MOTLEY	1	0
81	NACOGDOCHES	2	0
82	OCHILTREE	2	0
83	OLDHAM	1	0
84	PANOLA	1	0
85	RANDALL	1	0
86	RUSK	1	0
87	SABINE	12	0
88	SAN AUGUS...	3	0
89	SHELBY	3	0
90	SHERMAN	1	0
91	SWISHER	3	0
92	TAYLOR	3	0
93	TOM GREEN	1	0
94	WILLIAMSON	2	0
95	WILSON	1	0

```
% Highest Property Cost - GALVESTON, FORT BEND and MONTGOMERY
```

Highest Property Cost:

- GALVESTON
- FORT BEND
- MONTGOMERY

Three Counties with Highest Property Cost in State 2

Either type out, show in a table, or show in a clear visualization the three counties with the highest reported property cost in state 2. *Be sure to include the dollar amount*.

```
LousPropertyCost = groupsummary(Louisiana,"CZ_Name","sum","Property_Cost");
LousPropertyCost = sortrows(LousPropertyCost,'sum_Property_Cost','descend')
```

```
LousPropertyCost = 30×3 table
```

	CZ_Name	GroupCount	sum_Property_Cost
1	CALCASIEU	1	60000000
2	BEAUREGARD	1	15000000
3	ACADIA	1	200000
4	CAMERON	3	72000
5	VERMILION	4	5000
6	BIENVILLE	1	0
7	BOSSIER	1	0
8	CADDO	1	0
9	CALDWELL	1	0
10	CLAIBORNE	1	0
11	DE SOTO	3	0
12	EAST CAME...	1	0
13	GRANT	1	0
14	IBERIA	1	0
15	JACKSON	1	0
16	LA SALLE	1	0
17	LAFAYETTE	1	0
18	LAFOURCHE	1	0
19	LINCOLN	1	0
20	NATCHITOC...	21	0
21	OUACHITA	1	0
22	RED RIVER	9	0
23	SABINE	15	0
24	ST. CHARLES	1	0
25	ST. JAMES	1	0
26	ST. MARY	1	0
27	UNION	2	0
28	WEBSTER	1	0
29	WEST CAME...	1	0
30	WINN	6	0

```
% Highest Property Cost - CALCASIEU, BEAURGARD and ACADIA
```

Highest Property Cost:

- CALCASIEU
- BEAURGARD
- ACADIA

Conclusions and Recommendations

Summarize your analysis. Make a recommendation supported by the data.

According to the analysis done in 'Two States Most Impacted by Harvey' it is found that **Texas** and **Louisiana** are the most impcated states by Hurricane Harvey.

In Texas, the insurance company should send their people to *GALVESTON, FORT BEND and MONTGOMERY* where highest property cost occured. They should also consider counties *HARRIS, GALVESTON and FORT BEND* where most most events happend by Harvey.

On the other hand, **in Louisiana**, counties *CALCASIEU, BEAURGARD and ACADIA* faced highest property cost. So the insurance company should pay their attention there. They should also consider *NATCHITOCHES, SABINE and RED RIVER* where most events happened by the hurricane.