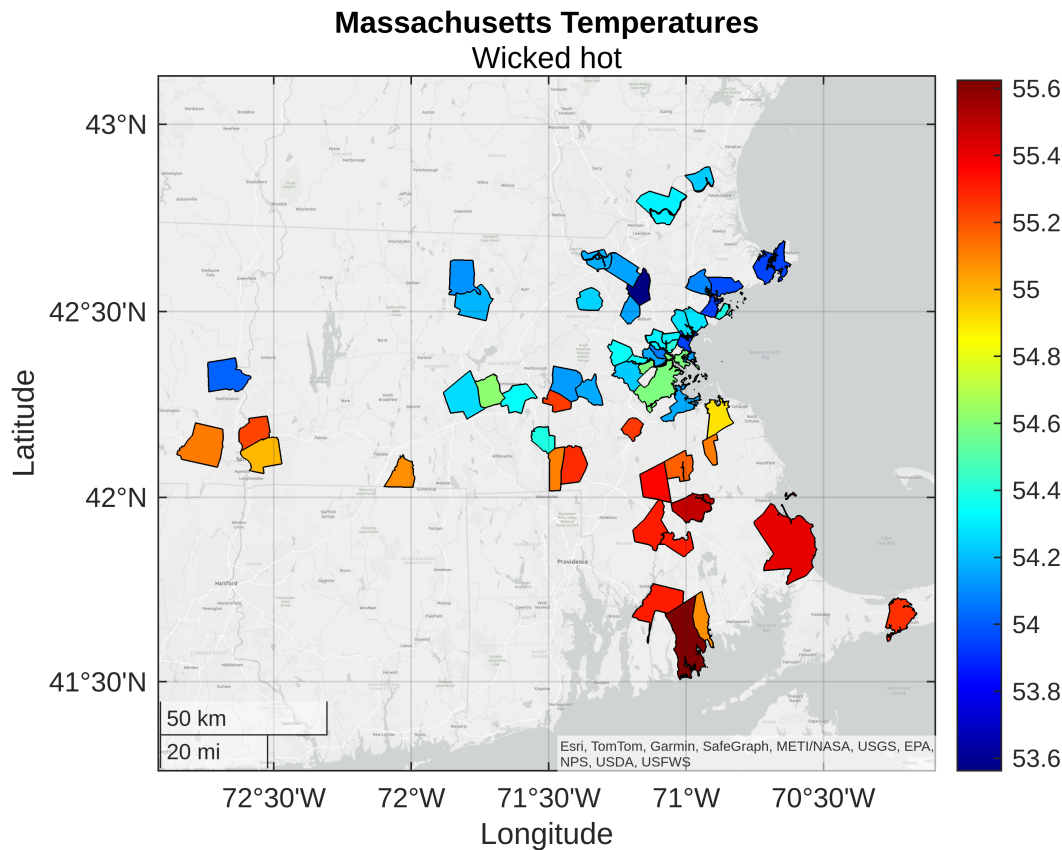


```

[data, stations] = simulateWeatherStations('10-01-2023', 10);
stations = categorical(upper(string(stations)));
data.MUNI = [categorical(upper(string({data.Station.MUNI})))];
means = array2table(stations, "VariableNames", "MUNI");
means.MUNI = upper(means.MUNI);
means.Temps = zeros(numel(stations),1);
for ii = 1:numel(stations)
    means.Temps(ii) = mean(data.Temp(data.MUNI == stations(ii)));
end
munis = readgeotable("townssurvey_shp/TOWNSSURVEY_POLY.shp");
munis.MUNI = categorical(munis.TOWN);

meansmunis = innerjoin(munis,means);
geoplot(meansmunis,ColorVariable="Temps");
colormap(jet);
colorbar;
title("Massachusetts Temperatures");
subtitle("Wicked hot");

```



data

data = 12960×6 table

	DateTime	Station	Temp	Humidity	Wind	MUNI
1	01-Oct-2023 01:00:00	1×1 struct	57	0.0600	10	BOSTON

	DateTime	Station	Temp	Humidity	Wind	MUNI
2	01-Oct-2023 01:00:00	1x1 struct	47	0.2400	8	WORCESTER
3	01-Oct-2023 01:00:00	1x1 struct	50	0.1200	6	SPRINGFIELD
4	01-Oct-2023 01:00:00	1x1 struct	51	0.1500	4	CAMBRIDGE
5	01-Oct-2023 01:00:00	1x1 struct	56	0.0500	4	LOWELL
6	01-Oct-2023 01:00:00	1x1 struct	56	0.0600	4	BROCKTON
7	01-Oct-2023 01:00:00	1x1 struct	48	0.1800	3	NEW BEDFORD
8	01-Oct-2023 01:00:00	1x1 struct	53	0.0800	1	QUINCY
9	01-Oct-2023 01:00:00	1x1 struct	57	0.2000	-1	LYNN
10	01-Oct-2023 01:00:00	1x1 struct	51	0.1200	-1	FALL RIVER
11	01-Oct-2023 01:00:00	1x1 struct	52	0.0800	1	MALDEN
12	01-Oct-2023 01:00:00	1x1 struct	52	0.1700	0	MEDFORD
13	01-Oct-2023 01:00:00	1x1 struct	51	0.1400	-2	TAUNTON
14	01-Oct-2023 01:00:00	1x1 struct	51	0.1900	-2	PLYMOUTH
15	01-Oct-2023 01:00:00	1x1 struct	57	0.2500	-2	REVERE
16	01-Oct-2023 01:00:00	1x1 struct	51	0.1900	-1	WALTHAM
17	01-Oct-2023 01:00:00	1x1 struct	56	0.0800	0	NEWTON
18	01-Oct-2023 01:00:00	1x1 struct	52	0.1200	1	SOMERVILLE
19	01-Oct-2023 01:00:00	1x1 struct	53	0.2500	0	BURLINGTON
20	01-Oct-2023 01:00:00	1x1 struct	52	0.1600	0	FRAMINGHAM
21	01-Oct-2023 01:00:00	1x1 struct	57	0.1000	0	WESTFIELD
22	01-Oct-2023 01:00:00	1x1 struct	54	0.1100	1	CHICOPEE
23	01-Oct-2023 01:00:00	1x1 struct	55	0.2400	2	EVERETT
24	01-Oct-2023 01:00:00	1x1 struct	50	0.1800	1	NORTHAMPTON
25	01-Oct-2023 01:00:00	1x1 struct	48	0.2400	1	FITCHBURG
26	01-Oct-2023 01:00:00	1x1 struct	57	0.1000	0	GLOUCESTER
27	01-Oct-2023 01:00:00	1x1 struct	54	0.1300	-2	BEVERLY
28	01-Oct-2023 01:00:00	1x1 struct	55	0.1900	-1	DANVERS
29	01-Oct-2023 01:00:00	1x1 struct	47	0.1000	0	SALEM

	DateTime	Station	Temp	Humidity	Wind	MUNI
30	01-Oct-2023 01:00:00	1x1 struct	57	0.0900	0	HAVERHILL
31	01-Oct-2023 01:00:00	1x1 struct	51	0.1300	1	LEOMINSTER
32	01-Oct-2023 01:00:00	1x1 struct	48	0.2400	-1	WESTBOROUGH
33	01-Oct-2023 01:00:00	1x1 struct	57	0.1200	1	MILFORD
34	01-Oct-2023 01:00:00	1x1 struct	48	0.1000	-1	NATICK
35	01-Oct-2023 01:00:00	1x1 struct	51	0.1500	1	SHREWSBURY
36	01-Oct-2023 01:00:00	1x1 struct	53	0.1400	1	SAUGUS
37	01-Oct-2023 01:00:00	1x1 struct	47	0.1400	1	WATERTOWN
38	01-Oct-2023 01:00:00	1x1 struct	53	0.2500	1	AMESBURY
39	01-Oct-2023 01:00:00	1x1 struct	49	0.0700	2	ASHLAND
40	01-Oct-2023 01:00:00	1x1 struct	58	0.0700	0	BELLINGHAM
41	01-Oct-2023 01:00:00	1x1 struct	50	0.2400	-1	BRIDGEWATER
42	01-Oct-2023 01:00:00	1x1 struct	51	0.2100	-1	CARLISLE
43	01-Oct-2023 01:00:00	1x1 struct	57	0.1200	0	DARTMOUTH
44	01-Oct-2023 01:00:00	1x1 struct	48	0.1800	2	EASTON
45	01-Oct-2023 01:00:00	1x1 struct	52	0.0700	0	FRANKLIN
46	01-Oct-2023 01:00:00	1x1 struct	54	0.1100	1	HINGHAM
47	01-Oct-2023 01:00:00	1x1 struct	47	0.2000	1	MARBLEHEAD
48	01-Oct-2023 01:00:00	1x1 struct	55	0.0800	0	NORWOOD
49	01-Oct-2023 01:00:00	1x1 struct	56	0.0700	1	ROCKLAND
50	01-Oct-2023 01:00:00	1x1 struct	54	0.2300	2	SOUTHBRIDGE
51	01-Oct-2023 01:00:00	1x1 struct	53	0.1000	0	TEWKSBURY
52	01-Oct-2023 01:00:00	1x1 struct	57	0.1900	-2	WILMINGTON
53	01-Oct-2023 01:00:00	1x1 struct	53	0.0900	0	WINTHROP
54	01-Oct-2023 01:00:00	1x1 struct	50	0.0800	2	YARMOUTH
55	01-Oct-2023 02:00:00	1x1 struct	54	0.1900	1	BOSTON
56	01-Oct-2023 02:00:00	1x1 struct	49	0.1800	0	WORCESTER

	DateTime	Station	Temp	Humidity	Wind	MUNI
57	01-Oct-2023 02:00:00	1x1 struct	45	0.0200	-1	SPRINGFIELD
58	01-Oct-2023 02:00:00	1x1 struct	54	0.0700	-1	CAMBRIDGE
59	01-Oct-2023 02:00:00	1x1 struct	51	0.0400	1	LOWELL
60	01-Oct-2023 02:00:00	1x1 struct	54	0.1500	-1	BROCKTON
61	01-Oct-2023 02:00:00	1x1 struct	55	0.1900	1	NEW BEDFORD
62	01-Oct-2023 02:00:00	1x1 struct	49	0.1200	-1	QUINCY
63	01-Oct-2023 02:00:00	1x1 struct	49	0.0500	-1	LYNN
64	01-Oct-2023 02:00:00	1x1 struct	47	0.1100	0	FALL RIVER
65	01-Oct-2023 02:00:00	1x1 struct	53	0.0800	0	MALDEN
66	01-Oct-2023 02:00:00	1x1 struct	52	0.1500	2	MEDFORD
67	01-Oct-2023 02:00:00	1x1 struct	46	0.0200	3	TAUNTON
68	01-Oct-2023 02:00:00	1x1 struct	53	0.2100	1	PLYMOUTH
69	01-Oct-2023 02:00:00	1x1 struct	52	0.0400	0	REVERE
70	01-Oct-2023 02:00:00	1x1 struct	48	0.0900	1	WALTHAM
71	01-Oct-2023 02:00:00	1x1 struct	52	0.1400	2	NEWTON
72	01-Oct-2023 02:00:00	1x1 struct	44	0.0100	0	SOMERVILLE
73	01-Oct-2023 02:00:00	1x1 struct	44	0.1900	-1	BURLINGTON
74	01-Oct-2023 02:00:00	1x1 struct	45	0.0400	1	FRAMINGHAM
75	01-Oct-2023 02:00:00	1x1 struct	49	0.1400	-1	WESTFIELD
76	01-Oct-2023 02:00:00	1x1 struct	52	0.1900	-1	CHICOPEE
77	01-Oct-2023 02:00:00	1x1 struct	53	0.0400	1	EVERETT
78	01-Oct-2023 02:00:00	1x1 struct	51	0.2100	0	NORTHAMPTON
79	01-Oct-2023 02:00:00	1x1 struct	54	0.0700	-2	FITCHBURG
80	01-Oct-2023 02:00:00	1x1 struct	50	0.0500	-2	GLOUCESTER
81	01-Oct-2023 02:00:00	1x1 struct	50	0.1100	-1	BEVERLY
82	01-Oct-2023 02:00:00	1x1 struct	52	0.1700	0	DANVERS
83	01-Oct-2023 02:00:00	1x1 struct	47	0.1400	1	SALEM
84	01-Oct-2023 02:00:00	1x1 struct	44	0.1500	0	HAVERHILL

	DateTime	Station	Temp	Humidity	Wind	MUNI
85	01-Oct-2023 02:00:00	1x1 struct	48	0.1700	1	LEOMINSTER
86	01-Oct-2023 02:00:00	1x1 struct	48	0.2100	-1	WESTBOROUGH
87	01-Oct-2023 02:00:00	1x1 struct	54	0.0100	1	MILFORD
88	01-Oct-2023 02:00:00	1x1 struct	53	0.1700	2	NATICK
89	01-Oct-2023 02:00:00	1x1 struct	47	0.1900	2	SHREWSBURY
90	01-Oct-2023 02:00:00	1x1 struct	54	0.0600	1	SAUGUS
91	01-Oct-2023 02:00:00	1x1 struct	53	0.0700	-1	WATERTOWN
92	01-Oct-2023 02:00:00	1x1 struct	49	0.1300	-1	AMESBURY
93	01-Oct-2023 02:00:00	1x1 struct	46	0.1600	-1	ASHLAND
94	01-Oct-2023 02:00:00	1x1 struct	48	0.0700	1	BELLINGHAM
95	01-Oct-2023 02:00:00	1x1 struct	52	0.0300	0	BRIDGEWATER
96	01-Oct-2023 02:00:00	1x1 struct	46	0.0700	-1	CARLISLE
97	01-Oct-2023 02:00:00	1x1 struct	54	0.0300	-1	DARTMOUTH
98	01-Oct-2023 02:00:00	1x1 struct	47	0.0100	0	EASTON
99	01-Oct-2023 02:00:00	1x1 struct	54	0.0700	0	FRANKLIN
100	01-Oct-2023 02:00:00	1x1 struct	49	0.1500	0	HINGHAM

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