Notes about analysis

Day 150 for time period 2006-2013

Window: 7 days

observations: 445

Correlations between predictors

2	mean_airtemp	min_airtemp	0.9477954
3	mean_vegcvr	mean_trnstr	0.9257377
4	mean_trnstr	mean_vegcvr	0.9257377
5	mean_airtemp	max_airtemp	0.8945360
6	max_airtemp	mean_airtemp	0.8945360
7	mean_wilt	mean_trnstr	0.8480014
8	mean_trnstr	mean_wilt	0.8480014
9	mean_sndep	mean_sncvr	0.7843003
10	mean_sncvr	mean_sndep	0.7843003
11	min_airtemp	max_airtemp	0.7429152
12	max_airtemp	min_airtemp	0.7429152
13	mean_wilt	mean_vegcvr	0.6469105
14	mean_vegcvr	mean_wilt	0.6469105

Poison Point Process models:

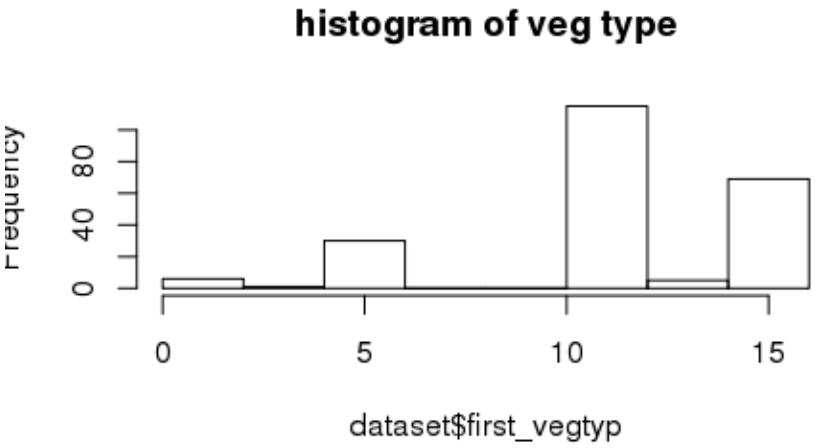
1. ppm(tick.ppp ~ mean_airtemp + mean_humidity + mean_vegcvr + uwind + vwind + sum_precip {+v3})
2. ppm(ticks.ppp ~ min_airtemp + mean_vegcvr + uwind + vwind + sum_precip +v3)
3. ppm(tick.ppp ~ mean_airtemp + mean_humidity + uwind + sum_precip +v3)
4. ppm(ticks.ppp ~ min_airtemp + mean_vegcvr + uwind + vwind + sum_precip + v3)
5. ppm(ticks.ppp ~ min_airtemp + mean_vegcvr + uwind + vwind + sum_precip + v3)

Day 170 for time period 2006-2013
Window: 7 days

observations: 262

Window: 3 days

Window: 7 days



used binary variable v4: vegtype = 11-15.

Correlations:

mean_sncvr	mean_sndep	0.9706247
mean_vegcvr	mean_trnstr	0.9400287
mean_trnstr	mean_vegcvr	0.9400287
min_airtemp	mean_airtemp	0.9105016
mean_airtemp	min_airtemp	0.9105016
mean_airtemp	max_airtemp	0.9098439
max_airtemp	mean_airtemp	0.9098439
mean_wilt	mean_trnstr	0.8401035
mean_trnstr	mean_wilt	0.8401035
min_airtemp	max_airtemp	0.7001948
max_airtemp	min_airtemp	0.7001948
mean_wilt	mean_vegcvr	0.6489837
mean_vegcvr	mean_wilt	0.6489837

Models:

ppm(ticks.ppp ~ mean_airtemp+ mean_humidity+ uwind+ vwind + sum_precip +v4)

ppm(ticks.ppp ~ min_airtemp+ mean_humidity+ uwind + sum_precip +v4)

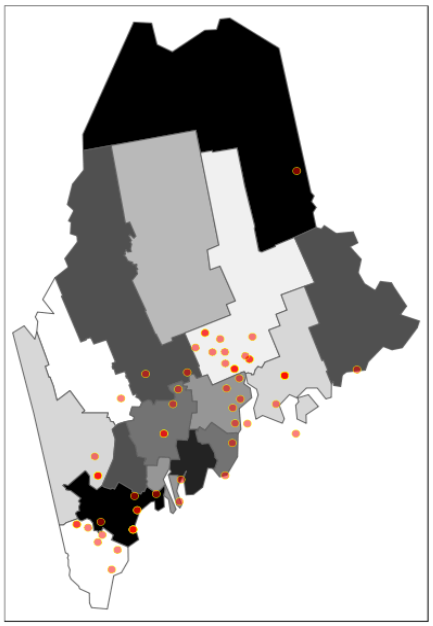
ppm(ticks.ppp ~ min_airtemp+ max_airtemp+ mean_humidity+ uwind+ vwind + sum_precip +v4)

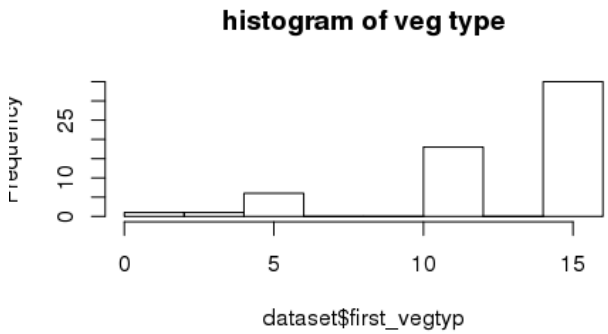
ppm(ticks.ppp ~ min_airtemp+ max_airtemp+ mean_humidity+ uwind+ trnstr+ sum_precip +v4)

ppm(ticks.ppp ~ min_airtemp+ max_airtemp+ mean_humidity+ uwind+ vwind +wilt + sum_precip +v4)

Day 200 for time period 2006-2013

Window: 3 days -> 19 obs, 7 days -> 40 obs 10 -> 61



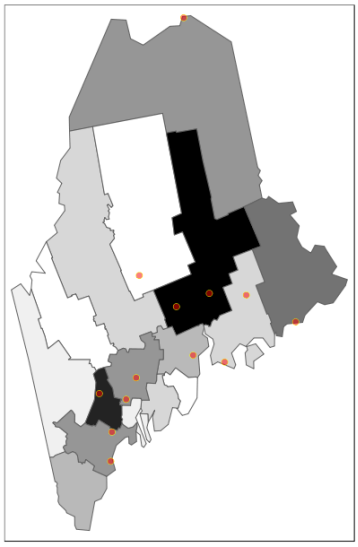


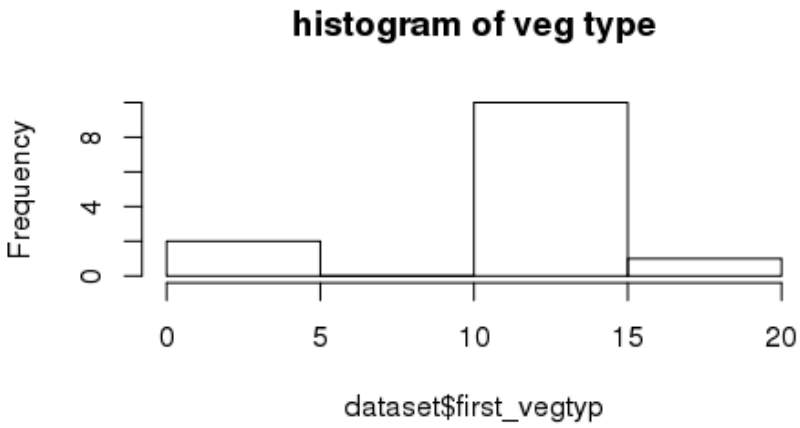
mean_trnstr	mean_vegcvr	0.9597807
mean_airtemp	max_airtemp	0.9254528
max_airtemp	mean_airtemp	0.9254528
min_airtemp	mean_airtemp	0.9154988
mean_airtemp	min_airtemp	0.9154988
mean_wilt	mean_trnstr	0.8715334
mean_trnstr	mean_wilt	0.8715334
min_airtemp	max_airtemp	0.7483884
max_airtemp	min_airtemp	0.7483884
mean_wilt	mean_vegcvr	0.7319078
mean_vegcvr	mean_wilt	0.7319078
mean_uwind	max_airtemp	0.5296166
max_airtemp	mean_uwind	0.5296166

ppm(ticks.ppp ~ wilt+sum_precip + v4)

Day 231 for time period 2006-2013

Window 13 days; 13 observations



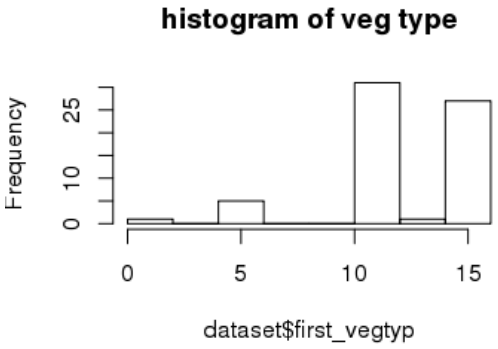


mean_trnstr	mean_vegcvr	0.9717943
min_airtemp	mean_airtemp	0.9156275
mean_airtemp	min_airtemp	0.9156275
mean_wilt	mean_trnstr	0.8810245
mean_trnstr	mean_wilt	0.8810245
mean_airtemp	max_airtemp	0.8778115
max_airtemp	mean_airtemp	0.8778115
mean_wilt	mean_vegcvr	0.7626061
mean_vegcvr	mean_wilt	0.7626061
sum_precip	min_airtemp	0.7210798
min_airtemp	sum_precip	0.7210798
min_airtemp	max_airtemp	0.6774406
max_airtemp	min_airtemp	0.6774406
mean_vwind	mean_relhum	0.6280291
mean_relhum	mean_vwind	0.6280291
sum_precip	mean_airtemp	0.6165027
mean_airtemp	sum_precip	0.6165027

ppm(ticks.ppp ~ mean_airtemp)
ppm(ticks.ppp ~ trnstr)
ppm(ticks.ppp ~ wilt)

Day 262 for time period 2006-2013

window: 7-> 36; 10 -> 62

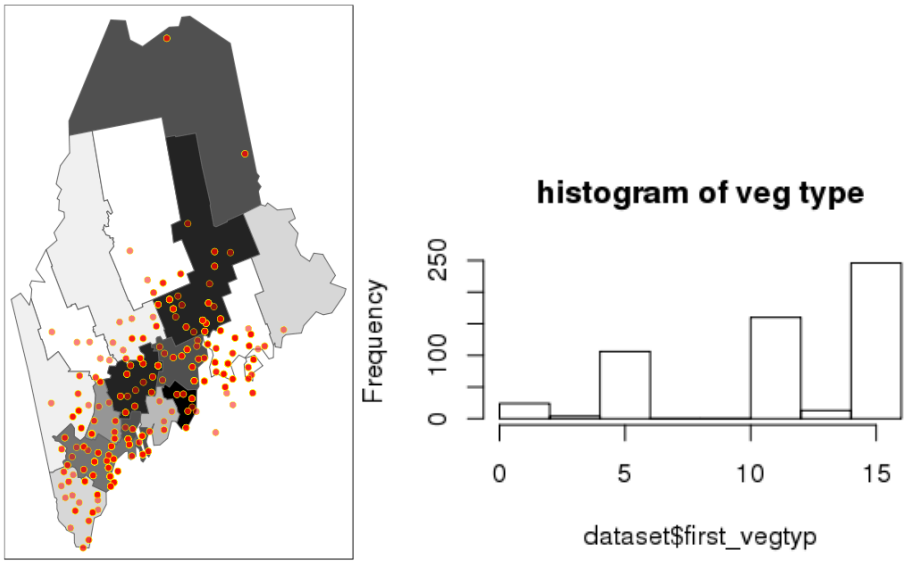


min_airtemp	mean_airtemp	0.9440952
mean_airtemp	min_airtemp	0.9440952
mean_vegcvr	mean_trnstr	0.9297405
mean_trnstr	mean_vegcvr	0.9297405
mean_airtemp	max_airtemp	0.9195529
max_airtemp	mean_airtemp	0.9195529
mean_wilt	mean_trnstr	0.8204510
mean_trnstr	mean_wilt	0.8204510
min_airtemp	max_airtemp	0.7839863
max_airtemp	min_airtemp	0.7839863
mean_wilt	mean_vegcvr	0.5937820
mean_vegcvr	mean_wilt	0.5937820

ppm(ticks.ppp ~ mean_airtemp+ uwind+ vwind+ sum_precip)

Day 292 for time period 2006-2013

window 3: 553

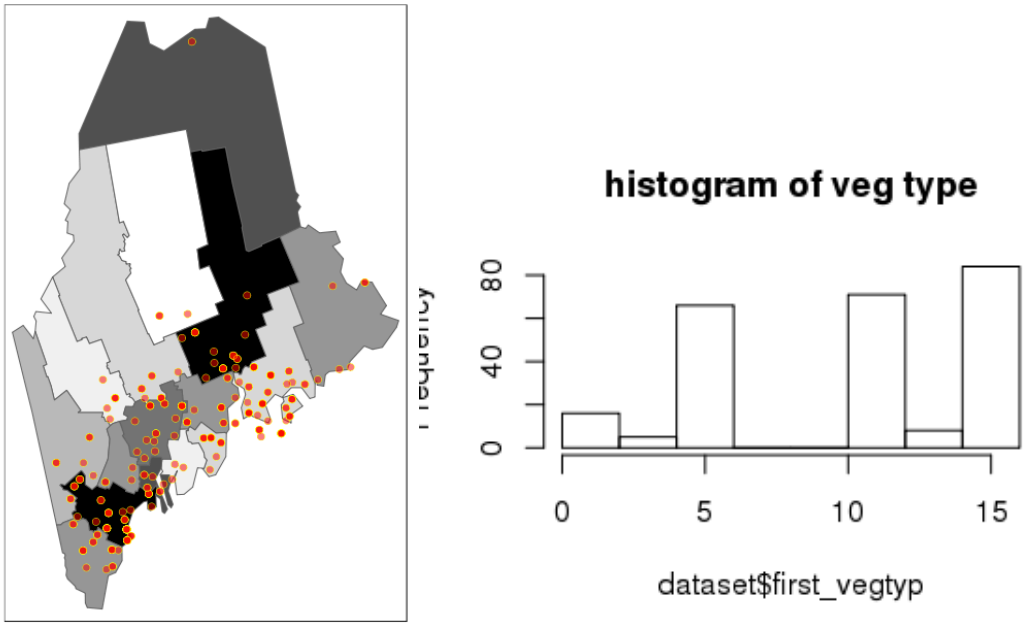


mean_vegcvr	mean_trnstr	0.9392926
mean_trnstr	mean_vegcvr	0.9392926
mean_airtemp	max_airtemp	0.8911385
max_airtemp	mean_airtemp	0.8911385
mean_wilt	mean_trnstr	0.8755327
mean_trnstr	mean_wilt	0.8755327
min_airtemp	max_airtemp	0.7395101
max_airtemp	min_airtemp	0.7395101
mean_wilt	mean_vegcvr	0.6987841
mean_vegcvr	mean_wilt	0.6987841
mean_sndep	mean_sncvr	0.6815756
mean_sncvr	mean_sndep	0.6815756
sum_precip	mean_relhum	0.5923389
mean_relhum	sum_precip	0.5923389
mean_vwind	mean_airtemp	0.5866086
mean_airtemp	mean_vwind	0.5866086
min_airtemp	mean_vwind	0.5727464
mean_vwind	min_airtemp	0.5727464
mean_vwind	max_airtemp	0.5229474

ppm(ticks.ppp ~ mean_airtemp+ uwind+mean_vegcvr +v4)
ppm(ticks.ppp ~ max_airtemp+ uwind+ wilt +v4)
ppm(ticks.ppp ~ max_airtemp+ uwind+ trnstr +v4)

Day 323 for time period 2006-2013

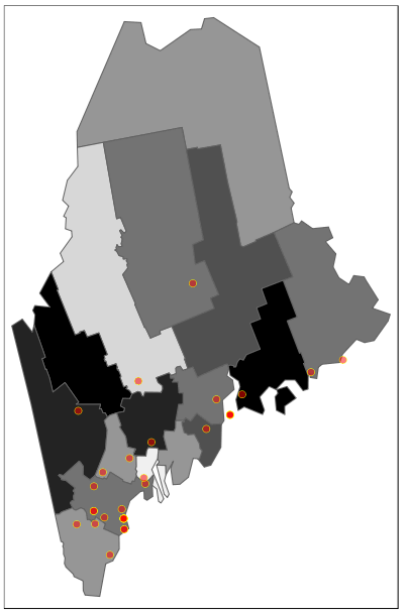
window = 3 ; #obs = 250

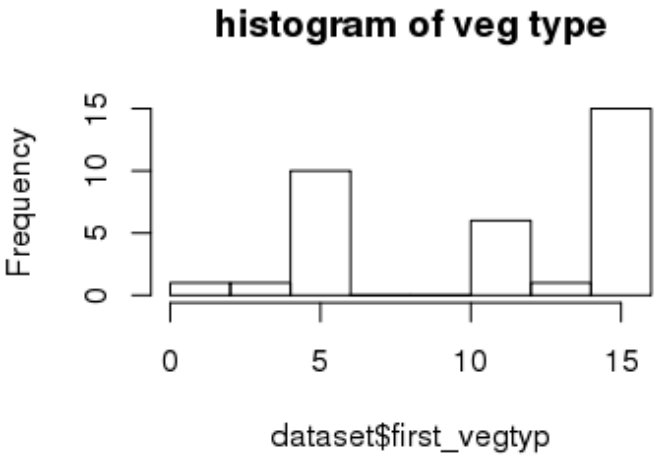


ppm(ticks.ppp ~ mean_airtemp+ trnstr+uwind+ vwind +v4)
ppm(ticks.ppp ~ mean_airtemp+ wilt+uwind+ vwind +v4)
ppm(ticks.ppp ~ mean_airtemp+ mean_vegcvr +uwind+ vwind +v4)

Day 353 for time period 2006-2013

window->10; 34



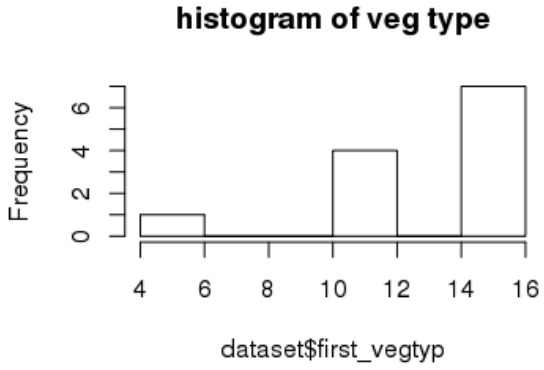


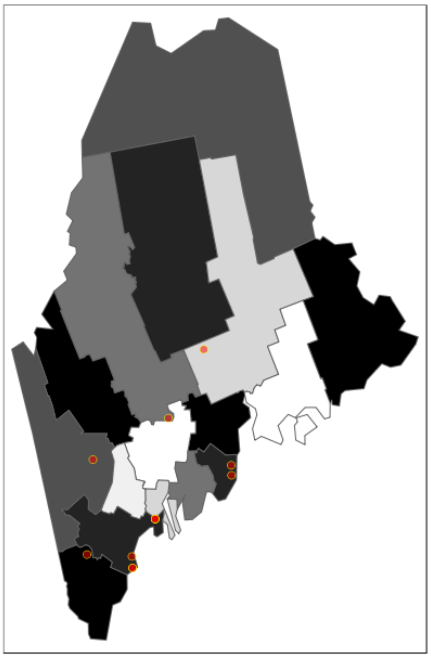
min_airtemp	mean_airtemp	0.9700001
mean_airtemp	min_airtemp	0.9700001
mean_airtemp	max_airtemp	0.9370351
max_airtemp	mean_airtemp	0.9370351
mean_wilt	mean_trnstr	0.8786891
mean_trnstr	mean_wilt	0.8786891
min_airtemp	max_airtemp	0.8554971
max_airtemp	min_airtemp	0.8554971
mean_sndep	mean_sncvr	0.6872991
mean_sncvr	mean_sndep	0.6872991
mean_vwind	max_airtemp	0.5755400
max_airtemp	mean_vwind	0.5755400
mean_wilt	mean_sncvr	0.5533342
mean_sncvr	mean_wilt	0.5533342

ppm(ticks.ppp ~ mean_humidity+ uwind+mean_vegcvr+v4)

Day 19 for time period 2006-2013

window 20: obs 12

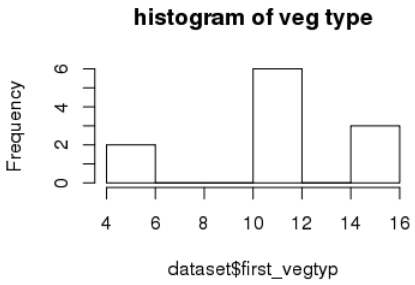


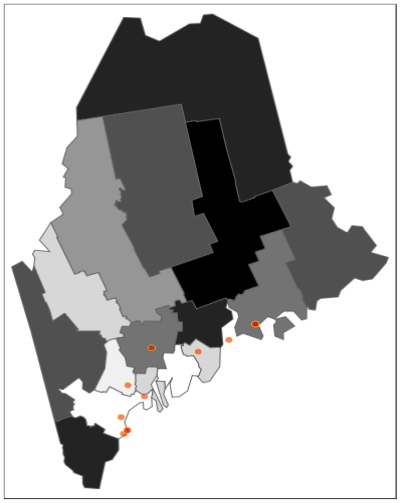


ppm(ticks.ppp ~ mean_airtemp+ vwind+ sndepth + sum_precip)
ppm(ticks.ppp ~ mean_airtemp + v4)

Day 50 for time period 2006-2013

window: 20; #obs 11

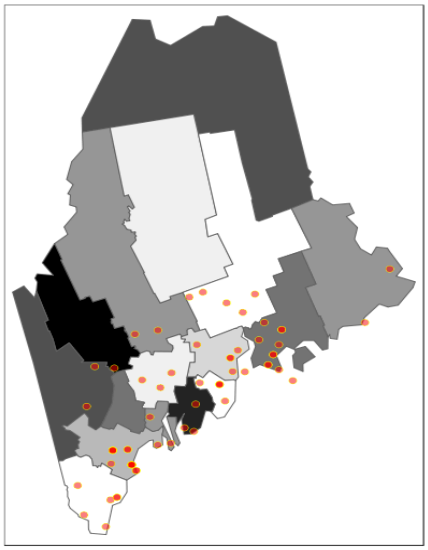


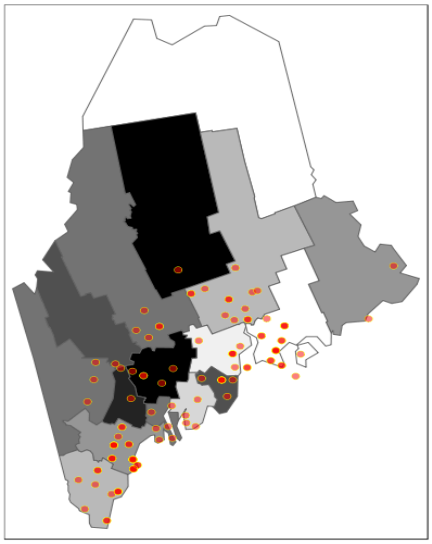


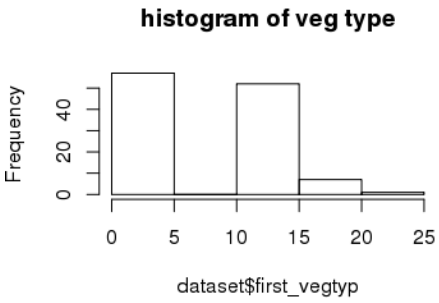
ppm(ticks.ppp ~ mean_airtemp+ vwind +sncvr)
ppm(ticks.ppp ~ mean_airtemp+ vwind+v4)

Day 78 for time period 2006-2013

window: 3->66 7 ->117



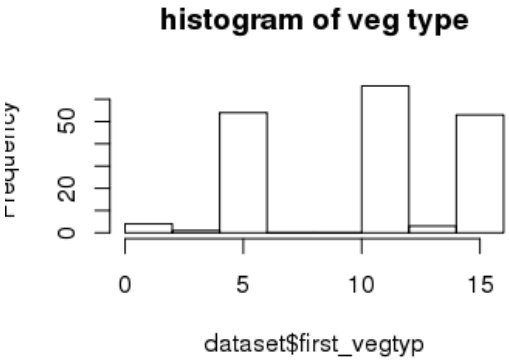


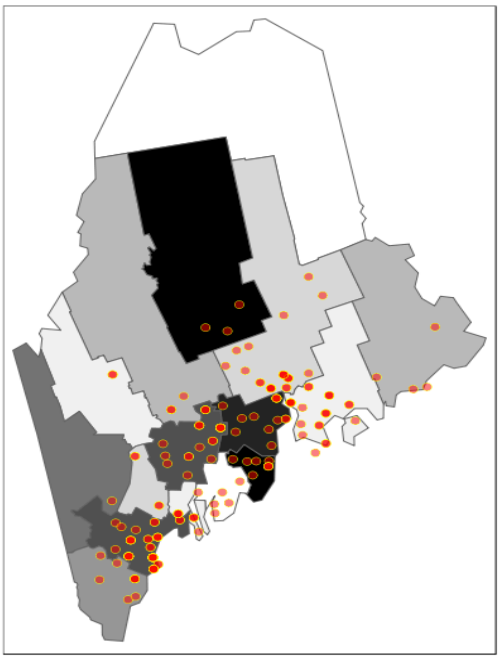


ppm(ticks.ppp ~ mean_airtemp+mean_vegcvr+ vwind + sum_precip+sncvr)
ppm(ticks.ppp ~ mean_airtemp+mean_vegcvr+ vwind + sum_precip+sncvr +v4)

Day 109 for time period 2006-2013

window 3 days -> 118



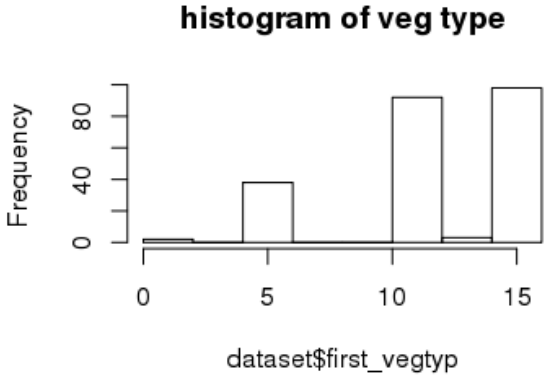


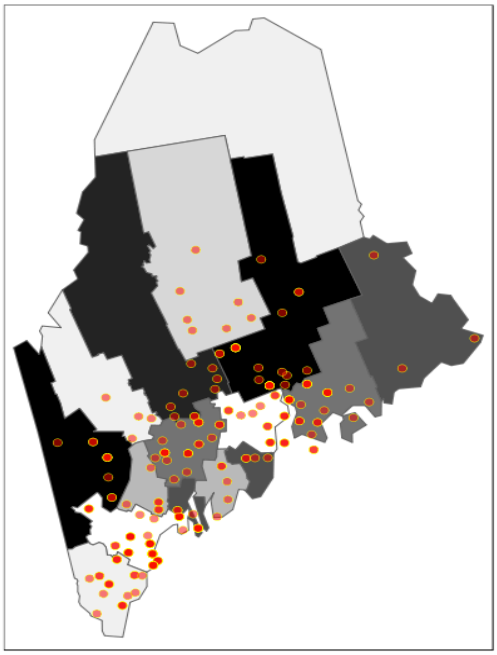
mean_airtemp	max_airtemp	0.9192855
max_airtemp	mean_airtemp	0.9192855
min_airtemp	mean_airtemp	0.9184097
mean_airtemp	min_airtemp	0.9184097
mean_vegcvr	mean_trnstr	0.8466389
mean_trnstr	mean_vegcvr	0.8466389
mean_wilt	mean_trnstr	0.8017429
mean_trnstr	mean_wilt	0.8017429
min_airtemp	max_airtemp	0.7247190
max_airtemp	min_airtemp	0.7247190
sum_precip	mean_sndep	0.6102523
mean_sndep	sum_precip	0.6102523
mean_sndep	mean_sncvr	0.5589193
mean_sncvr	mean_sndep	0.5589193

ppm(ticks.ppp ~ mean_airtemp+ uwind+mean_vegcvr+ vwind+ min_airtemp + sum_precip +v4)

Day 139 for time period 2006-2013

window 3 -> #obs 233





mean_vegcvr	mean_trnstr	0.9405134
mean_trnstr	mean_vegcvr	0.9405134
min_airtemp	mean_airtemp	0.9137828
mean_airtemp	min_airtemp	0.9137828
mean_airtemp	max_airtemp	0.9025232
max_airtemp	mean_airtemp	0.9025232
mean_wilt	mean_trnstr	0.8427099
mean_trnstr	mean_wilt	0.8427099
mean_sndep	mean_sncvr	0.7579176
mean_sncvr	mean_sndep	0.7579176
min_airtemp	max_airtemp	0.6888013
max_airtemp	min_airtemp	0.6888013
mean_wilt	mean_vegcvr	0.6552899
mean_vegcvr	mean_wilt	0.6552899
sum_precip	mean_relhum	0.5495780
mean_relhum	sum_precip	0.5495780

ppm(ticks.ppp ~ mean_airtemp+ uwind+mean_vegcvr+ vwind+ wilt + sum_precip)
ppm(ticks.ppp ~ mean_airtemp+ mean_vegcvr+ vwind+ sncvr)
ppm(ticks.ppp ~ mean_airtemp+ uwind+mean_vegcvr+ vwind+ wilt + sum_precip+v4)
ppm(ticks.ppp ~ mean_airtemp+ mean_vegcvr+ vwind+ sndepth+v4)
ppm(ticks.ppp ~ mean_airtemp+ mean_vegcvr+ vwind+ sndepth)