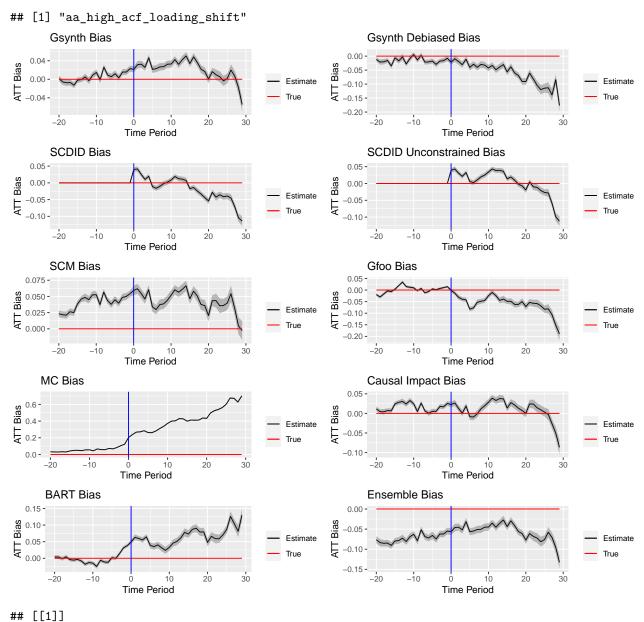
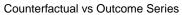
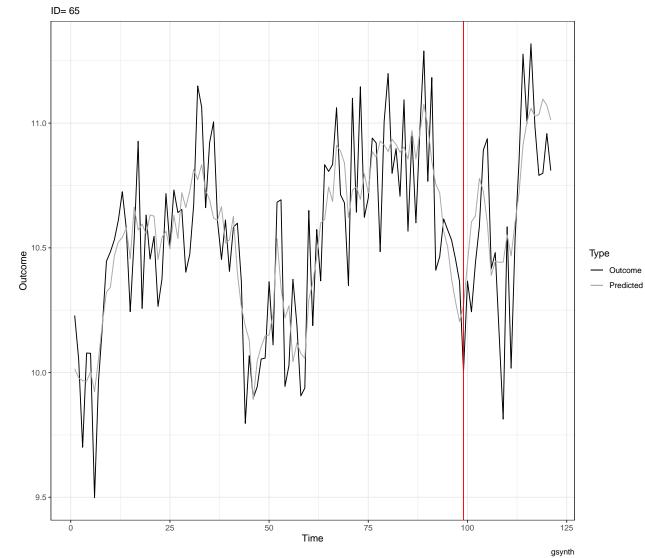
DGP Variations

For Loop Over DGPs

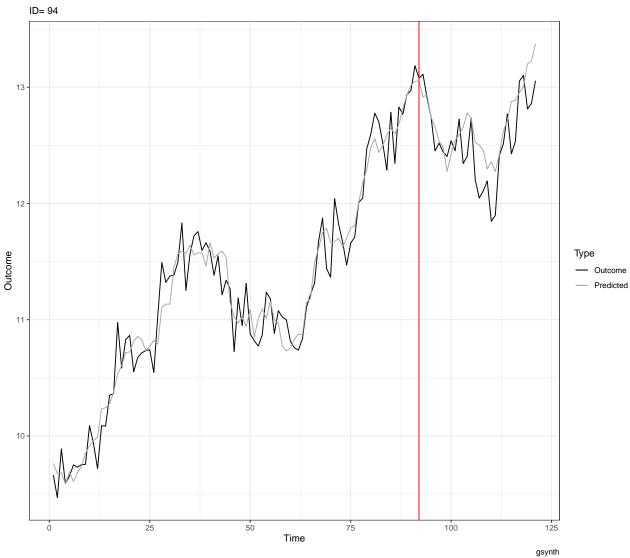


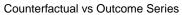


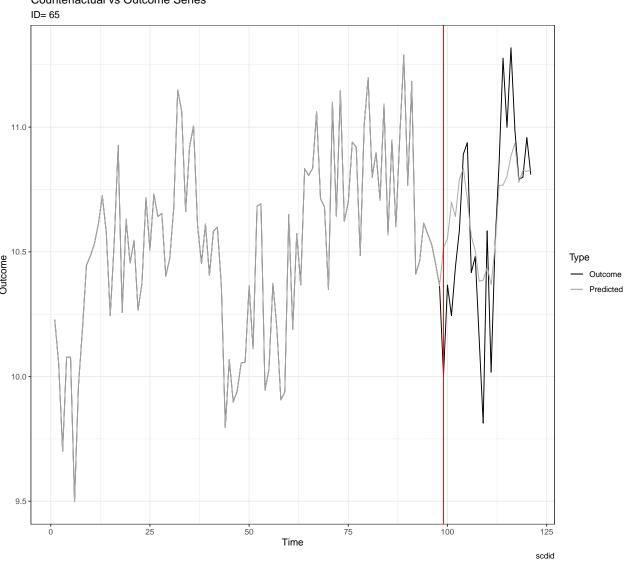


[[2]]





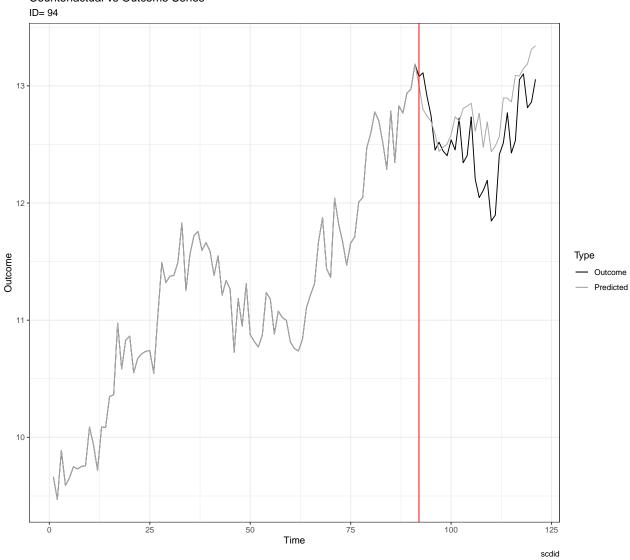


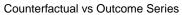


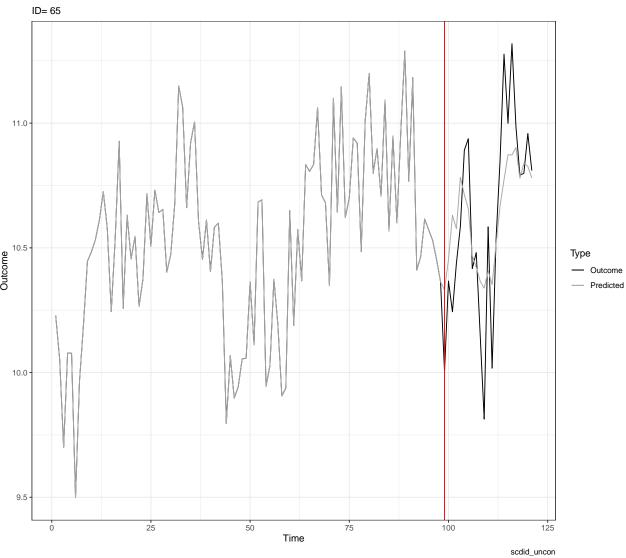
##

[[2]]



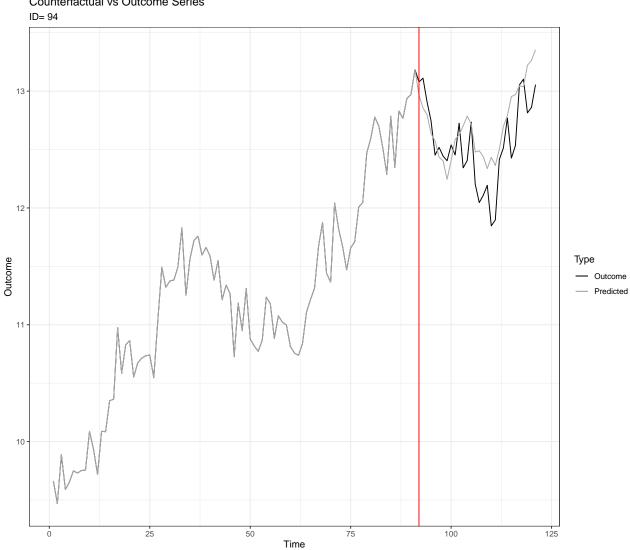




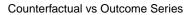


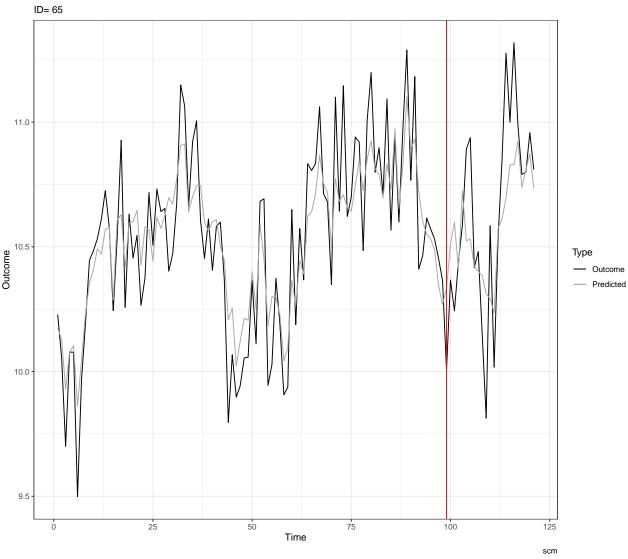
[[2]]





scdid_uncon

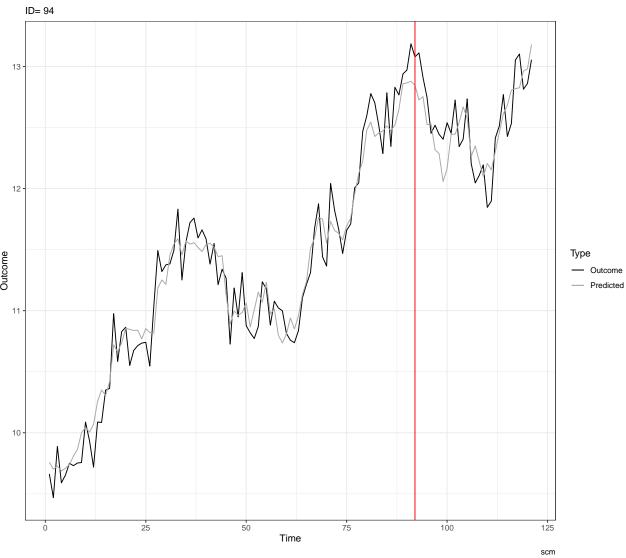




##

[[2]]

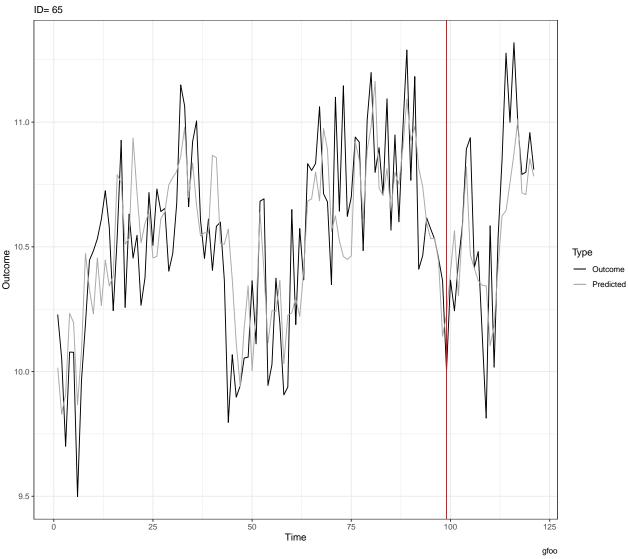




##

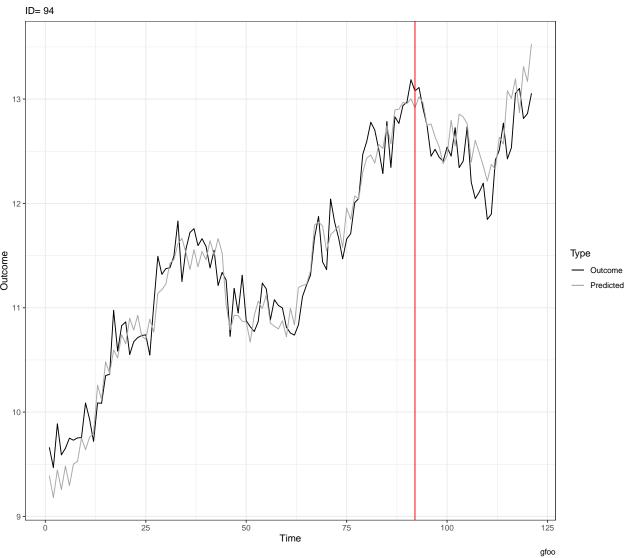
[[1]]

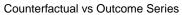


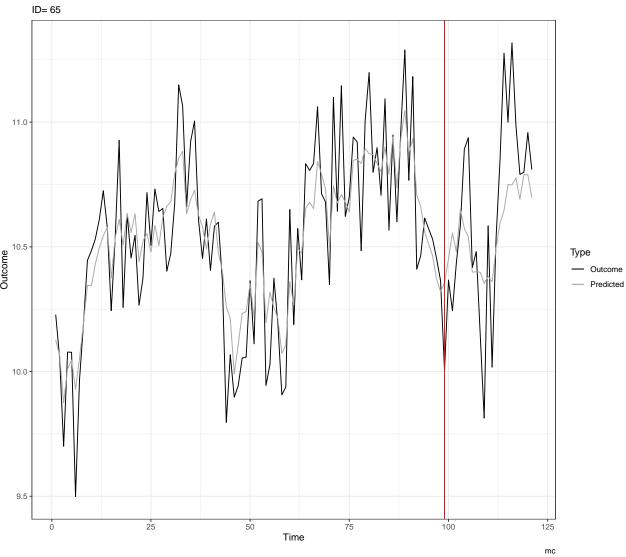


[[2]]



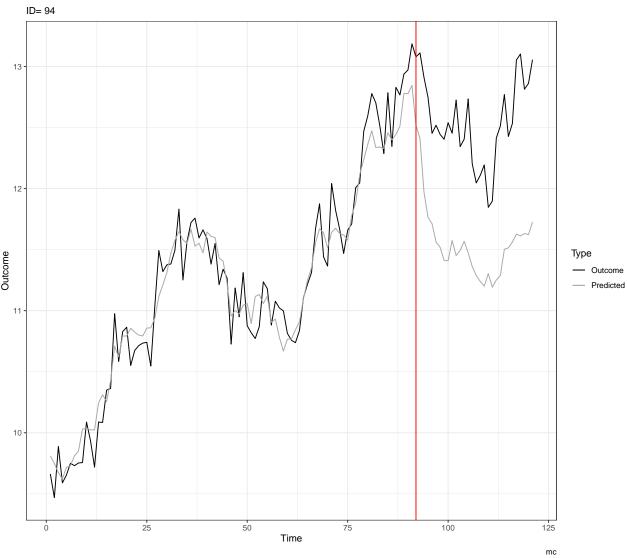




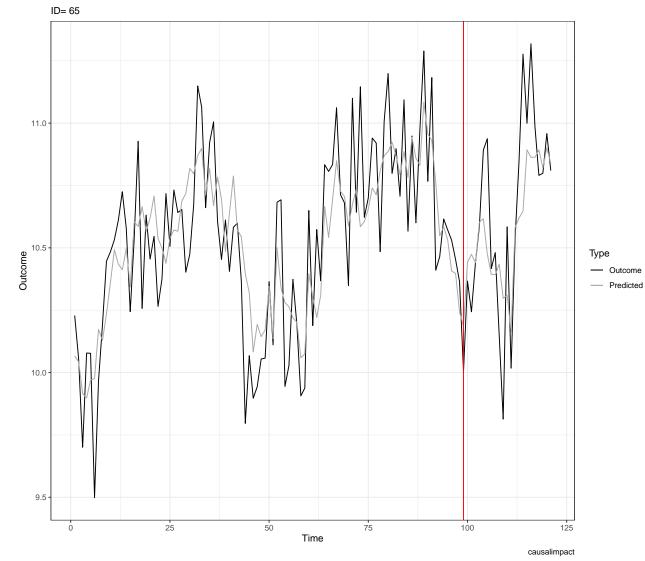


[[2]]



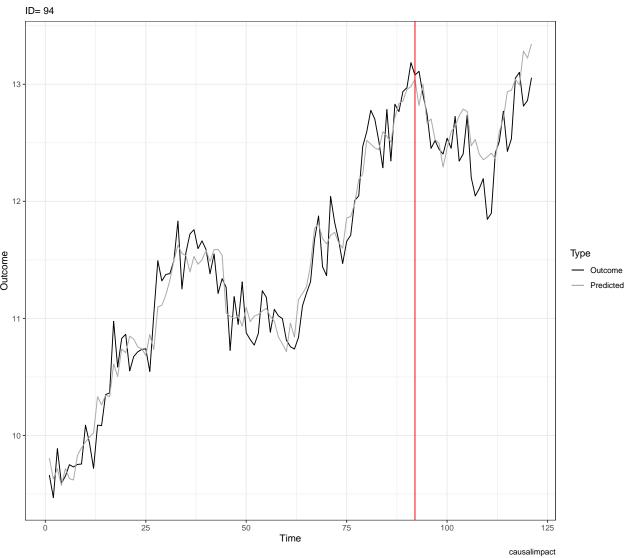




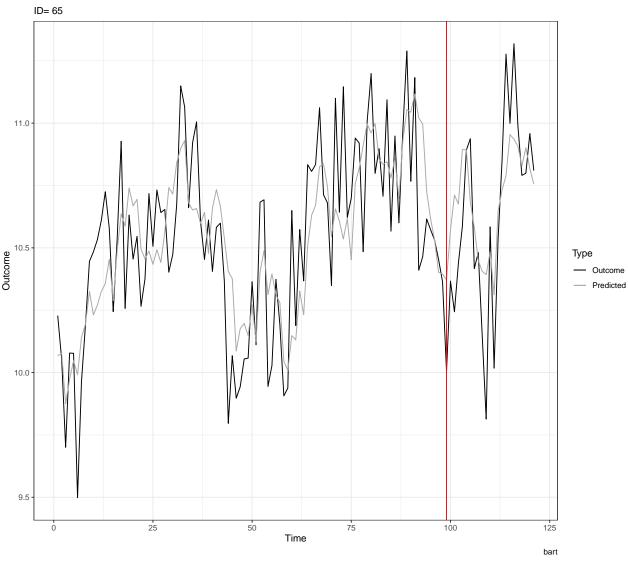


[[2]]





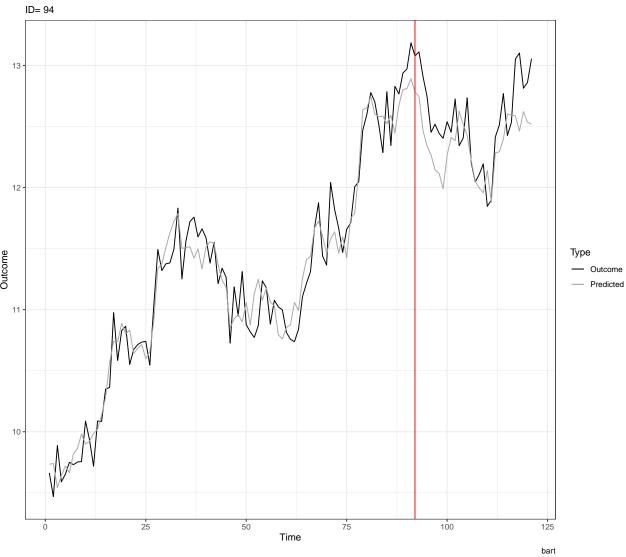




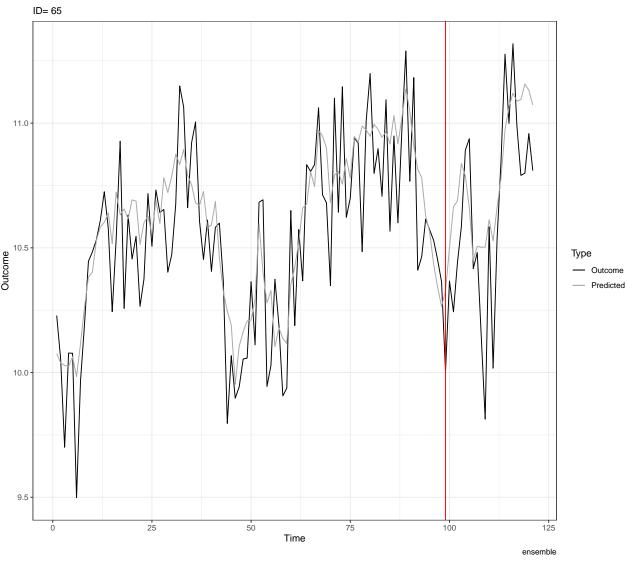
##

[[2]]





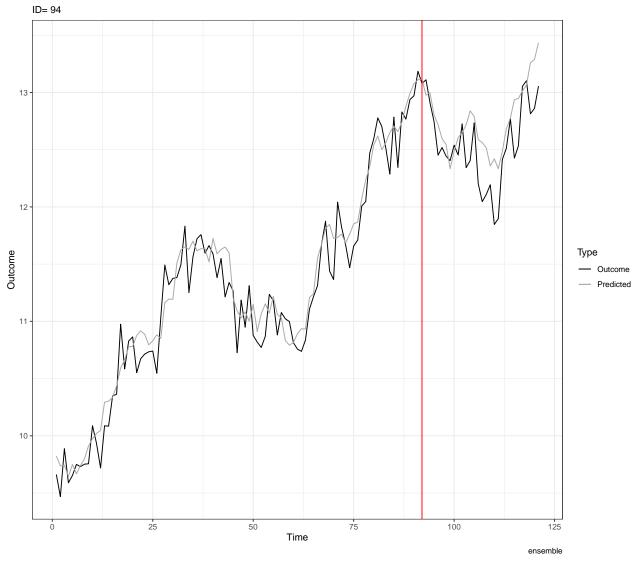




##

[[2]]

Counterfactual vs Outcome Series



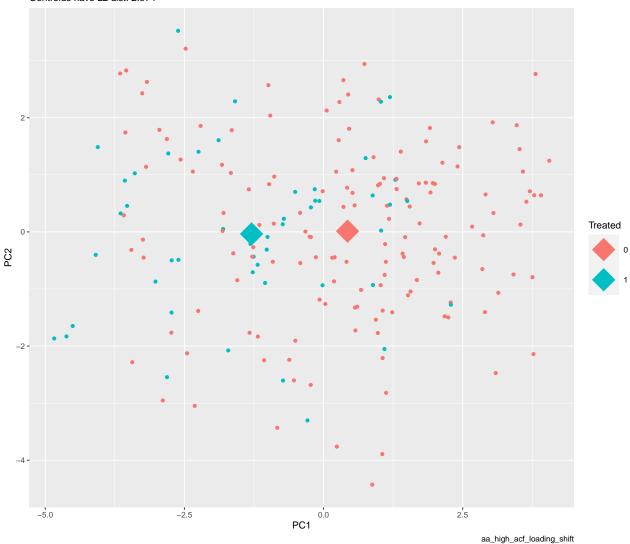
```
## Registered S3 method overwritten by 'quantmod':
```

method from

as.zoo.data.frame zoo

`summarise()` ungrouping output (override with `.groups` argument)

Centroids have L2 dist: 2.974



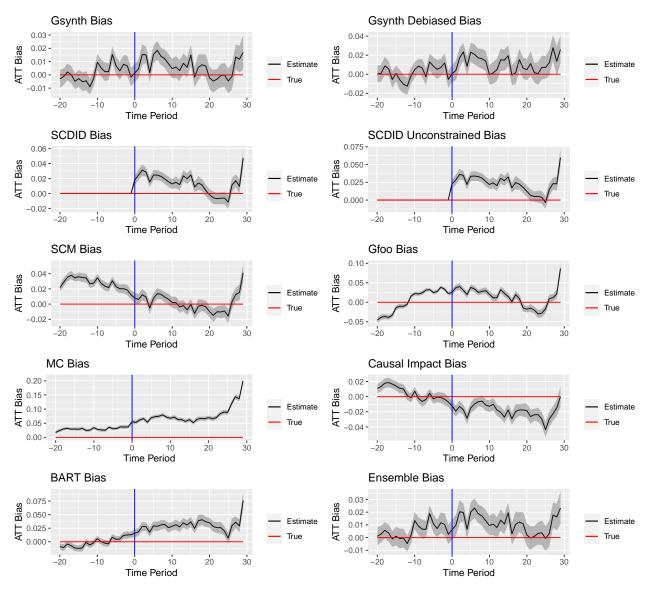
```
## # A tibble: 9 x 8
##
     vars
                         n2 statistic
                                          df
                                                         p.adj p.adj.signif
                   n1
                                                    р
##
     <chr>
                                <dbl> <dbl>
                                                         <dbl> <chr>
                <int> <int>
                                                <dbl>
## 1 curvature
                  150
                         50
                                 1.69 104. 9.41e- 2 1.06e- 1 ns
## 2 diff1_acf1
                  150
                                -2.82 79.0 6.08e- 3 7.82e- 3 **
                         50
## 3 diff2_acf1
                  150
                         50
                                 1.18
                                       92.1 2.40e- 1 2.40e- 1 ns
                                -3.99
                                        85.0 1.41e- 4 3.17e- 4 ***
## 4 e_acf1
                  150
                         50
## 5 entropy
                  150
                                       73.5 4.20e- 4 7.56e- 4 ***
                         50
                                 3.70
## 6 linearity
                                -2.83 79.3 5.97e- 3 7.82e- 3 **
                  150
                         50
## 7 spike
                  150
                         50
                                 7.03 174. 4.57e-11 4.11e-10 ****
                                            1.10e- 7 3.30e- 7 ****
## 8 trend
                  150
                         50
                                -5.72 101.
## 9 x_acf1
                  150
                         50
                                -5.85 101.
                                           6.21e- 8 2.79e- 7 ****
```

Metrics by Method aa_high_acf_loading_shift

Method gsynth gsynth_debiased scdid scdid_uncon scm gfoo mc causalimpact bart ensemble coverage

1	0.840	0.760	0.880	0.747	0.600	0.960	0.000	0.947	0.747	0.680
2	0.840	0.760	0.947	0.920	0.653	0.893	0.000	0.947	0.813	0.760
3	0.920	0.760	0.987	0.947	0.787	0.933	0.000	0.960	0.827	0.680
4	0.760	0.867	0.947	0.907	0.613	0.920	0.000	0.947	0.747	0.773
rmse										
0	0.035	0.044	0.049	0.048	0.067	0.034	0.204	0.039	0.056	0.067
1	0.047	0.052	0.054	0.055	0.070	0.042	0.241	0.043	0.074	0.062
2	0.047	0.053	0.040	0.043	0.063	0.054	0.270	0.036	0.068	0.059
3	0.041	0.055	0.030	0.036	0.056	0.057	0.273	0.032	0.065	0.065
4	0.055	0.046	0.036	0.044	0.067	0.060	0.286	0.038	0.073	0.052
bias										
0	0.021	-0.022	0.040	0.039	0.059	-0.001	0.202	0.022	0.049	-0.056
1	0.032	-0.009	0.041	0.043	0.062	-0.014	0.238	0.027	0.063	-0.046
2	0.033	-0.019	0.025	0.031	0.055	-0.031	0.268	0.013	0.060	-0.045
3	0.026	-0.031	0.010	0.021	0.046	-0.040	0.272	0.001	0.055	-0.052
4	0.046	-0.011	0.020	0.033	0.060	-0.042	0.285	0.019	0.065	-0.032

[1] "aa_high_acf"



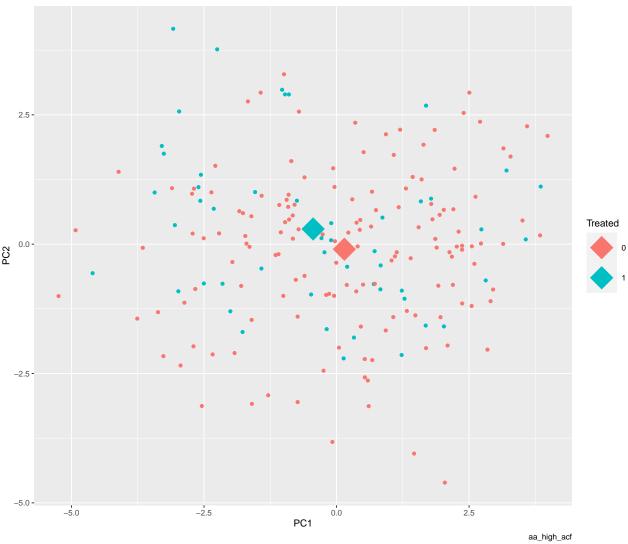
`summarise()` ungrouping output (override with `.groups` argument)

Centroids have L2 dist: 0.4999

9 x_acf1

150

50



A tibble: 9 x 8 n2 statistic ## vars df p p.adj p.adj.signif n1 <dbl> <dbl> <chr> ## <chr> <dbl> <dbl> <int> <int> ## 1 curvature 150 50 1.81 83.1 0.0736 0.194 ns ## 2 diff1_acf1 150 0.719 94.3 0.474 0.533 ns 50 ## 3 diff2_acf1 150 50 1.53 95.1 0.129 0.194 ns ## 4 e_acf1 0.540 0.59 ns 150 50 80.0 0.59 1.75 ## 5 entropy 150 73.3 0.0837 0.194 ns 50 ## 6 linearity 150 50 -0.921 66.3 0.361 0.464 ns 1.85 ## 7 spike 150 50 87.6 0.0682 0.194 ns ## 8 trend -1.61 76.3 0.111 0.194 ns 150 50

-1.73

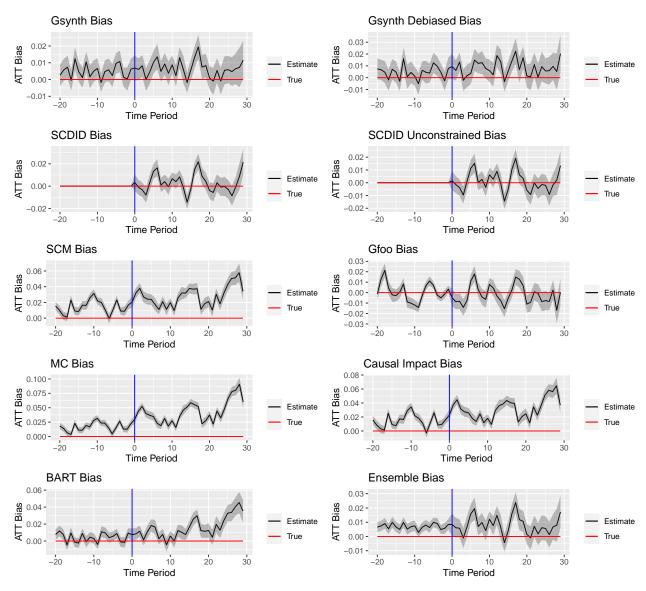
Metrics by Method aa_high_acf

78.5 0.0874 0.194 ns

Method gsynth gsynth_debiased scdid scdid_uncon scm gfoo mc causalimpact bart ensemble coverage

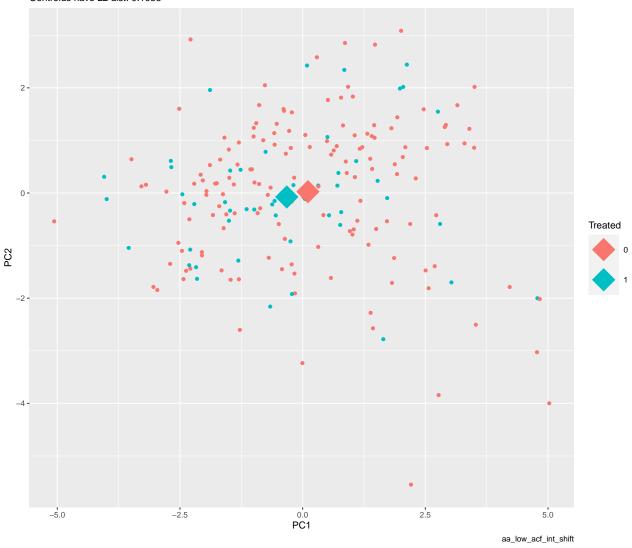
2 0.920 0.773 0.907 0.867 0.947 0.853 0.800 0.947 0.880 0.893 3 0.960 0.800 0.947 0.893 0.987 0.907 0.853 0.920 0.867 0.907 4 0.973 0.840 0.987 0.960 0.973 0.960 0.880 0.853 0.933 0.933 rmse 0 0.029 0.038 0.033 0.036 0.030 0.040 0.062 0.036 0.034 0.034 1 0.031 0.045 0.039 0.042 0.031 0.050 0.060 0.036 0.038 0.037 2 0.037 0.048 0.045 0.049 0.035 0.056 0.069 0.036 0.046 0.044 3 0.031 0.047 0.039 0.044 0.029 0.045 0.071 0.034 0.044 0.034 4 0.031 0.042 0.033 0.037<											
3 0.960 0.800 0.947 0.893 0.987 0.907 0.853 0.920 0.867 0.907 4 0.973 0.840 0.987 0.960 0.973 0.960 0.880 0.853 0.933 0.933 rmse 0 0.029 0.038 0.033 0.036 0.030 0.040 0.062 0.036 0.034 0.034 1 0.031 0.045 0.039 0.042 0.031 0.050 0.060 0.036 0.038 0.037 2 0.037 0.048 0.045 0.049 0.035 0.056 0.069 0.036 0.046 0.044 3 0.031 0.047 0.039 0.044 0.029 0.045 0.071 0.034 0.044 0.036 4 0.031 0.047 0.039 0.044 0.029 0.045 0.071 0.034 0.044 0.034 bias 0 0 0.01 0.018	1	0.933	0.840	0.907	0.880	0.947	0.853	0.827	0.920	0.920	0.920
4 0.973 0.840 0.987 0.960 0.973 0.960 0.880 0.853 0.933 0.933 rmse 0 0.029 0.038 0.033 0.036 0.030 0.040 0.062 0.036 0.034 0.034 1 0.031 0.045 0.039 0.042 0.031 0.050 0.060 0.036 0.038 0.037 2 0.037 0.048 0.045 0.049 0.035 0.056 0.069 0.036 0.046 0.044 3 0.031 0.047 0.039 0.044 0.029 0.045 0.071 0.034 0.044 0.036 4 0.031 0.042 0.033 0.037 0.034 0.040 0.062 0.044 0.041 0.034 bias 0 0.001 0.018 0.023 0.008 0.026 0.055 -0.012 0.016 0.006 1 0.005 0.004 0.025 0.028<	2	0.920	0.773	0.907	0.867	0.947	0.853	0.800	0.947	0.880	0.893
rmse 0 0.029 0.038 0.033 0.036 0.030 0.040 0.062 0.036 0.034 0.034 1 0.031 0.045 0.039 0.042 0.031 0.050 0.060 0.036 0.038 0.037 2 0.037 0.048 0.045 0.049 0.035 0.056 0.069 0.036 0.046 0.044 3 0.031 0.047 0.039 0.044 0.029 0.045 0.071 0.034 0.044 0.036 4 0.031 0.042 0.033 0.037 0.034 0.062 0.044 0.041 0.034 bias 0 0.001 0.018 0.023 0.008 0.026 0.055 -0.012 0.016 0.006 1 0.005 0.004 0.025 0.028 0.006 0.037 0.053 -0.019 0.018 0.010 2 0.015 0.017 0.031 0.036 0.012	3	0.960	0.800	0.947	0.893	0.987	0.907	0.853	0.920	0.867	0.907
0 0.029 0.038 0.033 0.036 0.030 0.040 0.062 0.036 0.034 0.034 1 0.031 0.045 0.039 0.042 0.031 0.050 0.060 0.036 0.038 0.037 2 0.037 0.048 0.045 0.049 0.035 0.056 0.069 0.036 0.046 0.044 3 0.031 0.047 0.039 0.044 0.029 0.045 0.071 0.034 0.044 0.036 4 0.031 0.042 0.033 0.037 0.034 0.040 0.062 0.044 0.041 0.034 bias 0 0.001 0.018 0.023 0.008 0.026 0.055 -0.012 0.016 0.006 1 0.005 0.004 0.025 0.028 0.006 0.037 0.053 -0.019 0.018 0.010 2 0.015 0.017 0.031 0.036 0.012	4	0.973	0.840	0.987	0.960	0.973	0.960	0.880	0.853	0.933	0.933
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	rmse										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	0.029	0.038	0.033	0.036	0.030	0.040	0.062	0.036	0.034	0.034
3 0.031 0.047 0.039 0.044 0.029 0.045 0.071 0.034 0.044 0.036 4 0.031 0.042 0.033 0.037 0.034 0.040 0.062 0.044 0.041 0.034 bias 0 0.001 0.001 0.018 0.023 0.008 0.026 0.055 -0.012 0.016 0.006 1 0.005 0.004 0.025 0.028 0.006 0.037 0.053 -0.019 0.018 0.010 2 0.015 0.017 0.031 0.036 0.012 0.041 0.062 -0.013 0.028 0.020 3 0.015 0.023 0.028 0.035 0.009 0.031 0.066 -0.017 0.028 0.020	1	0.031	0.045	0.039	0.042	0.031	0.050	0.060	0.036	0.038	0.037
4 0.031 0.042 0.033 0.037 0.034 0.040 0.062 0.044 0.041 0.034 bias 0 0.001 0.001 0.018 0.023 0.008 0.026 0.055 -0.012 0.016 0.006 1 0.005 0.004 0.025 0.028 0.006 0.037 0.053 -0.019 0.018 0.010 2 0.015 0.017 0.031 0.036 0.012 0.041 0.062 -0.013 0.028 0.020 3 0.015 0.023 0.028 0.035 0.009 0.031 0.066 -0.017 0.028 0.020	2	0.037	0.048	0.045	0.049	0.035	0.056	0.069	0.036	0.046	0.044
bias 0 0.001 0.001 0.018 0.023 0.008 0.026 0.055 -0.012 0.016 0.006 1 0.005 0.004 0.025 0.028 0.006 0.037 0.053 -0.019 0.018 0.010 2 0.015 0.017 0.031 0.036 0.012 0.041 0.062 -0.013 0.028 0.020 3 0.015 0.023 0.028 0.035 0.009 0.031 0.066 -0.017 0.028 0.020	3	0.031	0.047	0.039	0.044	0.029	0.045	0.071	0.034	0.044	0.036
0 0.001 0.001 0.018 0.023 0.008 0.026 0.055 -0.012 0.016 0.006 1 0.005 0.004 0.025 0.028 0.006 0.037 0.053 -0.019 0.018 0.010 2 0.015 0.017 0.031 0.036 0.012 0.041 0.062 -0.013 0.028 0.020 3 0.015 0.023 0.028 0.035 0.009 0.031 0.066 -0.017 0.028 0.020	4	0.031	0.042	0.033	0.037	0.034	0.040	0.062	0.044	0.041	0.034
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	bias										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	0.001	0.001	0.018	0.023	0.008	0.026	0.055	-0.012	0.016	0.006
0.015 0.023 0.028 0.035 0.009 0.031 0.066 -0.017 0.028 0.020	1	0.005	0.004	0.025	0.028	0.006	0.037	0.053	-0.019	0.018	0.010
	2	0.015	0.017	0.031	0.036	0.012	0.041	0.062	-0.013	0.028	0.020
$ 4 \qquad 0.002 \qquad 0.008 0.015 \qquad 0.022 -0.005 0.020 0.054 \qquad -0.028 0.018 \qquad 0.007 $	3	0.015	0.023	0.028	0.035	0.009	0.031	0.066	-0.017	0.028	0.020
	4	0.002	0.008	0.015	0.022	-0.005	0.020	0.054	-0.028	0.018	0.007

[1] "aa_low_acf_int_shift"



`summarise()` ungrouping output (override with `.groups` argument)

Centroids have L2 dist: 0.1958



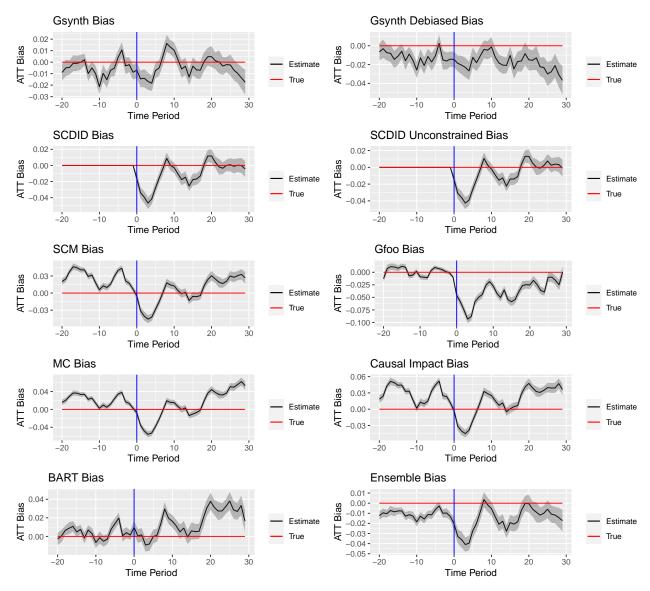
A tibble: 9 x 8 ## vars n2 statistic df p p.adj p.adj.signif n1 <dbl> <dbl> <chr> ## <chr> <dbl> <dbl> <int> <int> ## 1 curvature 150 50 -1.8690.7 0.0656 0.346 ns ## 2 diff1_acf1 150 1.44 86.5 0.154 0.346 ns 50 ## 3 diff2_acf1 150 50 0.848 88.2 0.399 0.598 ns ## 4 e_acf1 1.54 82.5 0.128 0.346 ns 150 50 ## 5 entropy 150 -1.07 83.2 0.290 0.522 ns 50 ## 6 linearity 150 50 0.105 90.9 0.916 0.916 ns ## 7 spike 150 50 0.379 90.7 0.705 0.793 ns ## 8 trend 0.455 102. 0.65 0.793 ns 150 50 ## 9 x_acf1 150 50 1.46 87.0 0.147 0.346 ns

Metrics by Method aa_low_acf_int_shift

Method gsynth gsynth_debiased scdid scdid_uncon scm gfoo mc causalimpact bart ensemb coverage

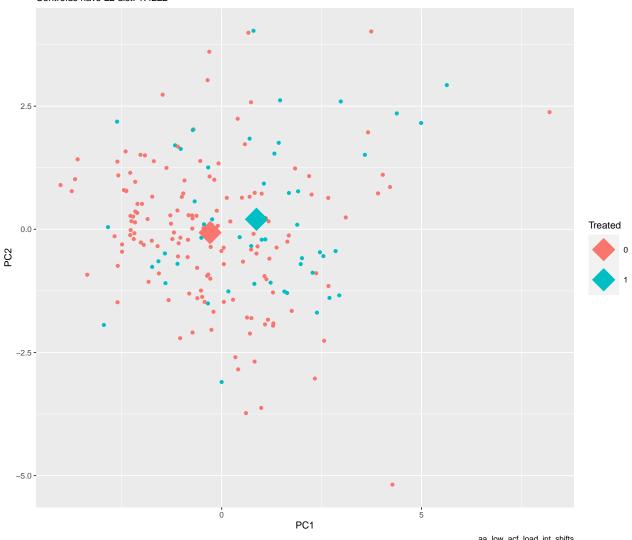
1	0.973	0.880	0.960	0.960	0.827	0.960	0.667	0.720	0.973	0.94
2	0.947	0.867	0.960	0.947	0.773	0.947	0.640	0.680	0.947	0.94
3	0.947	0.853	0.947	0.933	0.827	0.920	0.760	0.840	0.960	0.94
4	0.920	0.840	0.920	0.920	0.840	0.960	0.773	0.827	0.907	0.90
rmse										
0	0.033	0.047	0.032	0.032	0.038	0.036	0.043	0.039	0.033	0.03
1	0.029	0.037	0.029	0.029	0.043	0.032	0.052	0.047	0.030	0.03
2	0.029	0.037	0.028	0.028	0.047	0.033	0.059	0.053	0.030	0.02
3	0.029	0.039	0.031	0.031	0.041	0.037	0.049	0.043	0.028	0.03
4	0.031	0.042	0.030	0.030	0.038	0.034	0.047	0.042	0.035	0.03
bias										
0	0.007	0.009	0.003	0.002	0.021	-0.005	0.029	0.023	0.007	0.00
1	0.006	0.006	-0.001	-0.001	0.032	-0.009	0.044	0.037	0.009	0.00
2	0.008	0.013	-0.003	-0.004	0.038	-0.008	0.052	0.045	0.011	0.00
3	-0.000	-0.002	-0.008	-0.010	0.027	-0.014	0.040	0.031	0.001	-0.00
4	0.004	0.002	0.003	0.001	0.024	-0.007	0.037	0.027	0.011	0.00

[1] "aa_low_acf_load_int_shifts"



`summarise()` ungrouping output (override with `.groups` argument)

Centroids have L2 dist: 1.4222



aa_low_acf_load_int_shifts

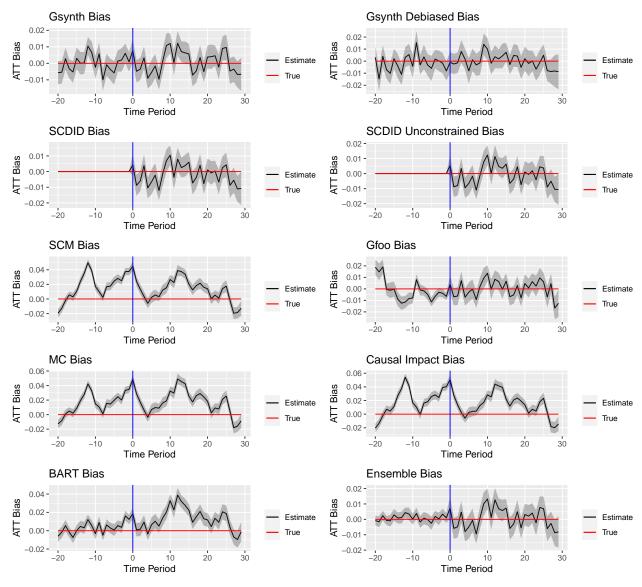
```
## # A tibble: 9 x 8
##
     vars
                         n2 statistic
                                          df
                                                        p.adj p.adj.signif
                   n1
                                                    р
##
     <chr>
                                <dbl> <dbl>
                <int> <int>
                                                <dbl>
                                                        <dbl> <chr>
## 1 curvature
                  150
                         50
                                 1.93
                                       81.0 0.0577
                                                      0.0915 ns
## 2 diff1_acf1
                  150
                                -1.90
                                       90.0 0.0601
                                                      0.0915
                         50
## 3 diff2_acf1
                  150
                         50
                                -1.37
                                        80.4 0.174
                                                      0.189
                                                              ns
## 4 e_acf1
                                                      0.189
                  150
                         50
                                -1.32 111. 0.189
                                                              ns
## 5 entropy
                  150
                                 1.90 82.1 0.061
                                                      0.0915 ns
                         50
## 6 linearity
                  150
                         50
                                -1.35 114. 0.179
                                                      0.189
## 7 spike
                  150
                         50
                                 2.99 82.2 0.00373 0.0112
## 8 trend
                         50
                                -3.76
                                        69.6 0.000348 0.00157 **
                  150
## 9 x_acf1
                  150
                         50
                                -3.80
                                      77.2 0.000289 0.00157 **
```

Metrics by Method $aa_low_acf_load_int_shifts$

Method gsynth gsynth_debiased scdid $scdid_uncon$ scmgfoo mccausalimpactbart en coverage

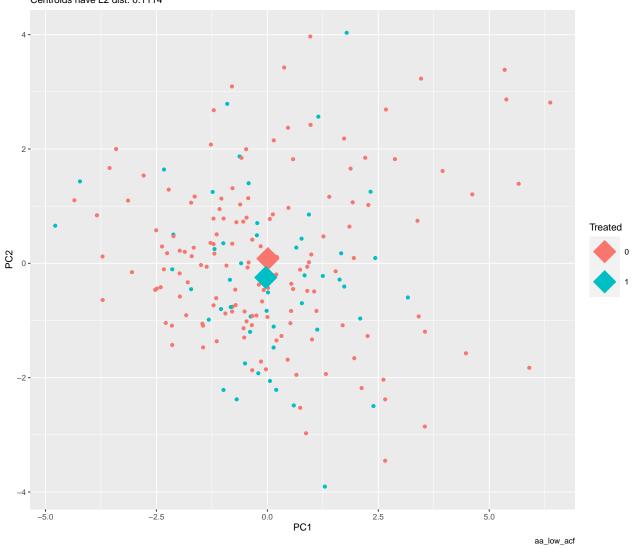
1	0.920	0.840	0.840	0.867	0.827	0.653	0.840	0.840	0.880	
2	0.893	0.747	0.760	0.773	0.773	0.507	0.680	0.787	0.960	
3	0.880	0.760	0.667	0.707	0.707	0.320	0.587	0.680	0.933	
4	0.933	0.760	0.733	0.800	0.813	0.400	0.613	0.827	0.973	
rmse										
0	0.030	0.038	0.032	0.031	0.028	0.054	0.029	0.027	0.032	
1	0.034	0.041	0.045	0.043	0.044	0.068	0.046	0.045	0.032	
2	0.037	0.047	0.051	0.048	0.053	0.083	0.058	0.053	0.031	
3	0.036	0.050	0.056	0.052	0.055	0.100	0.063	0.054	0.032	
4	0.035	0.049	0.051	0.048	0.051	0.095	0.060	0.049	0.033	
bias										
0	-0.007	-0.015	-0.016	-0.015	-0.005	-0.046	-0.007	-0.003	0.010	
1	-0.015	-0.019	-0.034	-0.031	-0.031	-0.059	-0.036	-0.032	0.000	
2	-0.014	-0.021	-0.039	-0.036	-0.040	-0.075	-0.048	-0.040	0.002	
3	-0.017	-0.023	-0.047	-0.043	-0.046	-0.093	-0.056	-0.045	-0.009	
4	-0.018	-0.027	-0.041	-0.039	-0.042	-0.088	-0.053	-0.038	-0.008	

[1] "aa_low_acf"



`summarise()` ungrouping output (override with `.groups` argument)

Centroids have L2 dist: 0.1114



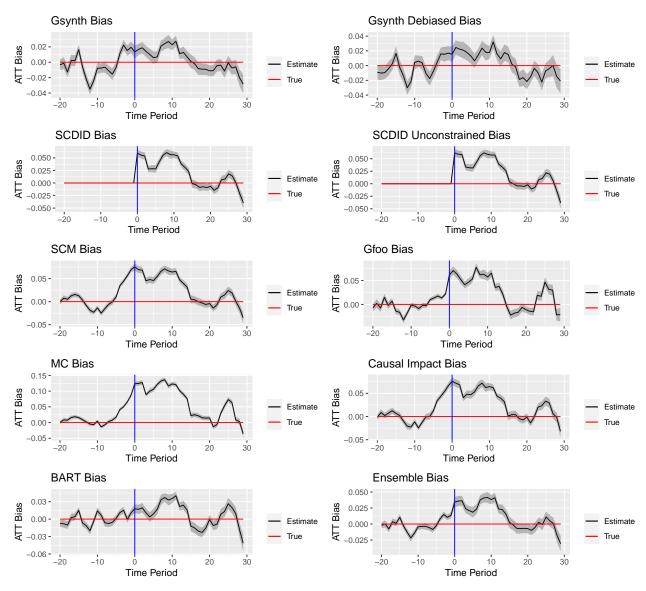
A tibble: 9 x 8 ## vars n2 statistic df p p.adj p.adj.signif n1 <dbl> <dbl> <chr> ## <chr> <dbl> <dbl> <int> <int> ## 1 curvature 150 50 -2.0384.8 0.0456 0.383 ns -0.0552 90.7 0.956 0.956 ns ## 2 diff1_acf1 150 50 ## 3 diff2_acf1 150 50 -0.42184.8 0.675 0.956 ns ## 4 e_acf1 -1.17 83.2 0.246 0.554 ns 150 50 ## 5 entropy 150 0.724 92.5 0.471 0.848 ns 50 ## 6 linearity 150 50 1.52 95.4 0.133 0.399 ns -0.188 ## 7 spike 150 50 82.7 0.852 0.956 ns ## 8 trend 150 1.74 102. 0.0851 0.383 ns 50 ## 9 x_acf1 150 50 0.0606 98.5 0.952 0.956 ns

Metrics by Method aa_low_acf

Method gsynth gsynth_debiased scdid scdid_uncon scm gfoo mc causalimpact bart en coverage

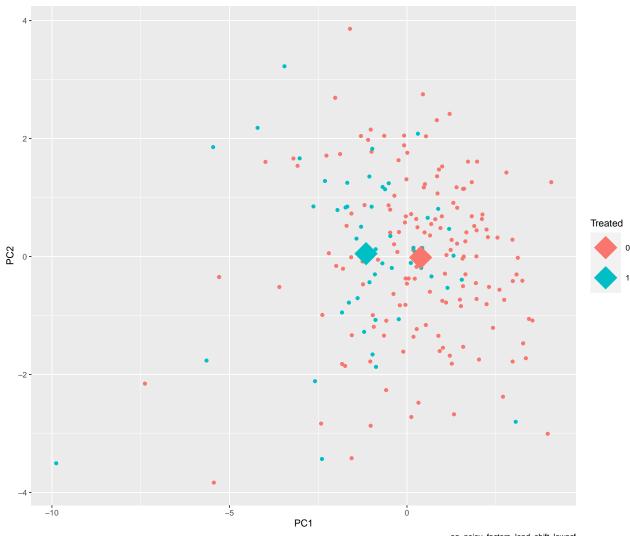
1	0.933	0.880	0.920	0.933	0.867	0.947	0.867	0.867	0.907	
2	0.947	0.907	0.960	0.933	0.933	0.933	0.907	0.947	0.920	
3	0.933	0.893	0.933	0.933	0.947	0.933	0.933	0.920	0.920	
4	0.973	0.907	0.933	0.973	0.973	0.973	0.973	0.987	0.960	
rmse										
0	0.031	0.038	0.031	0.031	0.054	0.033	0.056	0.060	0.034	
1	0.029	0.036	0.030	0.031	0.037	0.033	0.040	0.041	0.031	
2	0.029	0.037	0.029	0.030	0.032	0.034	0.034	0.032	0.032	
3	0.030	0.041	0.030	0.030	0.030	0.035	0.030	0.030	0.034	
4	0.028	0.037	0.031	0.030	0.029	0.033	0.027	0.029	0.029	
bias										
0	0.008	-0.001	0.004	0.006	0.045	0.004	0.048	0.051	0.019	
1	-0.005	-0.002	-0.009	-0.009	0.024	-0.007	0.029	0.028	0.001	
2	-0.003	-0.001	-0.006	-0.008	0.013	-0.006	0.017	0.014	0.002	
3	0.003	0.008	0.004	0.003	0.003	0.007	0.006	0.002	0.009	
4	-0.009	0.002	-0.010	-0.009	-0.006	-0.007	-0.004	-0.006	-0.004	

[1] "aa_noisy_factors_load_shift_lowacf"



`summarise()` ungrouping output (override with `.groups` argument)

Scatter Plot of First 2 PC by Treatment Centroids have L2 dist: 2.3646



aa_noisy_factors_load_shift_lowacf

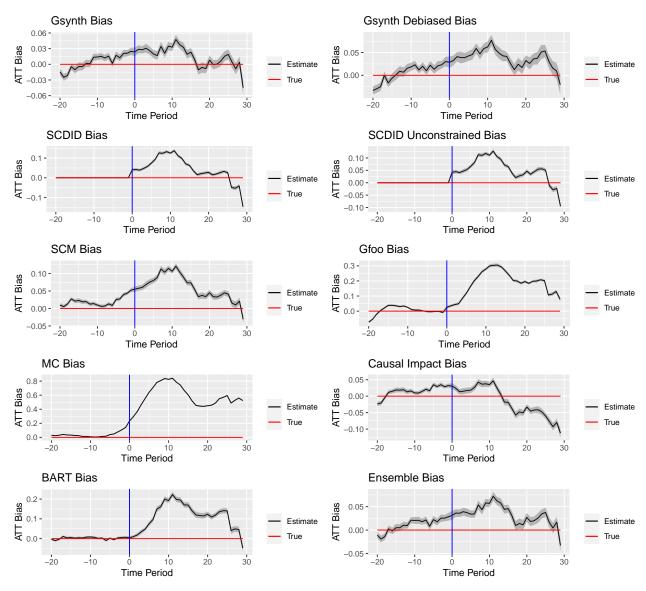
##	#	A tibble:	9 x 8						
##		vars	n1	n2	statistic	df	р	p.adj	p.adj.signif
##		<chr></chr>	<int></int>	<int></int>	<dbl></dbl>	<dbl></dbl>	<dbl></dbl>	<dbl></dbl>	<chr></chr>
##	1	curvature	150	50	0.454	114.	0.651	0.651	ns
##	2	diff1_acf1	150	50	-3.70	79.4	0.000393	0.00118	**
##	3	diff2_acf1	150	50	-1.67	90.7	0.0991	0.111	ns
##	4	e_acf1	150	50	-4.78	85.4	0.00000733	0.0000330	***
##	5	entropy	150	50	2.87	63.6	0.00557	0.0100	*
##	6	linearity	150	50	-1.96	81.6	0.0529	0.0680	ns
##	7	spike	150	50	3.26	96.9	0.00155	0.00349	**
##	8	trend	150	50	-2.77	73.8	0.00701	0.0105	*
##	9	x_acf1	150	50	-4.87	81.7	0.00000533	0.0000330	****

$\begin{array}{c} {\rm Metrics~by~Method} \\ {\rm aa_noisy_factors_load_shift_lowacf} \end{array}$

Method	gsynth	$gsynth_debiased$	scdid	scdid _uncon	scm	gfoo	mc	causalimpact	bart	ensemble
coverage										_

1	0.933	0.867	0.800	0.760	0.560	0.640	0.093	0.600	0.920	0.867
2	0.960	0.853	0.800	0.680	0.560	0.613	0.080	0.560	0.920	0.867
3	0.947	0.813	0.933	0.920	0.853	0.787	0.427	0.840	0.987	0.933
4	0.987	0.867	0.987	0.947	0.813	0.907	0.293	0.867	0.933	0.973
rmse										
0	0.038	0.048	0.067	0.069	0.082	0.071	0.128	0.083	0.037	0.049
1	0.036	0.048	0.064	0.067	0.077	0.080	0.128	0.080	0.038	0.049
2	0.037	0.049	0.062	0.066	0.075	0.073	0.131	0.077	0.041	0.049
3	0.034	0.053	0.039	0.043	0.054	0.062	0.093	0.052	0.034	0.039
4	0.034	0.049	0.042	0.045	0.057	0.052	0.104	0.059	0.036	0.037
bias										
0	0.013	0.015	0.059	0.062	0.075	0.062	0.124	0.076	0.018	0.034
1	0.017	0.025	0.056	0.059	0.069	0.071	0.124	0.072	0.017	0.036
2	0.019	0.022	0.054	0.058	0.068	0.063	0.127	0.069	0.019	0.036
3	0.014	0.021	0.028	0.033	0.045	0.051	0.089	0.041	0.011	0.024
4	0.010	0.018	0.029	0.032	0.048	0.041	0.100	0.048	0.004	0.021

[1] "aa_noisy_factors_load_shift"



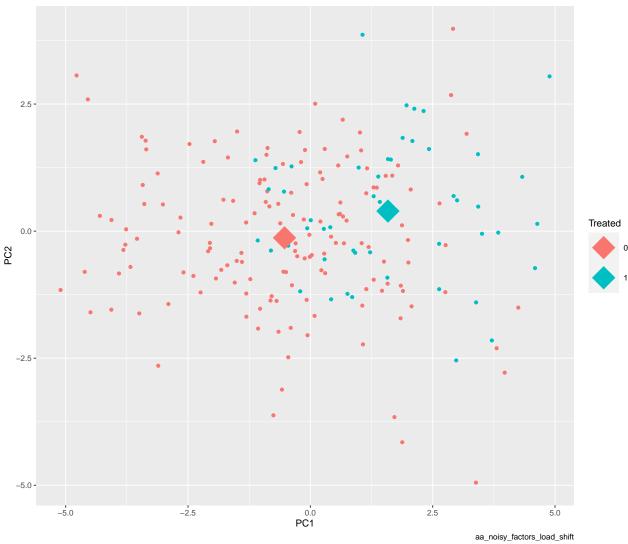
`summarise()` ungrouping output (override with `.groups` argument)

Centroids have L2 dist: 4.7413

9 x_acf1

150

50



A tibble: 9 x 8 ## vars n2 statistic df p.adj p.adj.signif n1 р ## <chr> <dbl> <dbl> <dbl> <chr> <int> <int> <dbl> ## 1 curvature 150 50 -0.830 72.2 4.09e- 1 4.09e- 1 ns ## 2 diff1_acf1 150 -6.3773.9 1.45e- 8 2.61e- 8 **** 50 ## 3 diff2_acf1 150 50 -1.51 101. 1.33e- 1 1.50e- 1 ns ## 4 e_acf1 -6.57 79.7 4.85e- 9 1.09e- 8 **** 150 50 ## 5 entropy 150 4.40 81.3 3.28e- 5 4.92e- 5 **** 50 -2.54 80.2 1.29e- 2 1.66e- 2 * ## 6 linearity 150 50 ## 7 spike 150 50 7.39 197. 4.16e-12 1.87e-11 **** -6.85 2.56e-10 7.68e-10 **** ## 8 trend 150 50 132.

140.

-7.79

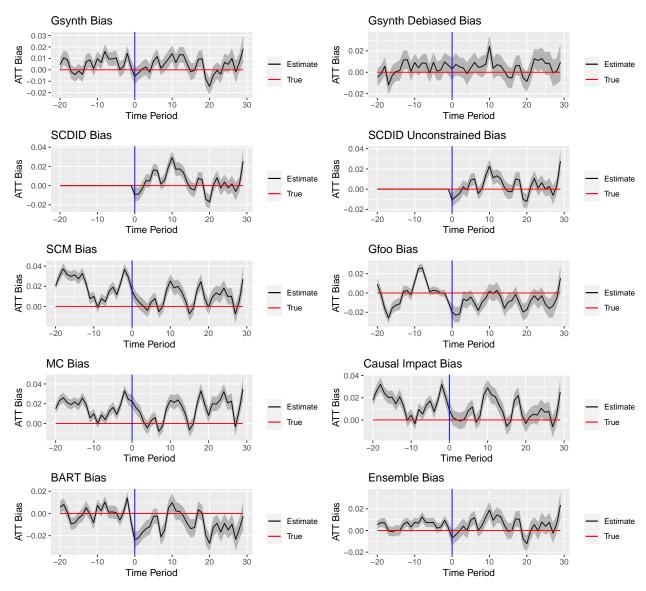
Metrics by Method aa_noisy_factors_load_shift

1.37e-12 1.23e-11 ****

Method gsynth gsynth_debiased scdid scdid_uncon scm gfoo mc causalimpact bart ensemble coverage

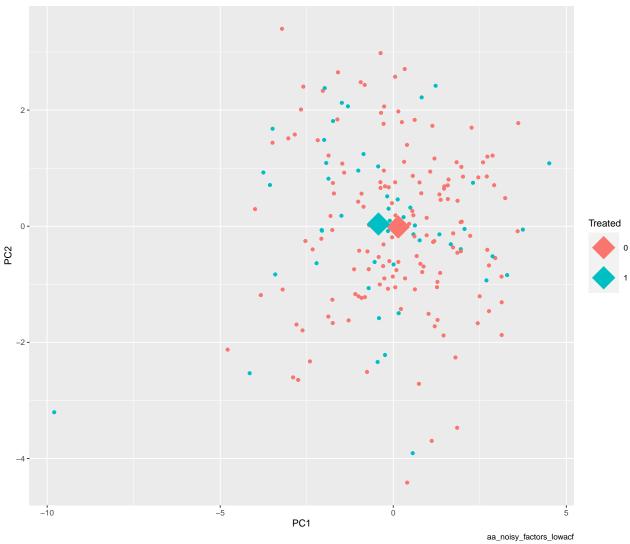
1	0.893	0.773	0.867	0.773	0.627	0.920	0.000	0.893	1.000	0.773
2	0.920	0.733	0.933	0.867	0.600	0.853	0.000	0.960	0.960	0.827
3	0.880	0.733	0.867	0.827	0.520	0.840	0.000	0.920	0.920	0.853
4	0.933	0.800	0.893	0.840	0.480	0.720	0.000	0.893	0.960	0.853
rmse										
0	0.042	0.062	0.054	0.055	0.065	0.048	0.235	0.049	0.036	0.051
1	0.044	0.057	0.052	0.055	0.066	0.051	0.298	0.044	0.033	0.051
2	0.041	0.060	0.048	0.051	0.068	0.057	0.370	0.037	0.042	0.049
3	0.048	0.069	0.058	0.058	0.079	0.062	0.467	0.043	0.058	0.054
4	0.043	0.060	0.065	0.062	0.083	0.095	0.554	0.042	0.061	0.053
bias										
0	0.024	0.029	0.041	0.042	0.055	0.026	0.233	0.031	0.004	0.031
1	0.029	0.032	0.042	0.045	0.058	0.035	0.296	0.024	0.010	0.036
2	0.028	0.041	0.039	0.041	0.060	0.043	0.369	0.014	0.019	0.036
3	0.031	0.039	0.047	0.047	0.068	0.049	0.466	0.015	0.034	0.039
4	0.026	0.039	0.057	0.053	0.075	0.085	0.553	0.017	0.048	0.037

[1] "aa_noisy_factors_lowacf"



`summarise()` ungrouping output (override with `.groups` argument)

Centroids have L2 dist: 0.3308



A tibble: 9 x 8 ## vars n2 statistic df p p.adj p.adj.signif n1 ## <chr> <dbl> <dbl> <dbl> <dbl> <chr> <int> <int> ## 1 curvature 150 50 0.783 76.3 0.436 0.507 ns ## 2 diff1_acf1 150 -1.5675.9 0.122 0.440 ns 50 ## 3 diff2_acf1 150 50 -1.11 83.2 0.269 0.440 ns ## 4 e_acf1 -1.23 150 50 79.5 0.222 0.440 ns ## 5 entropy 150 1.90 63.3 0.0625 0.440 ns 50 ## 6 linearity 150 50 0.389 82.0 0.698 0.698 ns ## 7 spike 150 50 1.15 82.1 0.255 0.440 ns ## 8 trend -0.75871.4 0.451 0.507 ns 150 50 ## 9 x_acf1 150 50 -1.06 71.3 0.293 0.440 ns

Metrics by Method aa_noisy_factors_lowacf

Method gsynth gsynth_debiased scdid scdid_uncon scm gfoo mc causalimpact bart en coverage

1 2 3	0.960 0.973 0.947	0.840 0.893 0.827	0.960 0.987 0.973	0.973 0.973 0.973	0.973 0.960 0.960	0.920 0.893 0.947	0.973 0.960 0.987	0.960 0.973 0.947	0.947 0.933 0.973
$\frac{4}{\text{rmse}}$	0.973	0.800	0.973	0.973	0.987	0.973	1.000	0.987	0.920
0	0.033	0.045	0.033	0.033	0.036	0.039	0.038	0.035	0.039
1	0.028	0.045	0.030	0.029	0.029	0.042	0.032	0.030	0.035
2	0.030	0.038	0.030	0.031	0.030	0.041	0.031	0.030	0.033
3	0.032	0.041	0.030	0.030	0.030	0.037	0.029	0.032	0.034
4	0.030	0.046	0.030	0.030	0.030	0.037	0.030	0.033	0.034
bias									
0	-0.006	0.003	-0.009	-0.011	0.016	-0.019	0.023	0.009	-0.024
1	-0.003	0.007	-0.009	-0.007	0.008	-0.023	0.016	0.002	-0.022
2	0.001	0.005	-0.003	-0.004	0.004	-0.022	0.012	0.000	-0.017
3	0.003	0.004	0.005	0.002	0.000	-0.006	0.002	-0.001	-0.014
4	-0.002	-0.001	0.005	-0.001	-0.004	-0.008	-0.005	0.001	-0.012