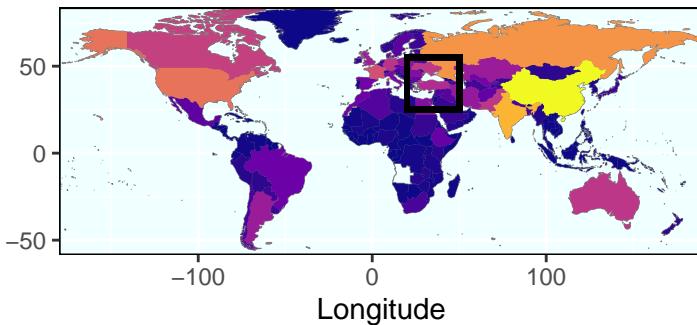
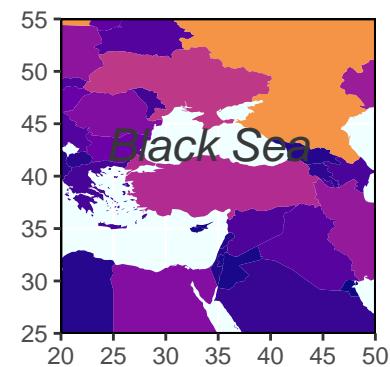
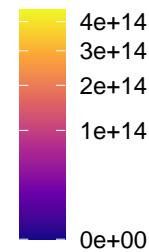


Production Before Disruption (in kilocalories)

Latitude

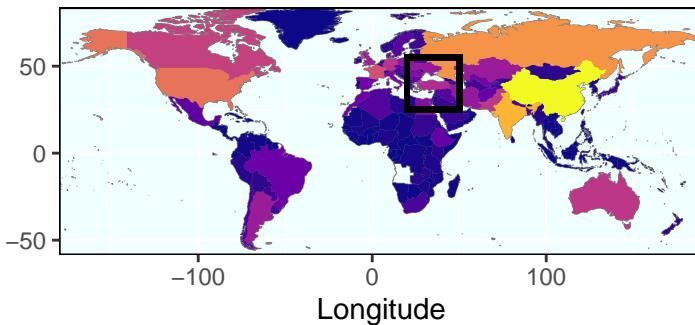


Production



Production After Disruption (in kilocalories)

Latitude



-100

0

100

Longitude

50

0

-50

Production

4e+14

3e+14

2e+14

1e+14

0e+00

55

50

45

40

35

30

25

20

25

30

35

40

45

50

55



Black Sea

55

50

45

40

35

30

25

20

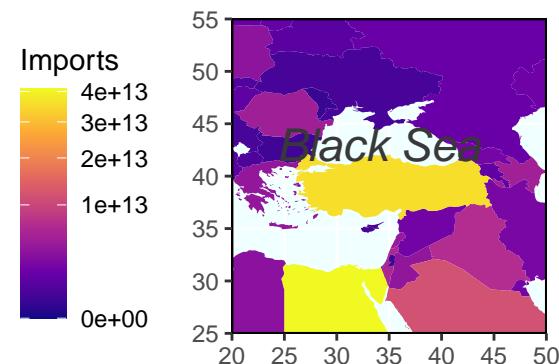
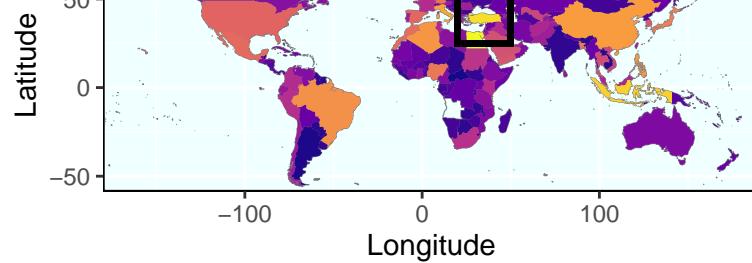
15

10

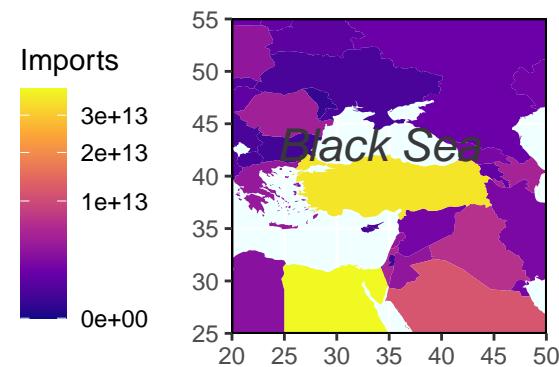
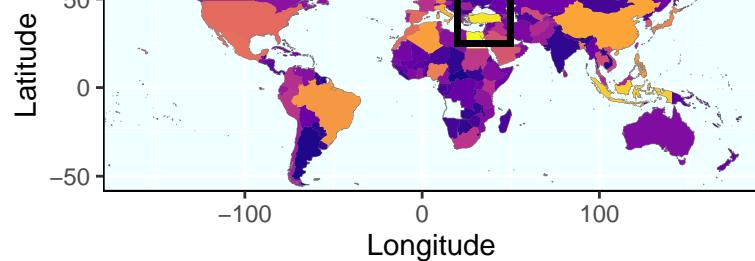
5

0

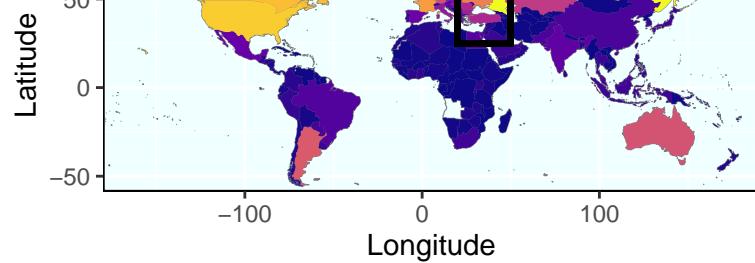
Imports Before Disruption (in kilocalories)



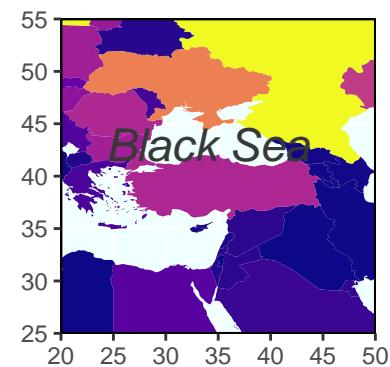
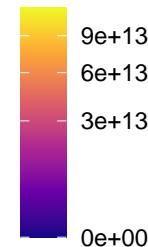
Imports After Disruption (in kilocalories)



Exports Before Disruption (in kilocalories)

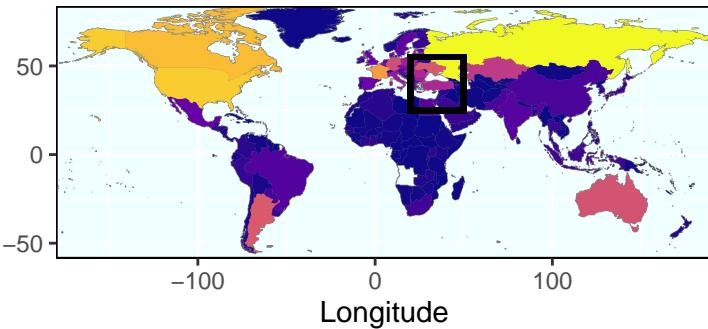


Exports



Exports After Disruption (in kilocalories)

Latitude



-100

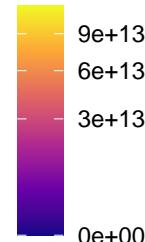
0

100

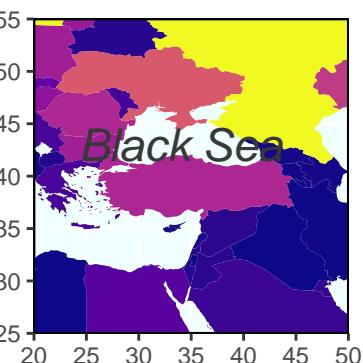
Longitude

50  
0  
-50

Exports



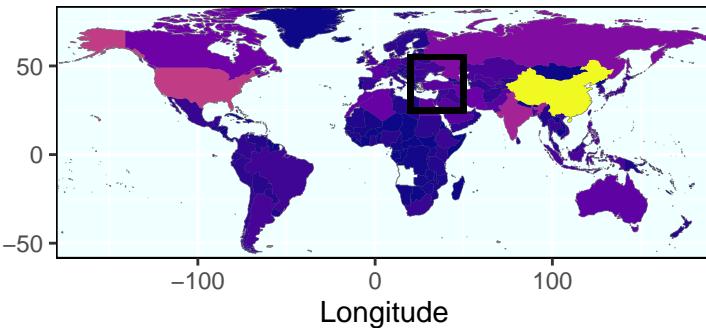
55  
50  
45  
40  
35  
30  
25



20  
25  
30  
35  
40  
45  
50

Reserves Before Disruption (in kilocalories)

Latitude



-100

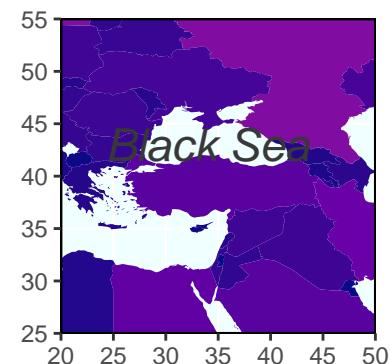
0

100

Longitude

50  
0  
-50

Reserves

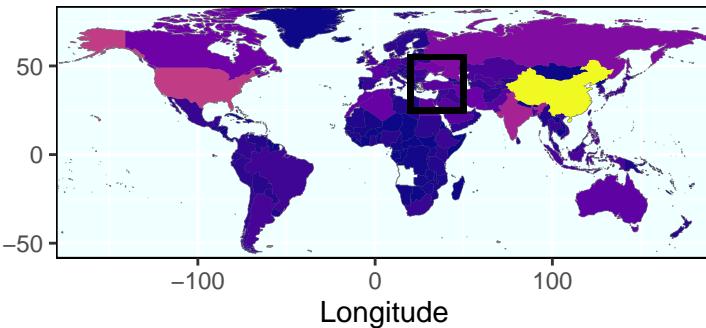


55  
50  
45  
40  
35  
30  
25

20 25 30 35 40 45 50

Reserves After Disruption (in kilocalories)

Latitude



-100

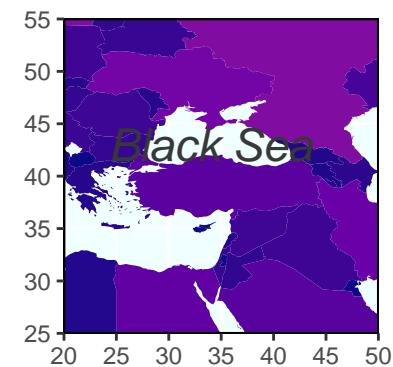
0

100

Longitude

50  
0  
-50

Reserves

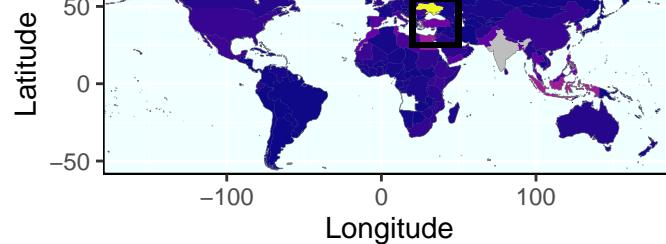


Black Sea

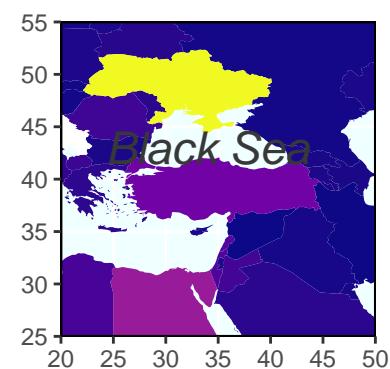
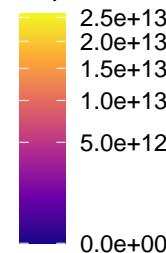
55  
50  
45  
40  
35  
30  
25

20 25 30 35 40 45 50

Impaired Supply (in kilocalories)

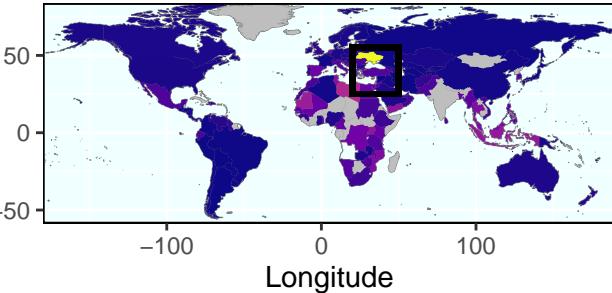


Impaired.Supply



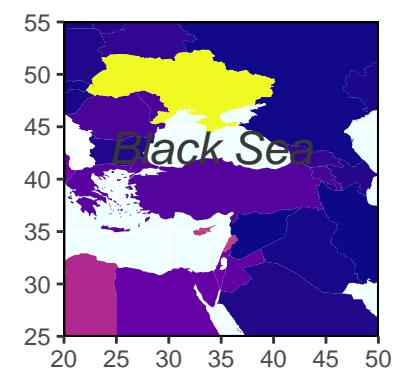
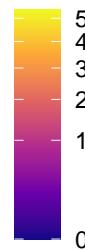
Ratio of Impaired Supply to Reserves (in kilocalories)

Latitude



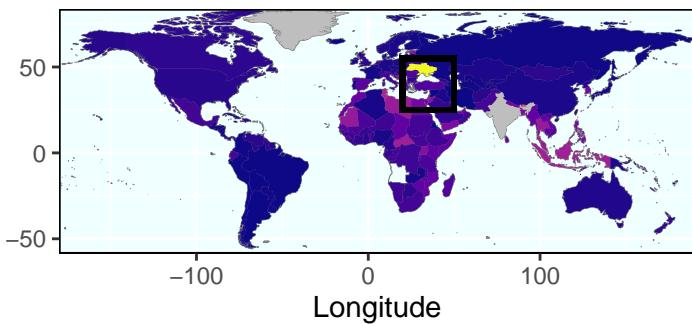
Longitude

Impaired Supply  
/Reserves



Ratio of Impaired to Baseline Supply (in kilocalories)<sub>S</sub>  
Impaired /Baseline S

Latitude



-100

0

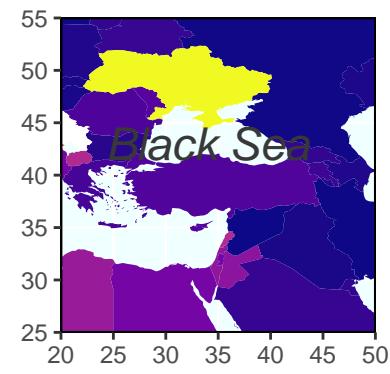
100

Longitude

50

0

-50



55

50

45

40

35

30

25

20

25

30

35

40

45

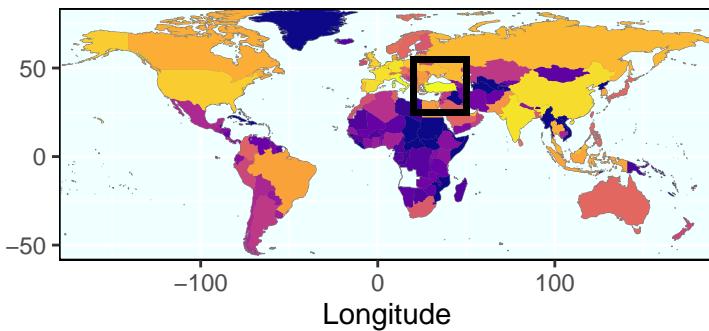
50

55

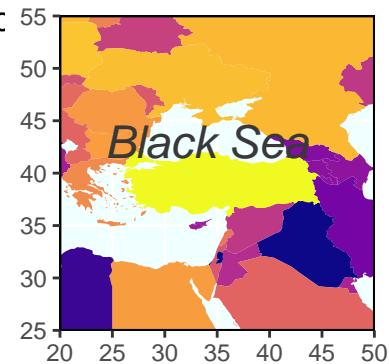
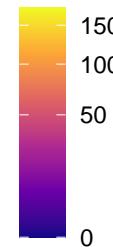
Black Sea

Number of Export Partners Before Disruption (in kilocalc)

Latitude

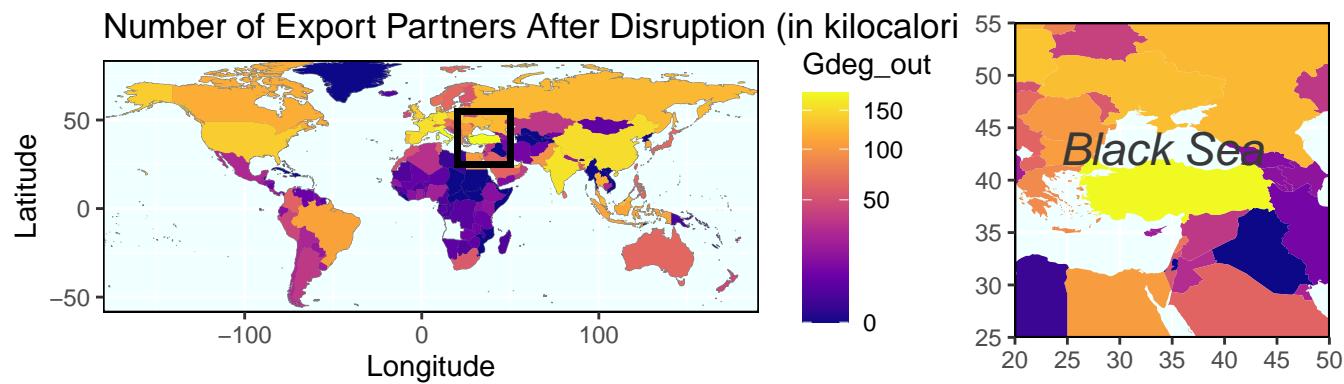


Gdeg\_out

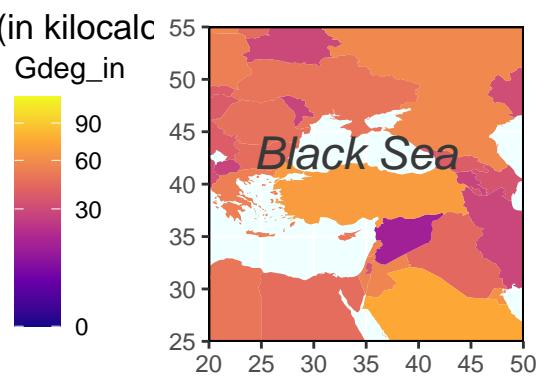
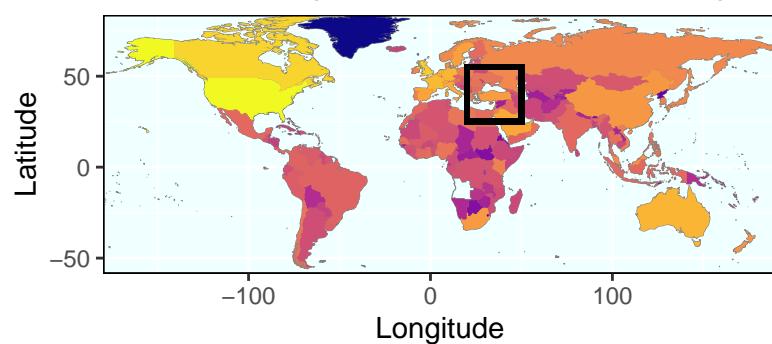


Black Sea

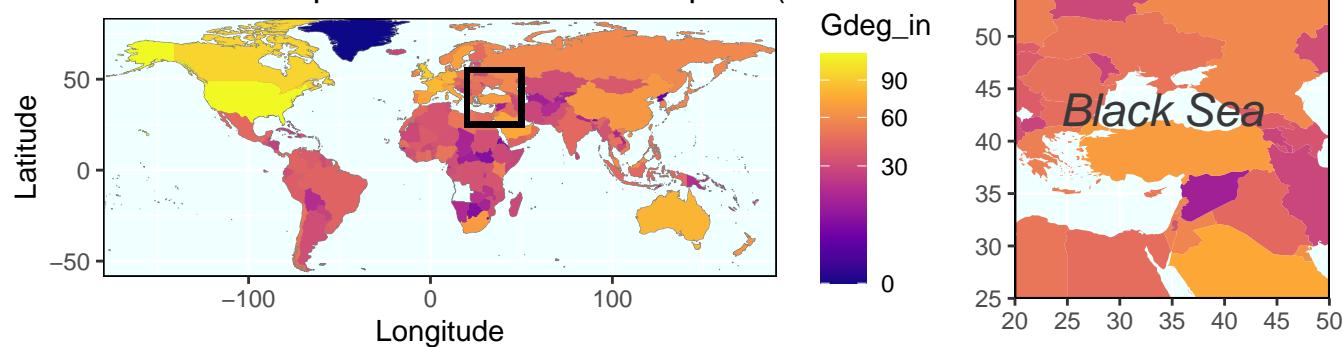
Number of Export Partners After Disruption (in kilocalories)



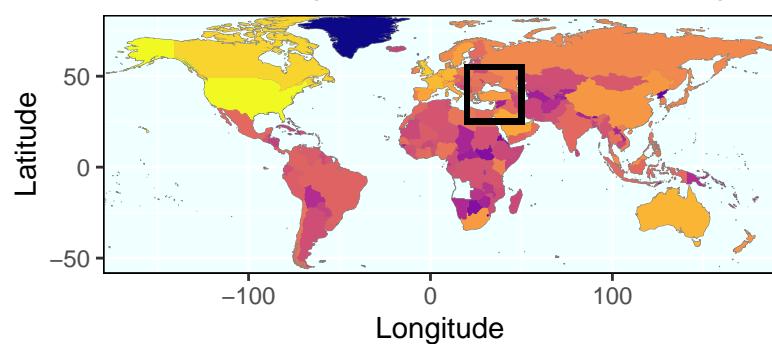
Number of Import Partners Before Disruption (in kilocalc)



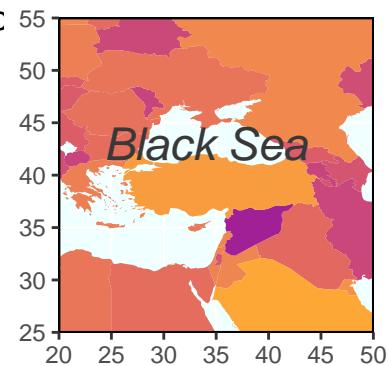
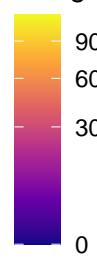
Number of Import Partners After Disruption (in kilocalories)



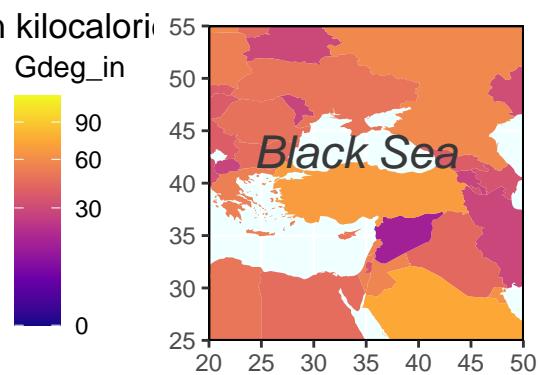
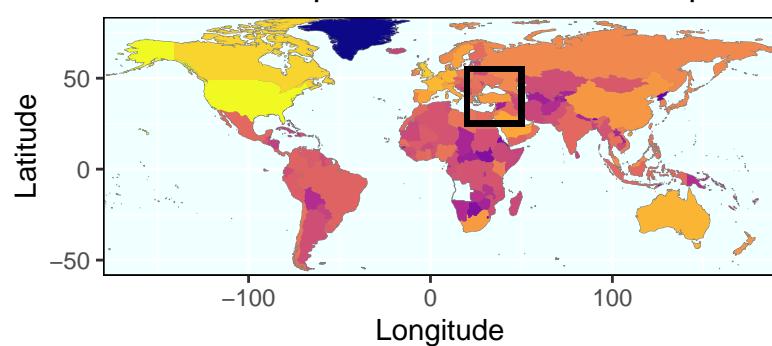
Number of Import Partners Before Disruption (in kilocalc)



Gdeg\_in

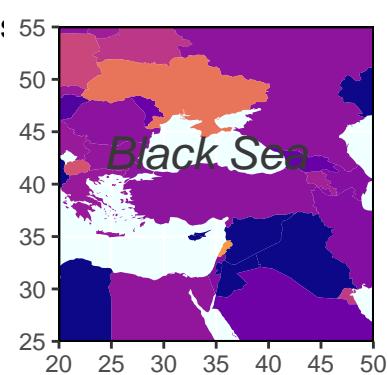
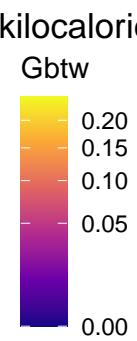
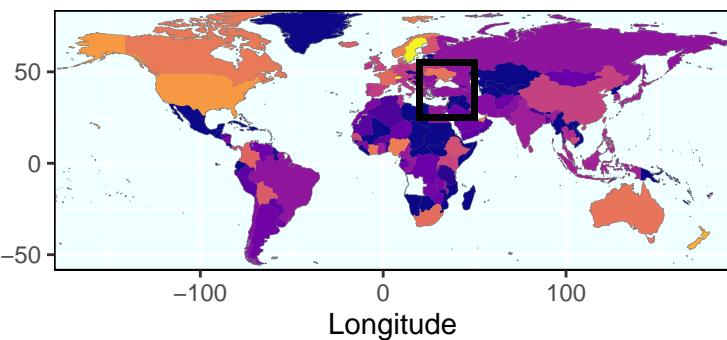


Number of Import Partners After Disruption (in kilocalories)



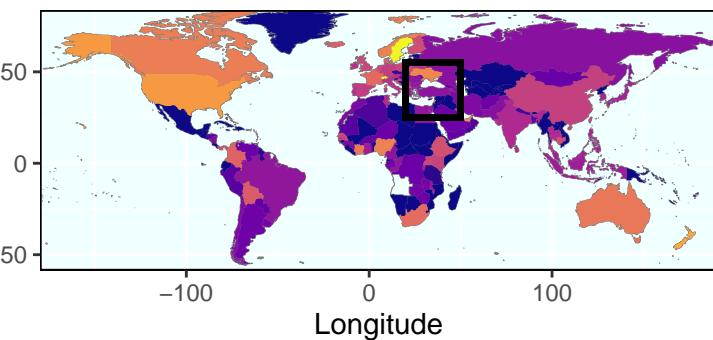
Betweenness Centrality Before Disruption (in kilocalories)

Latitude

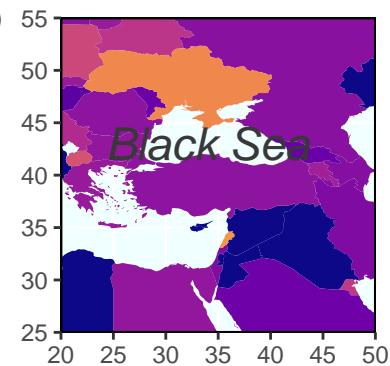


Betweenness Centrality After Disruption (in kilocalories)

Latitude

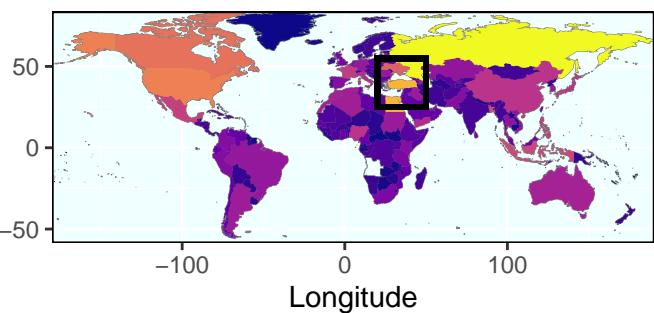


Gbtw

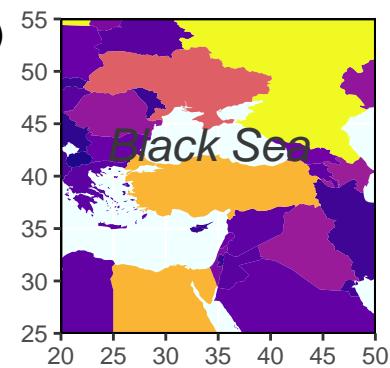
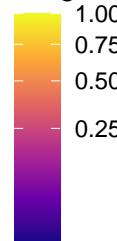


Eigenvector Centrality Before Disruption (in kilocalories)

Latitude



Geigencentral  
1.00  
0.75  
0.50  
0.25



Eigenvector Centrality After Disruption (in kilocalories)  
Geigencentral

Latitude

