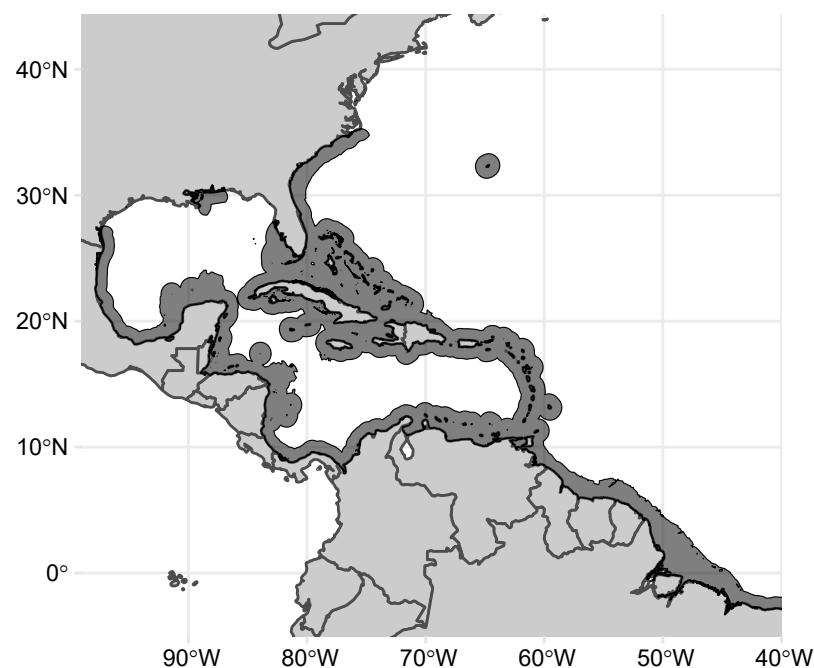
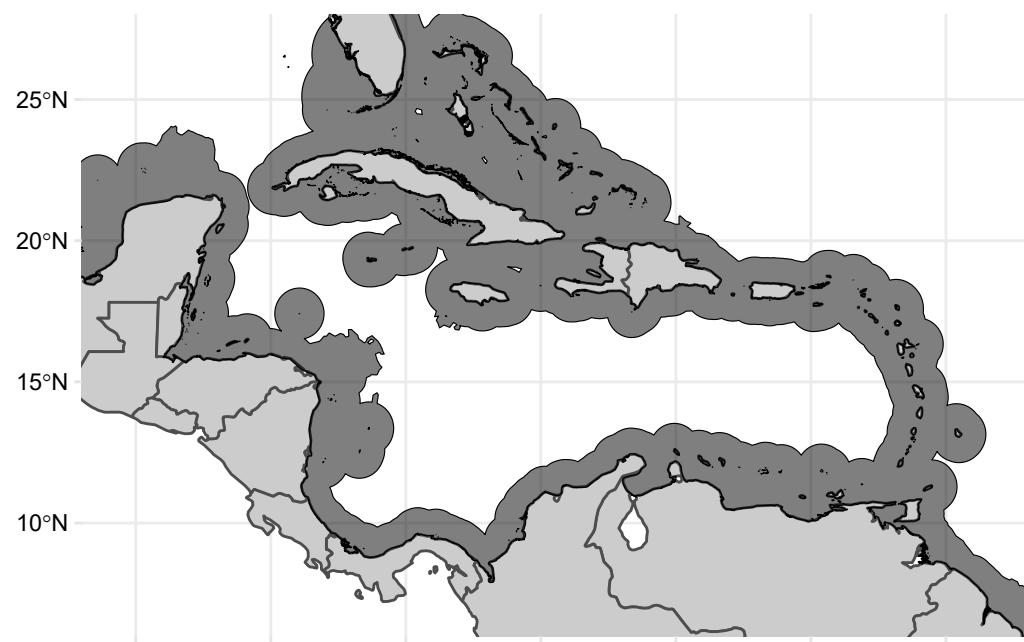


A

### Mutton Snapper

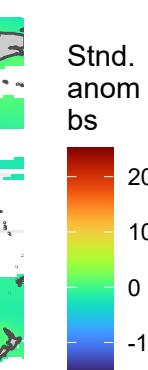
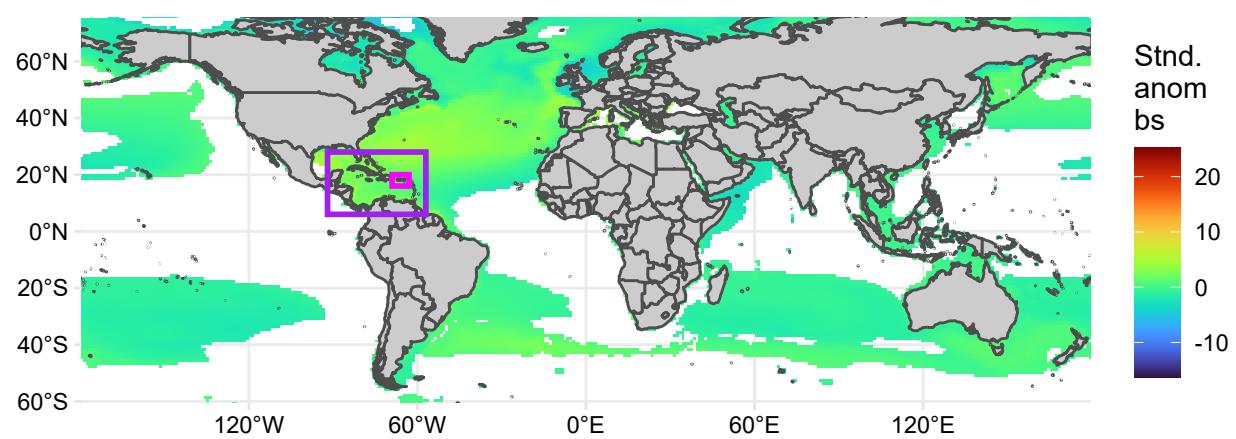


B



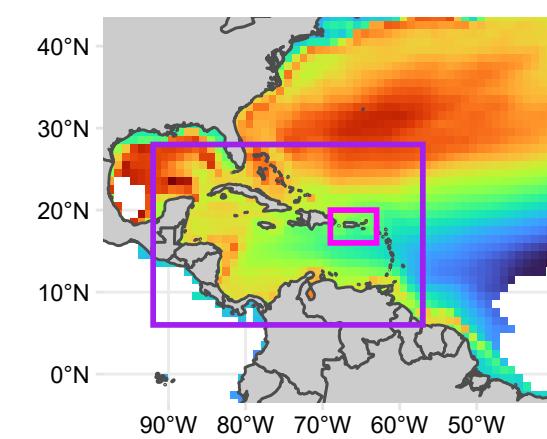
C

### Global: bs



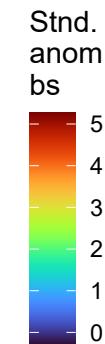
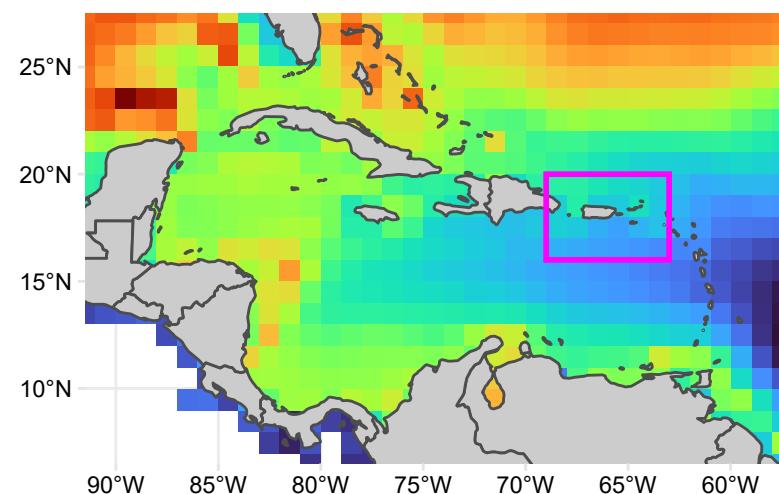
D

### W. Atlantic: bs



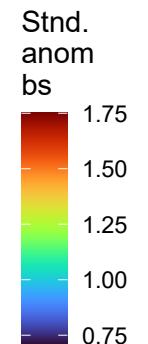
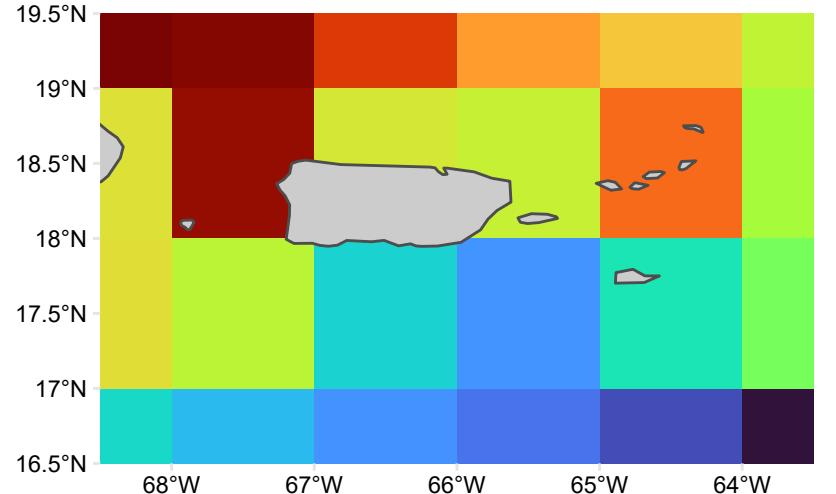
E

### Caribbean Sea: bs



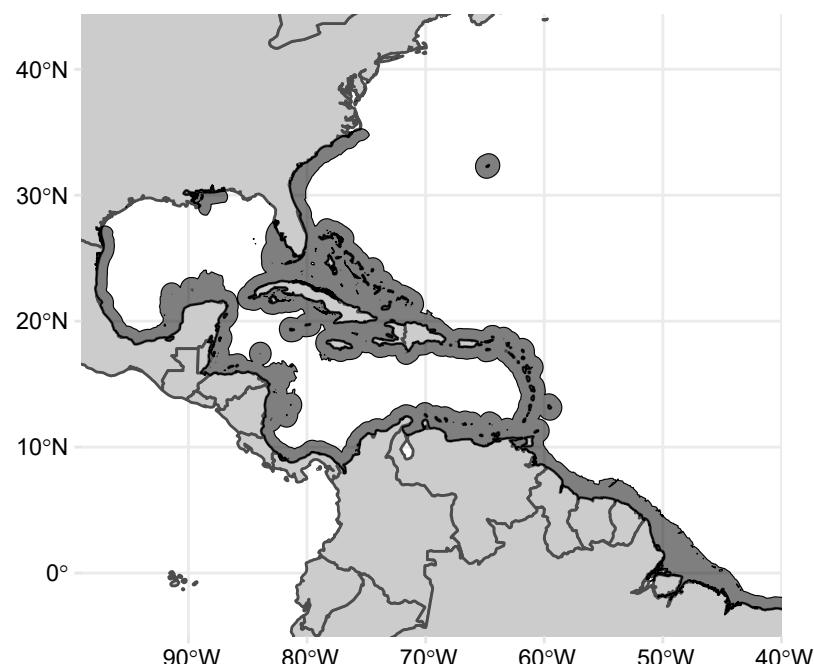
F

### U.S. Caribbean: bs

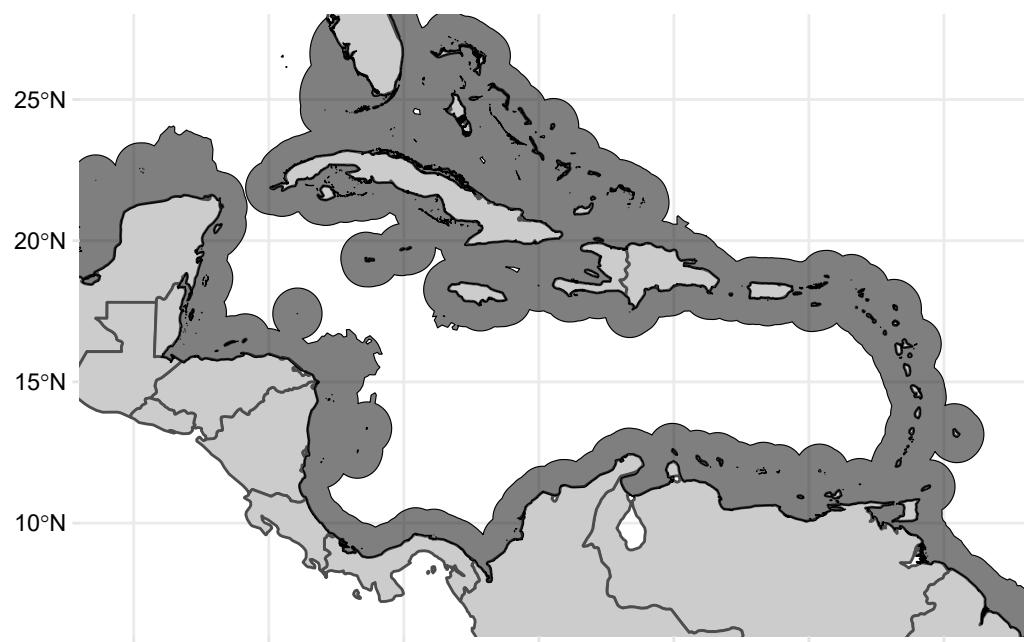


A

### Mutton Snapper

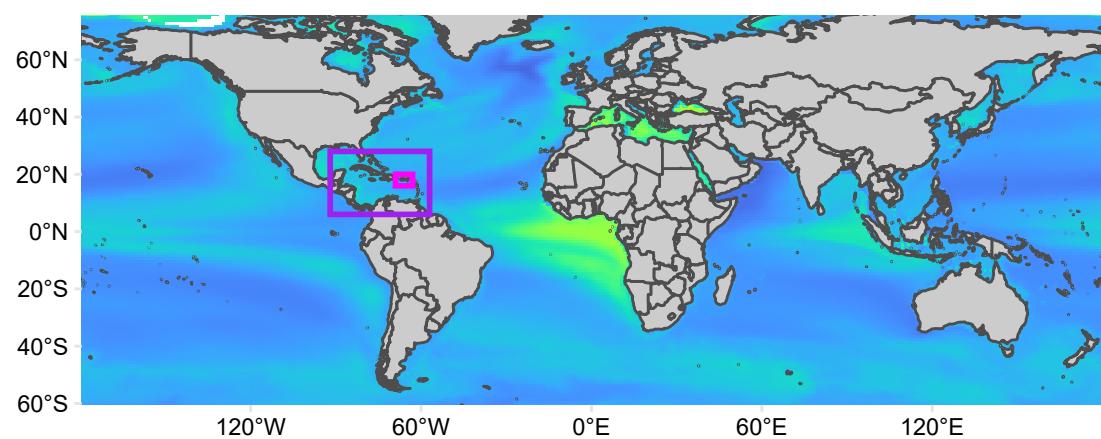


B



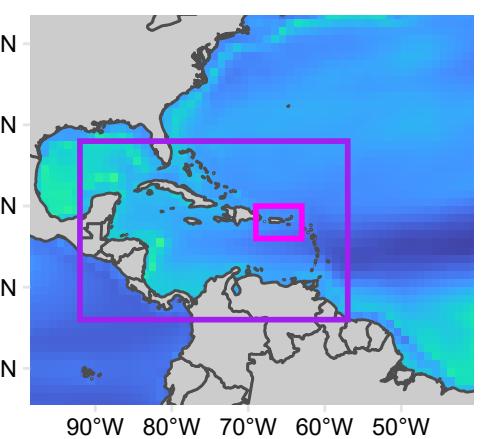
C

### Global: bt



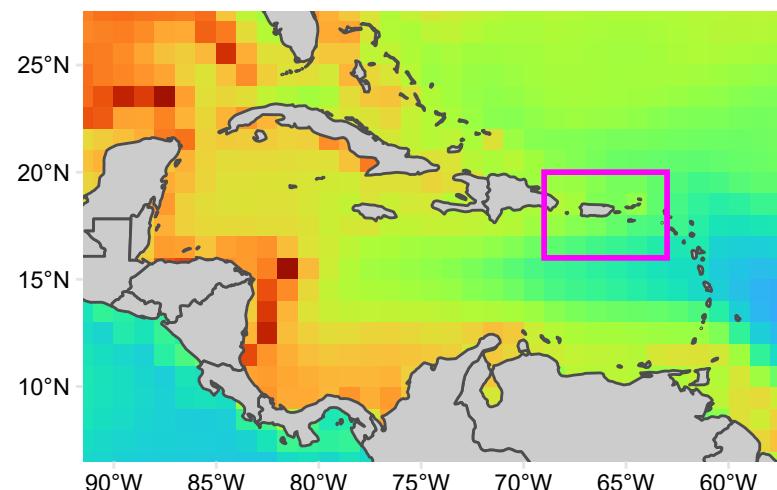
D

### W. Atlantic: bt



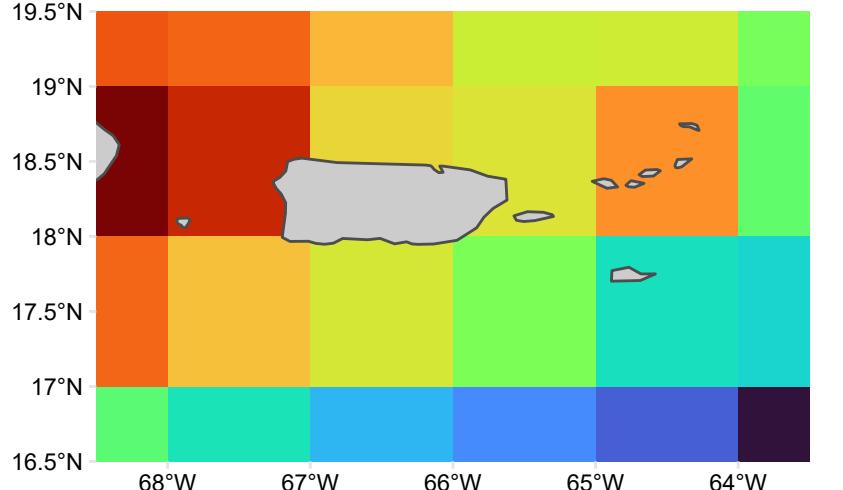
E

### Caribbean Sea: bt



F

### U.S. Caribbean: bt

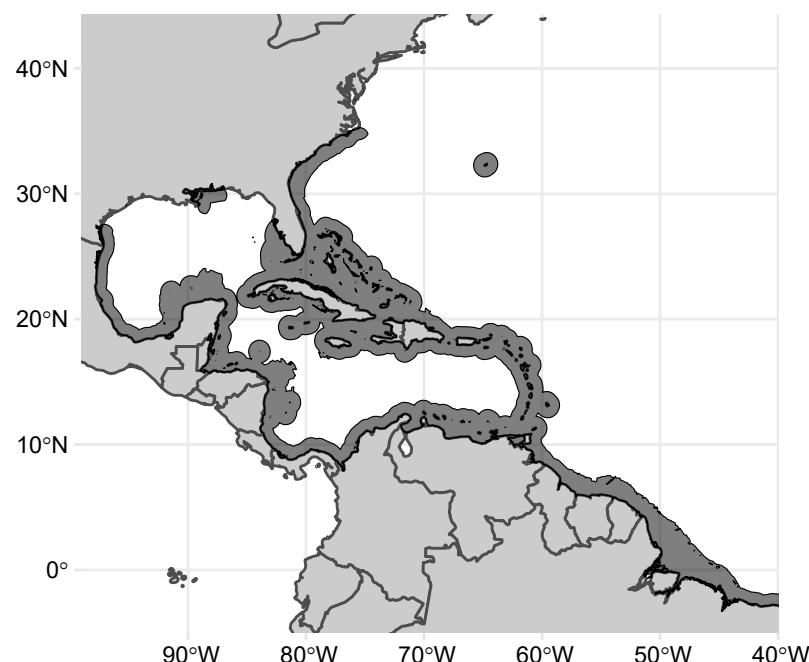


Stnd.  
anom  
bt

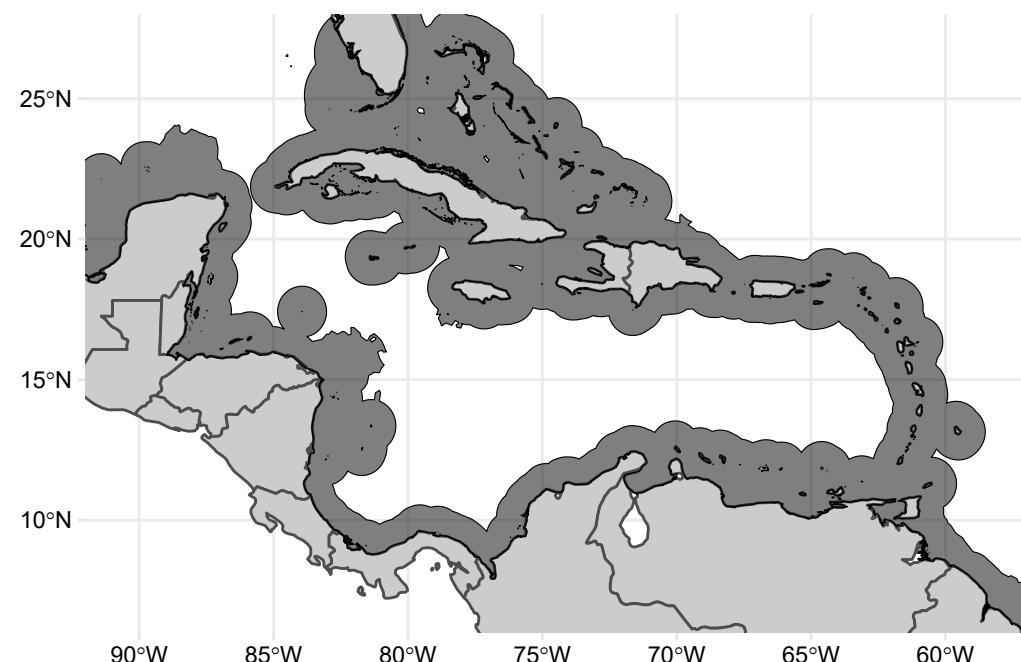
Stnd.  
anom  
bt

A

### Mutton Snapper

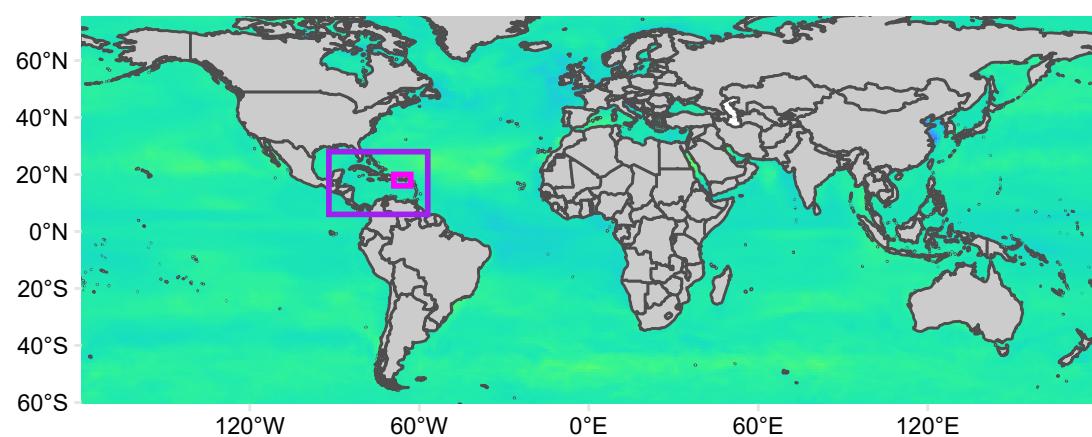


B



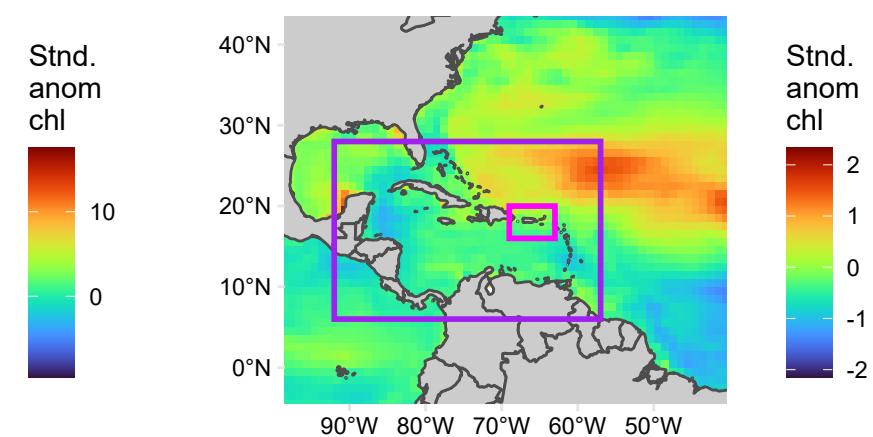
C

### Global: chl



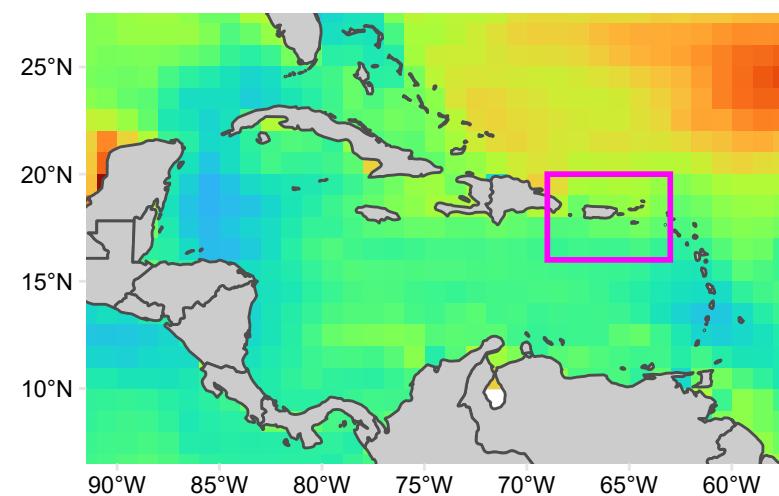
D

### W. Atlantic: chl



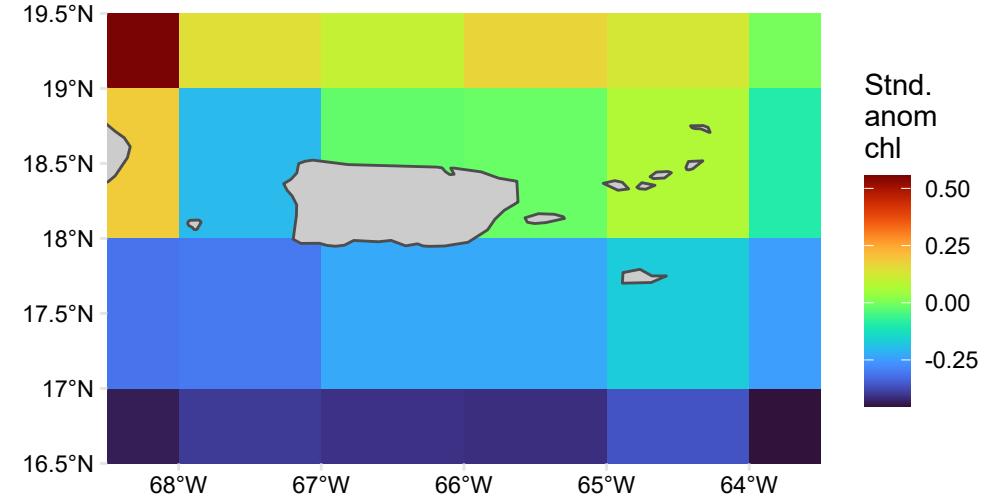
E

### Caribbean Sea: chl



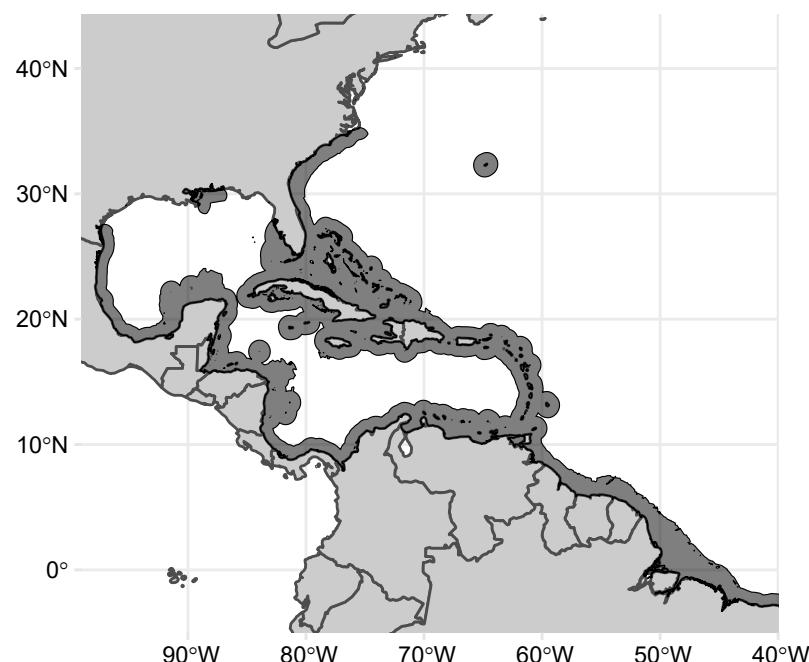
F

### U.S. Caribbean: chl

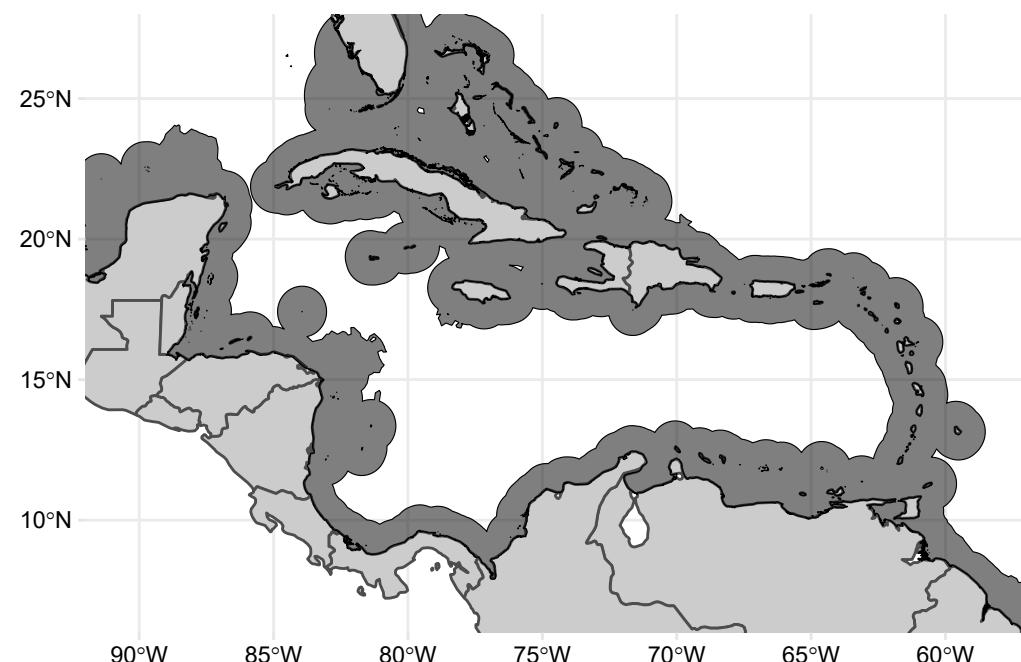


A

### Mutton Snapper

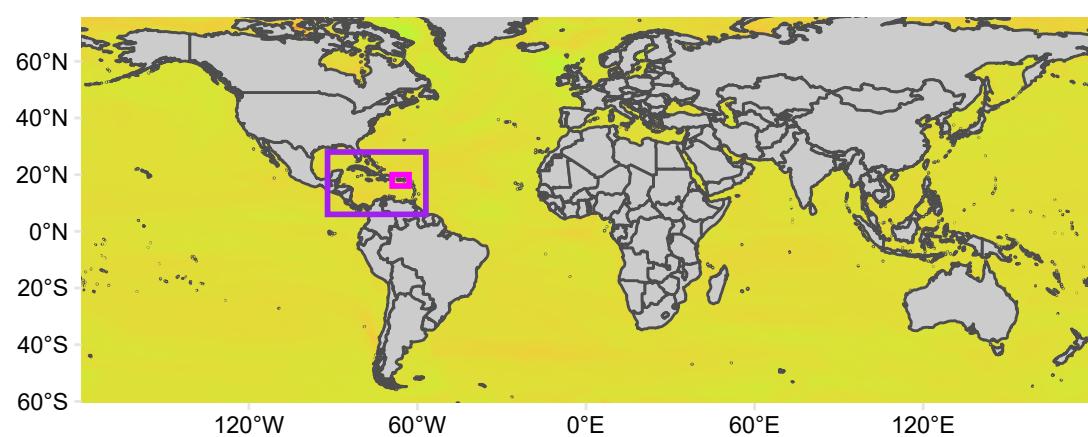


B



C

### Global: mld

D

### W. Atlantic: mld

A zoomed-in map of the Western Atlantic region, focusing on the Caribbean Sea and the adjacent continental shelves. The purple box from Map C is overlaid on this map, indicating the specific area of interest. The color scale ranges from -1.0 (dark blue) to 1.0 (dark red), representing standard anomalies in meters of depth.

E

### Caribbean Sea: mld

A detailed map of the Caribbean Sea and parts of the Gulf of Mexico. The purple box from Map D is overlaid on this map, highlighting the central and eastern Caribbean Sea. The color scale ranges from -1.0 (dark blue) to 0.5 (dark red), showing significant depth anomalies in the central basin and along the continental shelves.

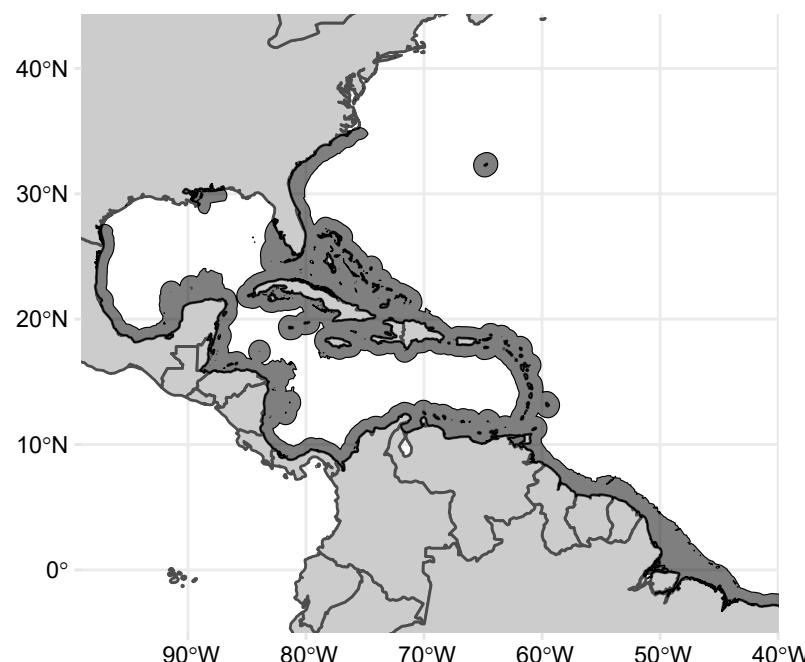
F

### U.S. Caribbean: mld

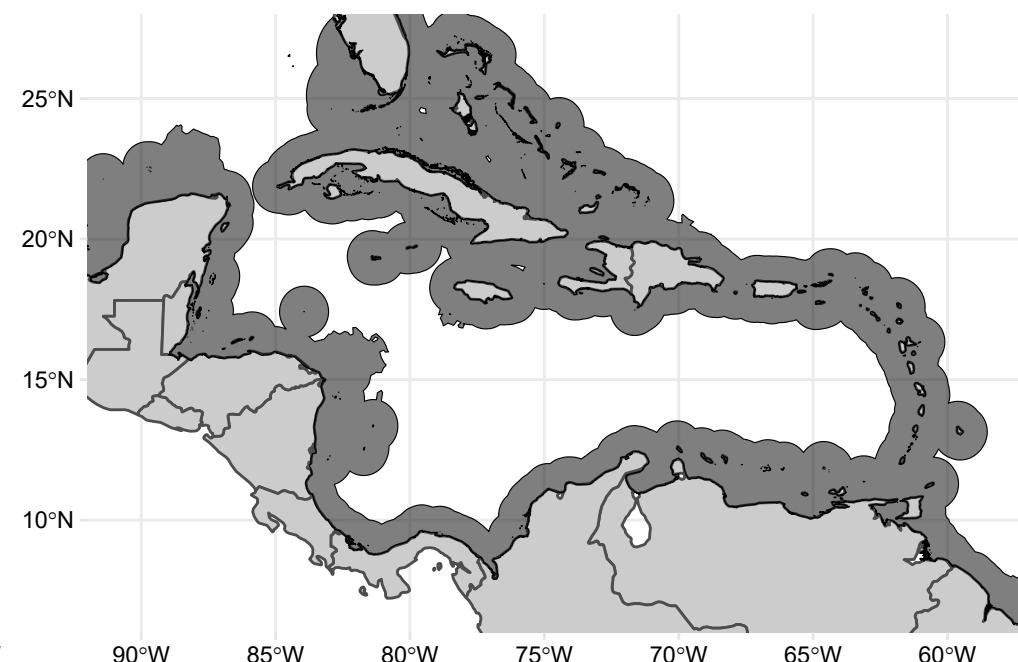
A highly detailed map of the U.S. Caribbean region, including the Gulf of Mexico and the islands of the Caribbean. The purple box from Map E is overlaid on this map, focusing on the island arcs and continental shelves. The color scale ranges from -0.35 (dark blue) to -0.15 (dark red), showing very strong negative depth anomalies (shallower water) in the central and southern parts of the region.

A

### Mutton Snapper

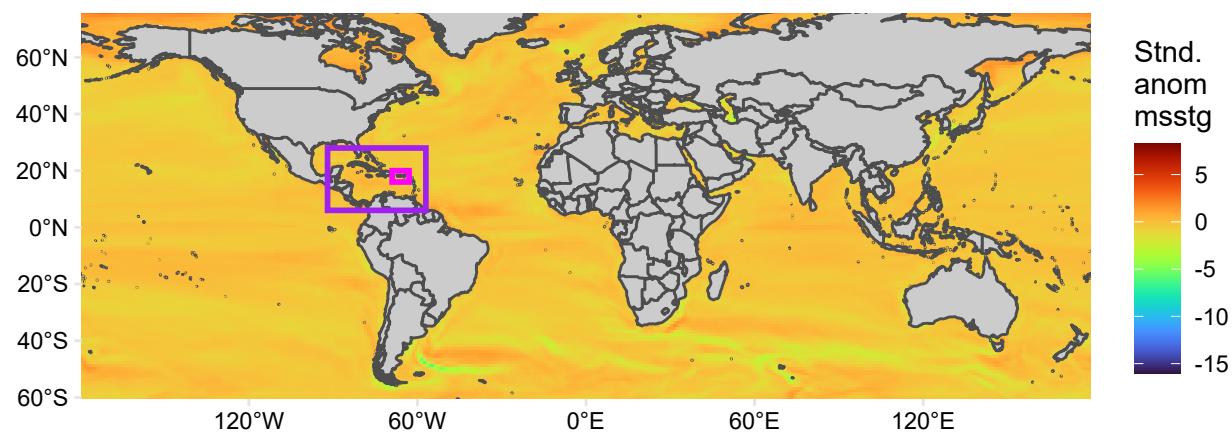


B



C

### Global: msstg

D

### W. Atlantic: msstg

Zoomed-in map of the Western Atlantic region (90°W to 50°W, 0°N to 40°N) showing standard anomalies (msstg). The color scale ranges from -4 (dark blue) to 8 (dark red). A purple rectangular box highlights the area shown in Map E.

E

### Caribbean Sea: msstg

Zoomed-in map of the Caribbean Sea region (90°W to 60°W, 10°N to 25°N) showing standard anomalies (msstg). The color scale ranges from -4 (dark blue) to 8 (dark red). A purple rectangular box highlights the area shown in Map F.

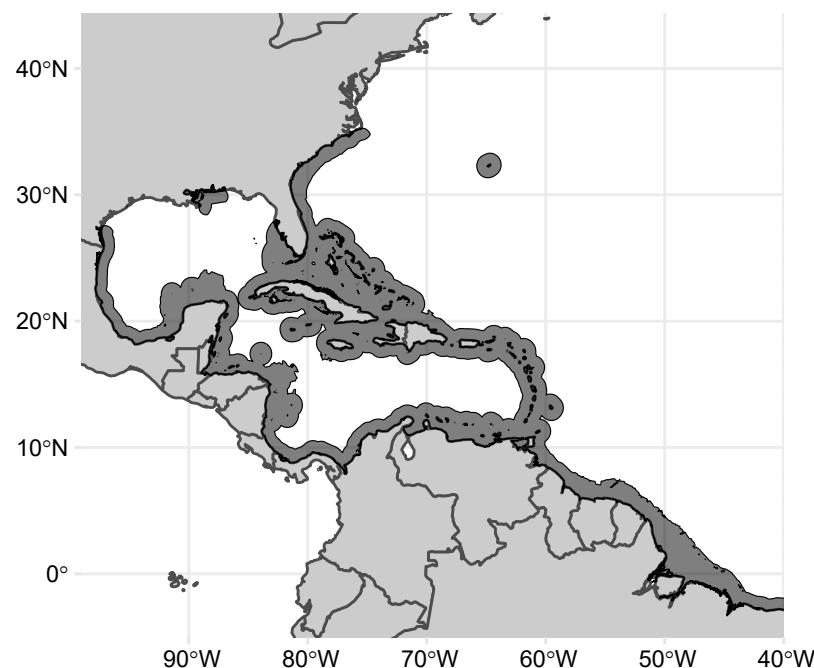
F

### U.S. Caribbean: msstg

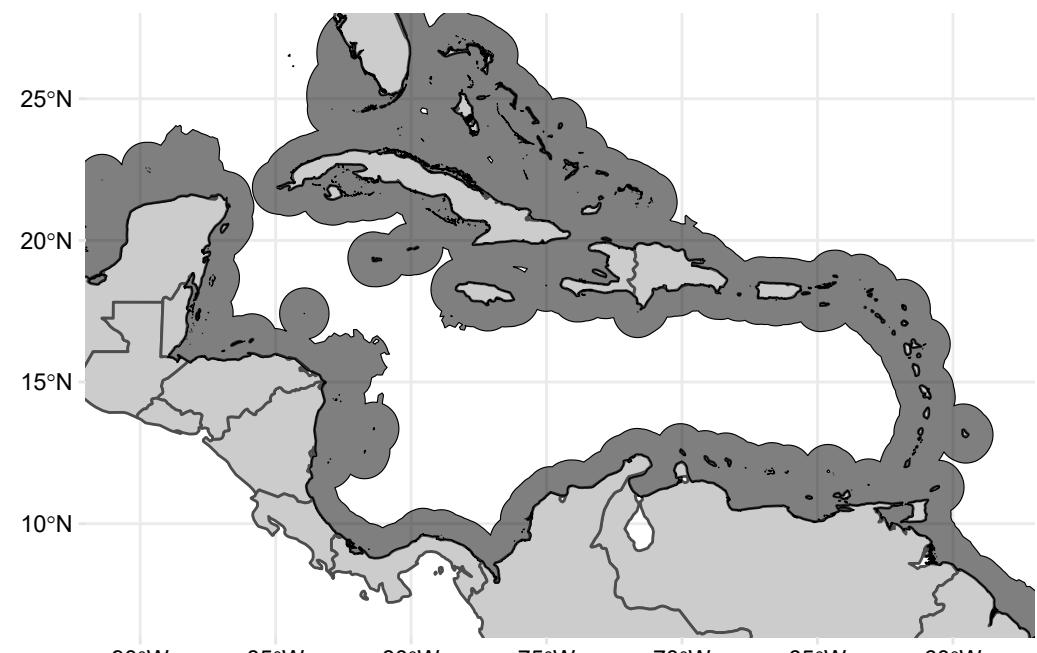
Detailed map of the U.S. Caribbean region (68°W to 64°W, 16.5°N to 19.5°N) showing standard anomalies (msstg). The color scale ranges from -0.75 (dark blue) to -0.25 (dark red). The map shows a clear pattern of alternating positive (red/orange) and negative (blue/cyan) anomalies across the shelf and slope areas.

A

### Mutton Snapper

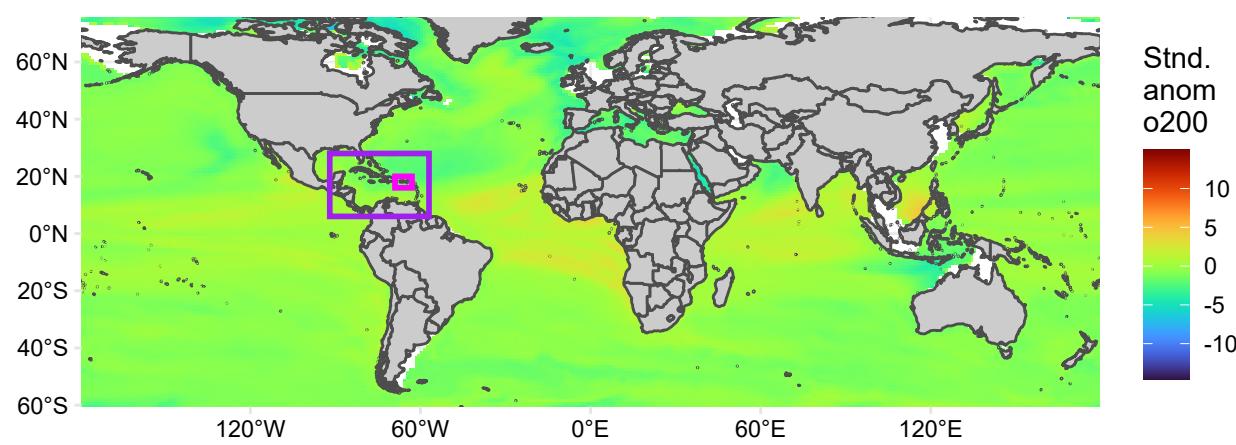


B



C

### Global: o200

D

### W. Atlantic: o200

A zoomed-in map of the Western Atlantic from 0°N to 40°N and 90°W to 50°W. It shows the same color scale for standard deviation anomalies at depth o200. The purple box from Panel C is overlaid on the map, and a cyan line indicates a specific transect across the Caribbean Sea.

E

### Caribbean Sea: o200

A detailed map of the Caribbean Sea from 10°N to 25°N and 90°W to 60°W. It shows standard deviation anomalies at depth o200 with a color scale from -2 (dark blue) to 2 (dark red). Two purple boxes highlight specific areas: one in the northern Caribbean and another in the southern Caribbean.

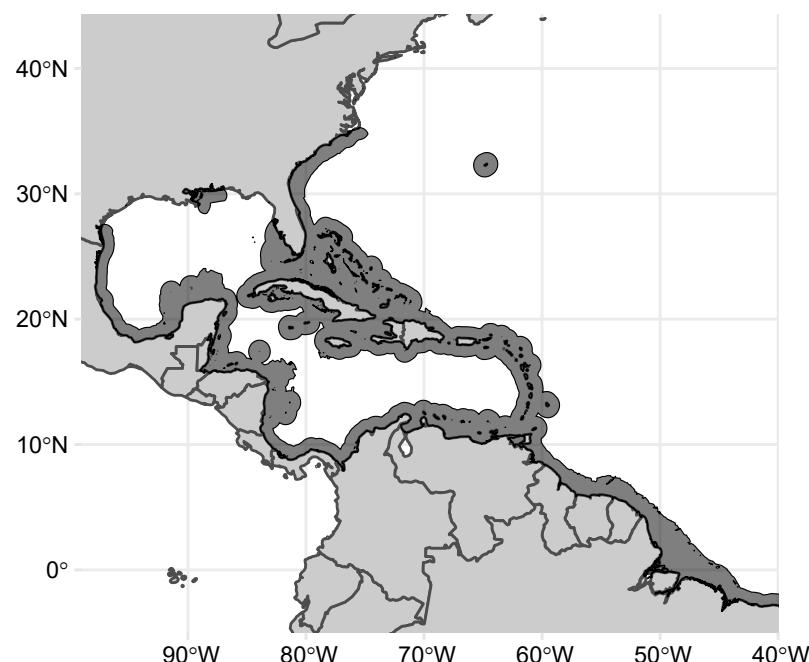
F

### U.S. Caribbean: o200

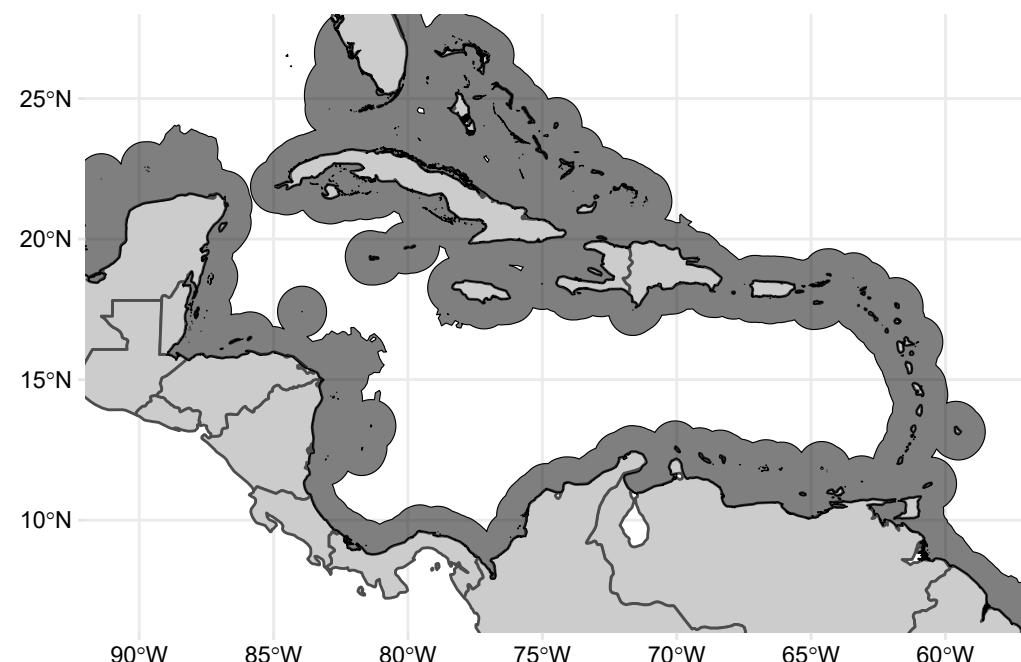
A highly detailed map of the U.S. Caribbean region from 16.5°N to 19.5°N and 68°W to 64°W. It shows standard deviation anomalies at depth o200 with a color scale from -2.1 (dark red) to -1.5 (dark blue). The map includes labels for latitude (16.5°N to 19.5°N) and longitude (68°W to 64°W).

A

### Mutton Snapper

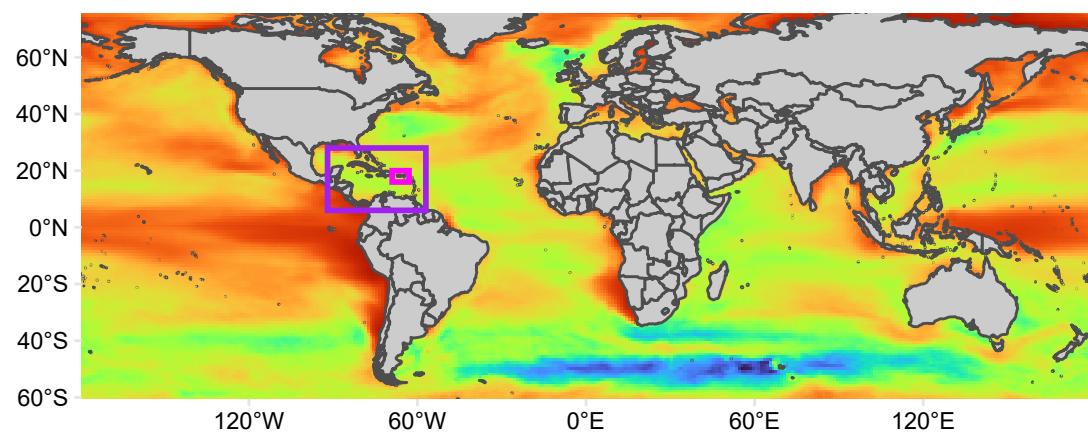


B



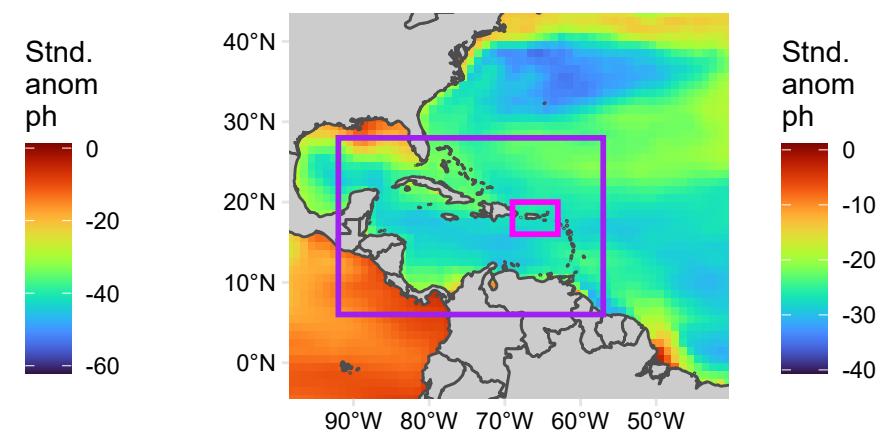
C

### Global: ph



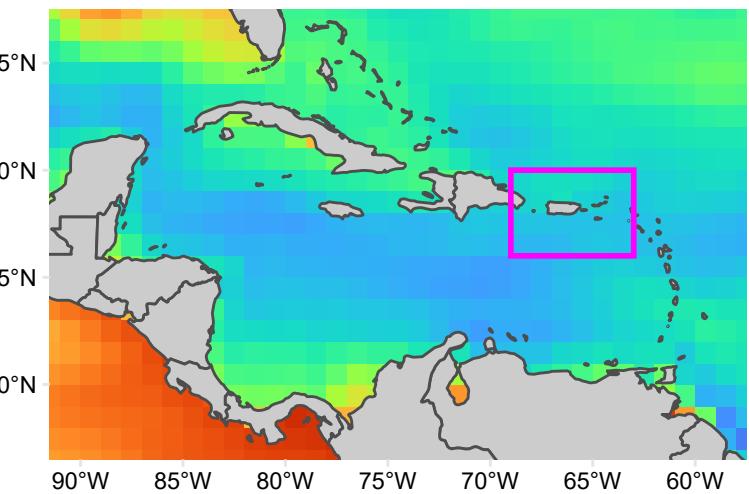
D

### W. Atlantic: ph



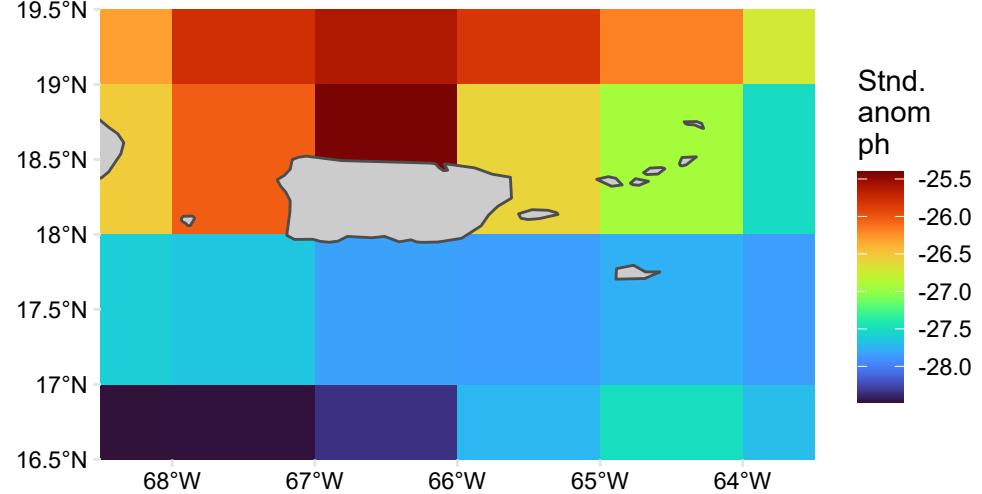
E

### Caribbean Sea: ph



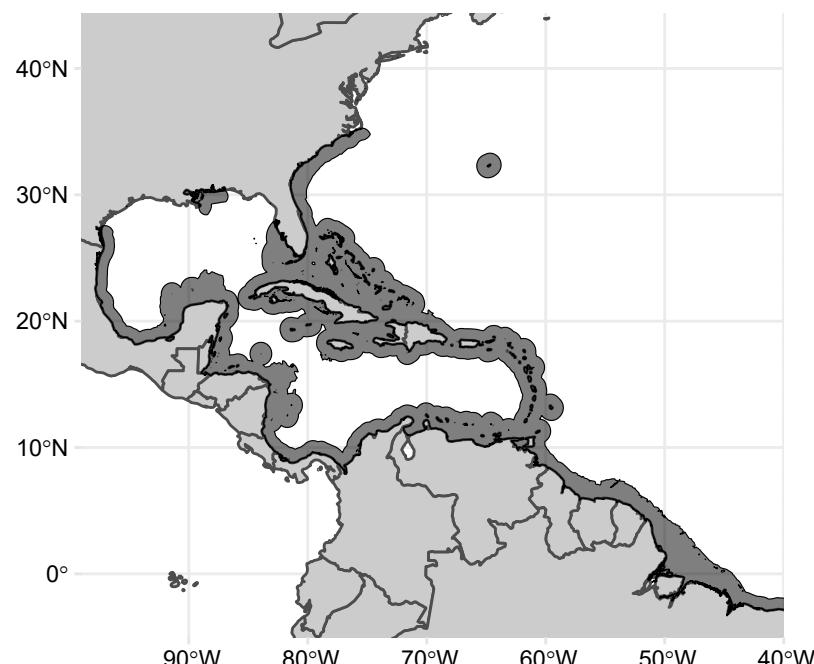
F

### U.S. Caribbean: ph

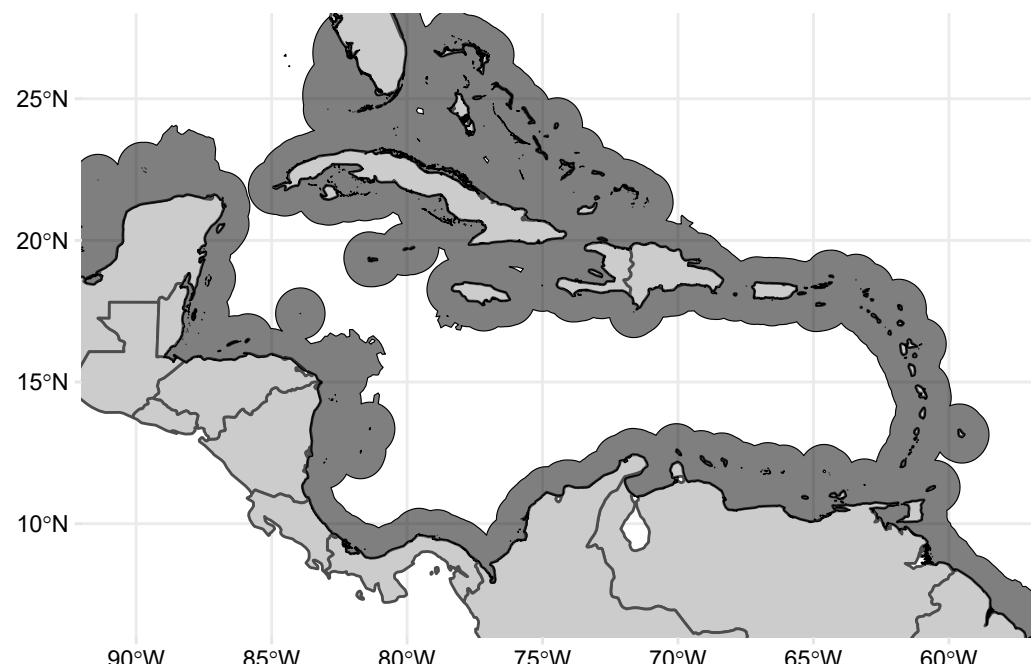


A

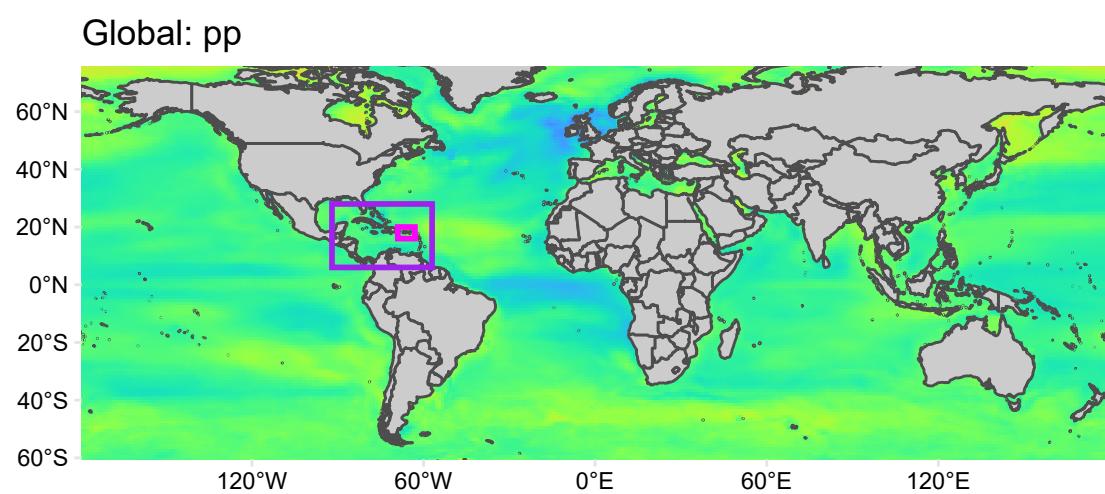
### Mutton Snapper



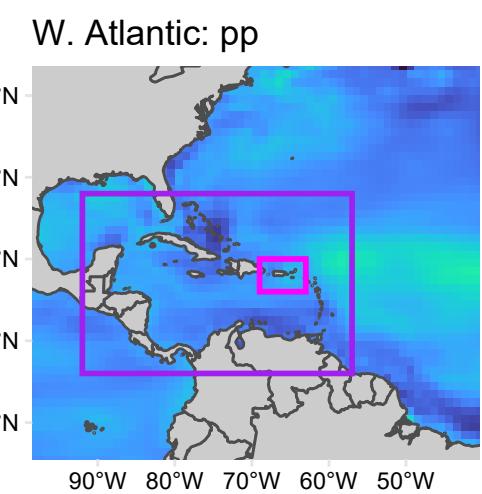
B



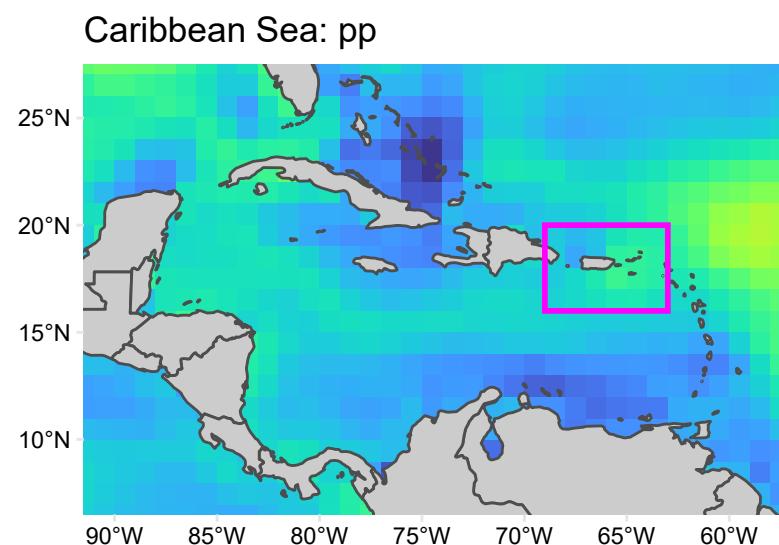
C



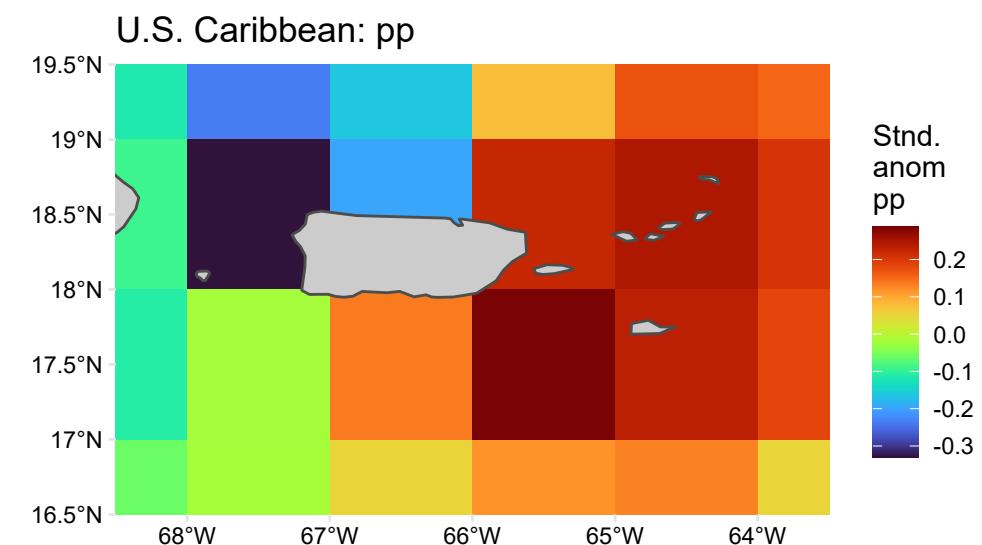
D



E

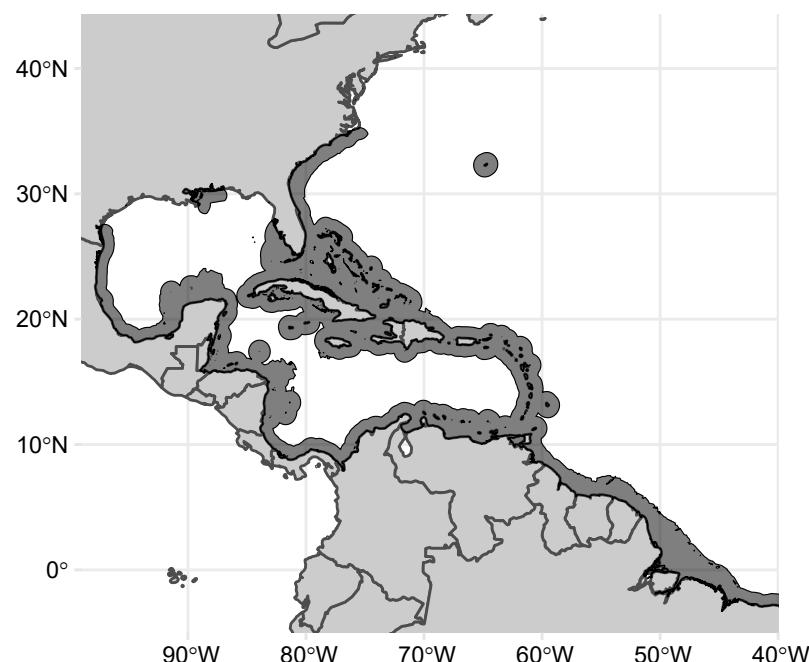


F

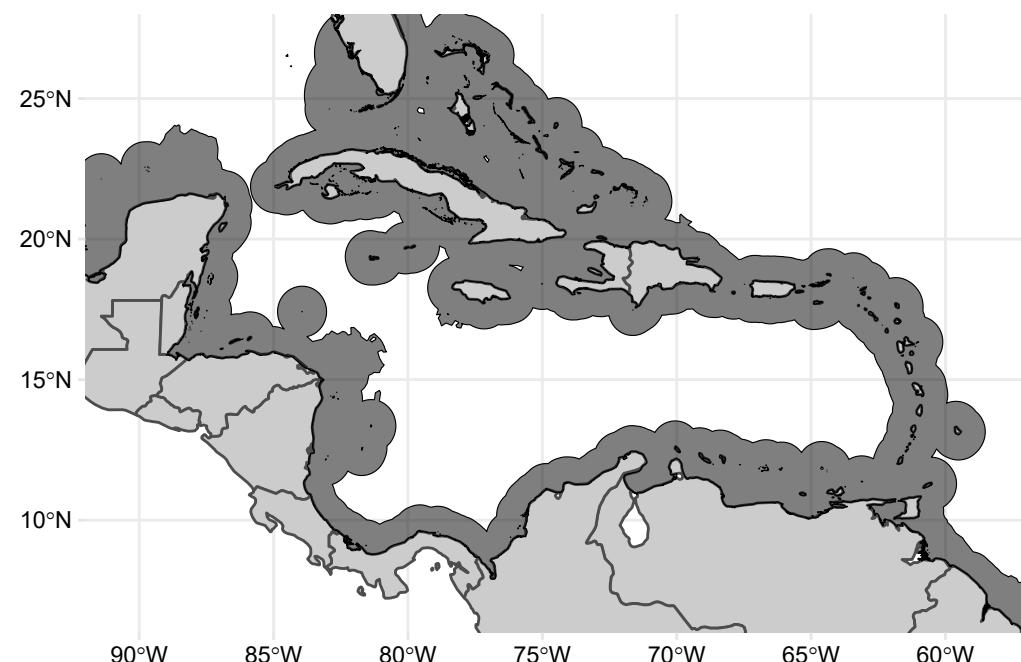


A

### Mutton Snapper

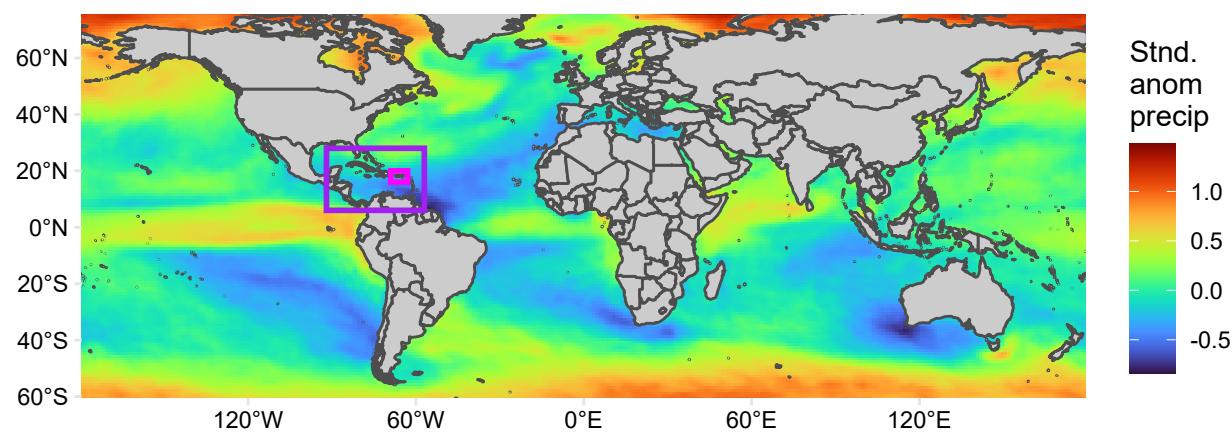


B



C

### Global: precip

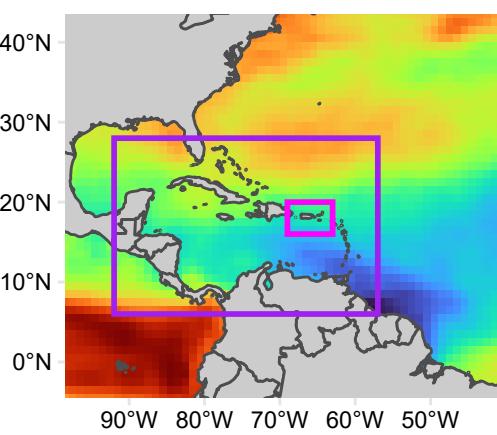


Stnd.  
anom  
precip

1.0  
0.5  
0.0  
-0.5

D

### W. Atlantic: precip

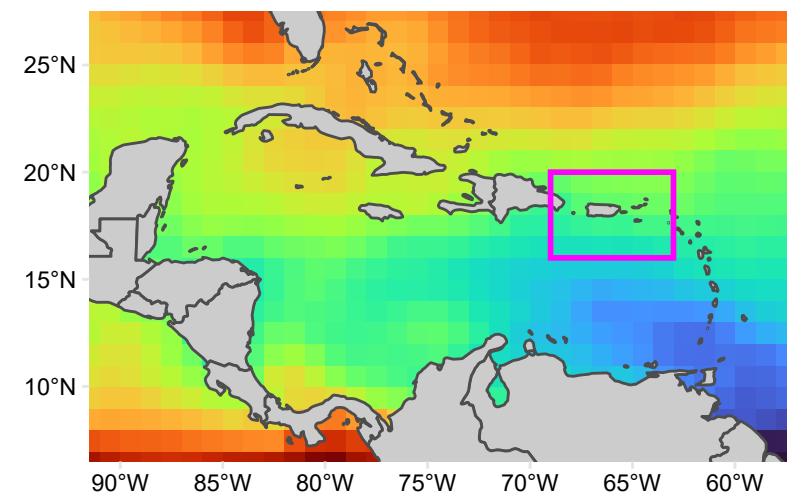


Stnd.  
anom  
precip

0.4  
0.0  
-0.4  
-0.8

E

### Caribbean Sea: precip

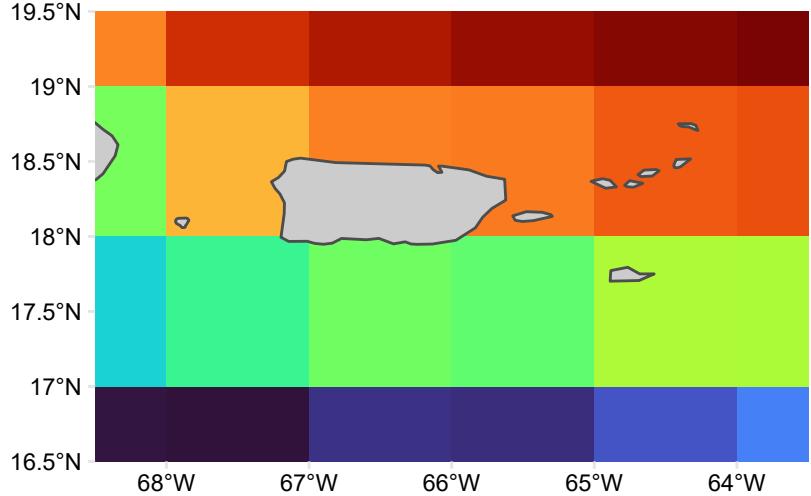


Stnd.  
anom  
precip

0.4  
0.0  
-0.4  
-0.8

F

### U.S. Caribbean: precip

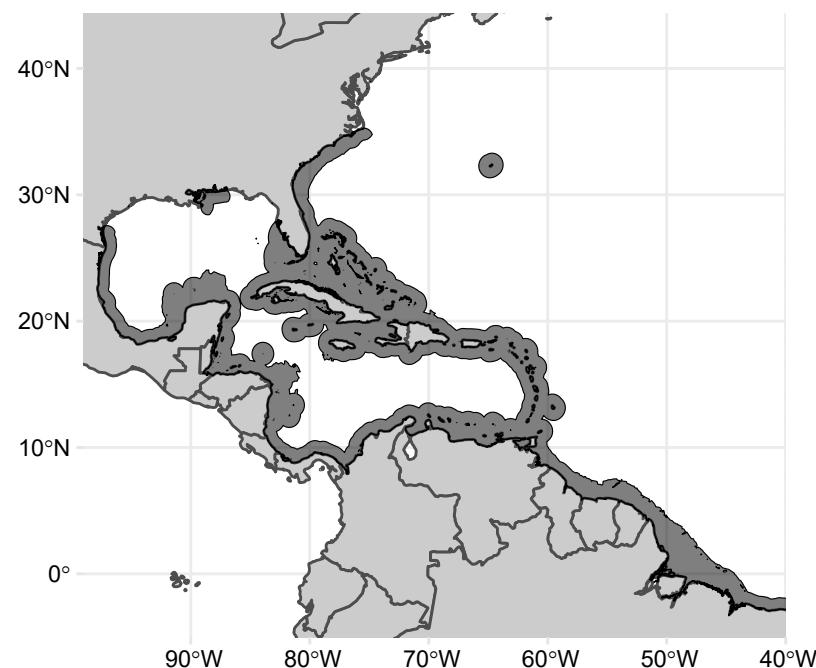


Stnd.  
anom  
precip

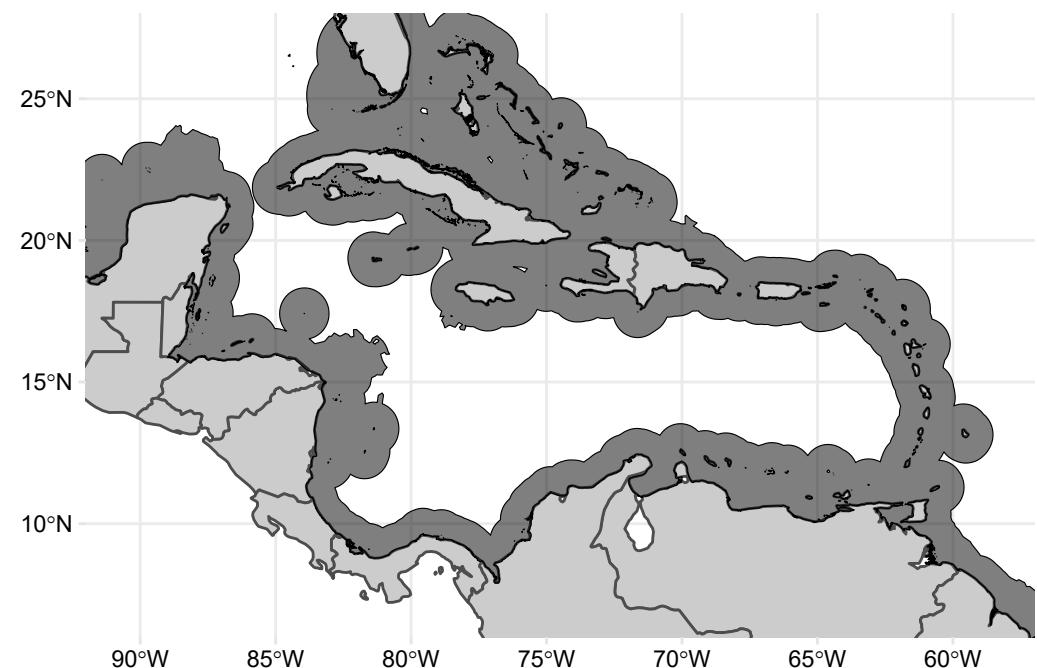
-0.25  
-0.30  
-0.35  
-0.40

A

### Mutton Snapper

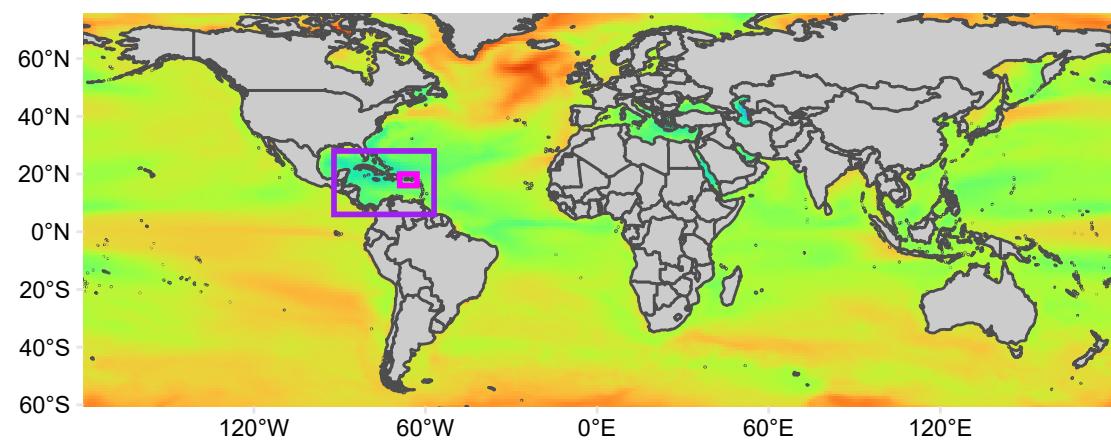


B



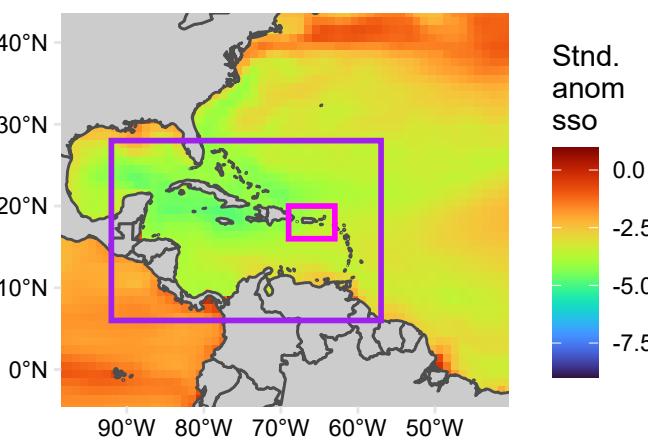
C

### Global: sso



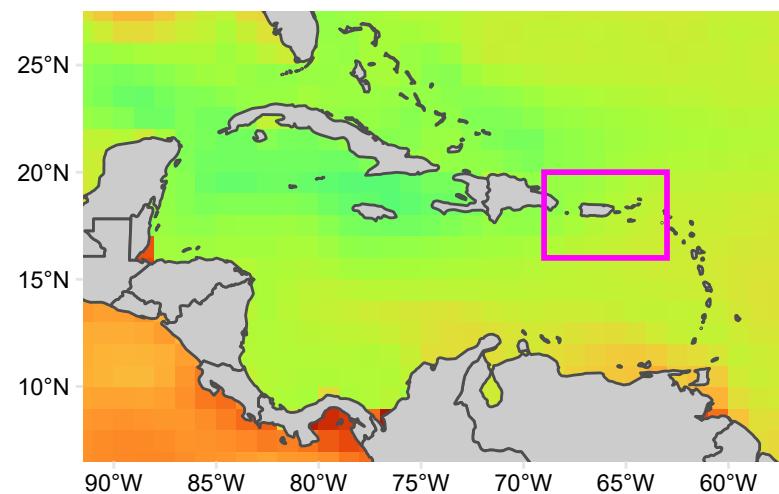
D

### W. Atlantic: sso



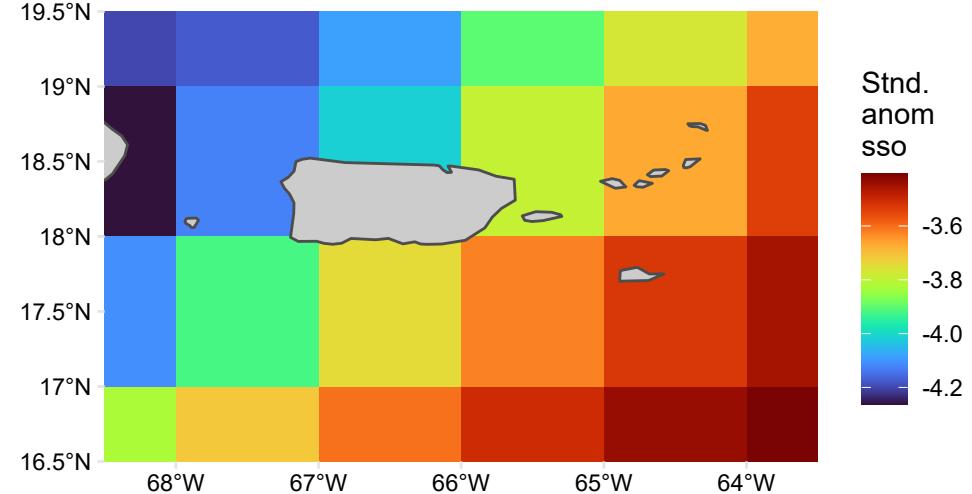
E

### Caribbean Sea: sso



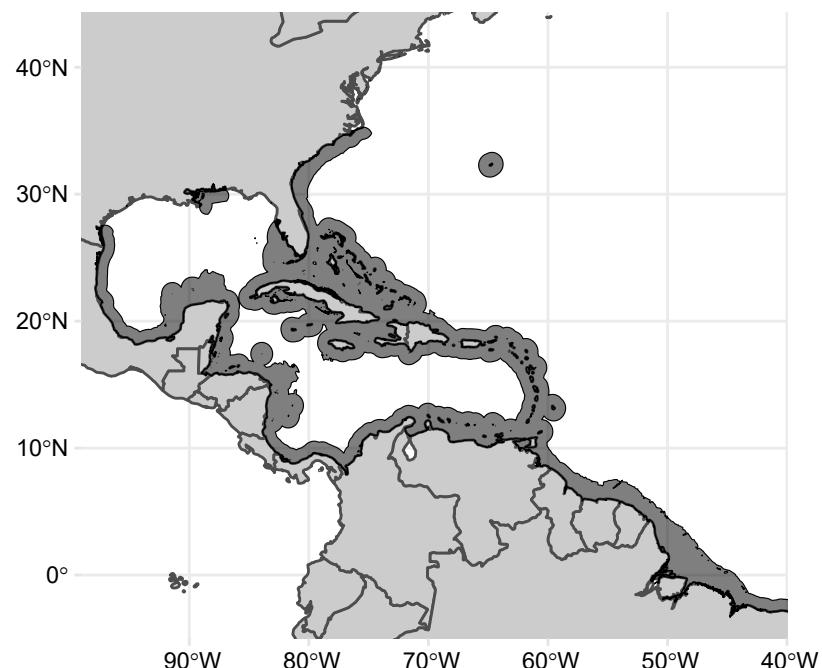
F

### U.S. Caribbean: sso

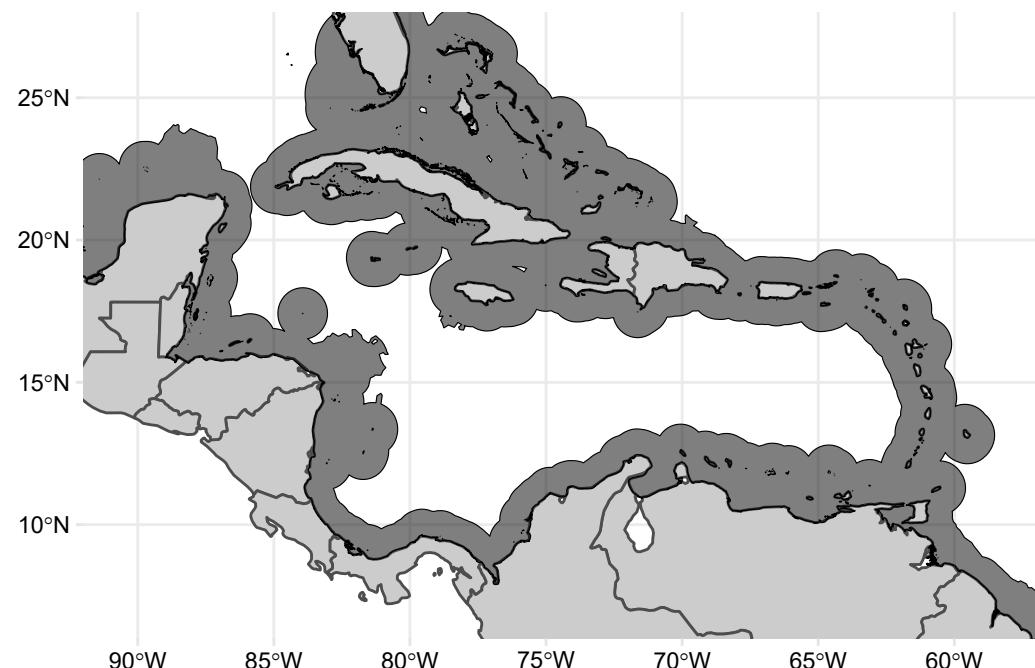


A

### Mutton Snapper

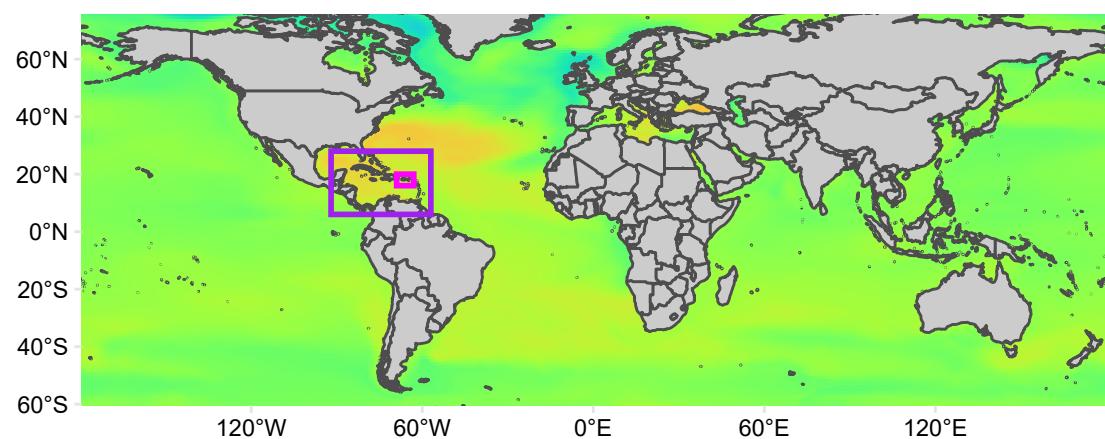


B



C

### Global: sss

D

### W. Atlantic: sss

A zoomed-in map of the Western Atlantic region, focusing on the Caribbean Sea and the Gulf of Mexico. The purple box from panel C is overlaid on the map, showing a strong positive salinity anomaly (red/orange colors) across the entire Caribbean basin.

E

### Caribbean Sea: sss

A detailed map of the Caribbean Sea region. The purple box highlights the same area as in panels C and D, showing a very strong positive salinity anomaly (red colors) throughout the entire basin.

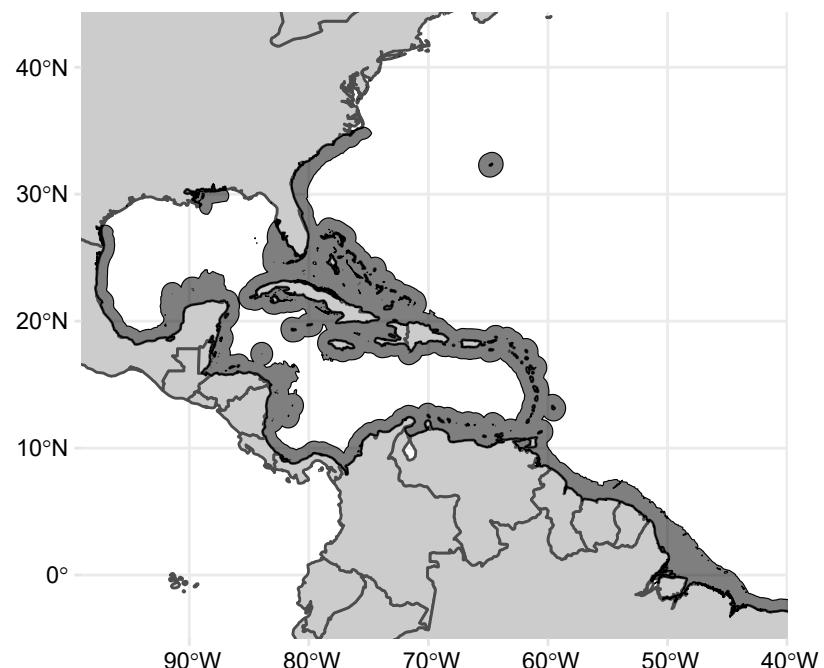
F

### U.S. Caribbean: sss

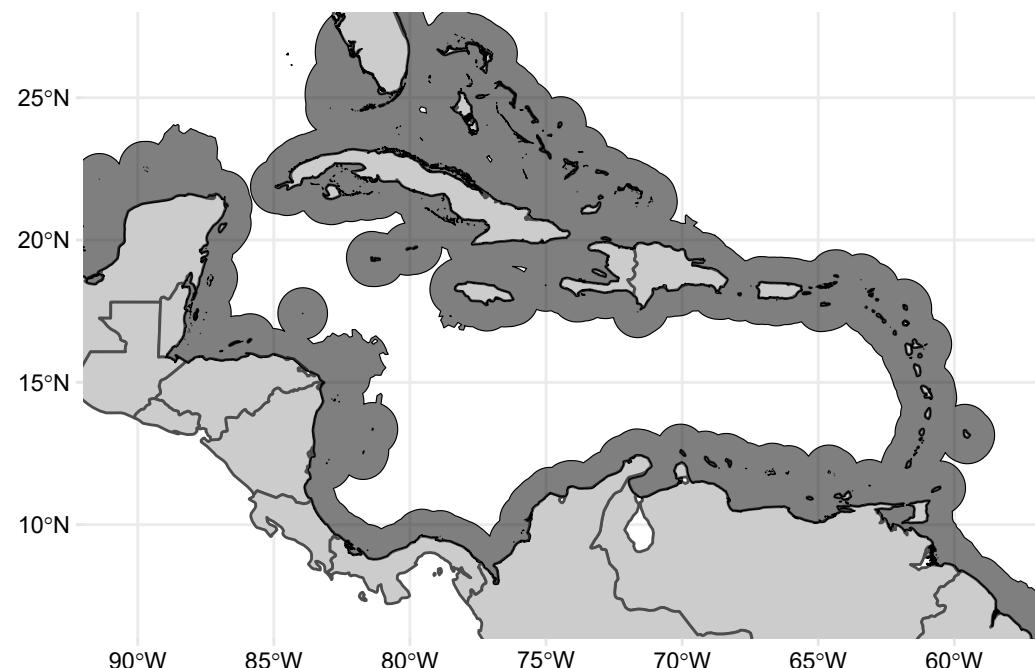
A highly detailed map of the U.S. Caribbean region, spanning from 16.5°N to 19.5°N latitude and 68°W to 64°W longitude. The purple box is centered over the Puerto Rican Trench, where the highest positive salinity anomalies (dark red colors) are observed.

A

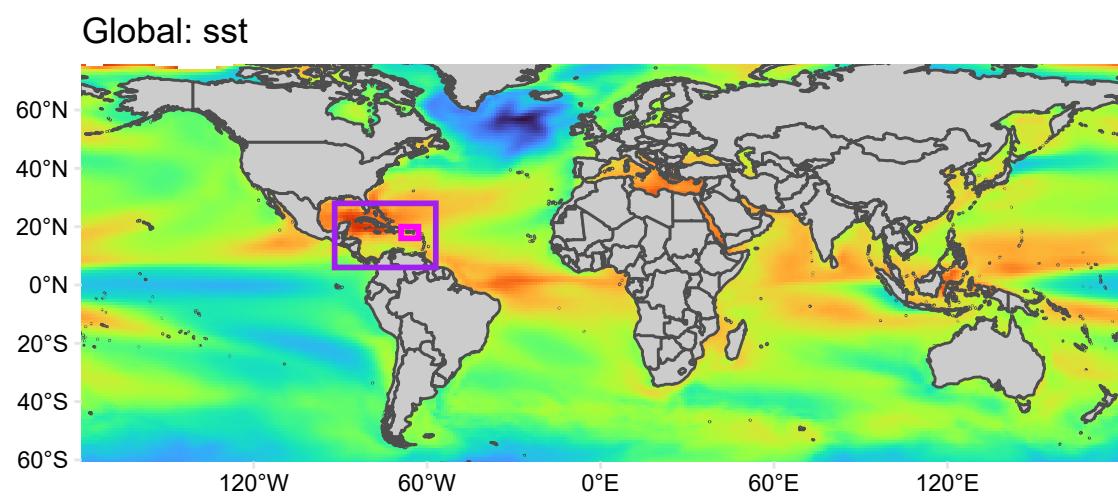
### Mutton Snapper



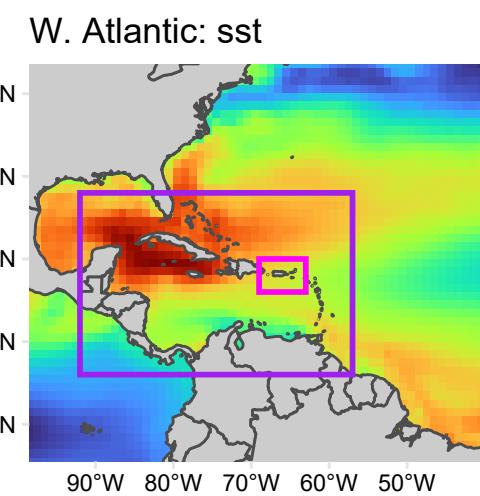
B



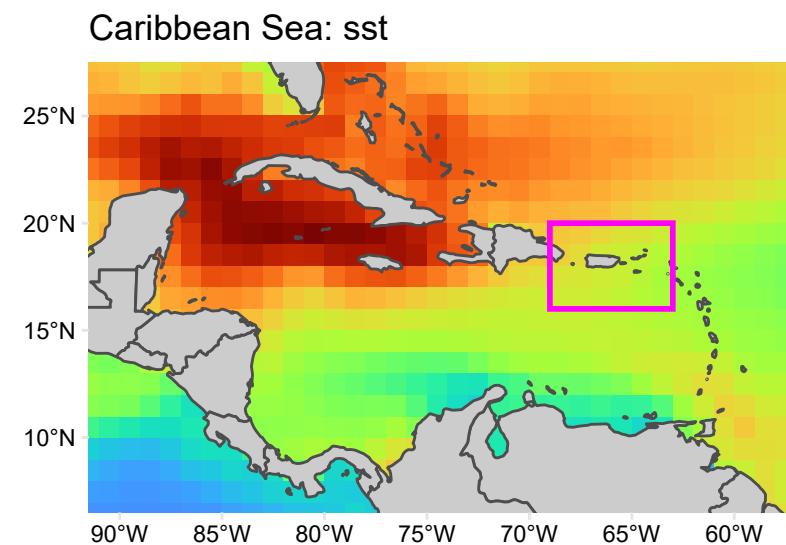
C



D

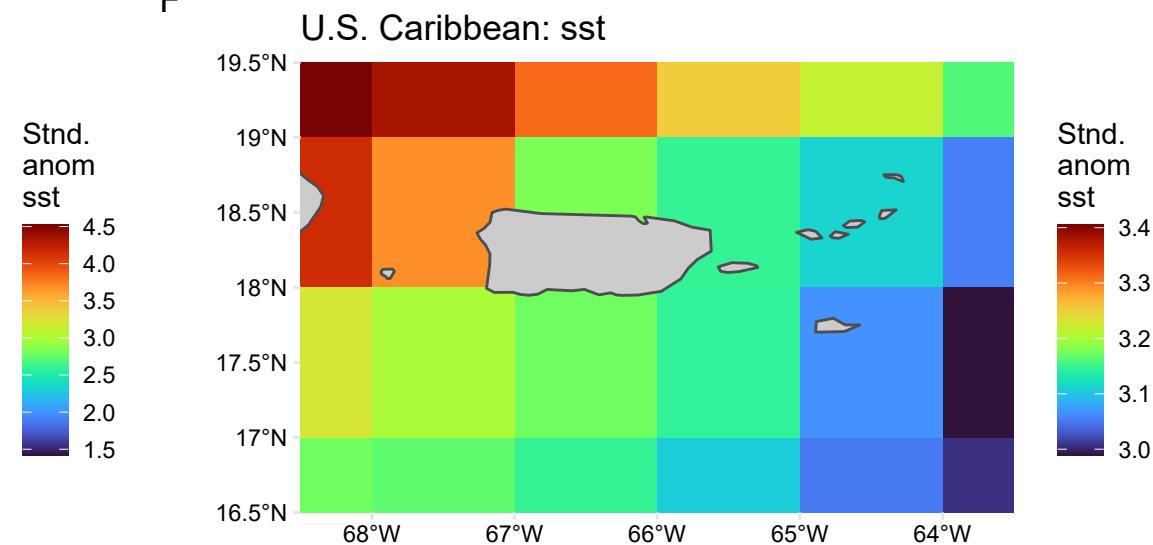


E



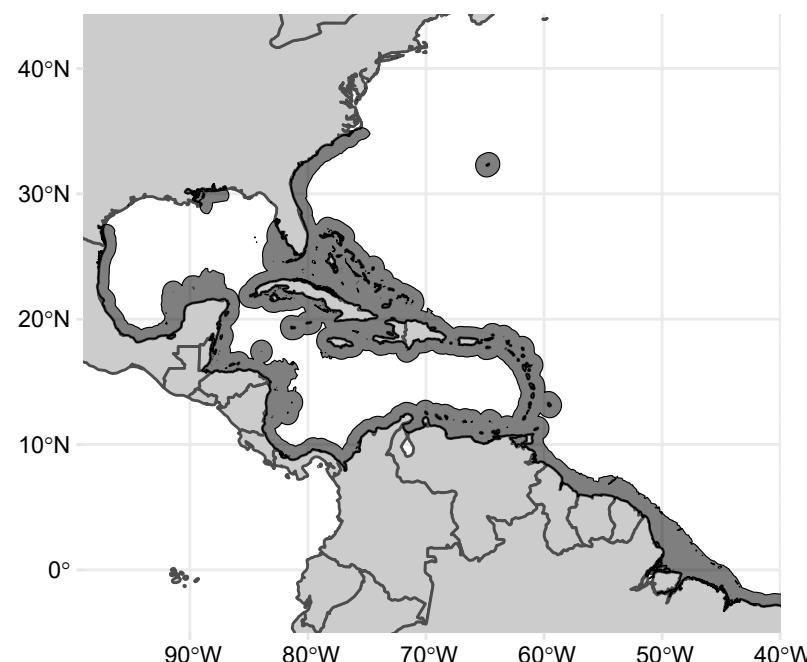
F

### U.S. Caribbean: sst

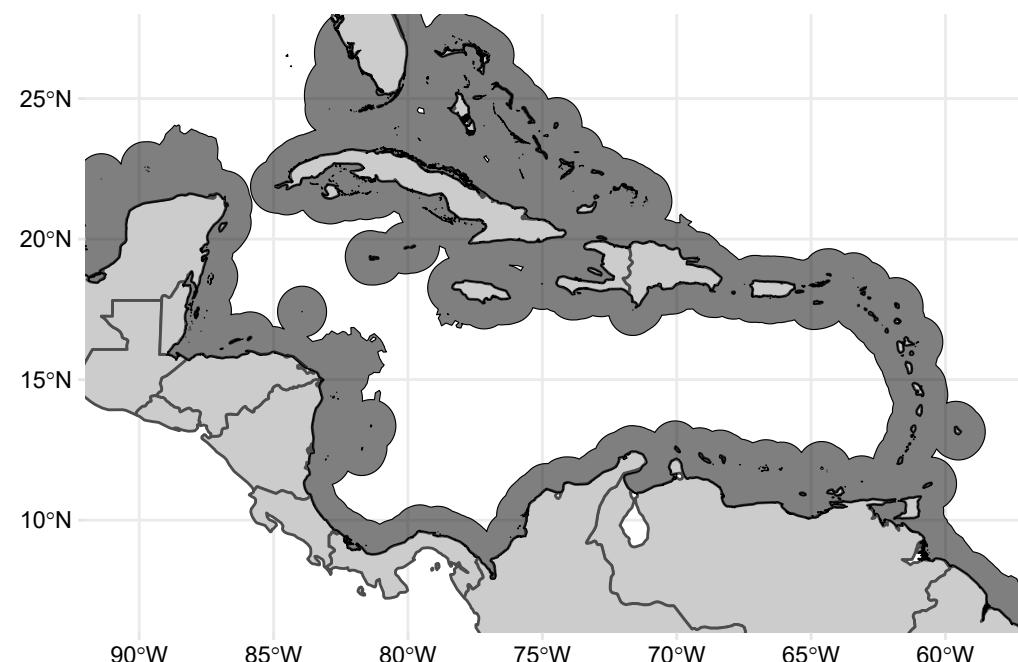


A

### Mutton Snapper

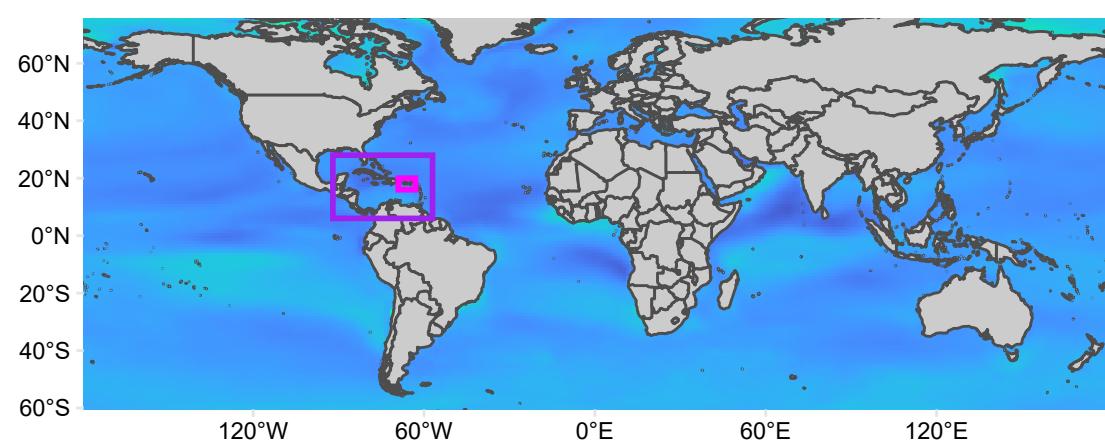


B



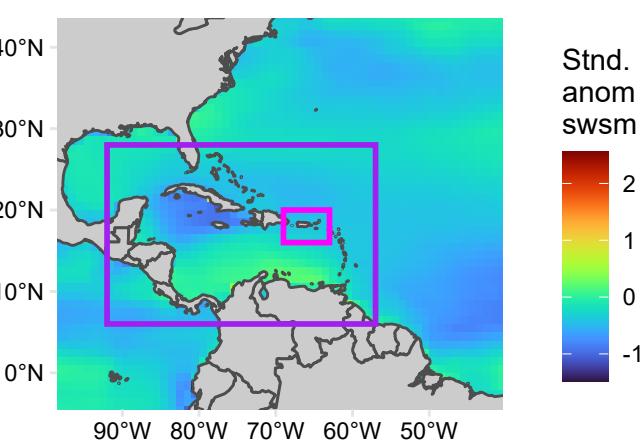
C

### Global: swsms



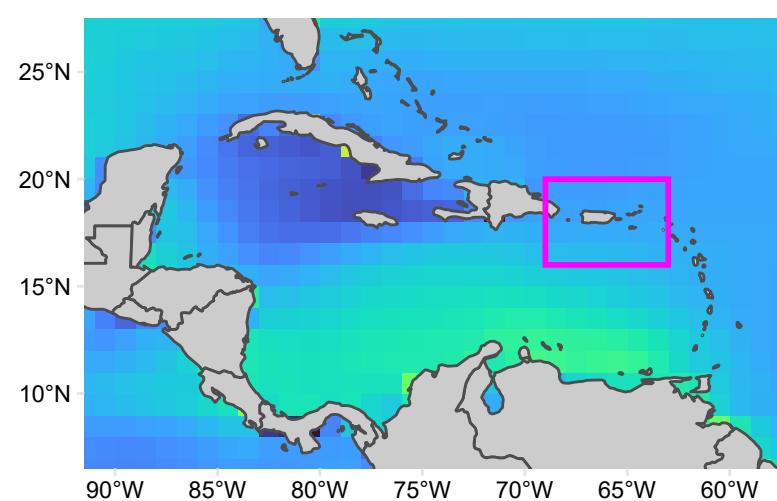
D

### W. Atlantic: swsms



E

### Caribbean Sea: swsms



F

### U.S. Caribbean: swsms

