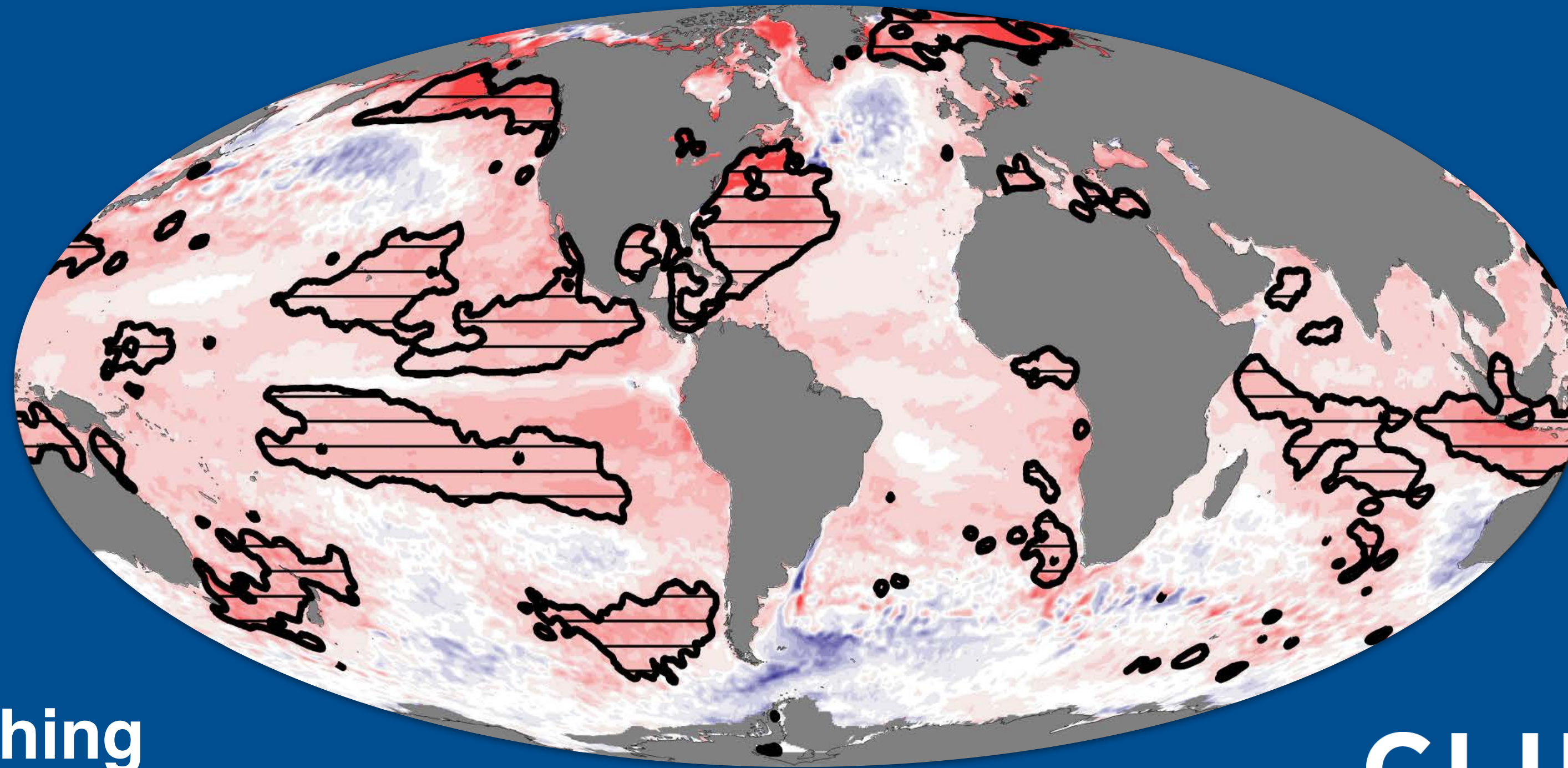


# Marine Heatwaves in the NW Atlantic



Andrew J. Pershing

@sci\_officer,

[apershing@climatecentral.org](mailto:apershing@climatecentral.org)

CLIMATE



CENTRAL

# *Climate Central*

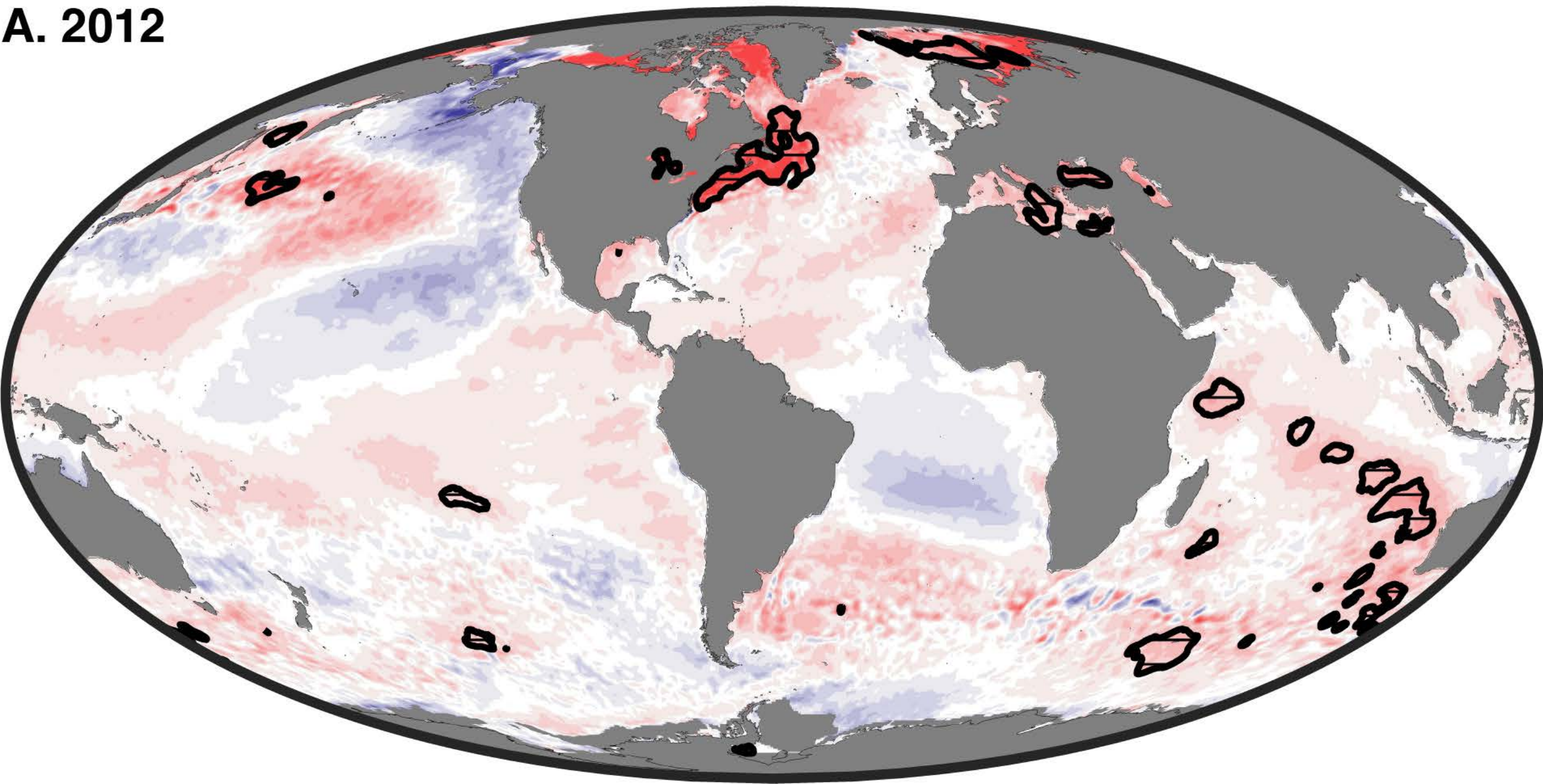
- Climate science research and communications NGO, founded 2008
- 30 staff, most @ Princeton, NJ
- Non-partisan, policy/technology neutral, **non-advocacy**
- **Catalyzing** media, NGOs, government, educators, businesses
- **Practitioners** of climate science, climate journalism, and climate communications



# 2012 Northwest Atlantic Heatwave

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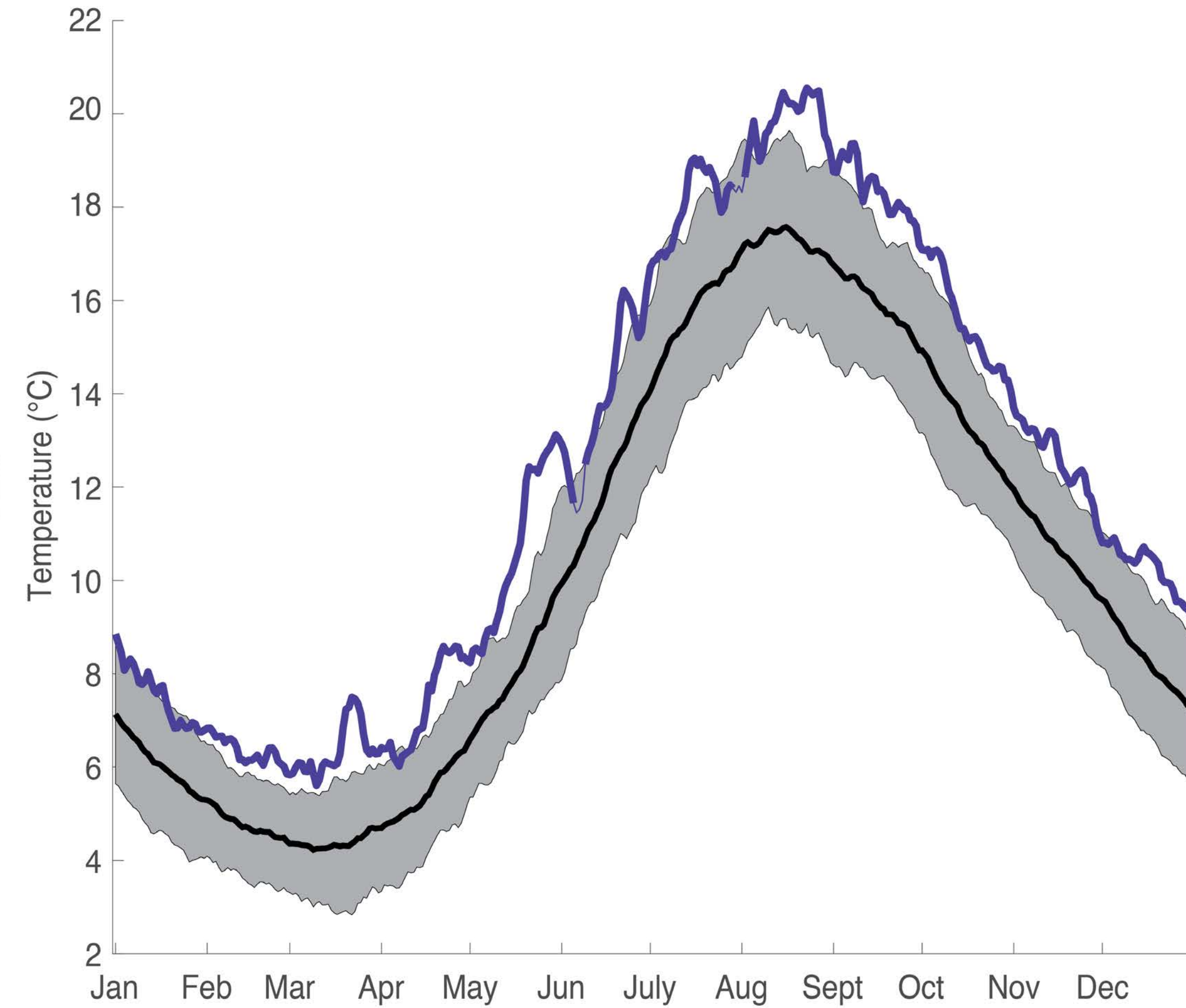
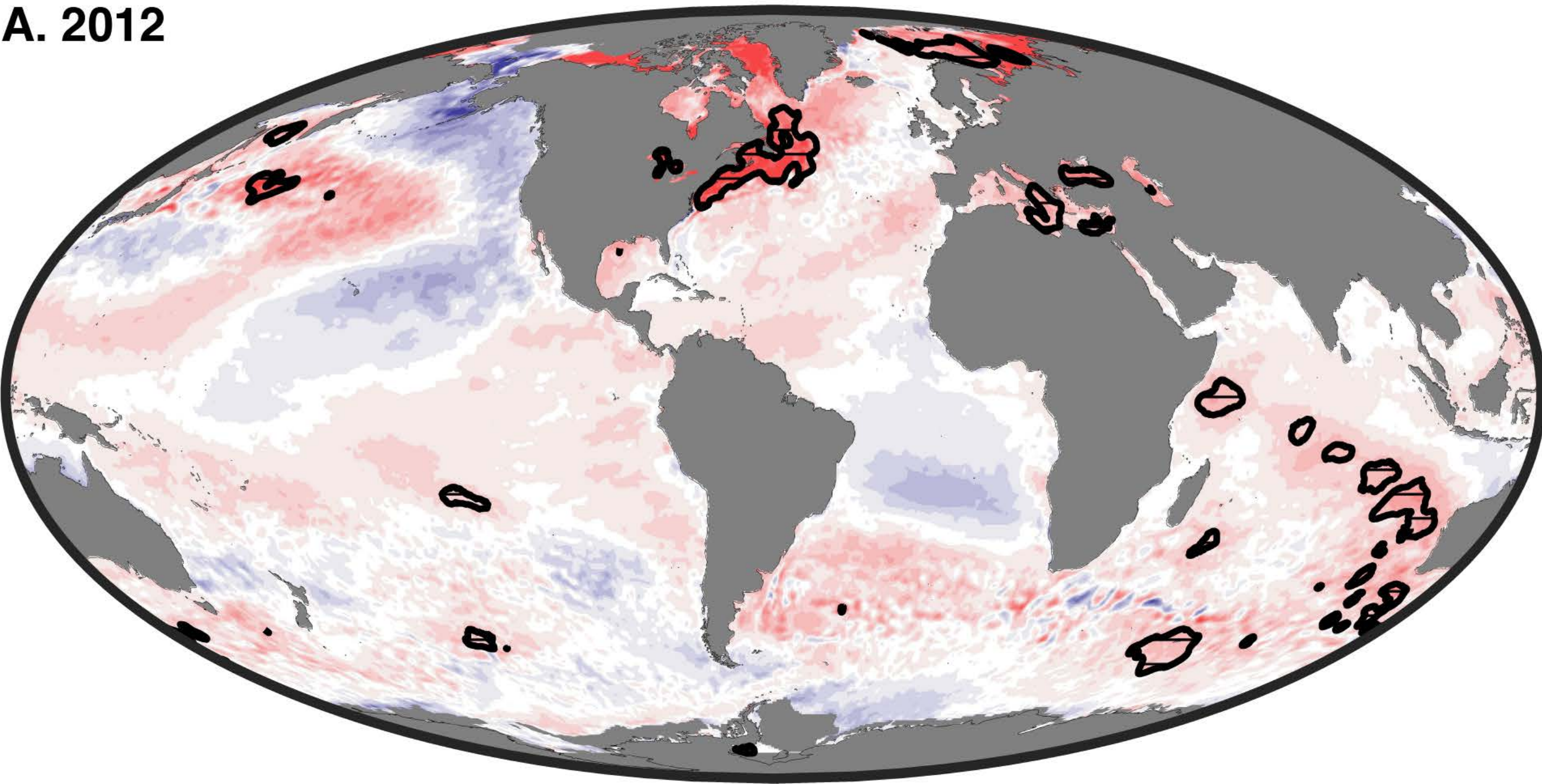
A. 2012





# 2012 Northwest Atlantic Heatwave

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# 2012 Northwest Atlantic Heatwave

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squid, National Undersea Research Center, U. Connecticut

<https://www.fisheries.noaa.gov/species/longfin-squid>



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black sea bass, Gulf of Maine Research Institute



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butterfish, NOAA  
<https://www.greateratlantic.fisheries.noaa.gov/sustainable/index.html>



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puffin, [http://en.wikipedia.org/wiki/Atlantic\\_puffin](http://en.wikipedia.org/wiki/Atlantic_puffin)



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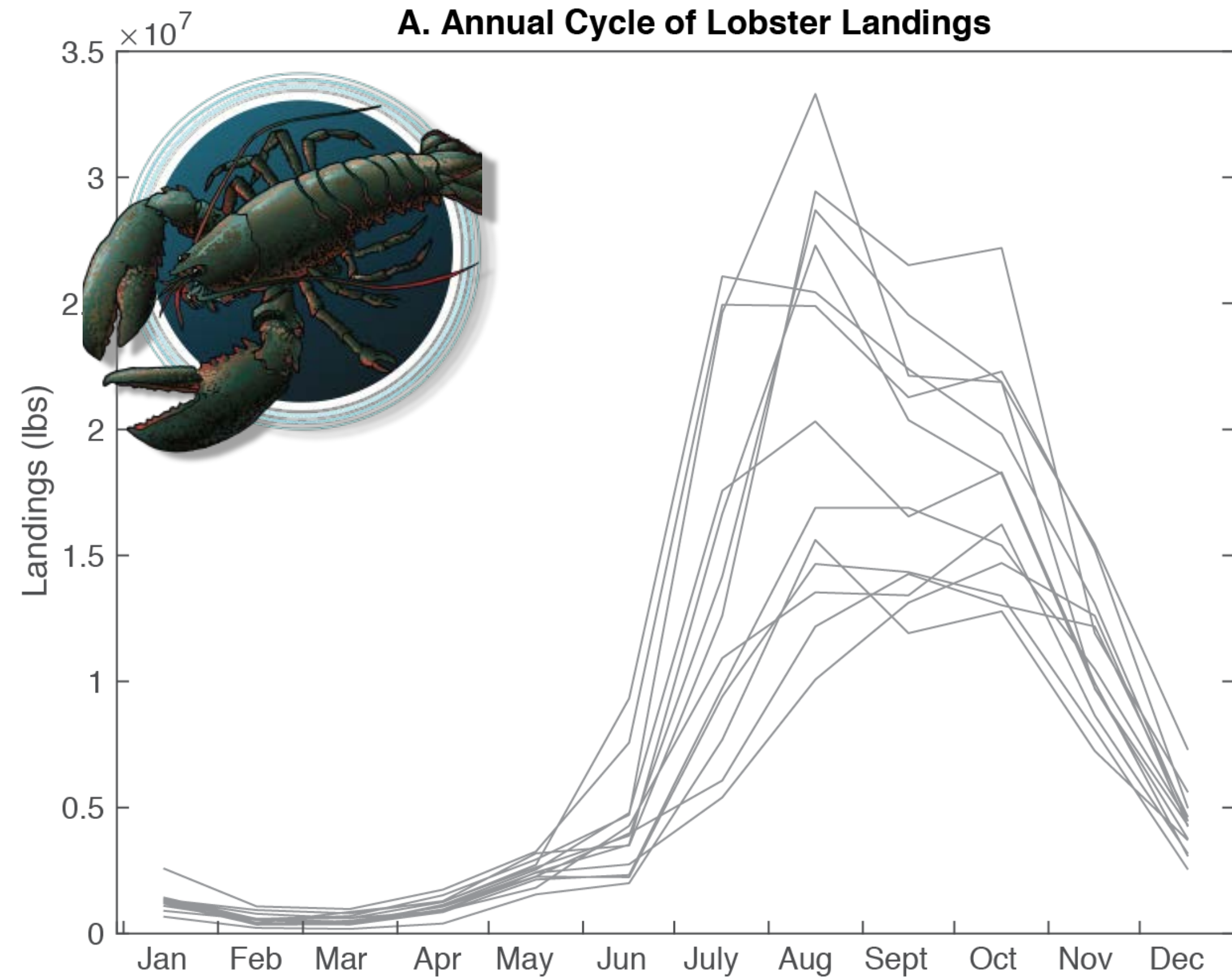
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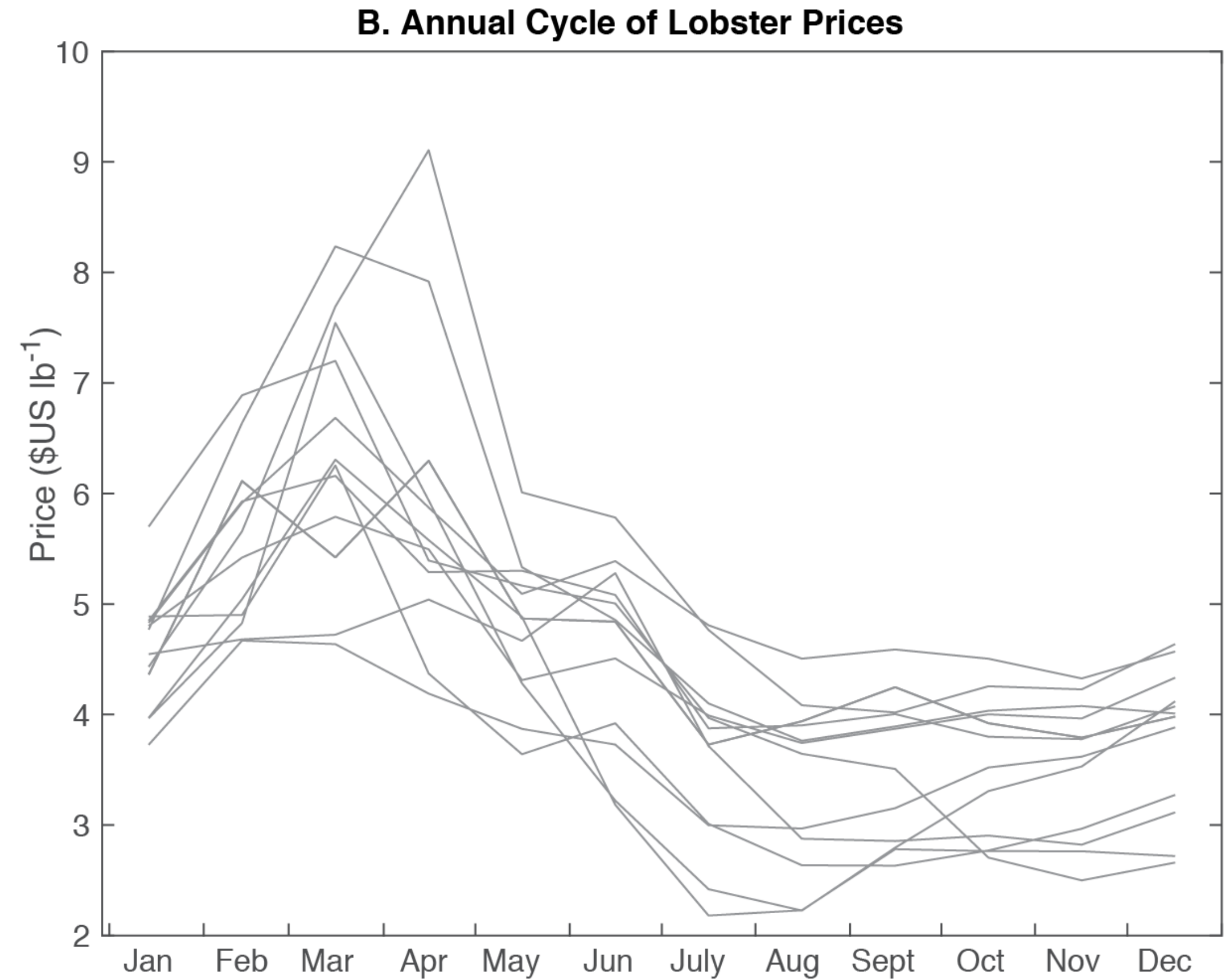
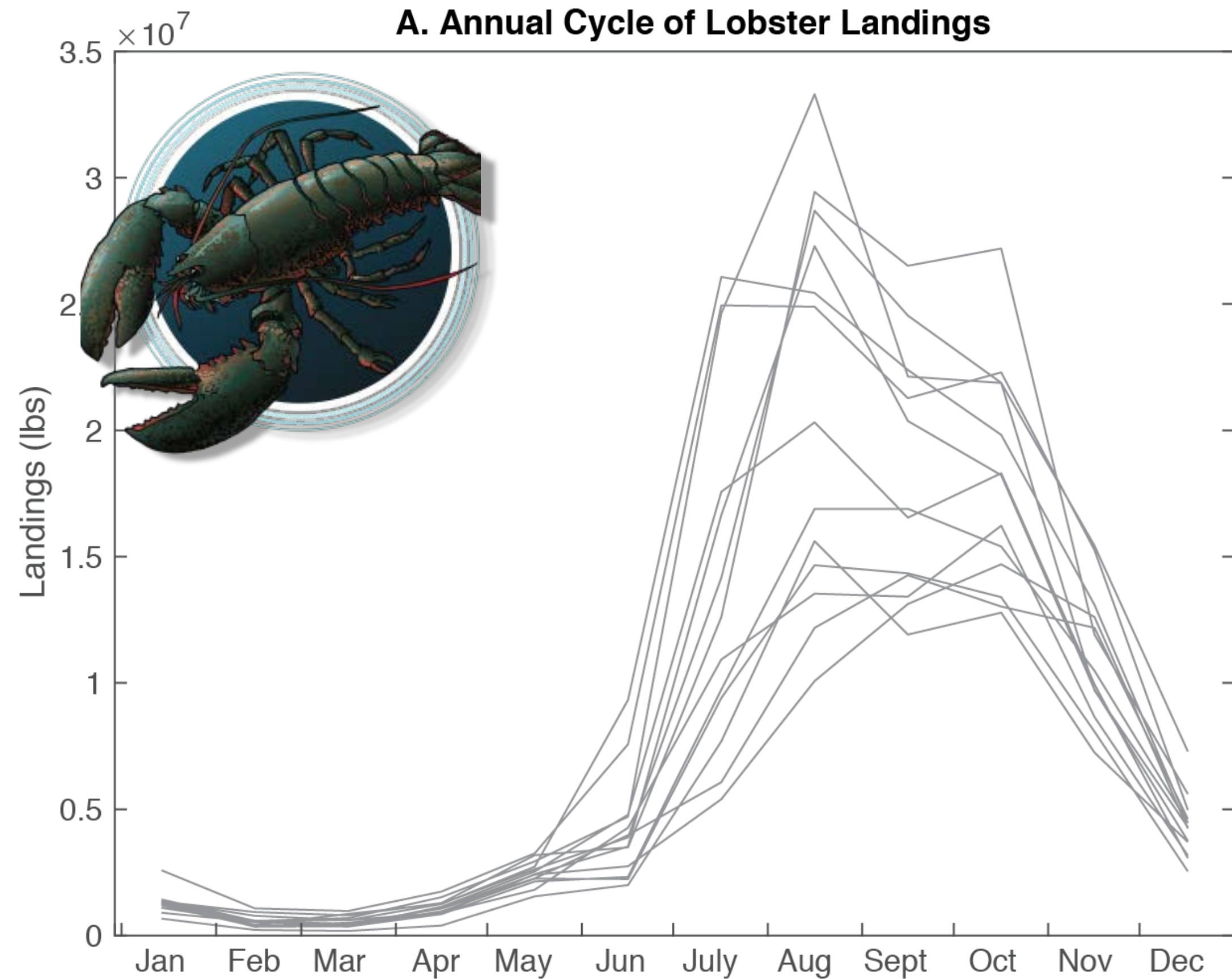


# 2012 Northwest Atlantic Heatwave





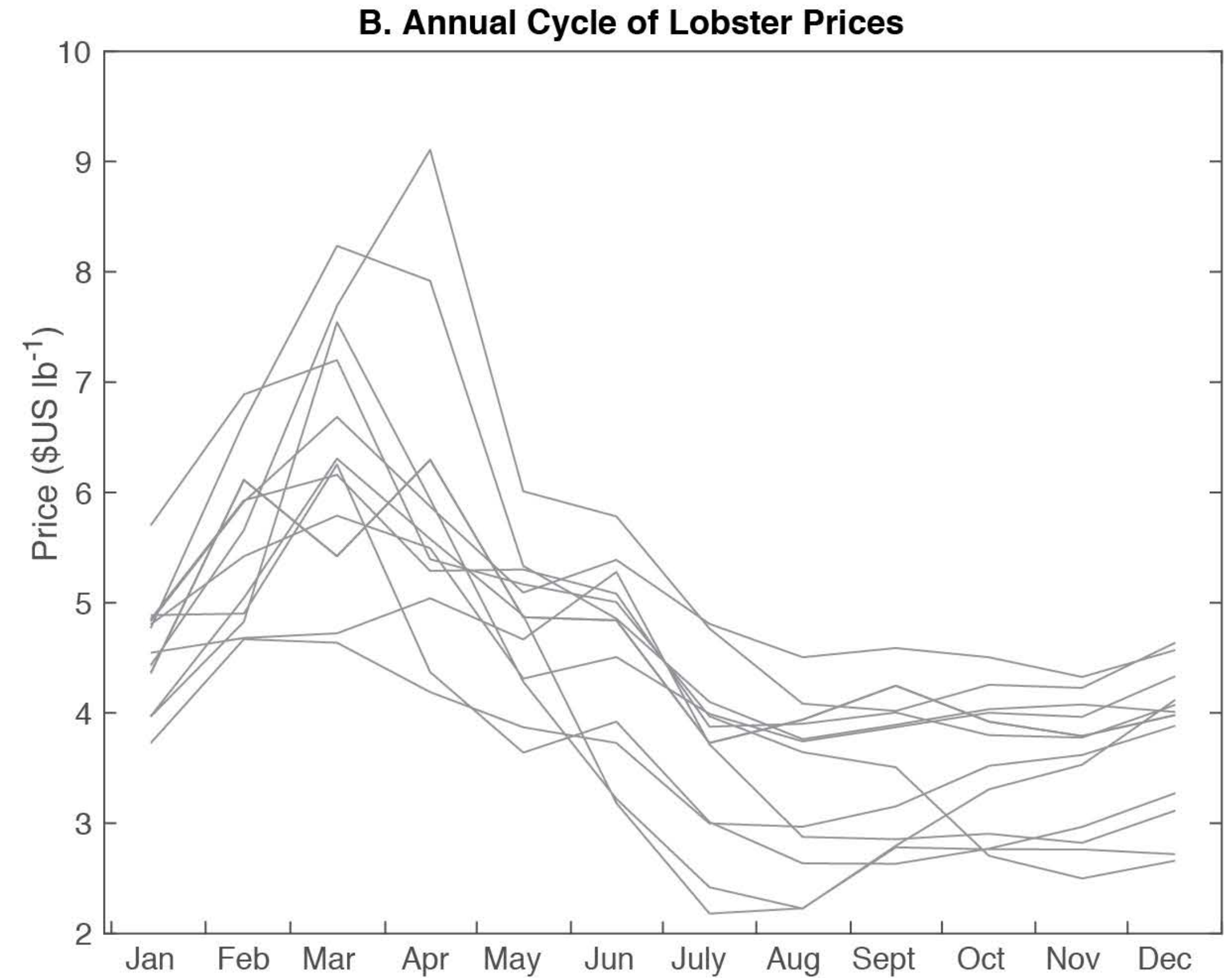
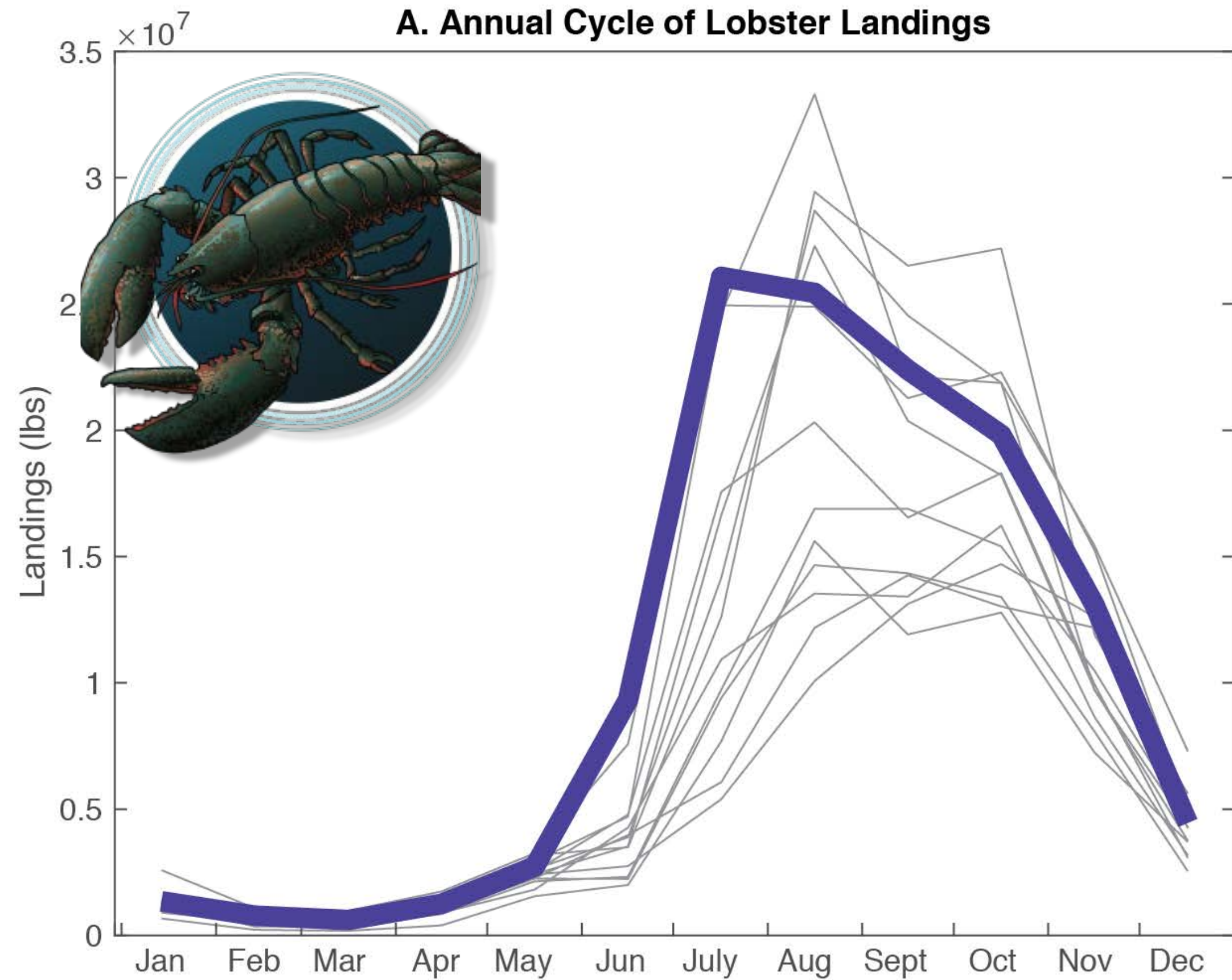
# 2012 Northwest Atlantic Heatwave



- Lobster price is seasonal



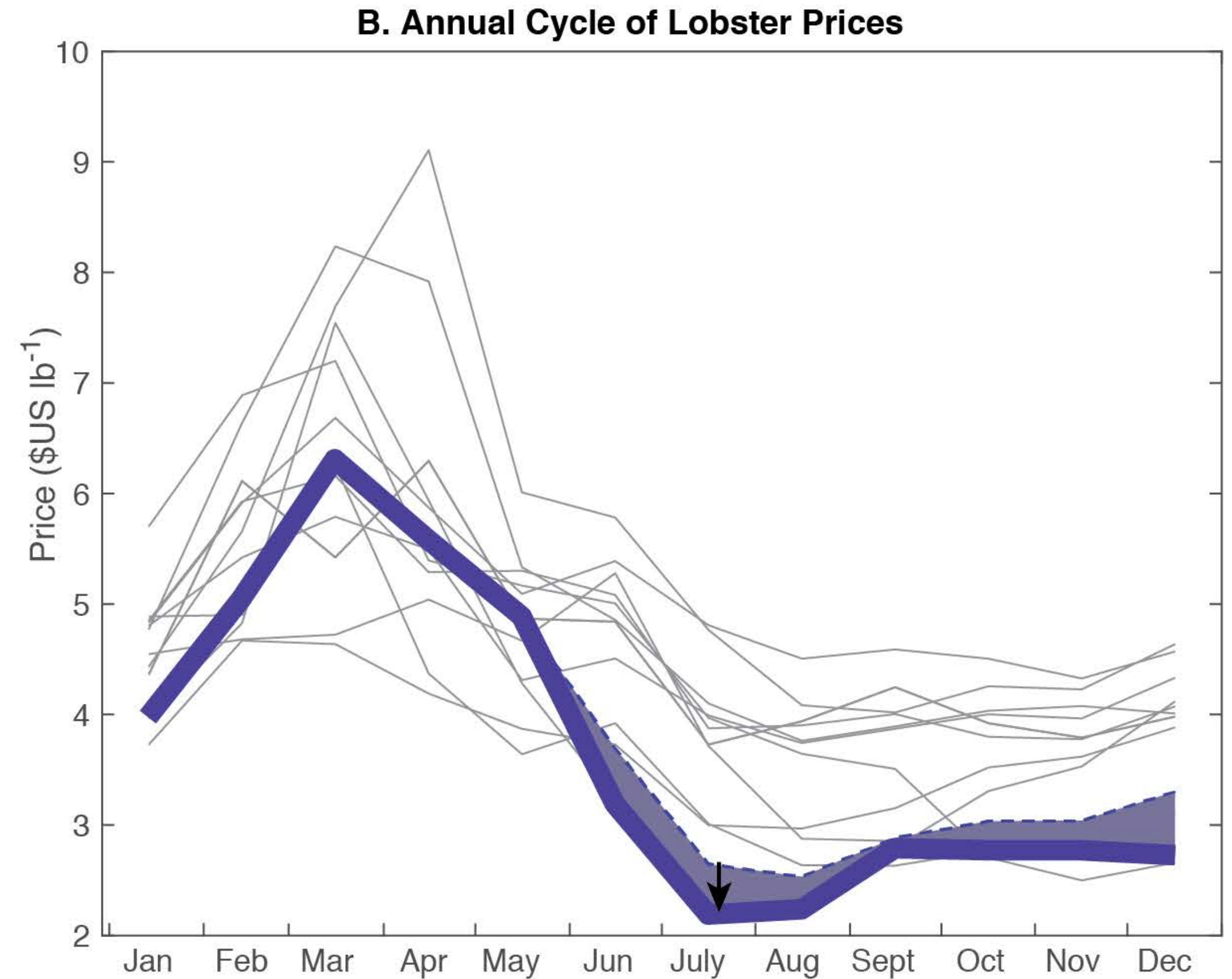
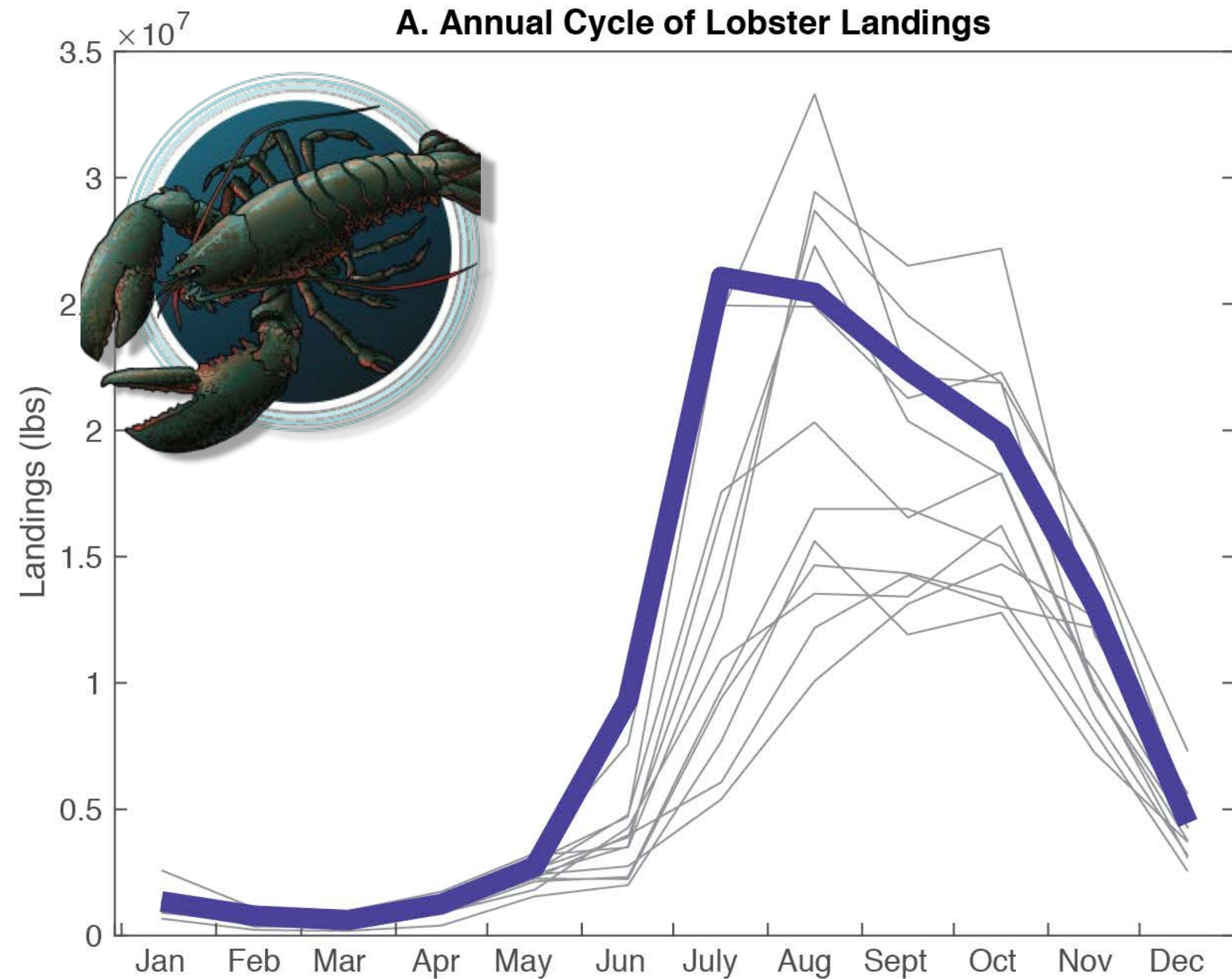
# 2012 Northwest Atlantic Heatwave



- Lobster price is seasonal



# 2012 Northwest Atlantic Heatwave



- Lobster price is seasonal
- 2012: low

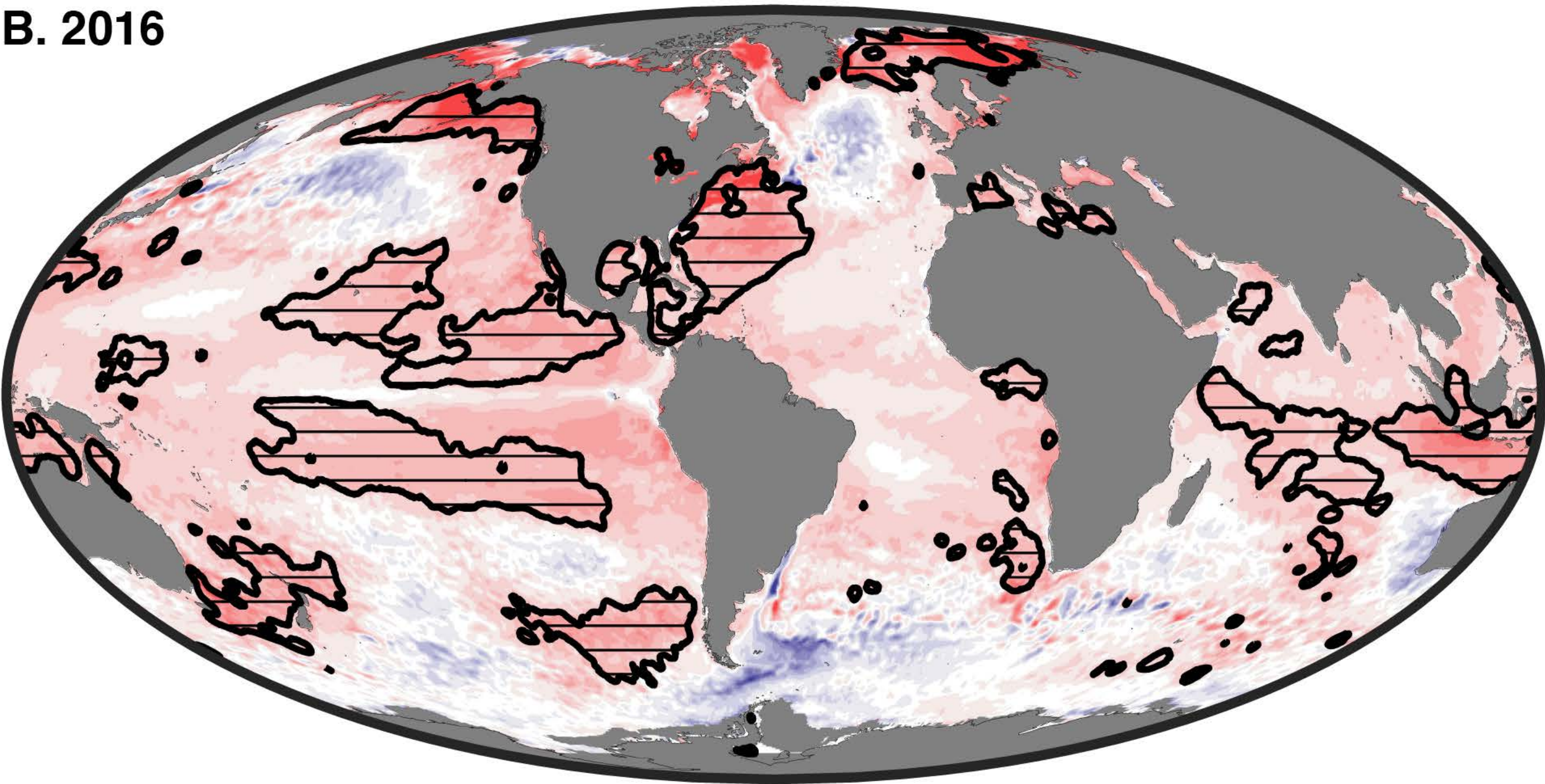


# 2016 Northwest Atlantic Heatwave



# 2016 Northwest Atlantic Heatwave

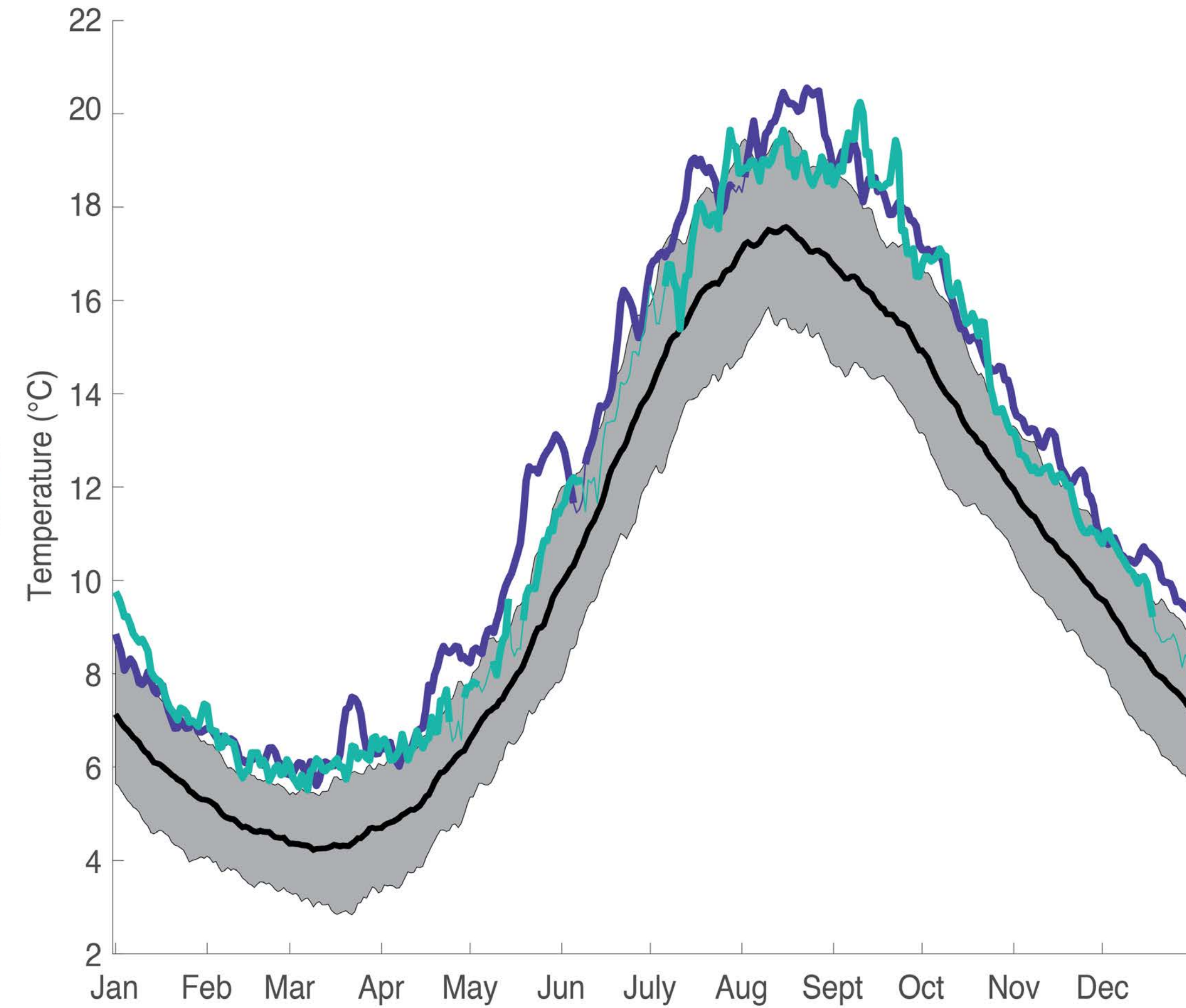
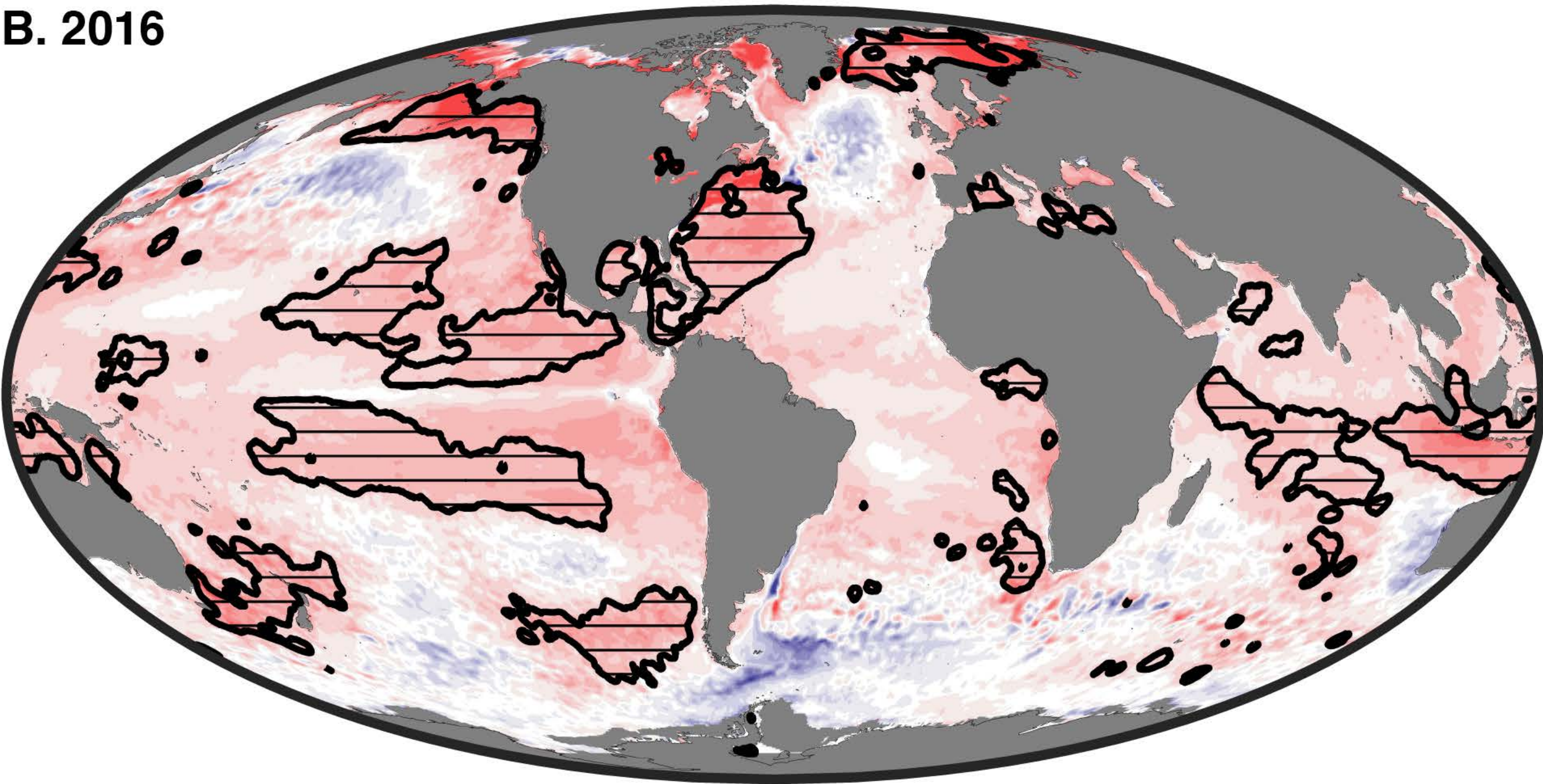
B. 2016





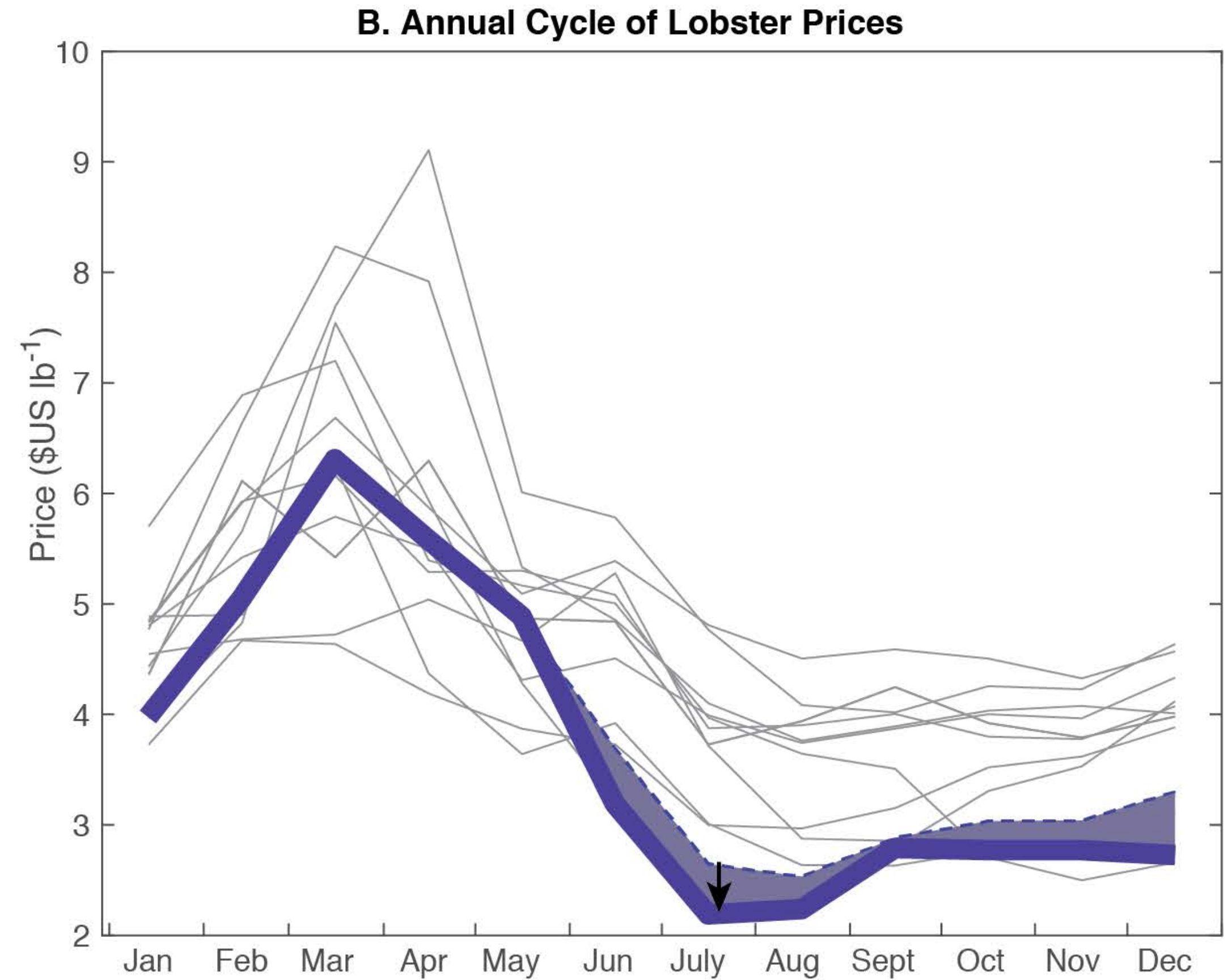
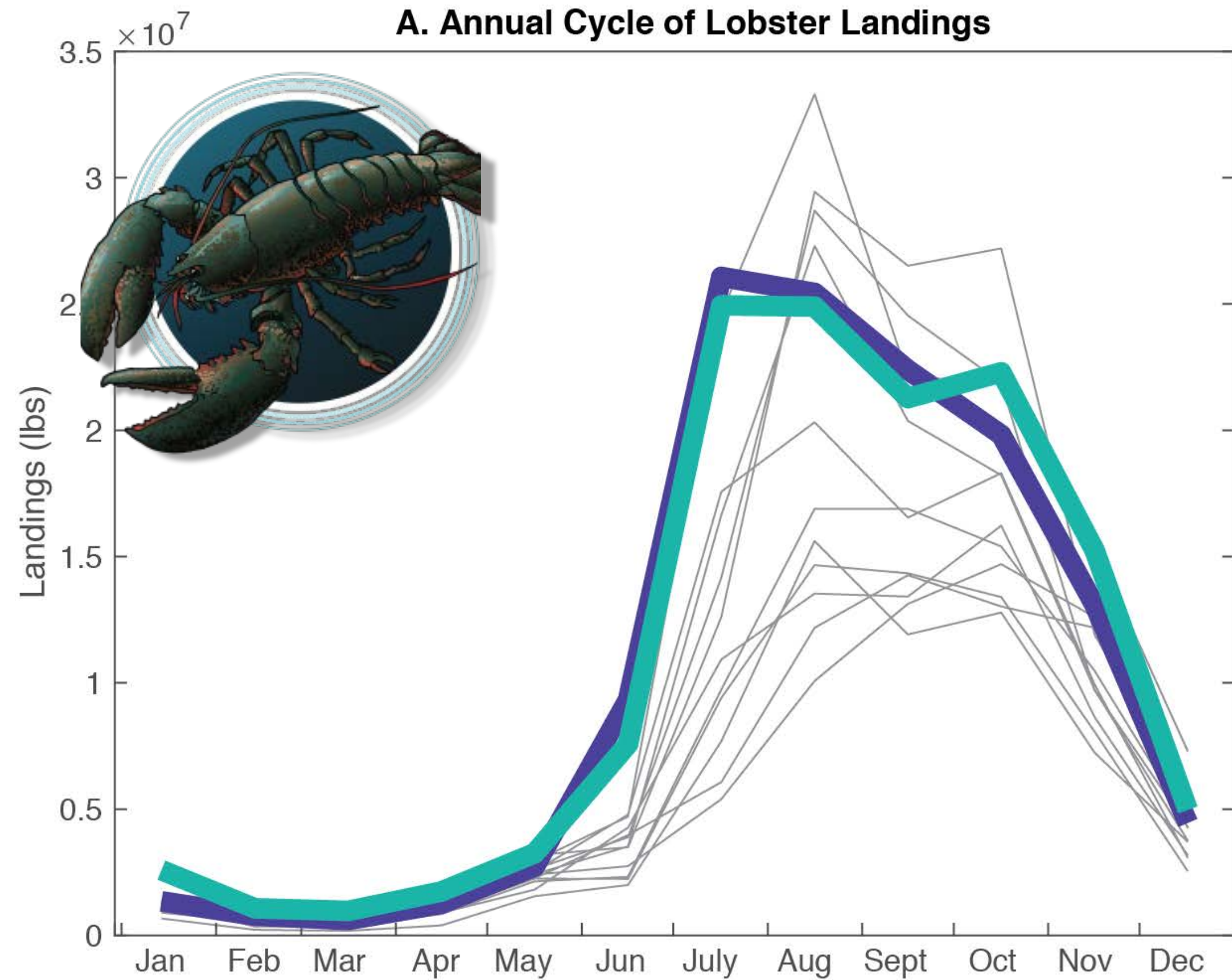
# 2016 Northwest Atlantic Heatwave

B. 2016





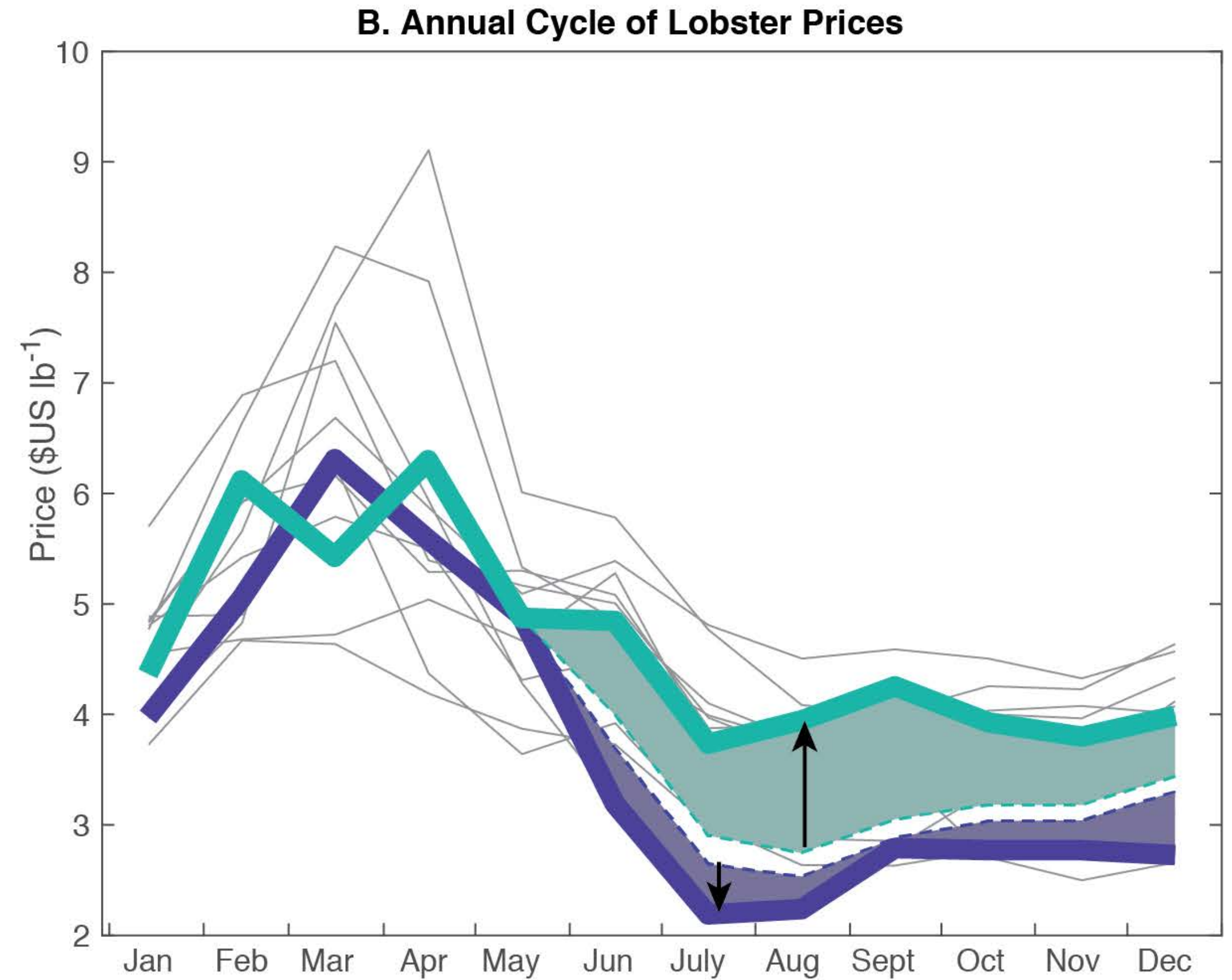
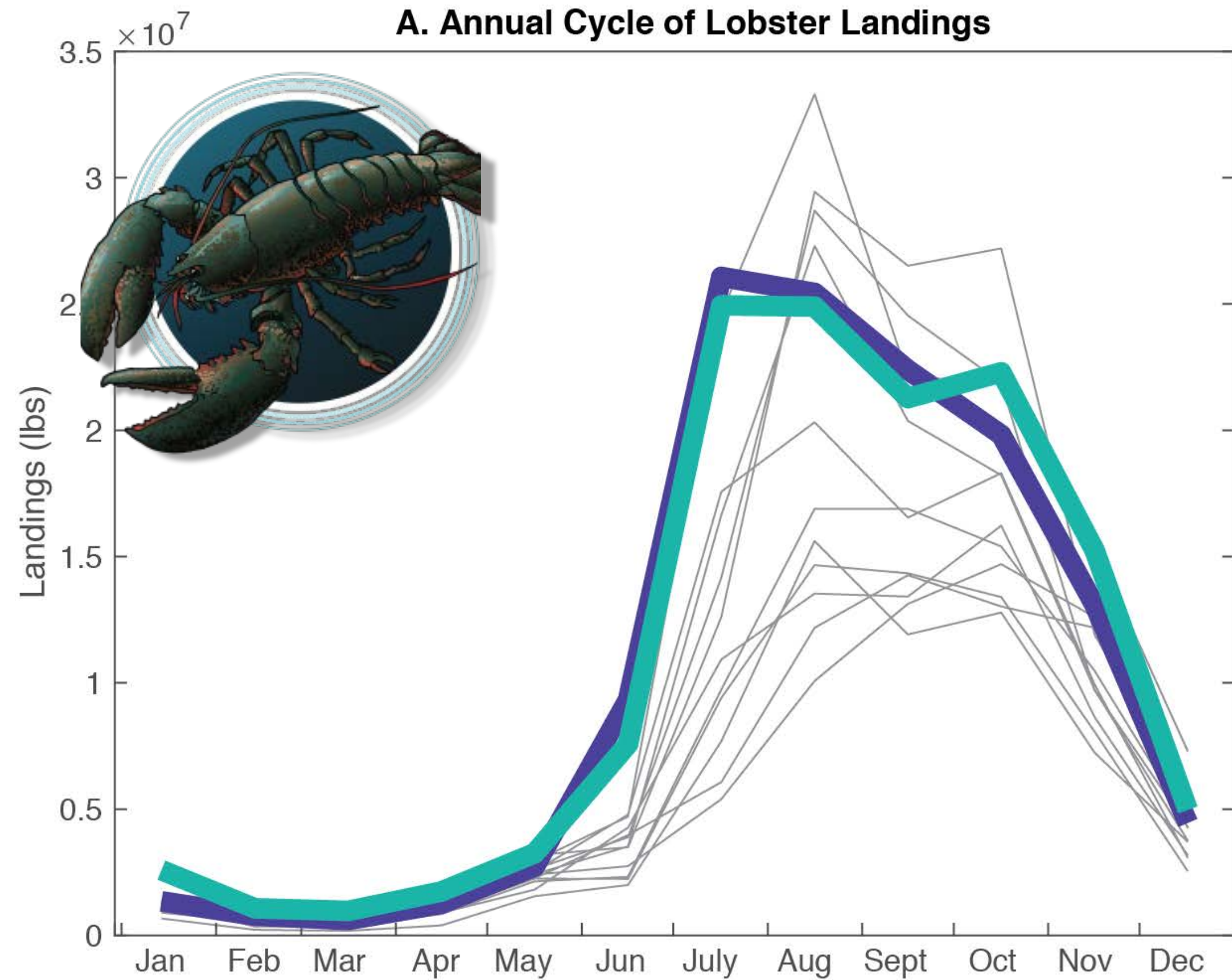
# 2012 Northwest Atlantic Heatwave



- 2012: low



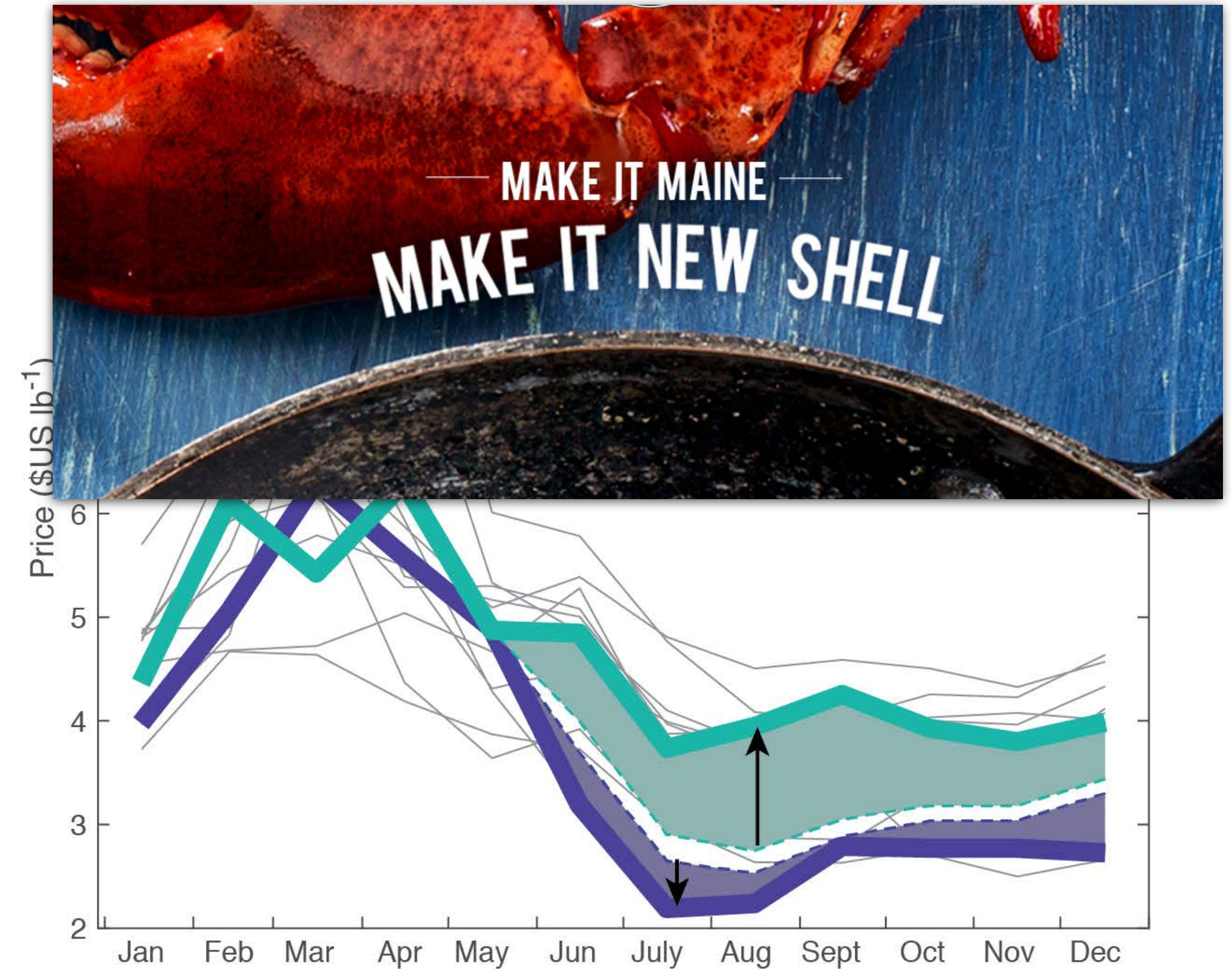
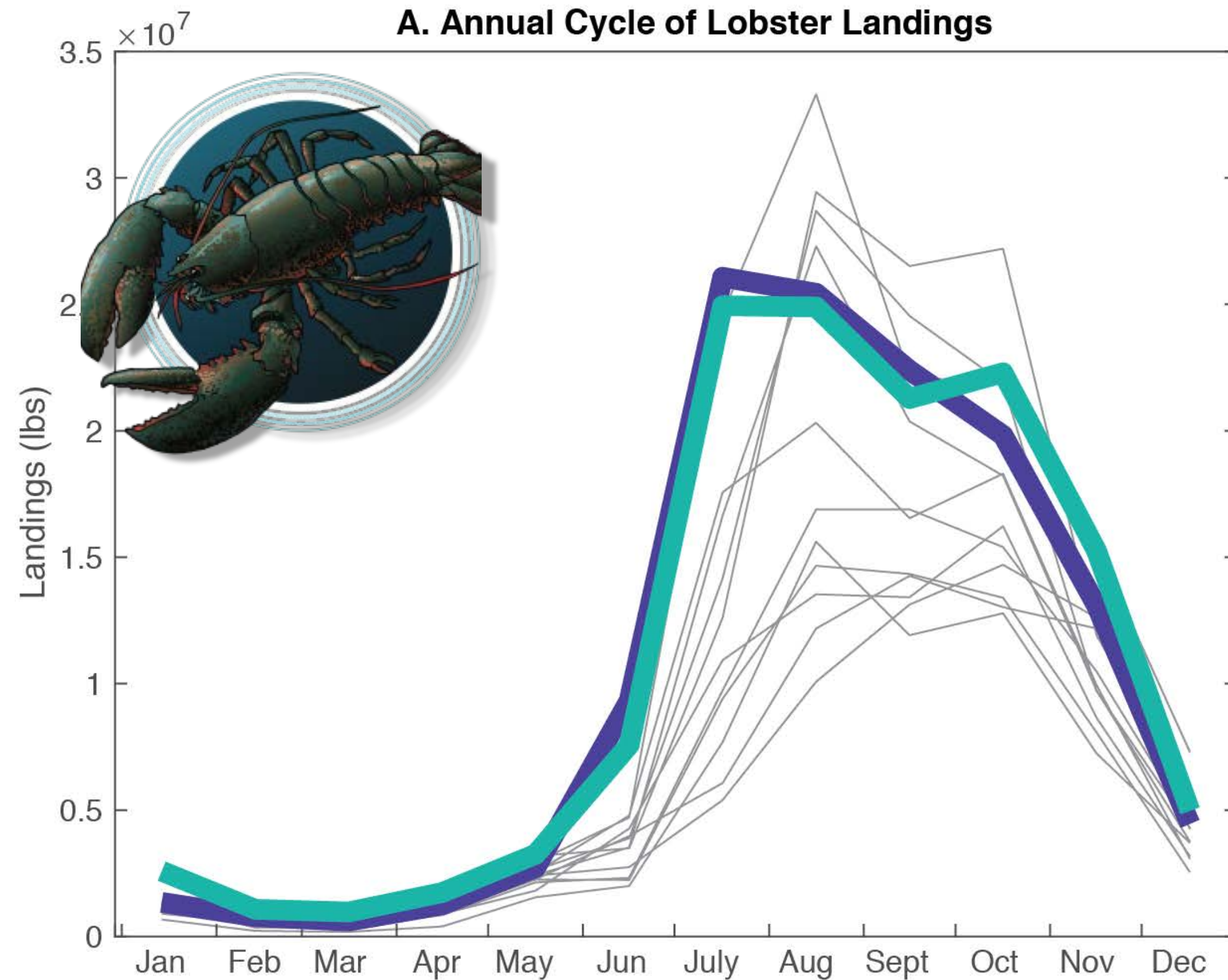
# 2012 Northwest Atlantic Heatwave



- 2012: low
- 2016: high



# 2012 Northwest Atlantic Heatwave



- 2012: low
- 2016: high



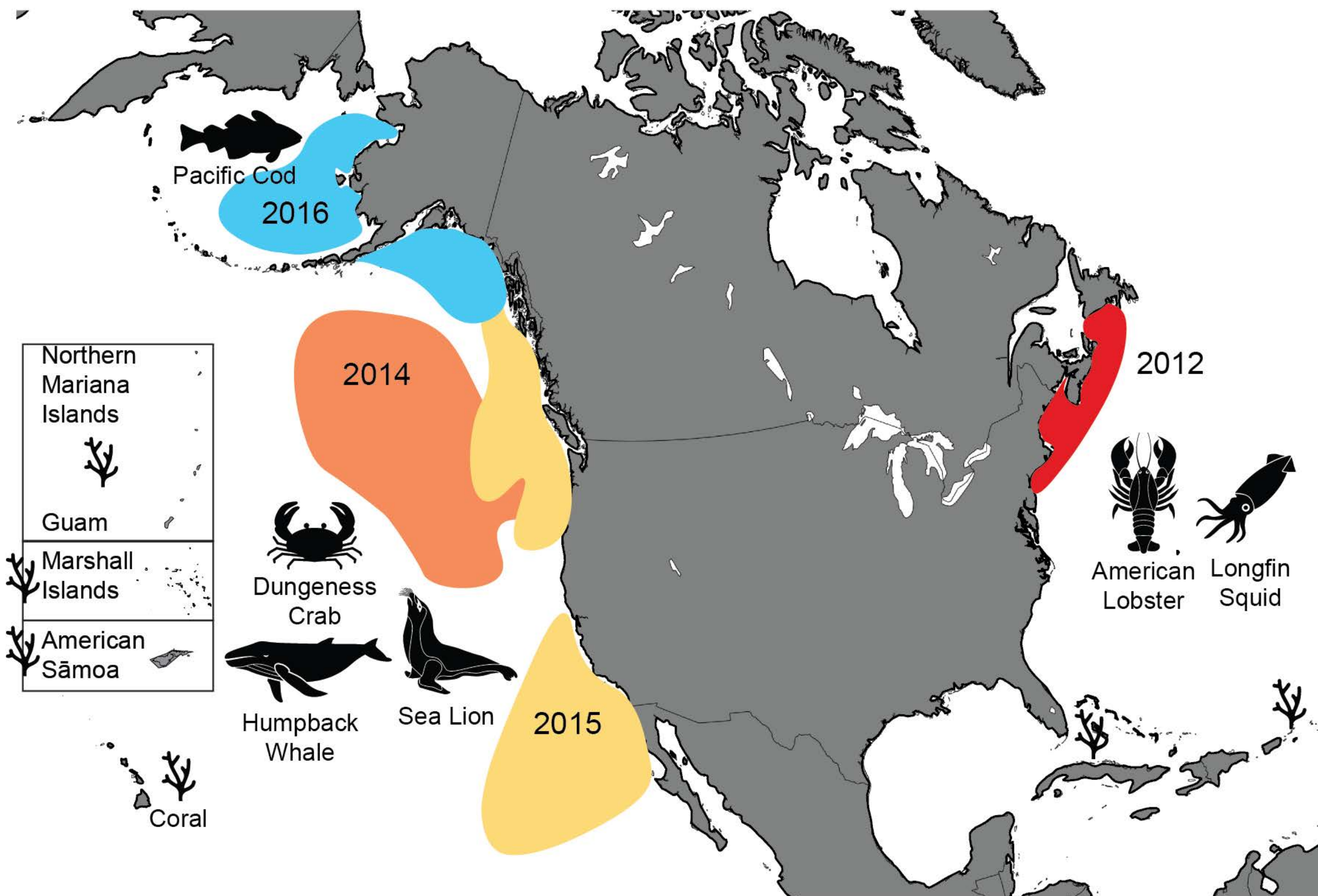
# Heatwaves & other surprises

- Oceans and Marine Resources Chapter, 4th US National Climate Assessment



# Heatwaves & other surprises

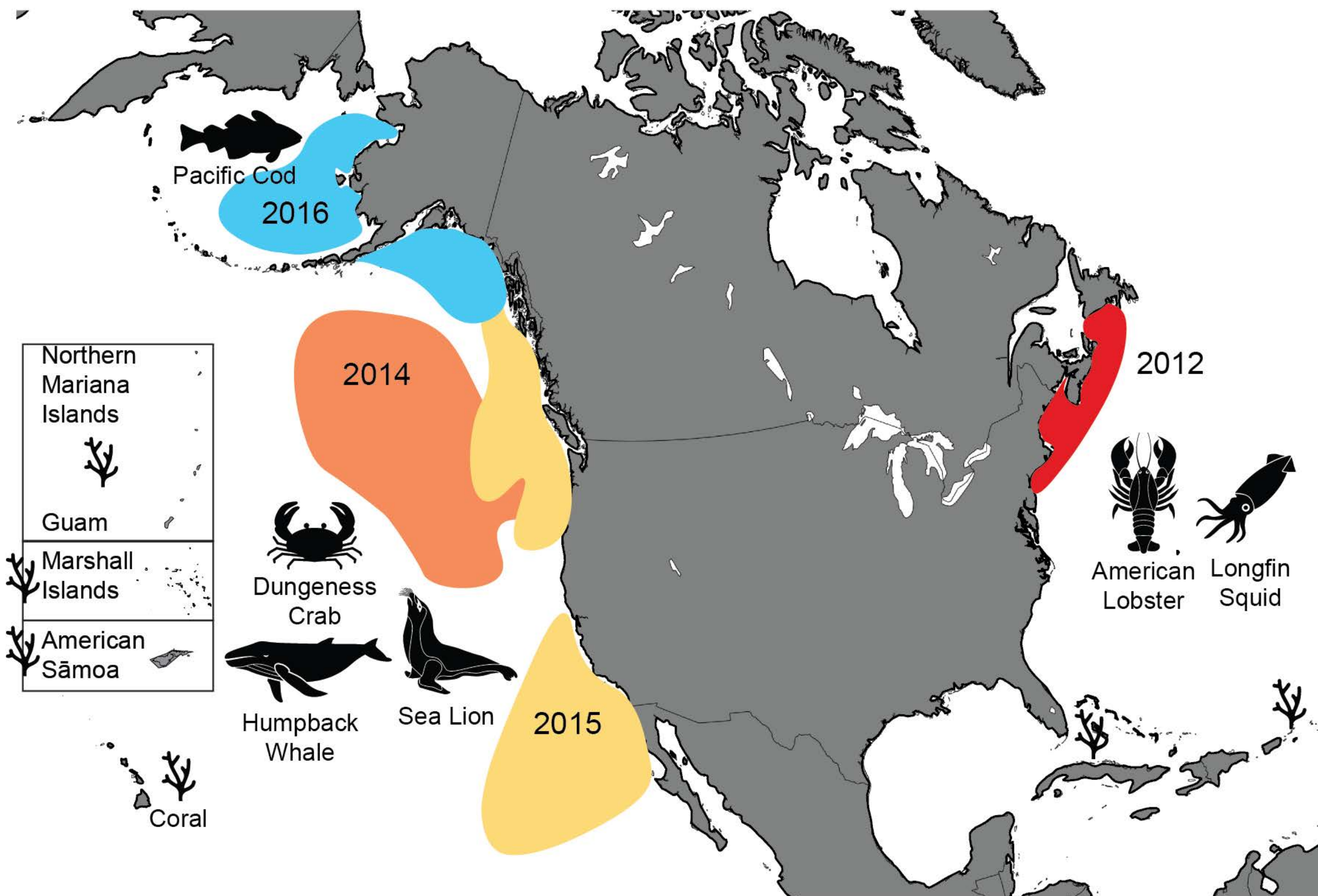
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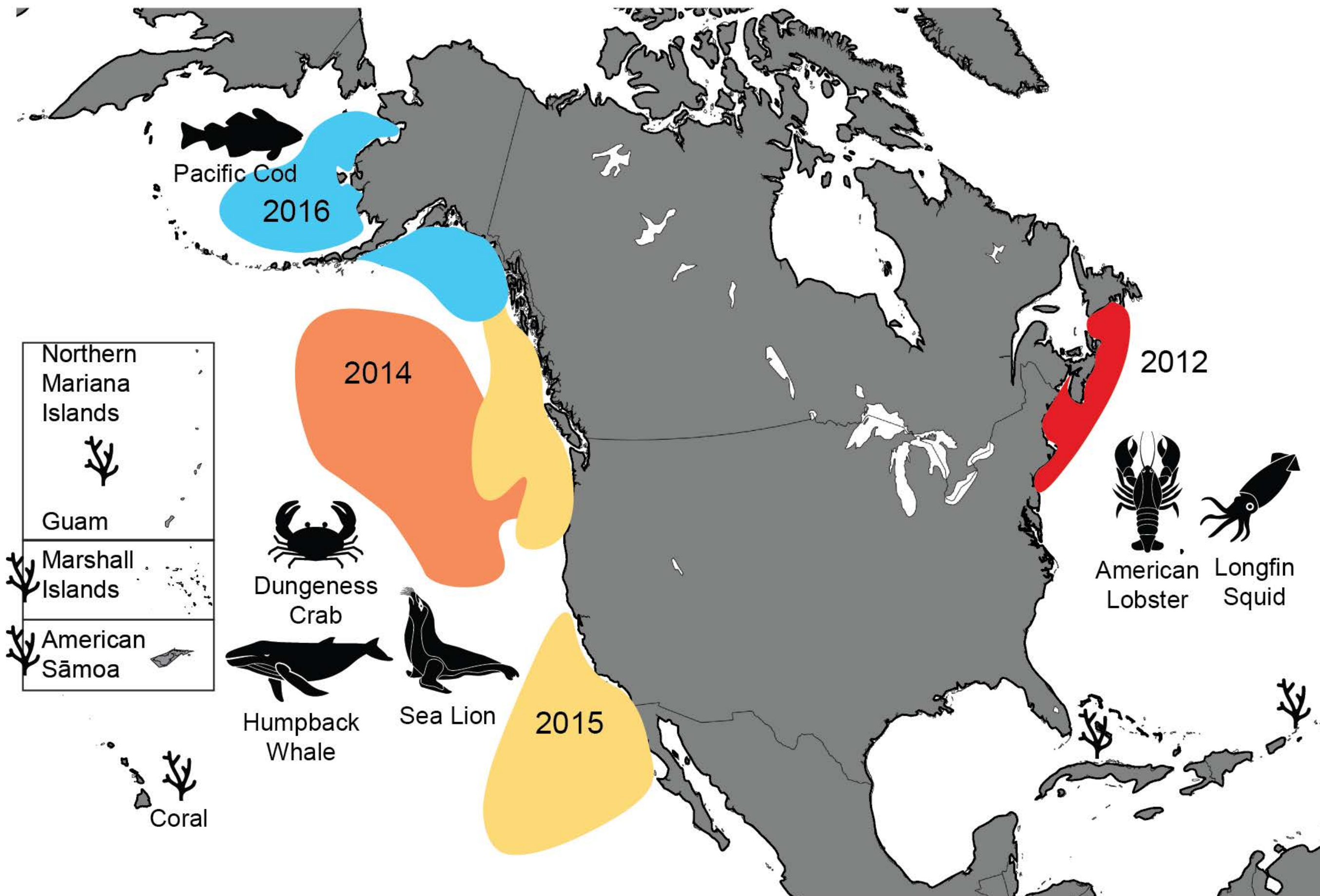


- risk of significant impacts from extreme events



# Heatwaves & other surprises

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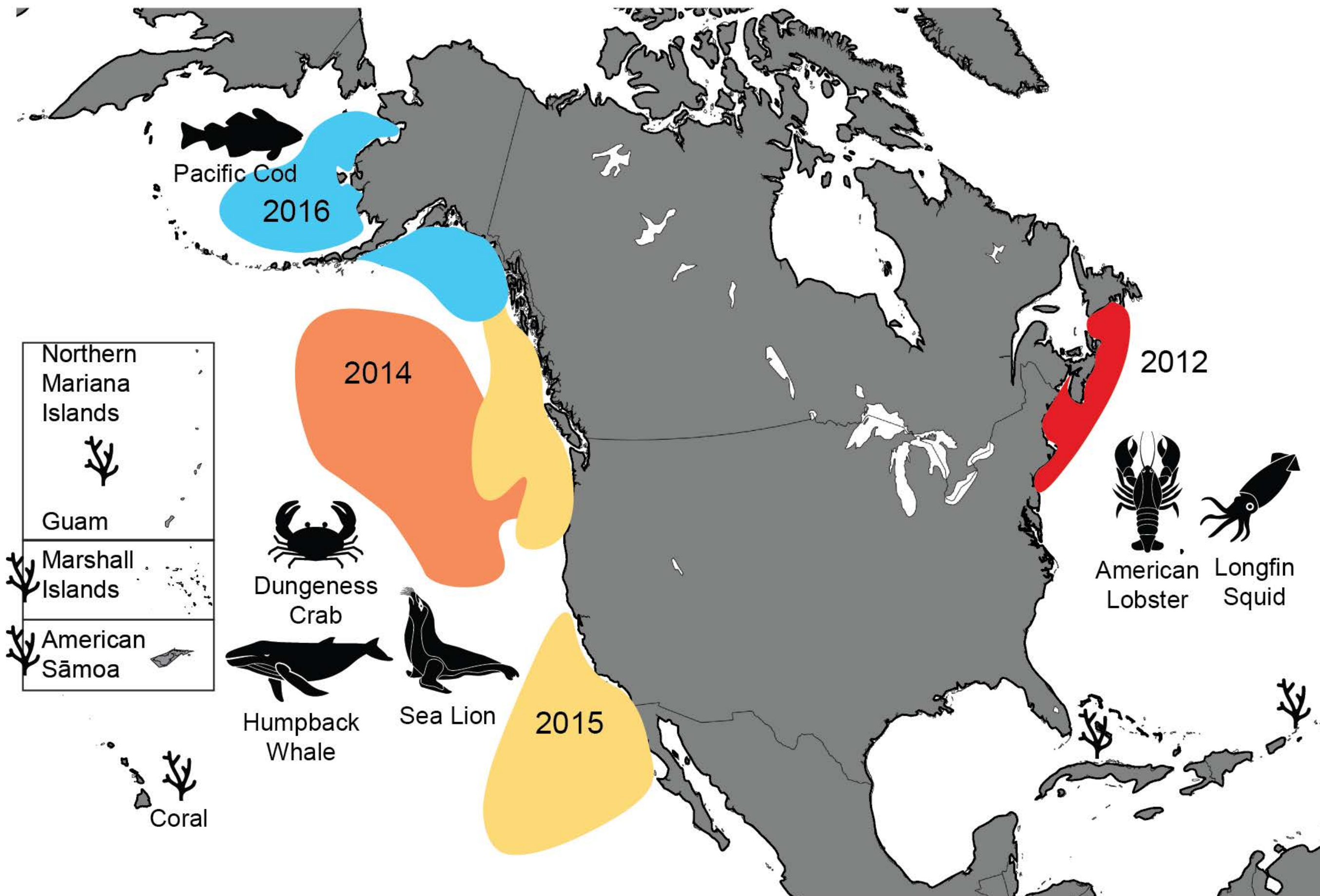


- risk of significant impacts from extreme events
- unusual events will become more common and more severe in the future



# Heatwaves & other surprises

- Oceans and Marine Resources Chapter, 4th US National Climate Assessment



- risk of significant impacts from extreme events
- unusual events will become more common and more severe in the future
- they expose vulnerabilities that can motivate change