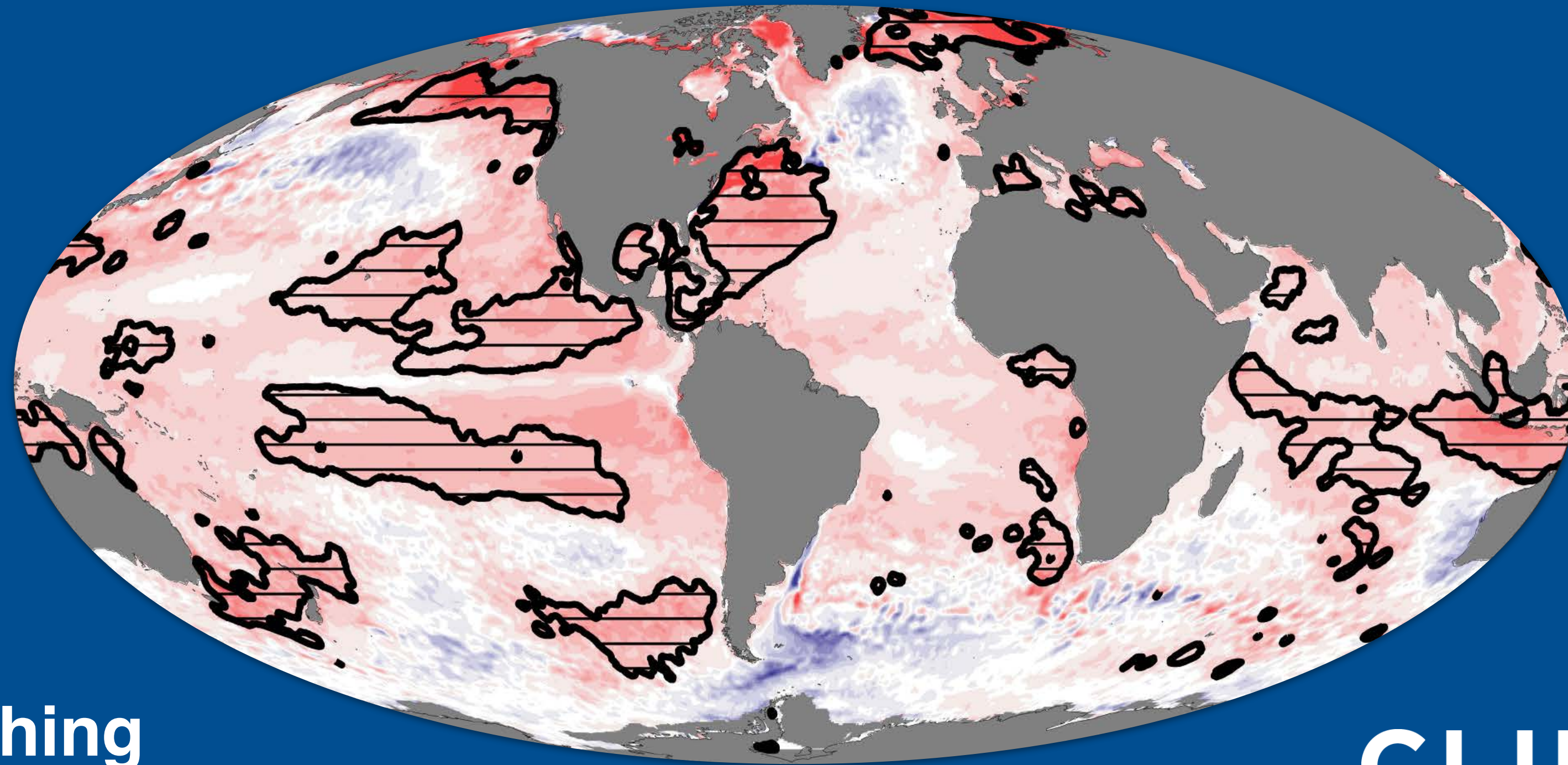


Marine Heatwaves in the NW Atlantic



Andrew J. Pershing
@sci_officer,
apershing@climatecentral.org



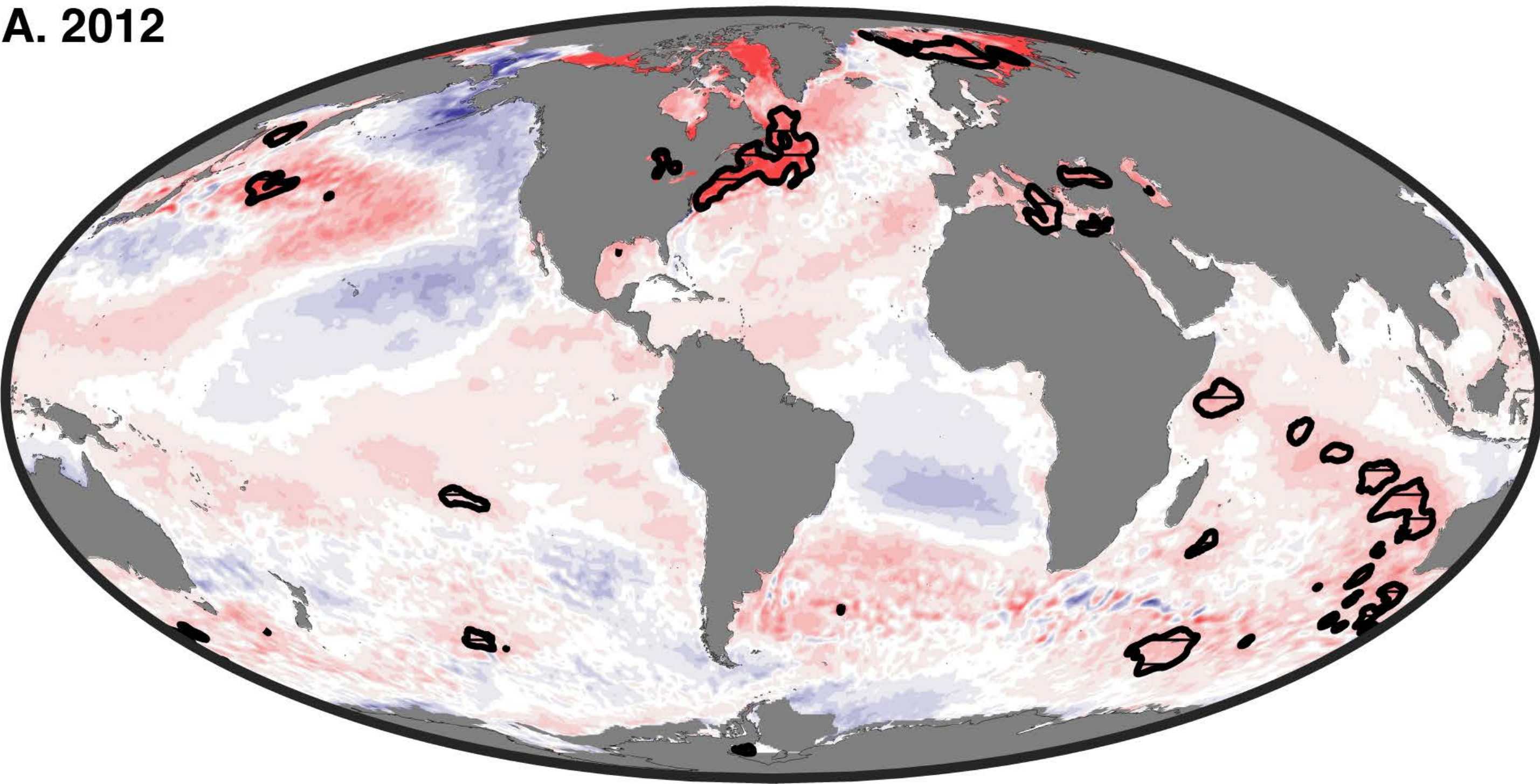
Climate Central

- 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

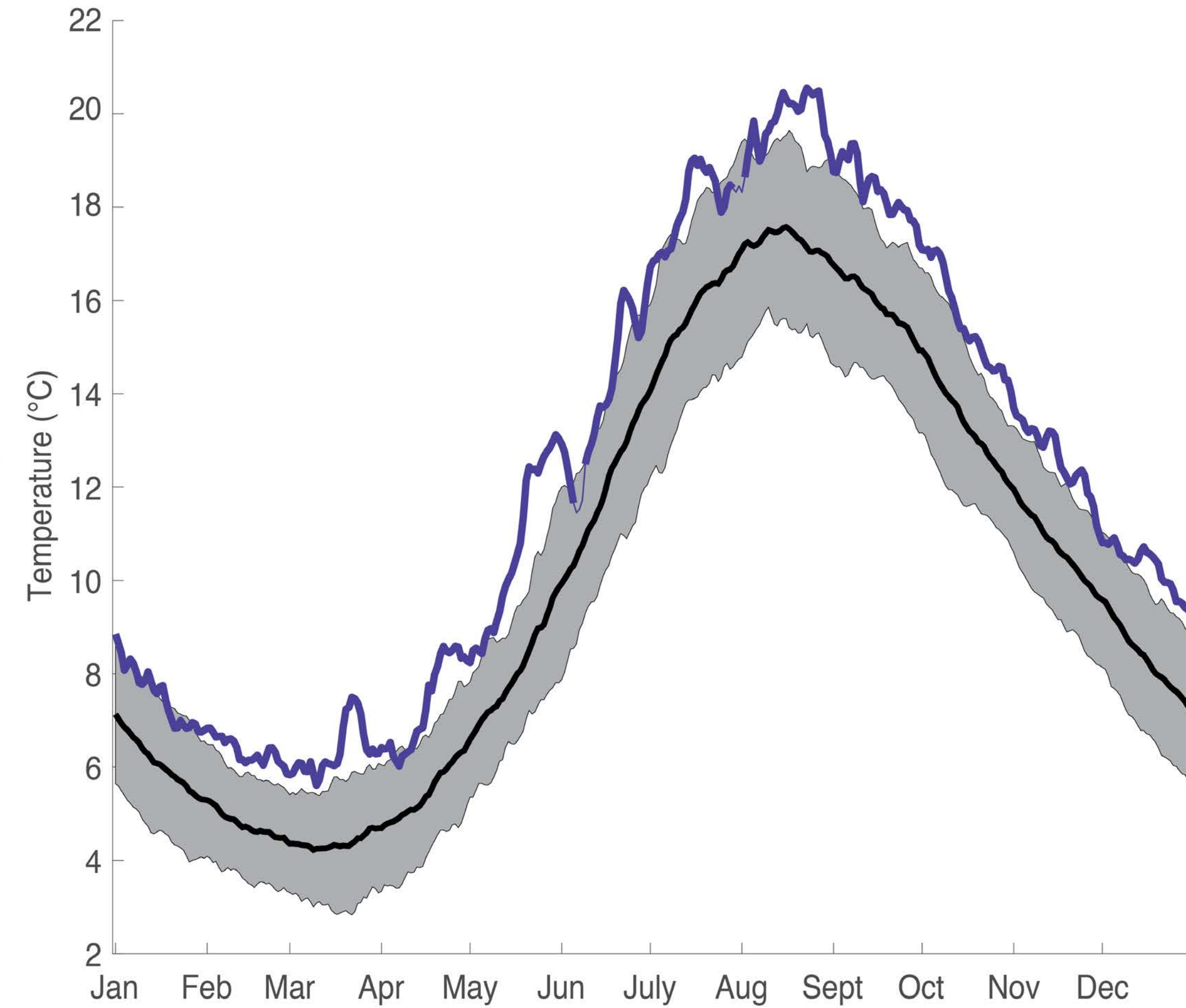
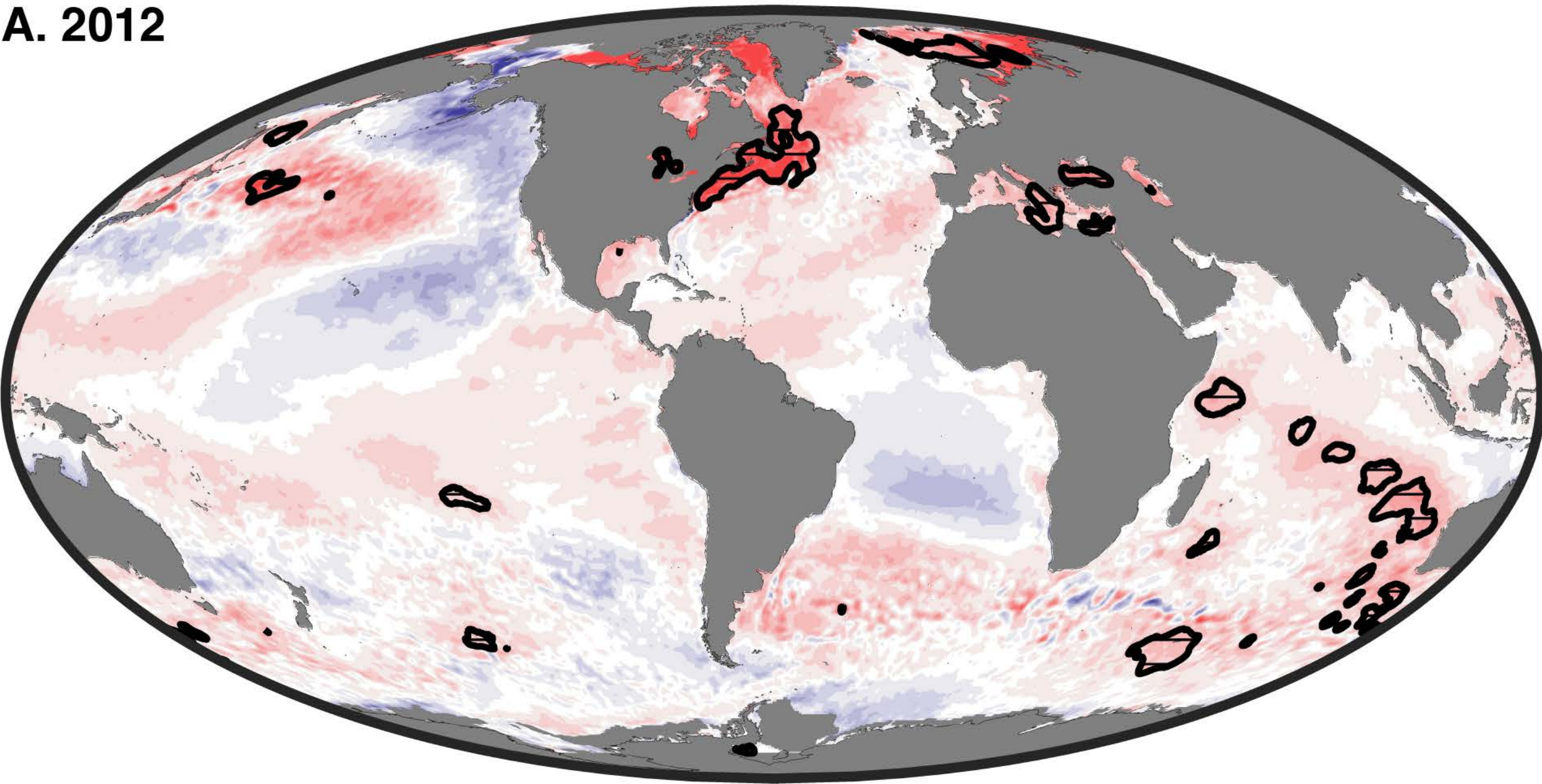
2012 Northwest Atlantic Heatwave

A. 2012



2012 Northwest Atlantic Heatwave

A. 2012



2012 Northwest Atlantic Heatwave

2012 Northwest Atlantic Heatwave



squid, National Undersea Research Center, U. Connecticut

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

2012 Northwest Atlantic Heatwave



squid, National Undersea Research Center, U. Connecticut
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black sea bass, Gulf of Maine Research Institute

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black sea bass, Gulf of Maine Research Institute



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

2012 Northwest Atlantic Heatwave



squid, National Undersea Research Center, U. Connecticut
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puffin, http://en.wikipedia.org/wiki/Atlantic_puffin

2012 Northwest Atlantic Heatwave



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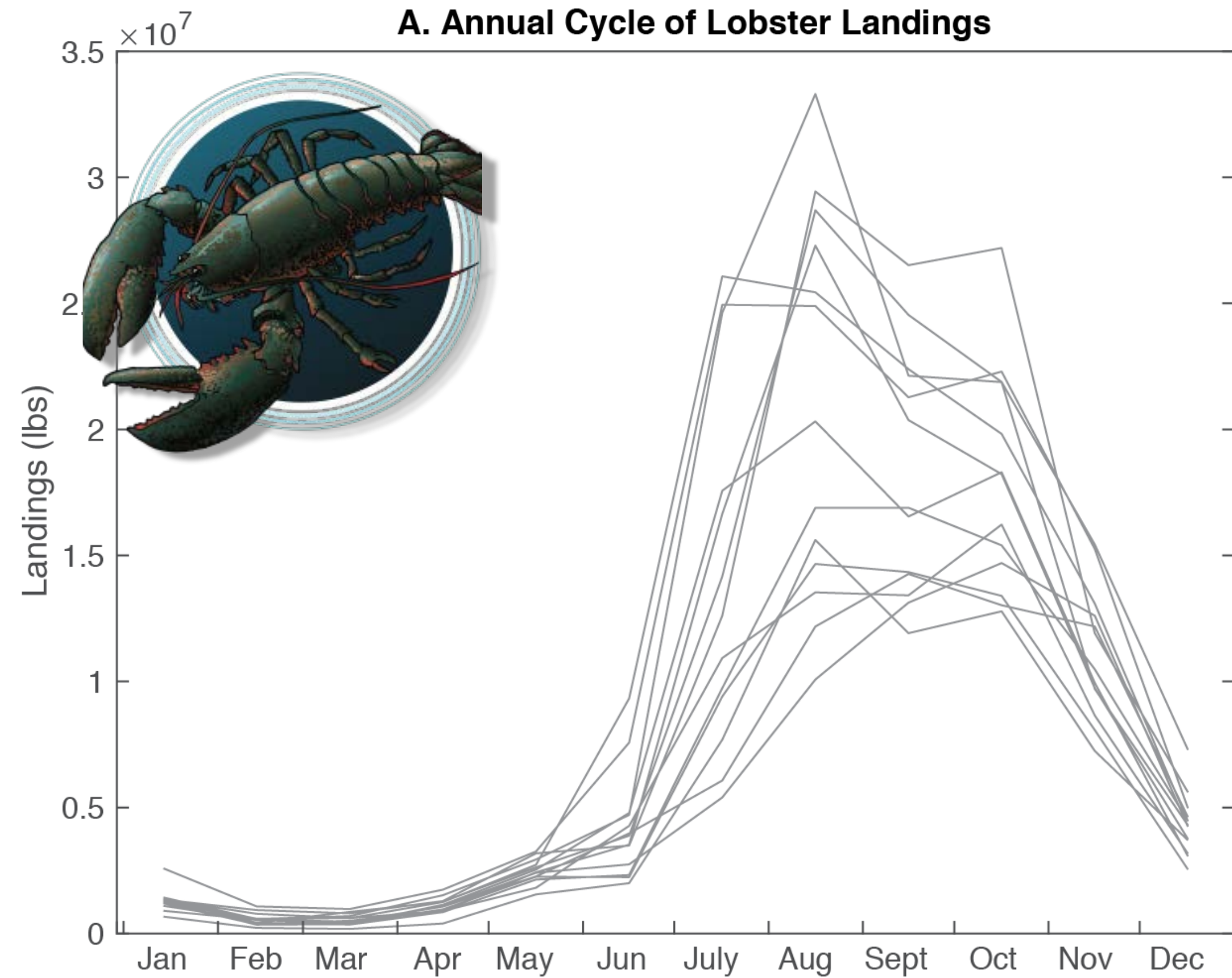


butterfish, NOAA
<https://www.greateratlantic.fisheries.noaa.gov/sustainable/index.html>

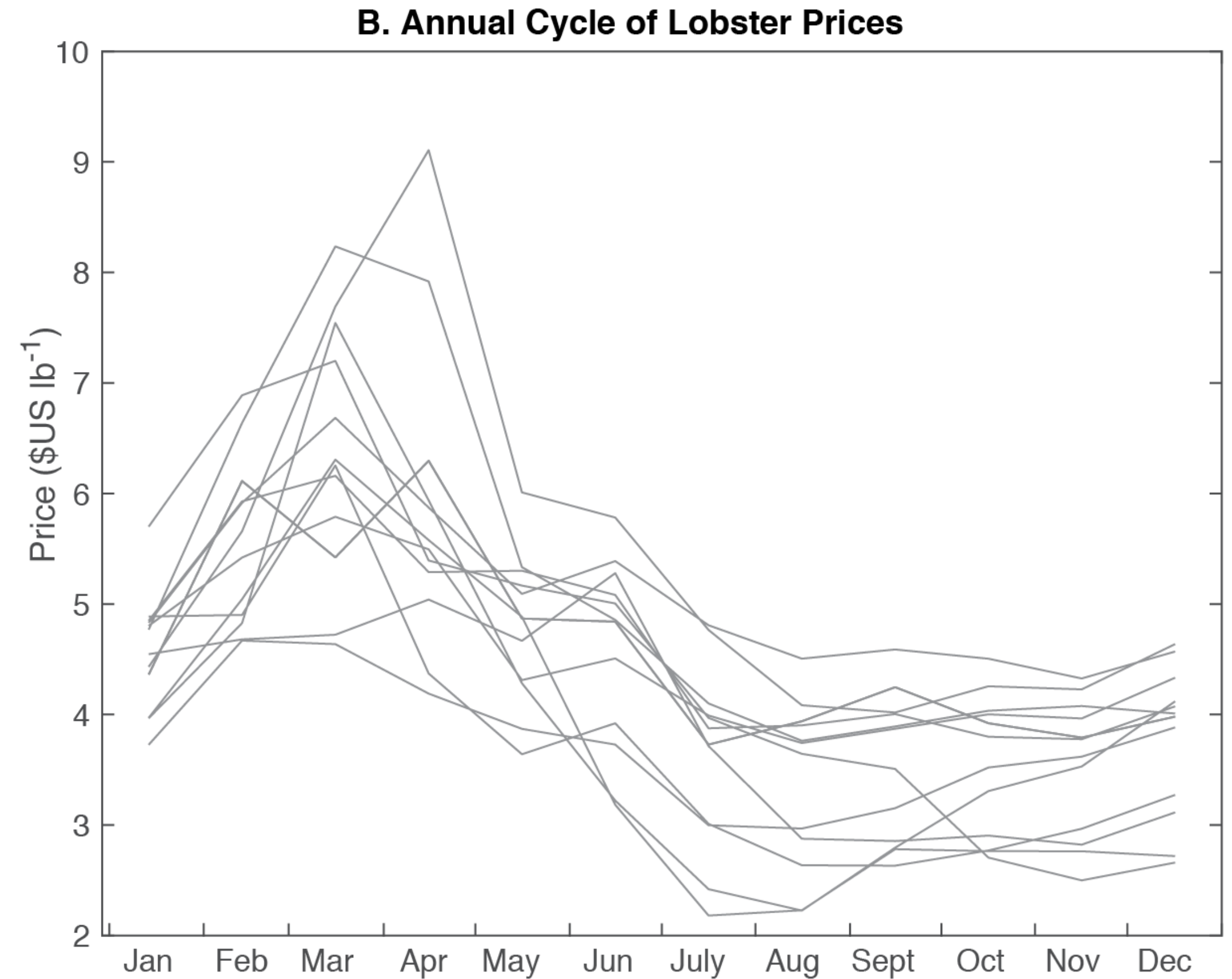
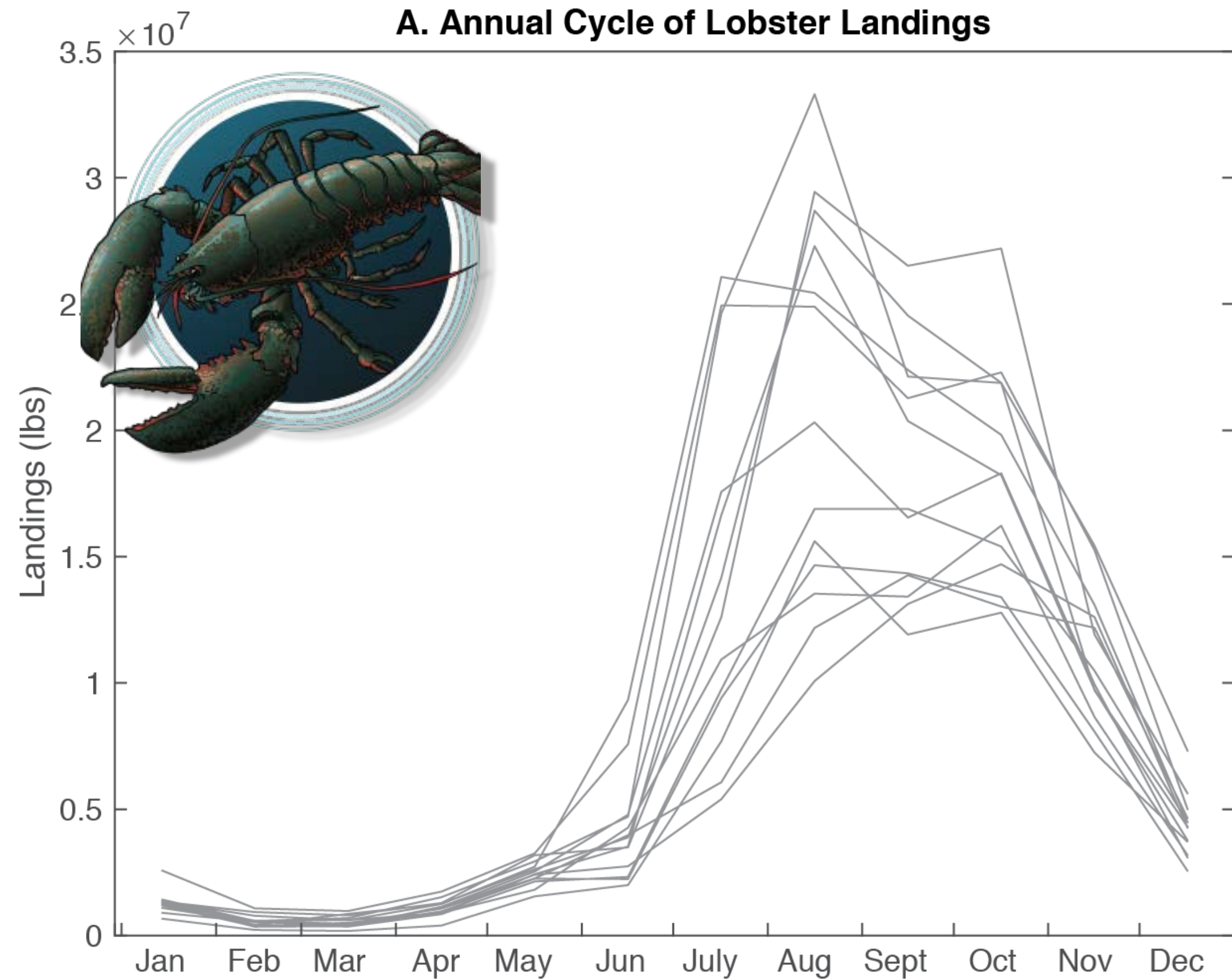


puffin, http://en.wikipedia.org/wiki/Atlantic_puffin

2012 Northwest Atlantic Heatwave

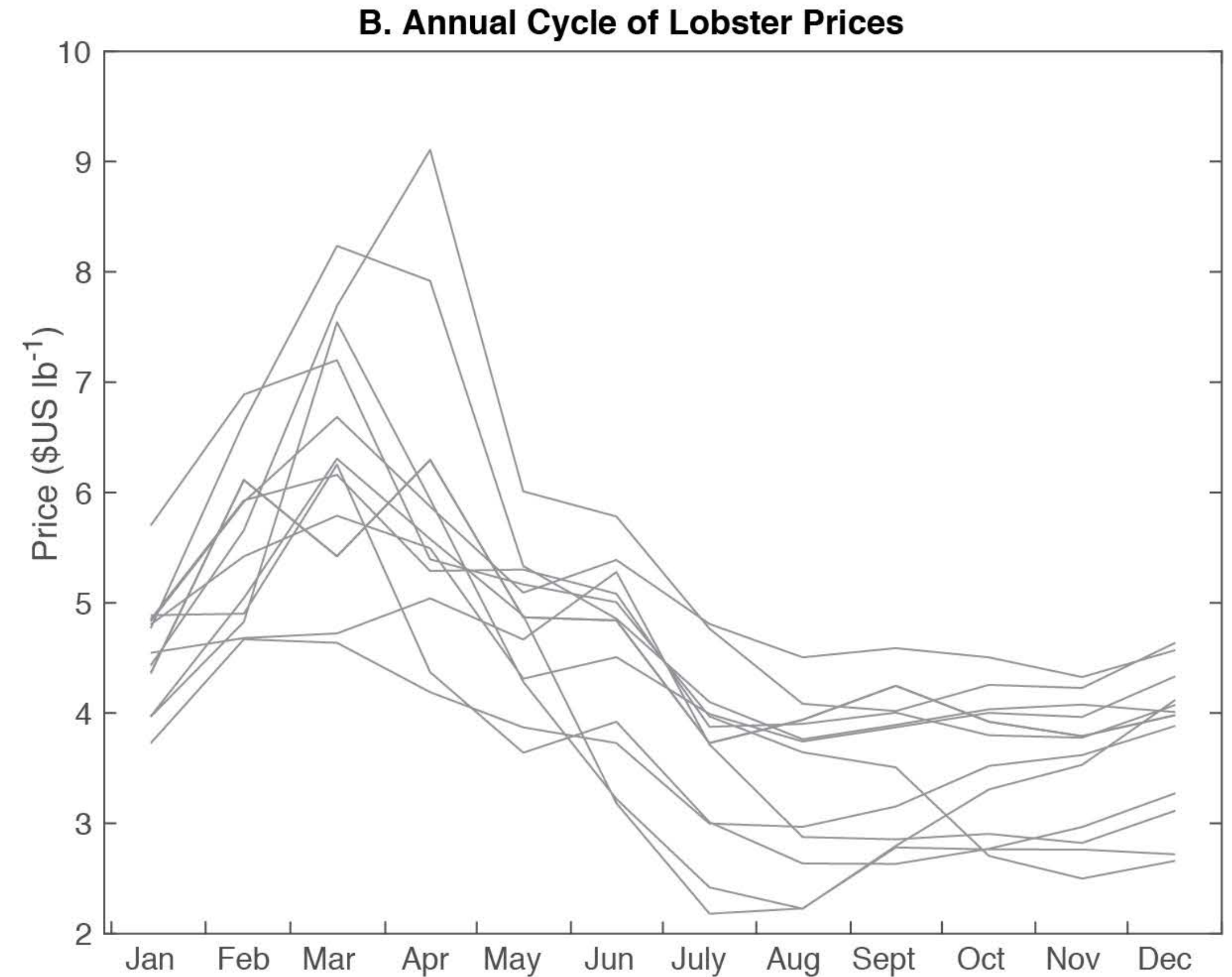
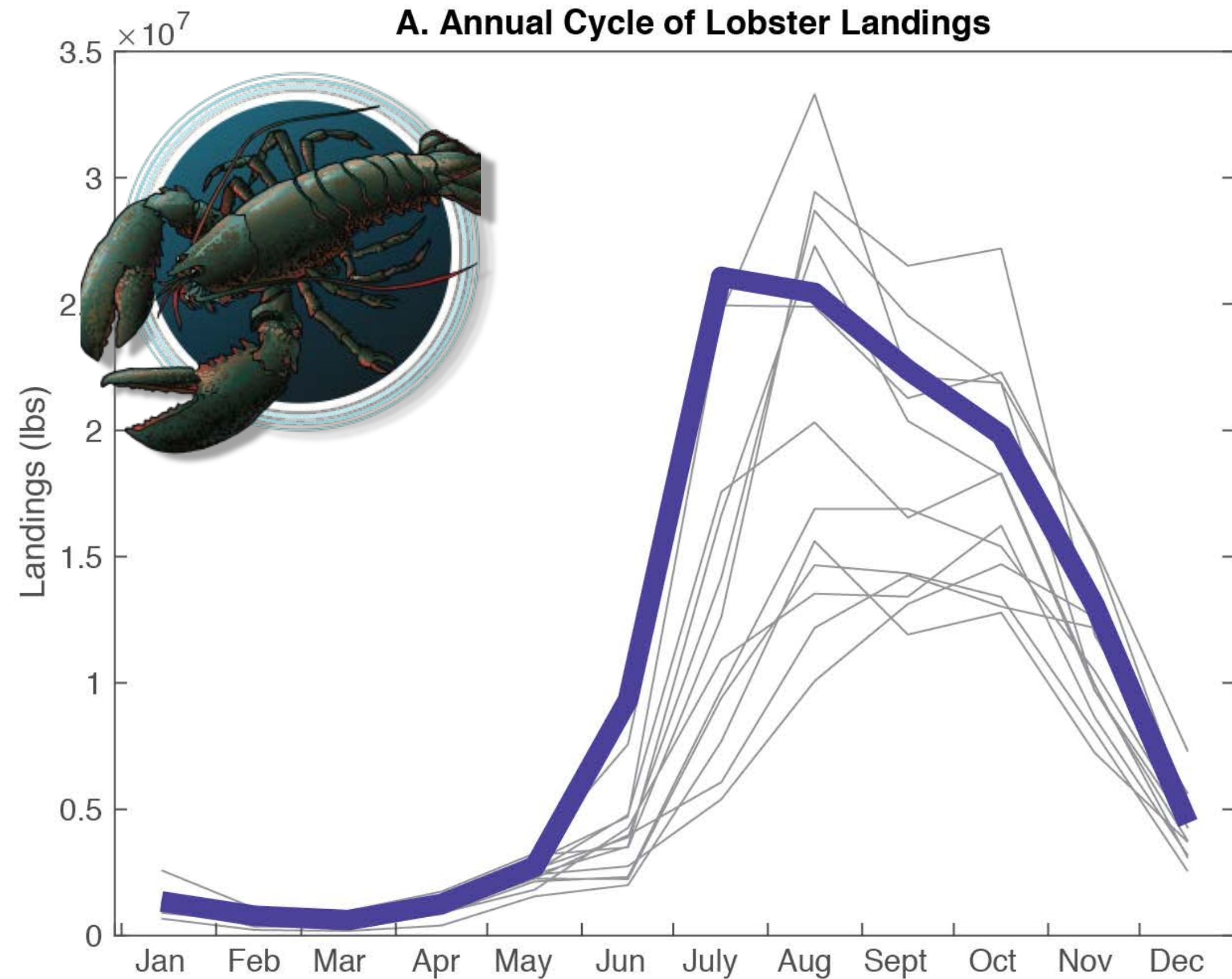


2012 Northwest Atlantic Heatwave



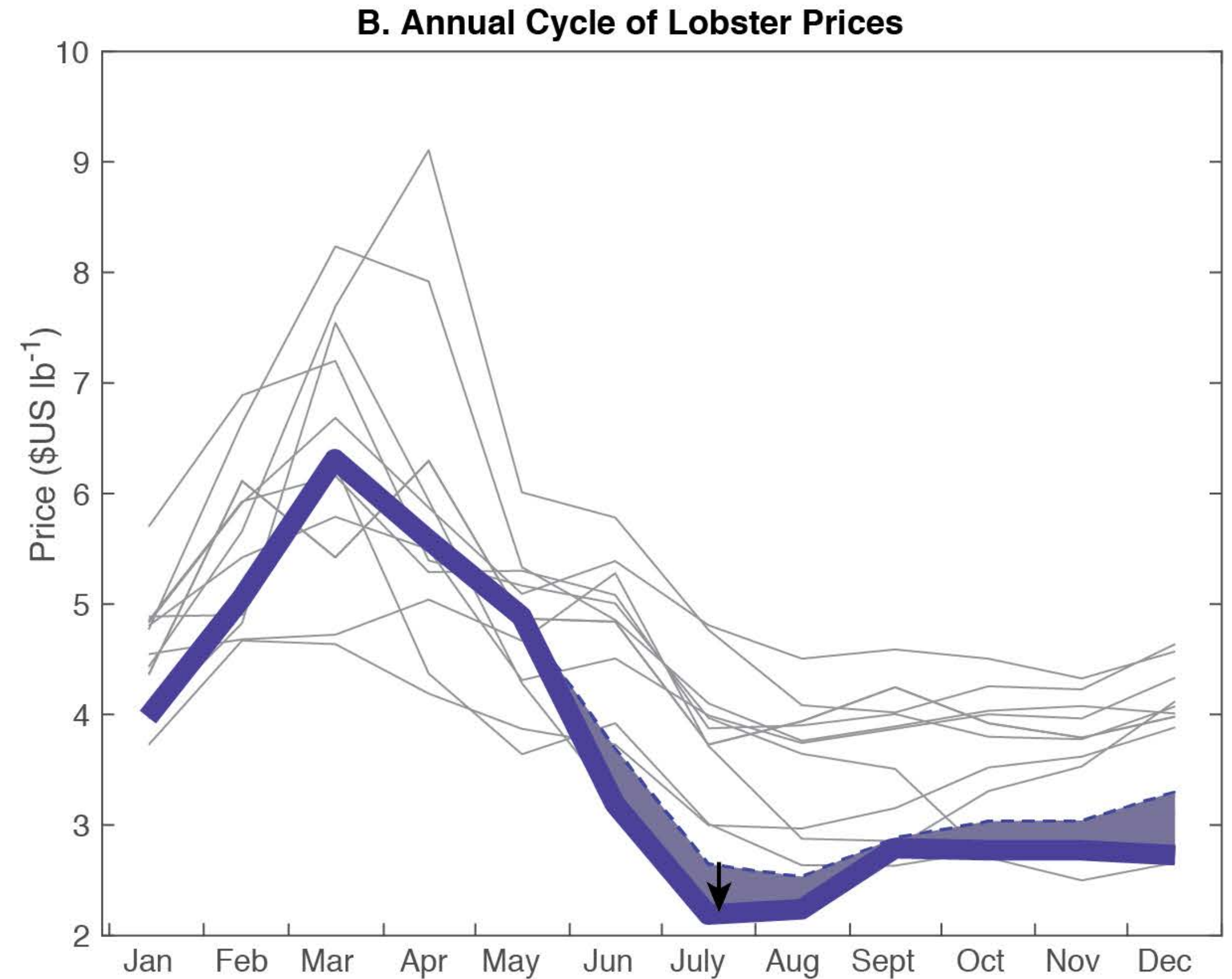
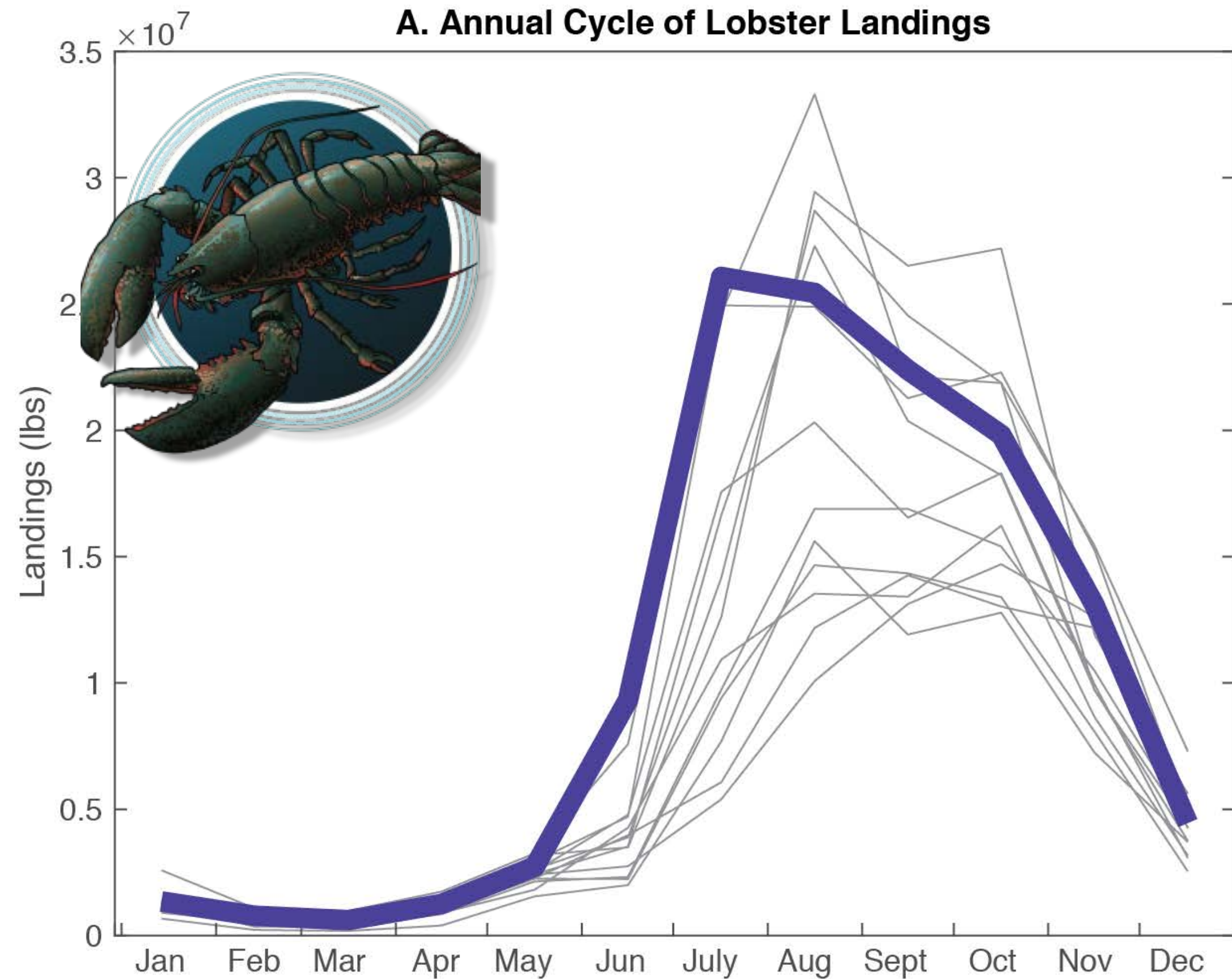
- Lobster price is seasonal

2012 Northwest Atlantic Heatwave



- Lobster price is seasonal

2012 Northwest Atlantic Heatwave

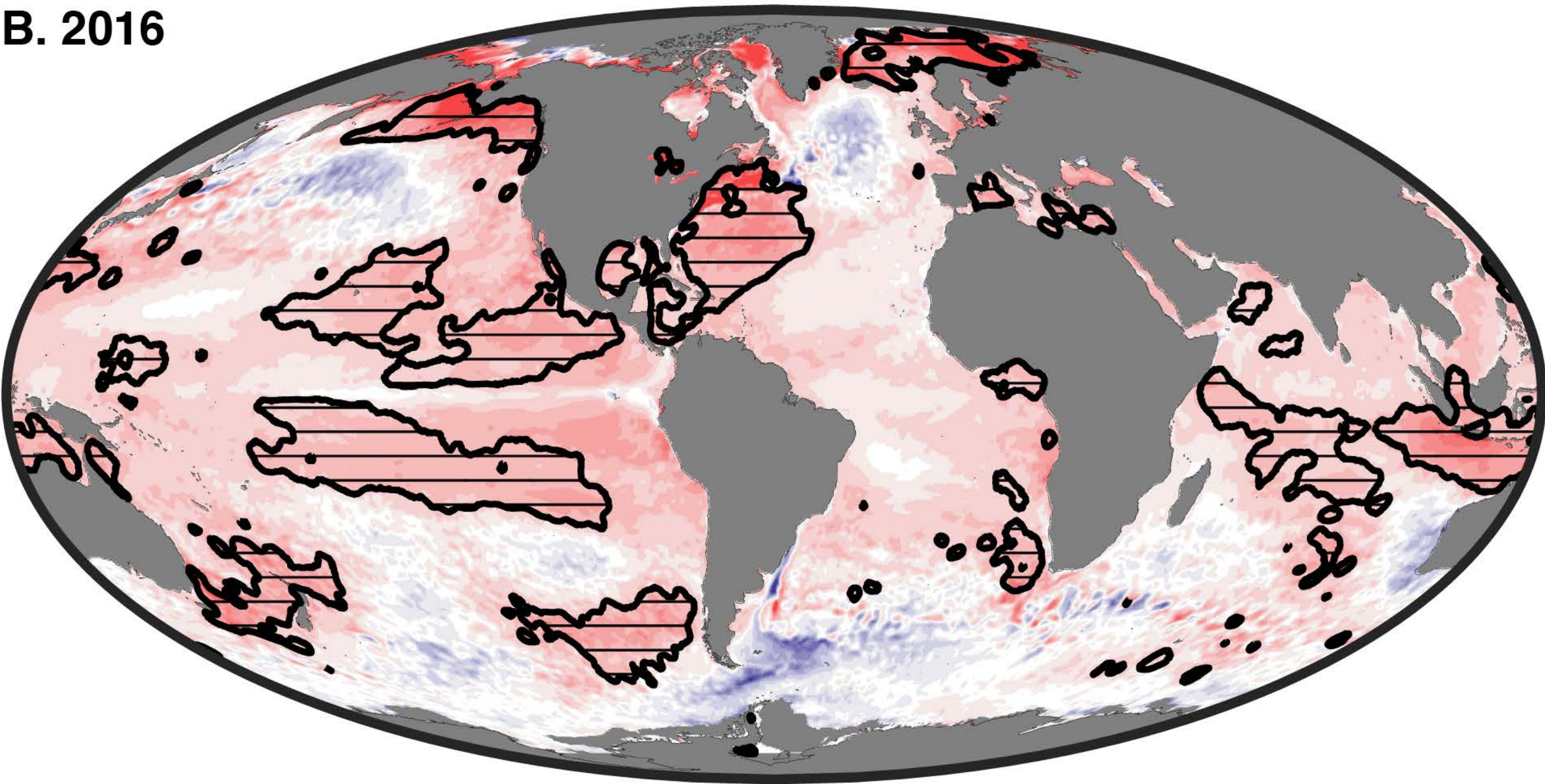


- Lobster price is seasonal
- 2012: low

2016 Northwest Atlantic Heatwave

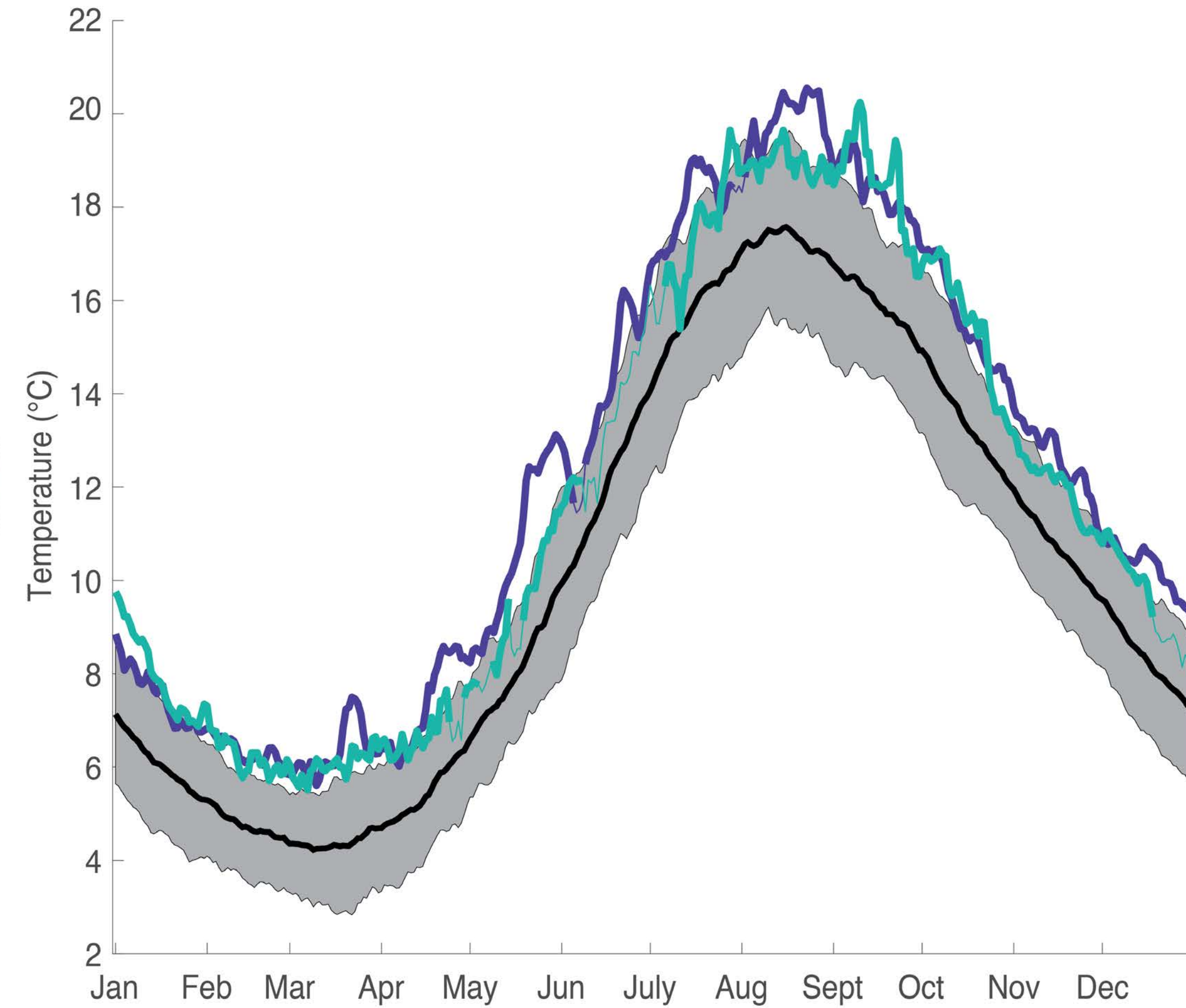
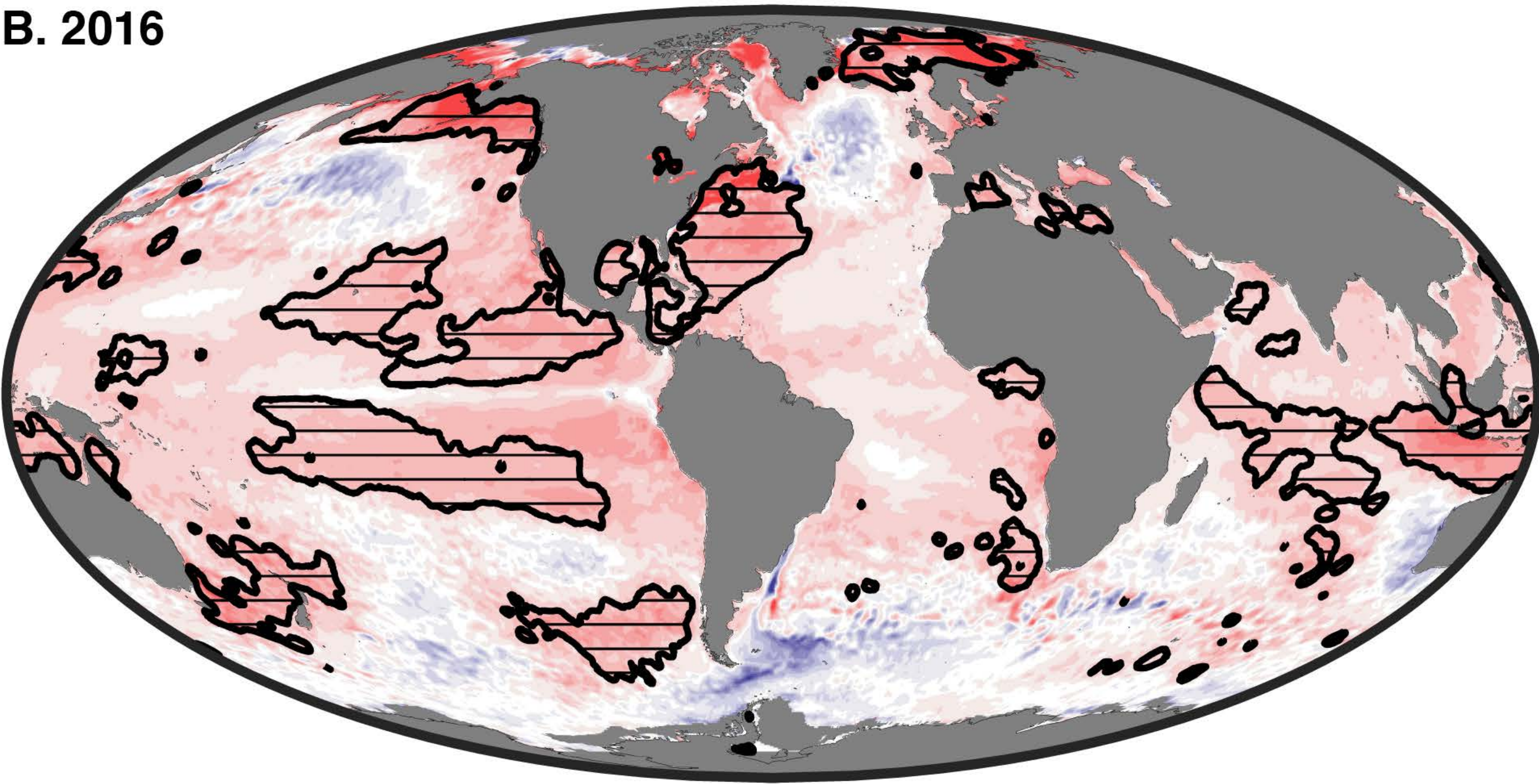
2016 Northwest Atlantic Heatwave

B. 2016

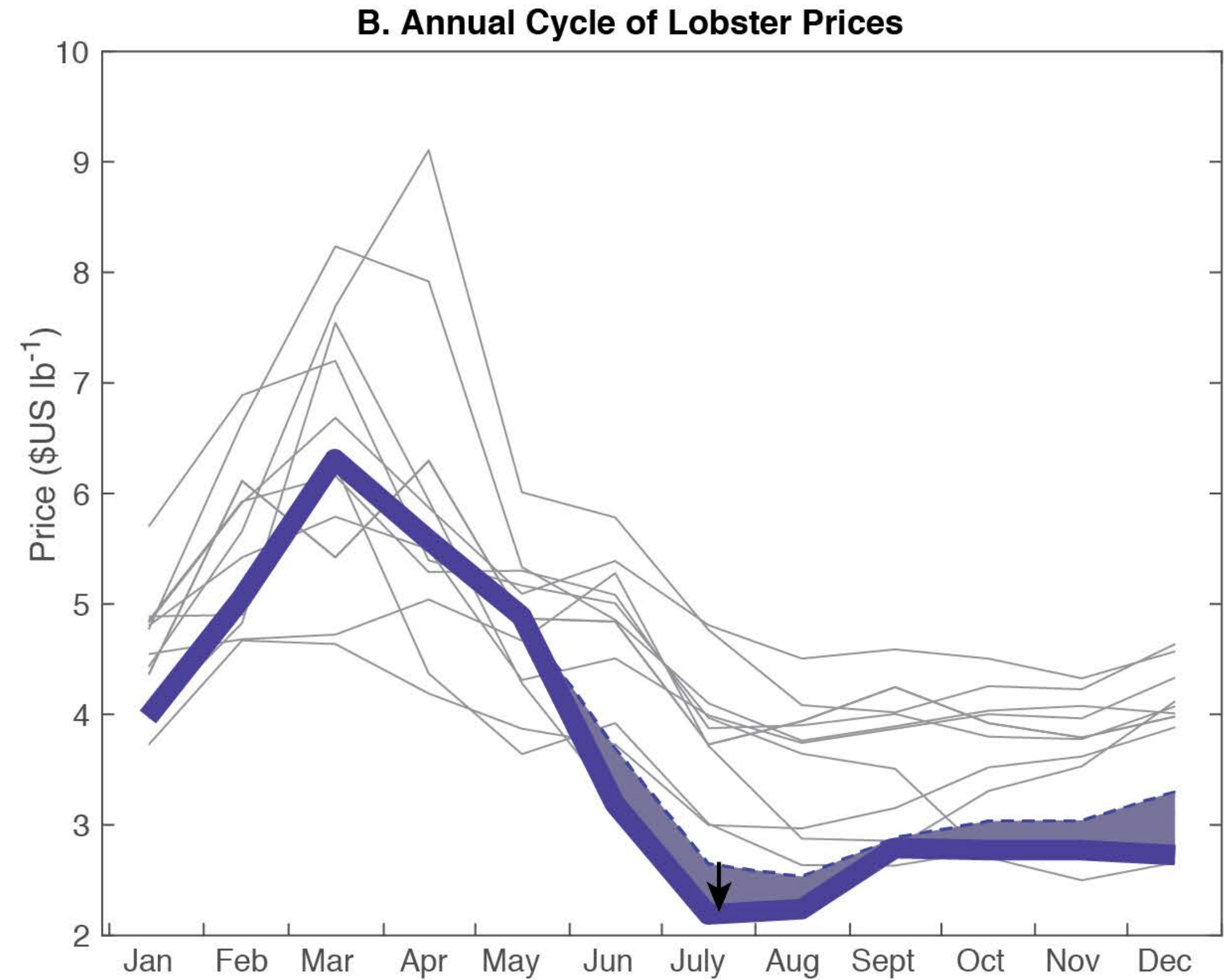
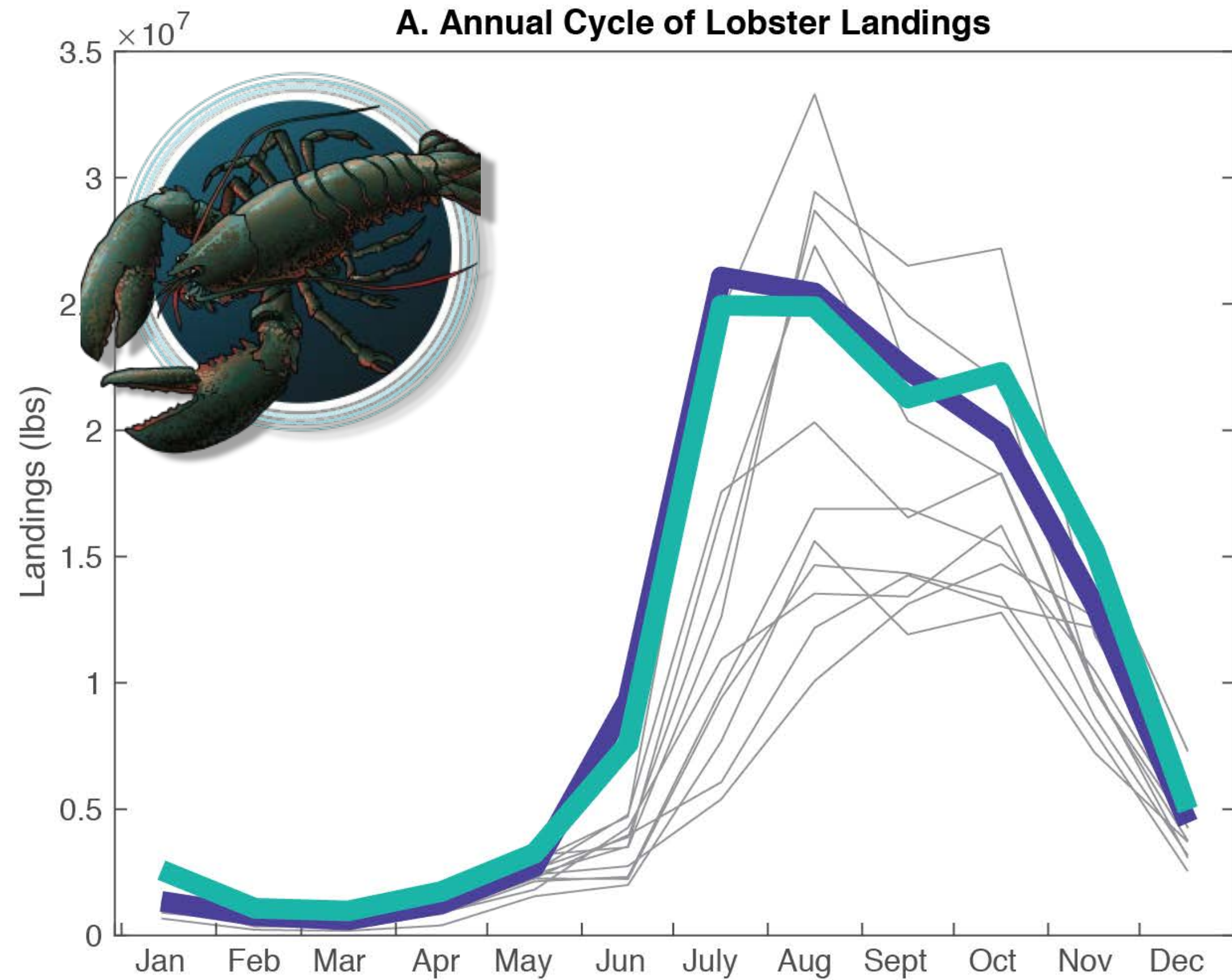


2016 Northwest Atlantic Heatwave

B. 2016

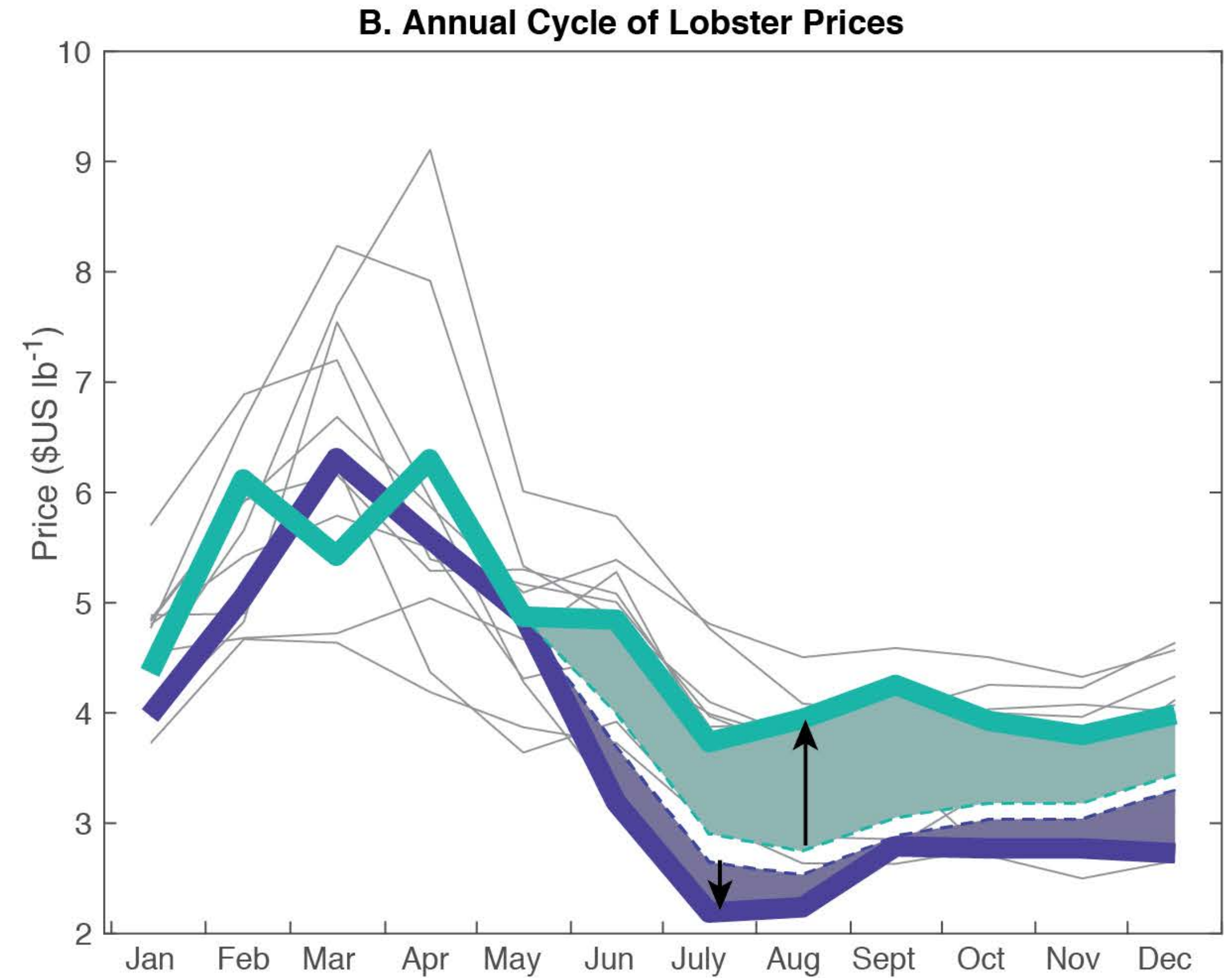
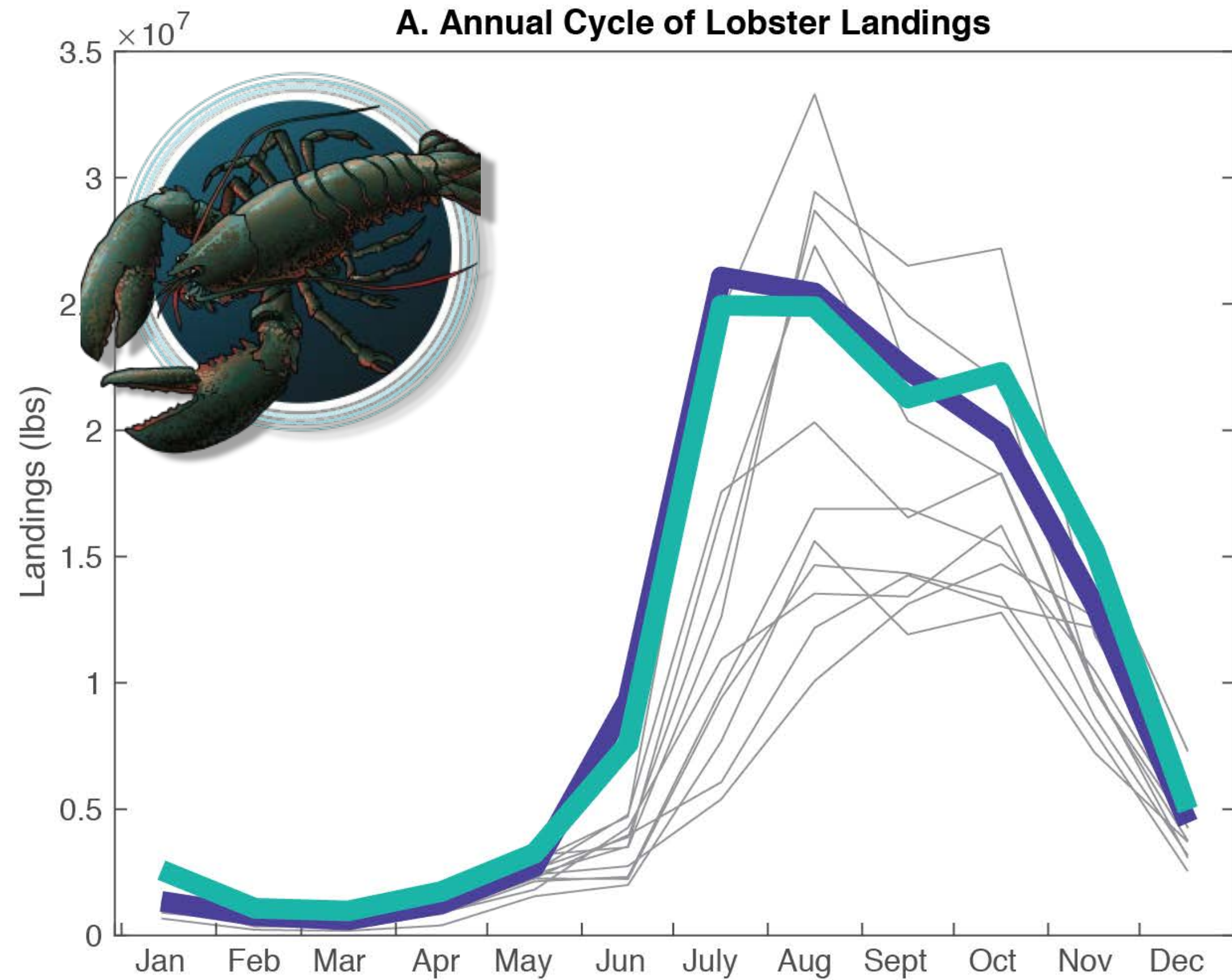


2012 Northwest Atlantic Heatwave



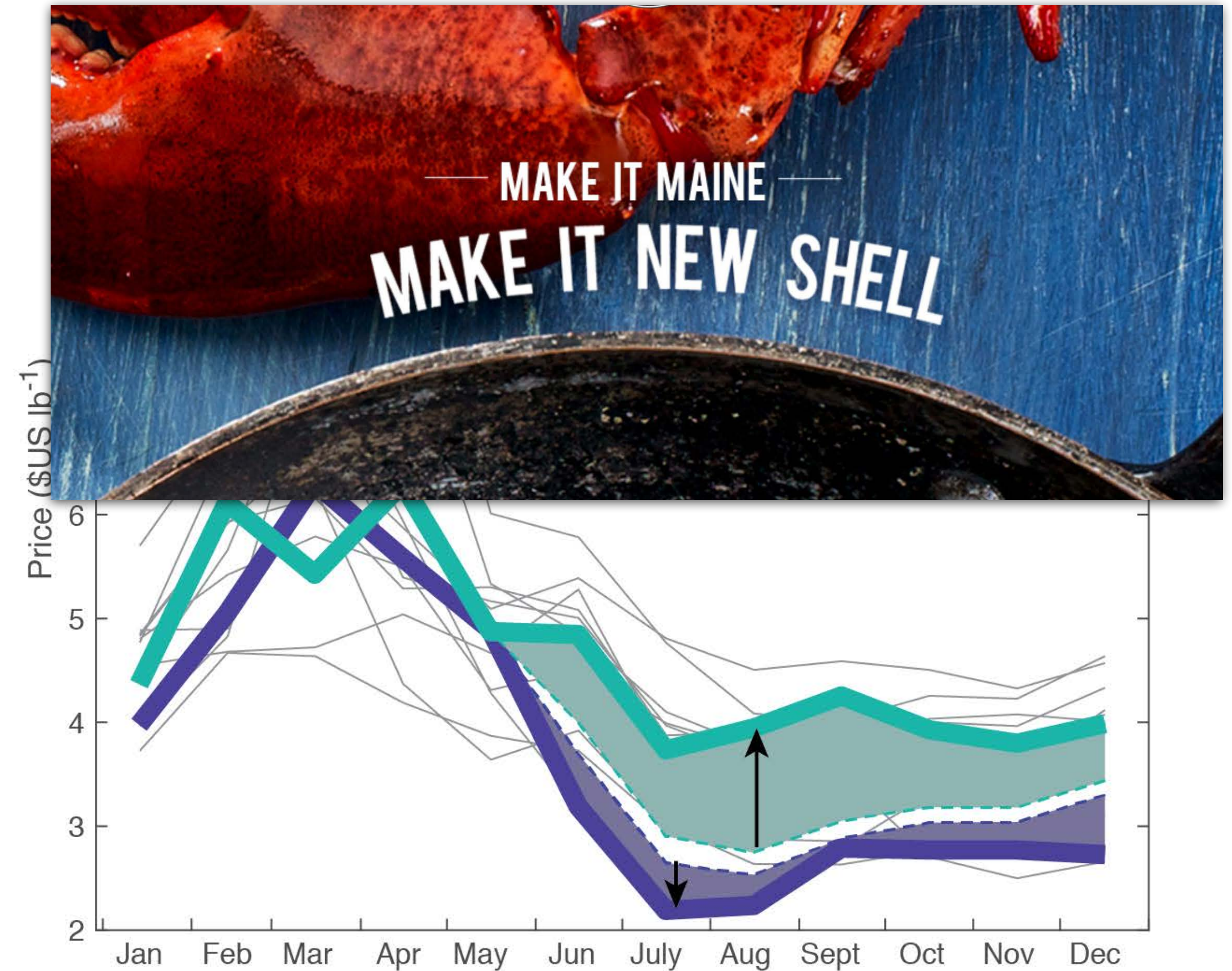
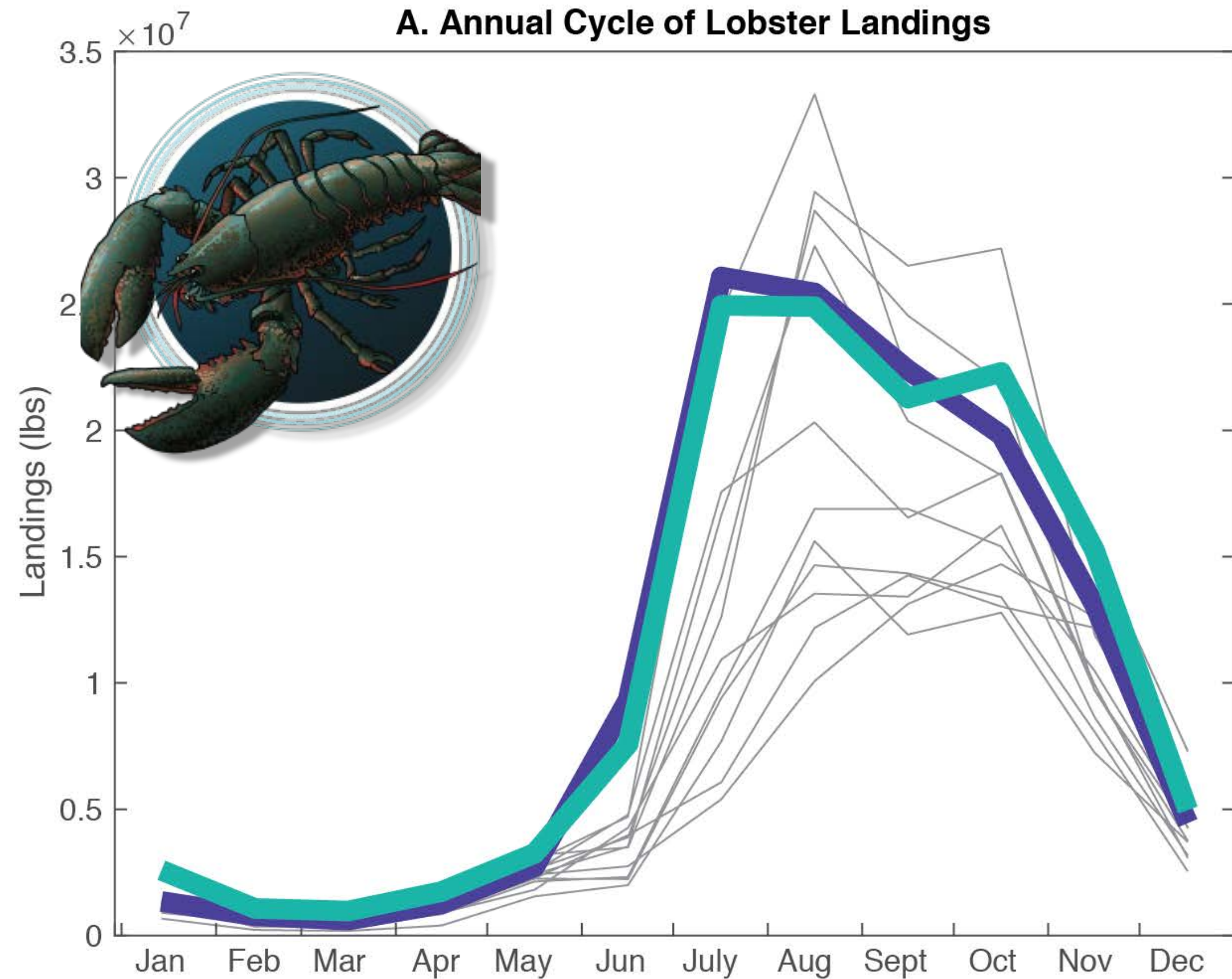
- 2012: low

2012 Northwest Atlantic Heatwave



- 2012: low
- 2016: high

2012 Northwest Atlantic Heatwave



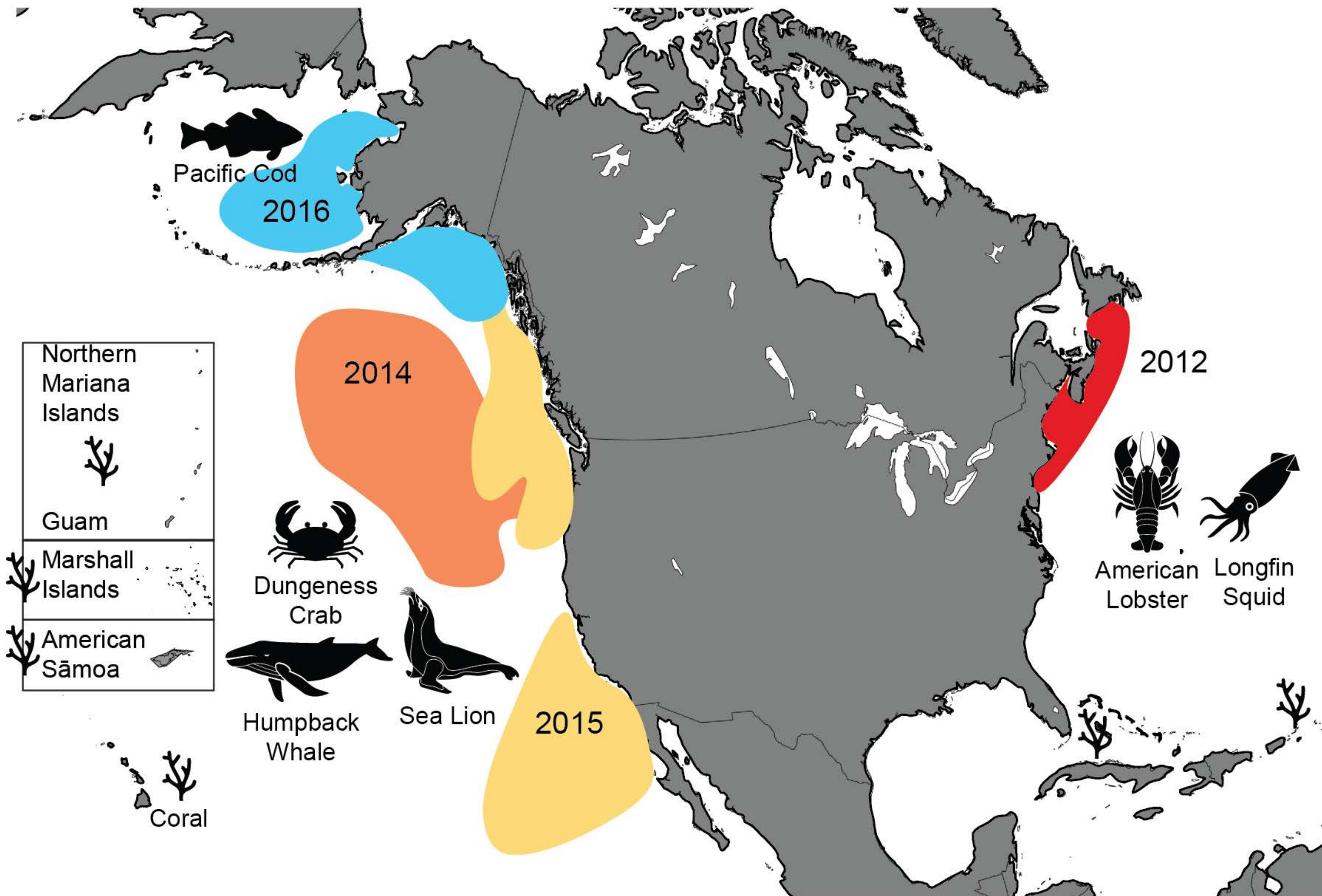
- 2012: low
- 2016: high

Heatwaves & other surprises

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

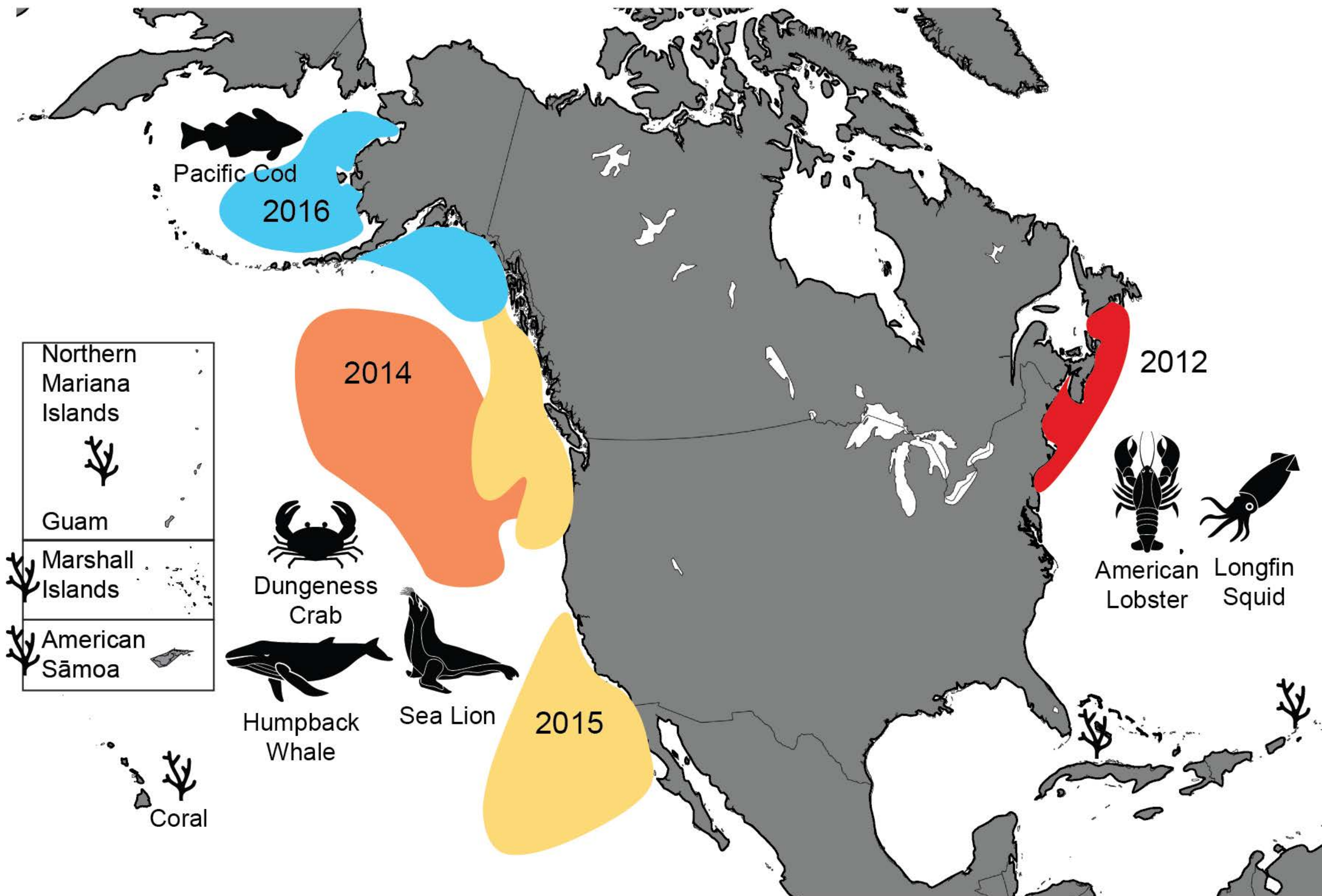
Heatwaves & other surprises

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Heatwaves & other surprises

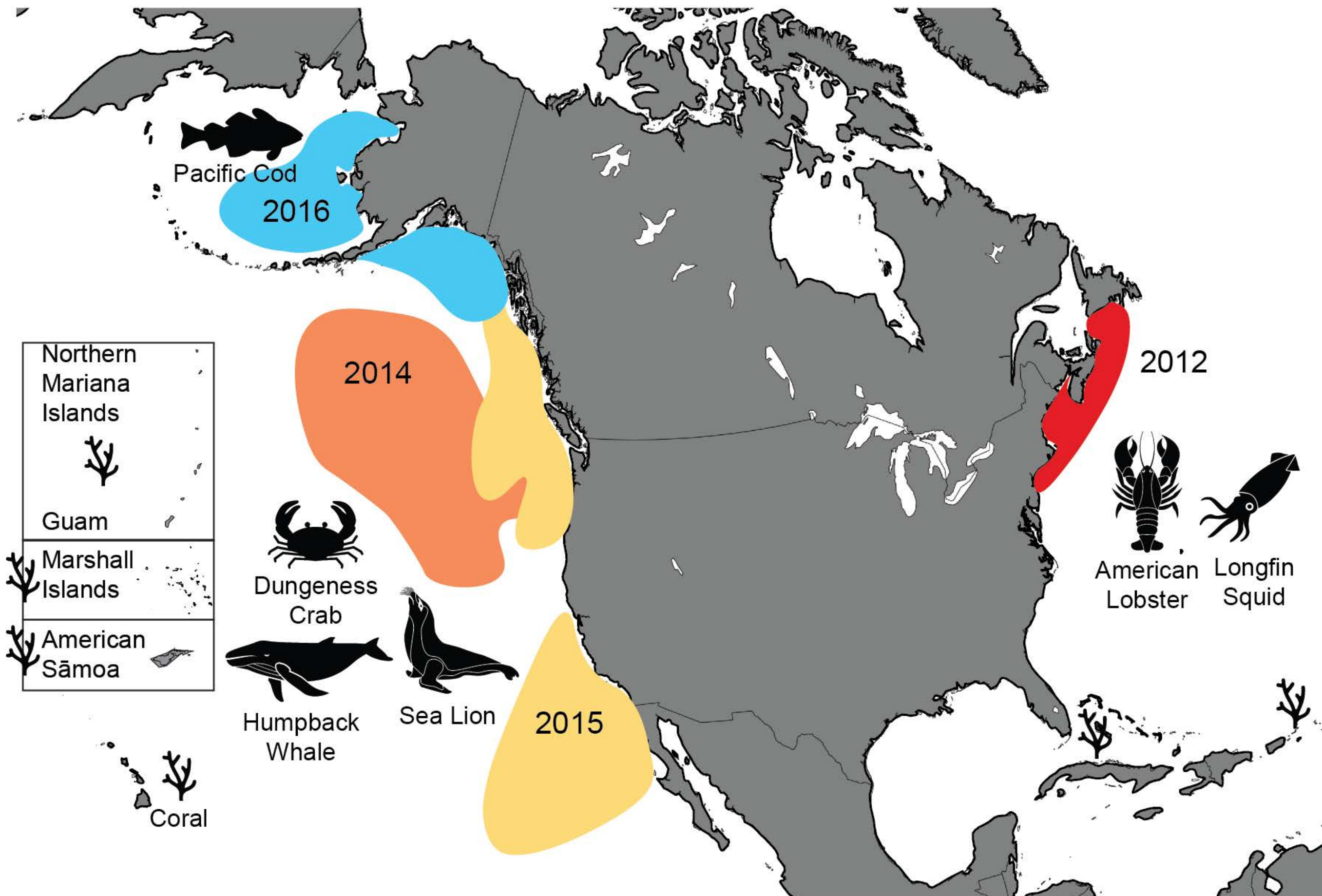
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- risk of significant impacts from extreme events

Heatwaves & other surprises

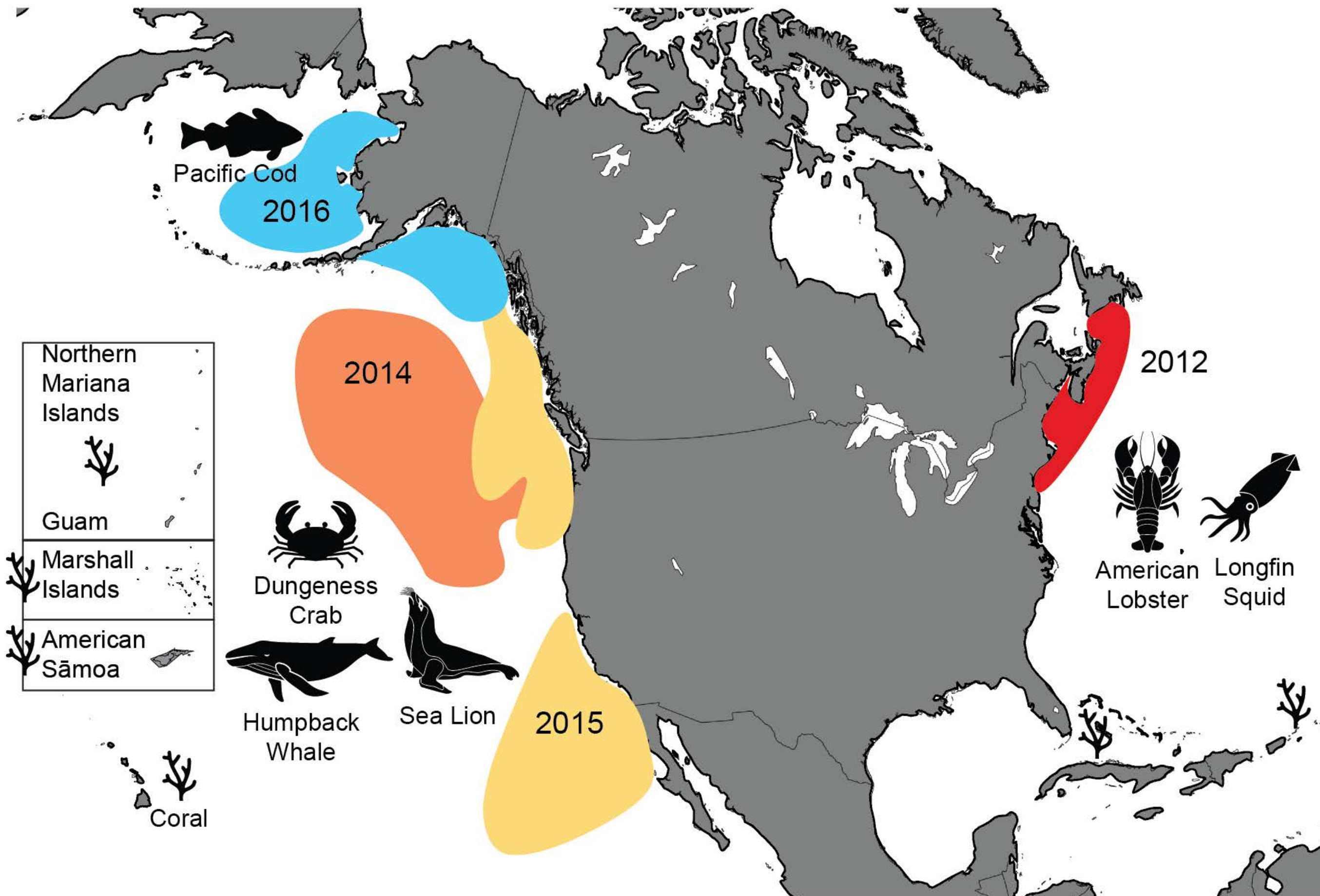
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- risk of significant impacts from extreme events
- unusual events will become more common and more severe in the future

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