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# High Seas CWT Recoveries in 2012 and 2013

Adrian Celewycz

Auke Bay Laboratories, Alaska Fisheries Science Center

Juneau, AK 99801

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# High seas CWT sampling, 2012 and 2013

- Gulf of Alaska (GOA) groundfish fishery

- ▶ North Pacific Groundfish and Halibut Observer Program (visual, 2012 and 2013)

- Bering Sea-Aleutian Islands (BSAI) groundfish fishery

- ▶ North Pacific Groundfish and Halibut Observer Program (visual, 2012 and 2013)



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## ■ Gulf of Alaska (GOA) groundfish fishery

- ▶ North Pacific Groundfish and Halibut Observer Program (visual, 2012 and 2013)
- ▶ CWT Tunnel Detector Test (electronic, 2012)
- ▶ Salmon Excluder Device trawling (electronic, 2013)
- ▶ Rockfish Trawl Fishery (electronic, 2013)

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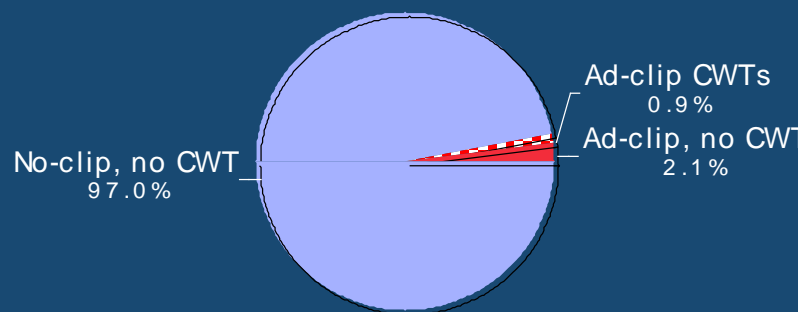
## ■ WA-OR-CA hake, non-hake, rockfish, sablefish trawl fisheries

- ▶ No new CWT recoveries reported by NMFS, NWFSC since 2011



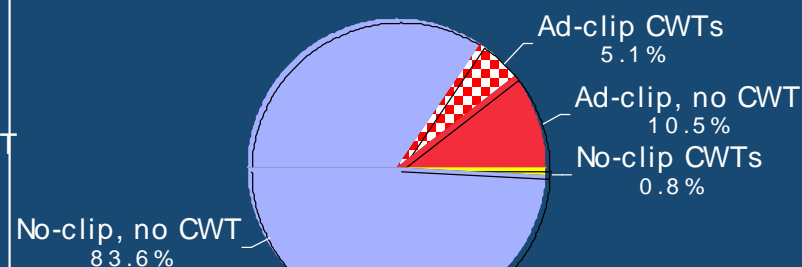
# CWT sampling programs on salmon bycatch in the GOA in 2012

## Observer Program (visual)



Total Chinook sampled = 1004  
Total CWTs = 9

## Tunnel Detector (electronic)



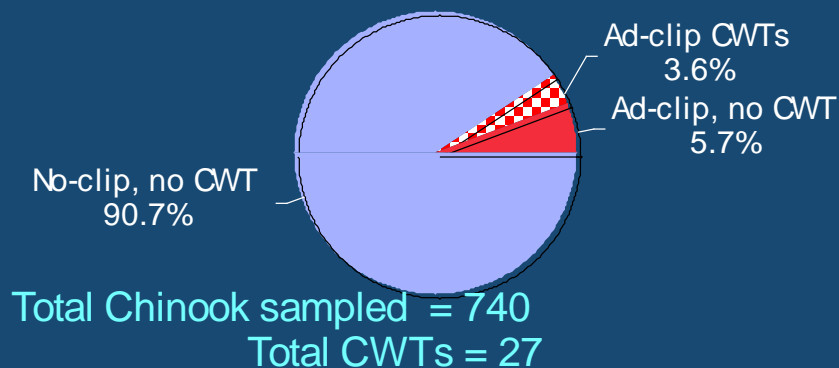
Total Chinook sampled = 1203  
Total CWTs = 71

**Total Chinook salmon bycatch = 22,581**

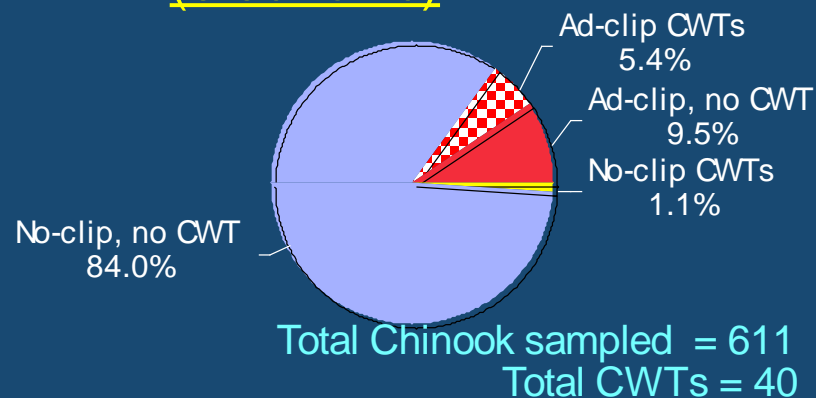


# CWT sampling programs on salmon bycatch in the GOA in 2013

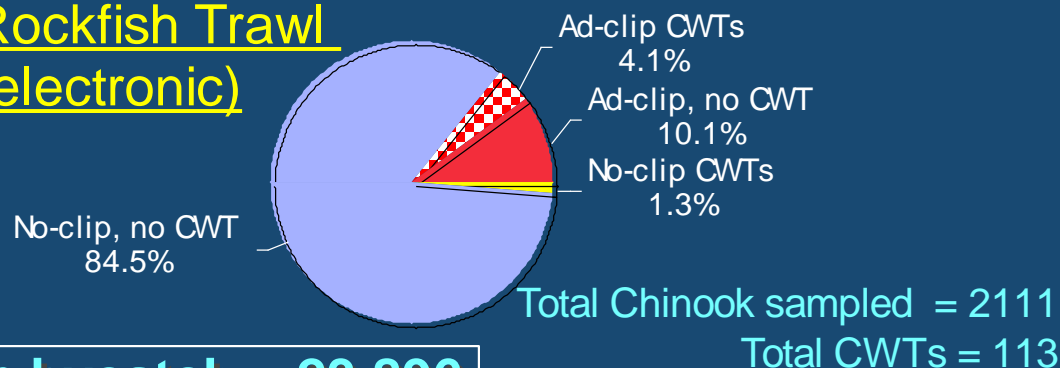
## Observer Program (visual)



## Salmon Excluder Device (electronic)



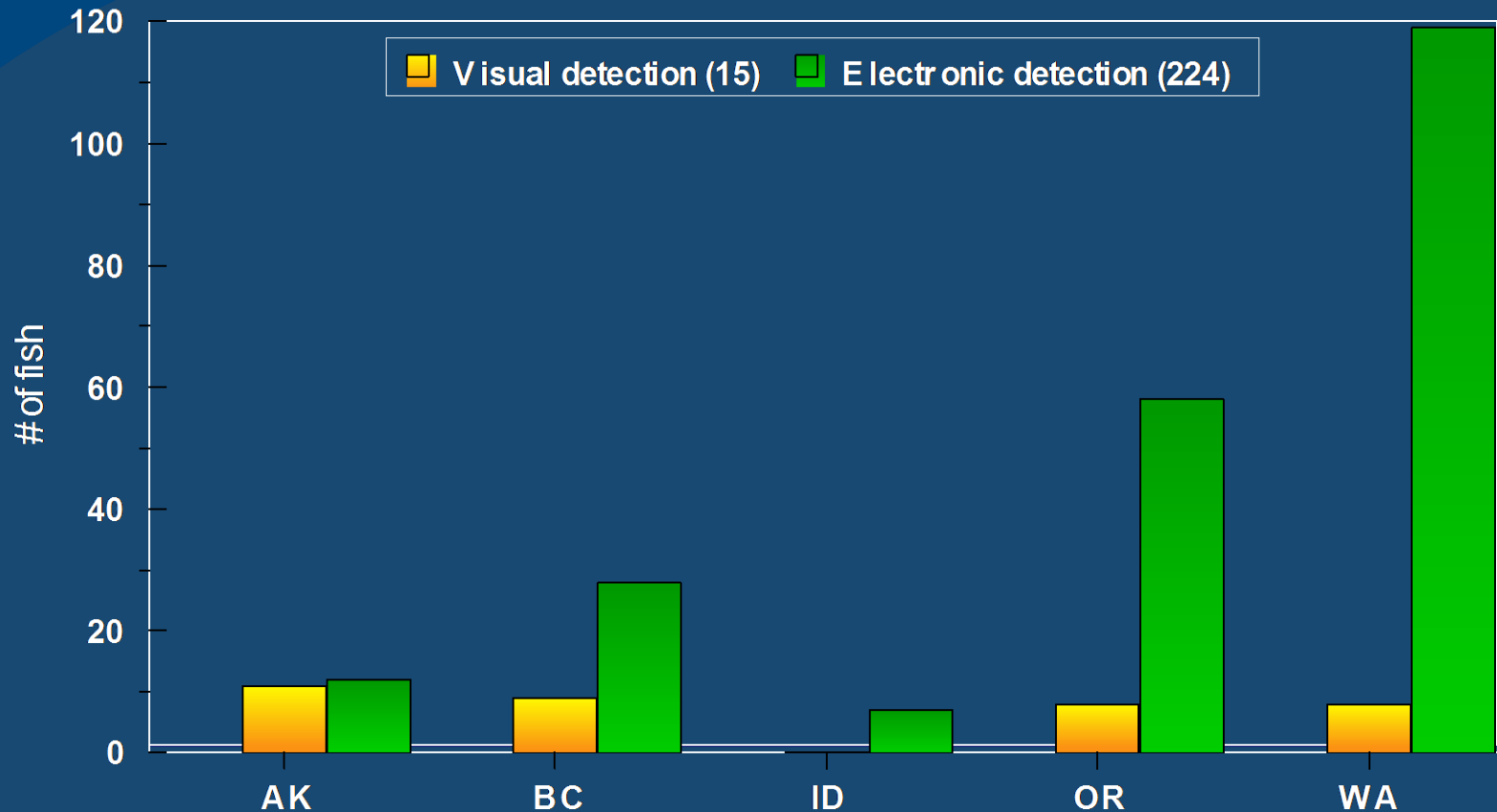
## Rockfish Trawl (electronic)



**Total Chinook salmon bycatch = 23,896**



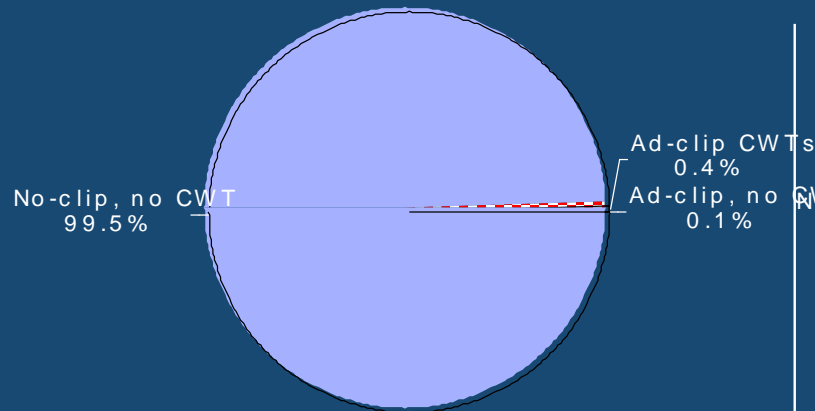
# Number of CWT recoveries of Chinook salmon by state of origin in the GOA in 2012 and 2013 in different sampling programs





# CWT sampling (visual) of salmon bycatch by the Observer Program in the BSAI, 2012 and 2013

2012

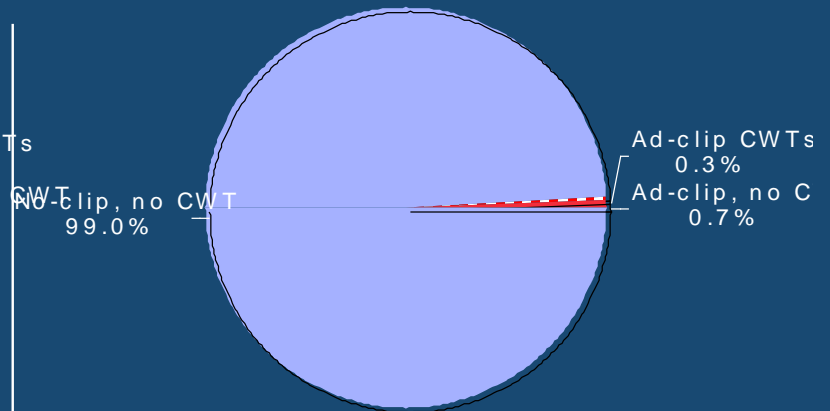


Total Chinook sampled = 1160  
Total CWTs = 5

Total Chinook Bycatch = 12,932

Total Estimated Contribution = 56 CWTs

2013



Total Chinook sampled = 1323  
Total CWTs = 4

Total Chinook Bycatch = 16,003

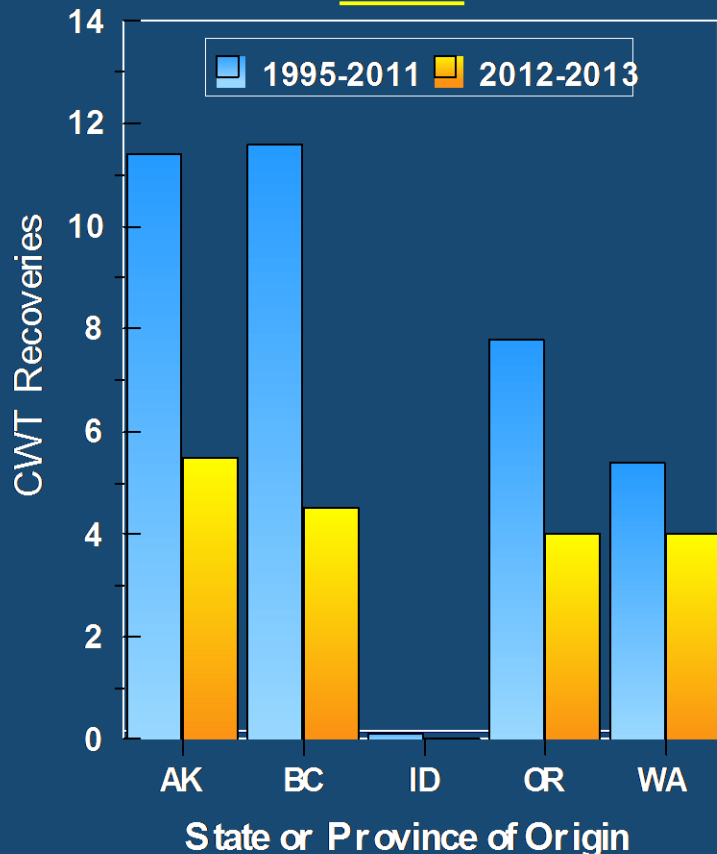
Total Estimated Contribution = 48 CWTs



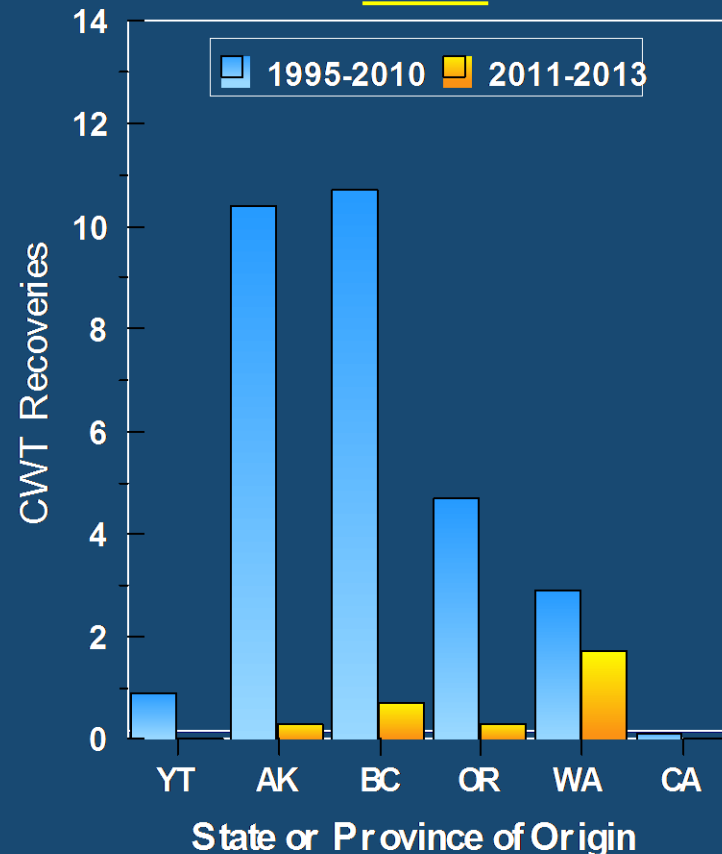
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# Mean annual CWT recoveries of Chinook salmon in Alaskan groundfish trawl fisheries as sampled by observers

## GOA

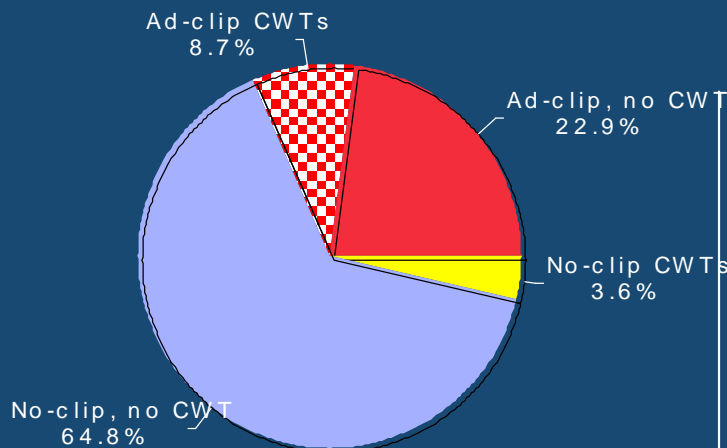


## BSAI



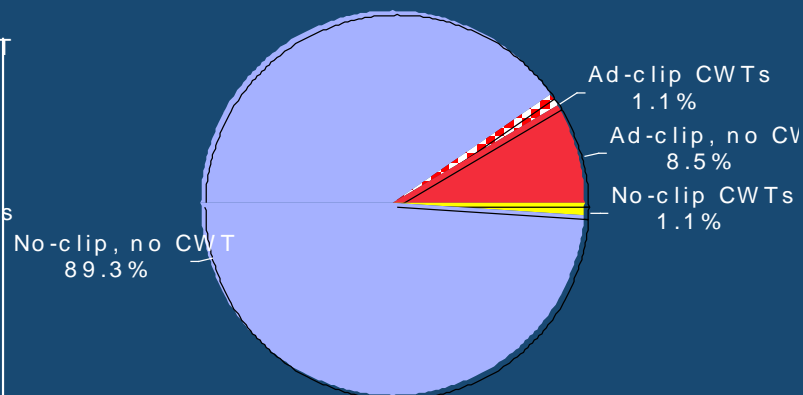
# Electronic CWT sampling of juvenile salmon by US trawl research in the GOA in 2012

## Chinook salmon



Total Chinook sampled = 554  
Total CWTs = 68

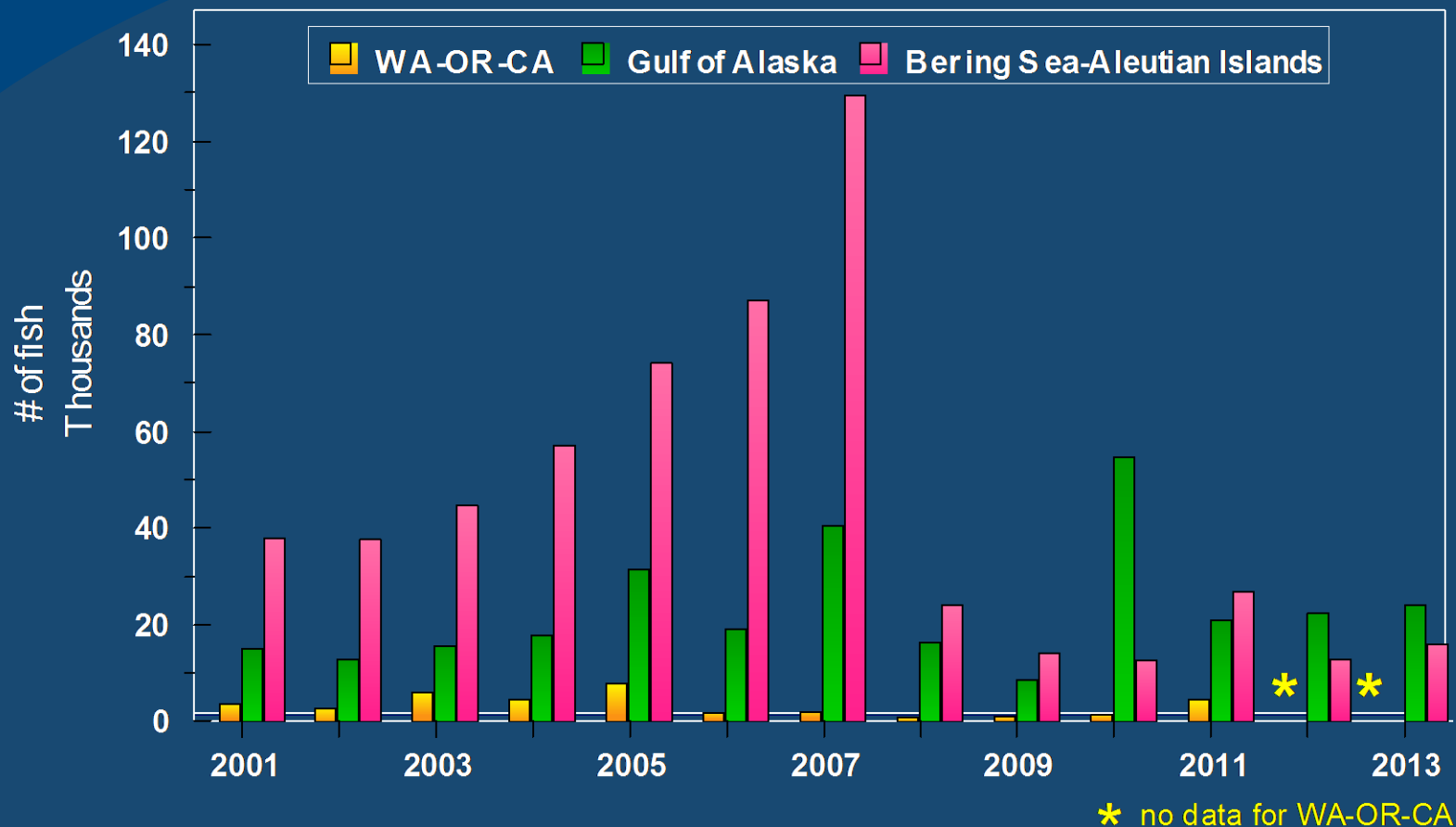
## Coho salmon



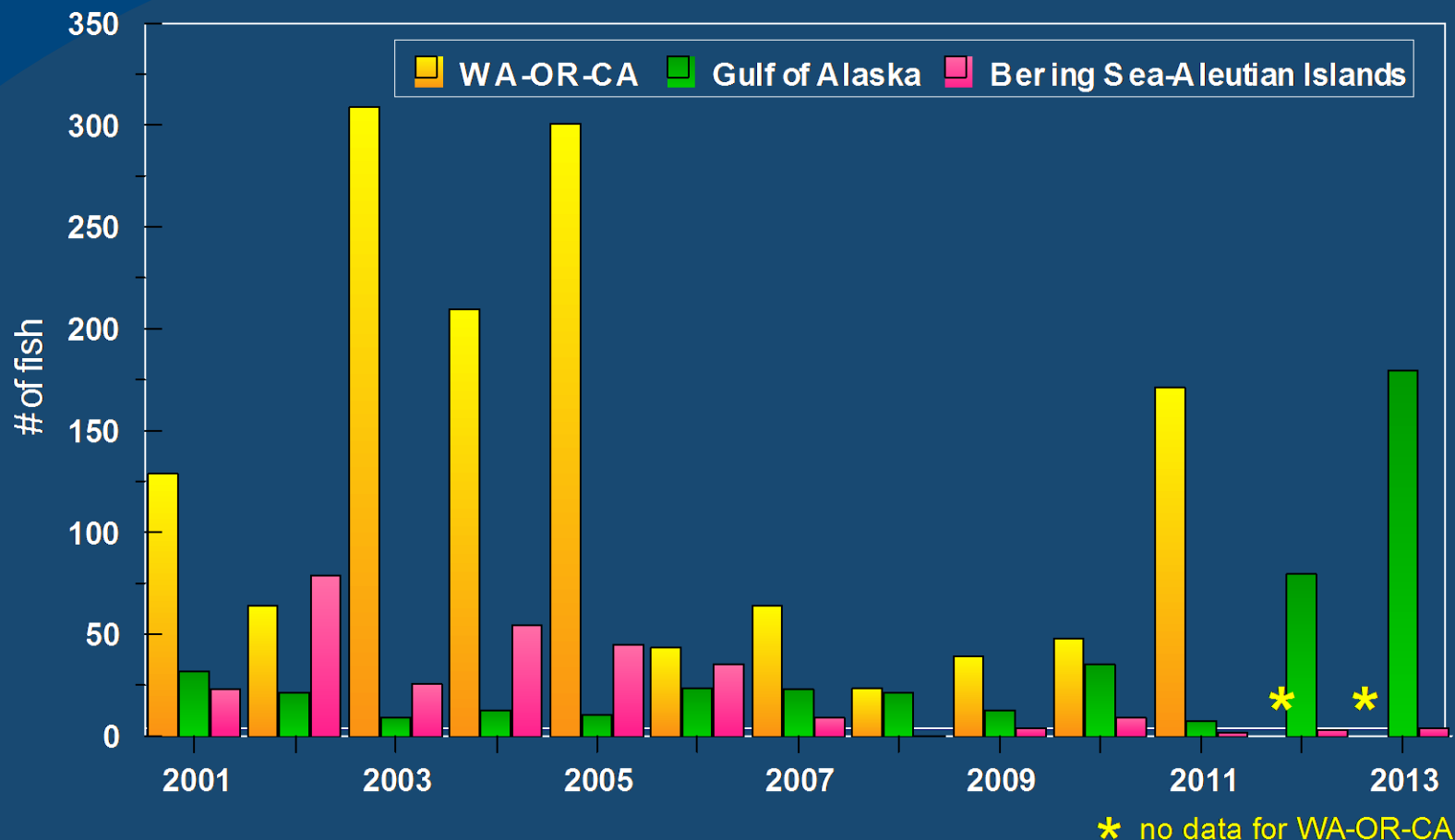
Total Coho sampled = 645  
Total CWTs = 15



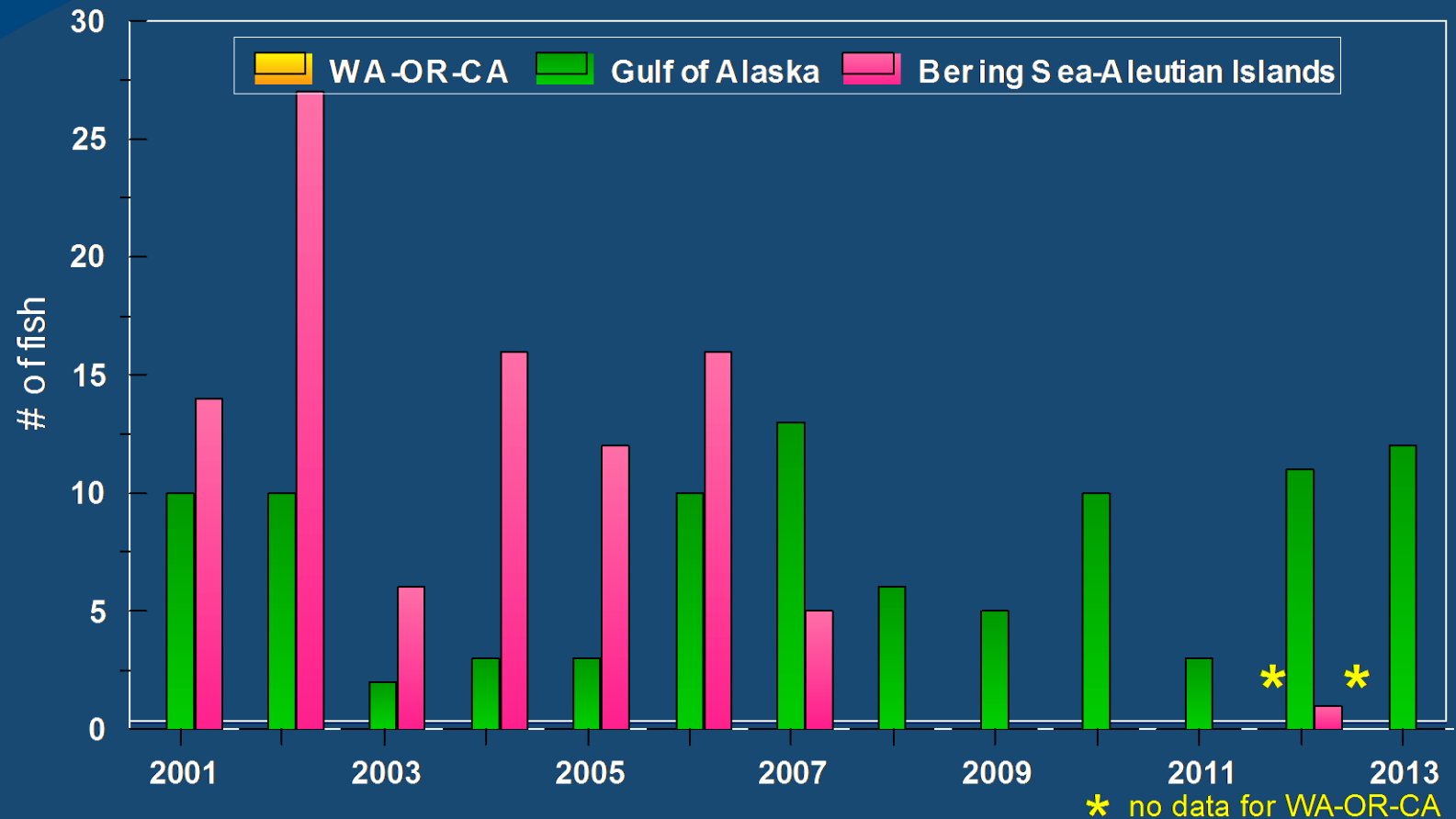
# Total Chinook salmon bycatch in 3 high seas trawl fisheries, 2001-2013



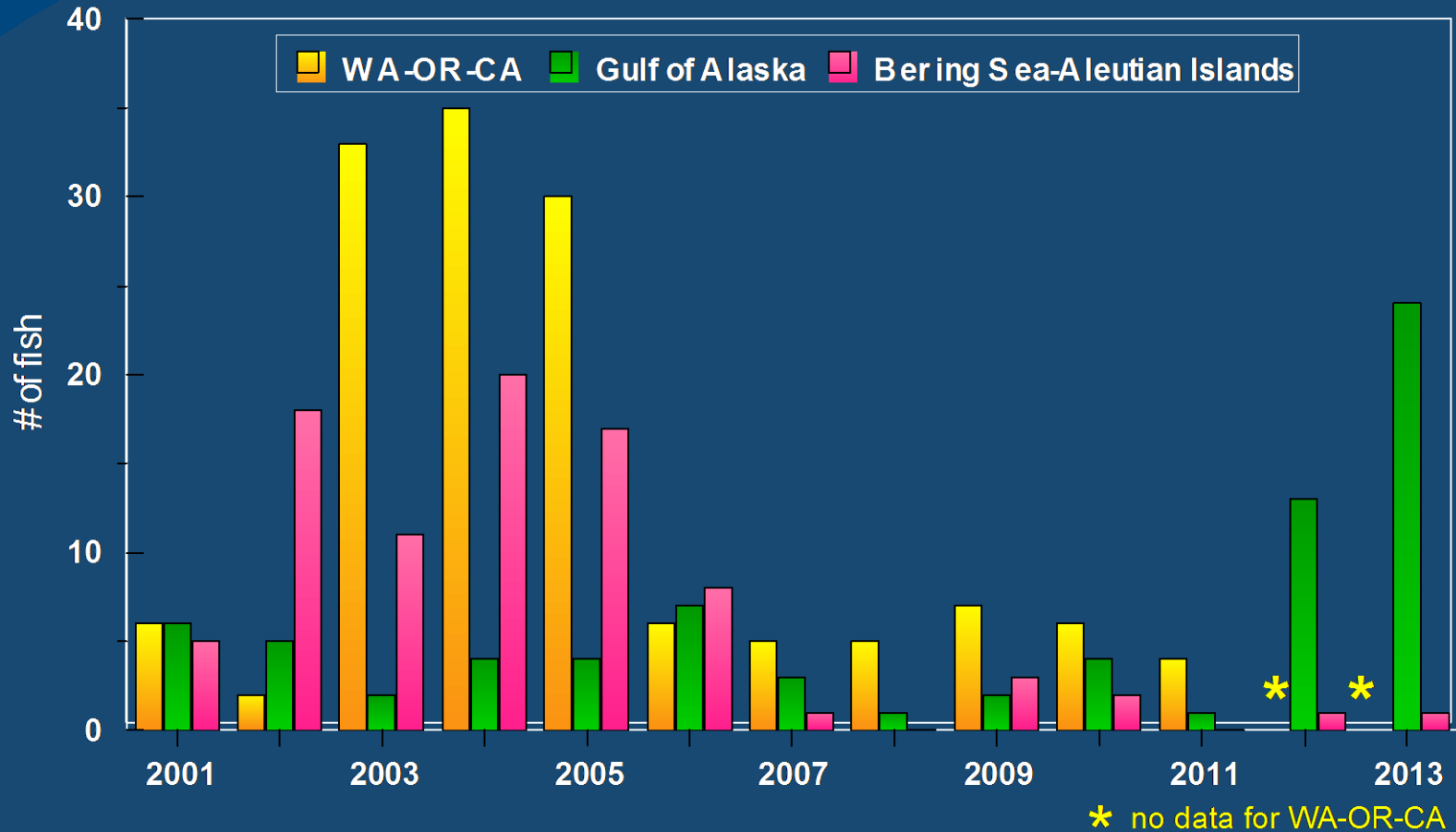
# Occurrence of CWT Chinook salmon in 3 high seas trawl fisheries, 2001-2013



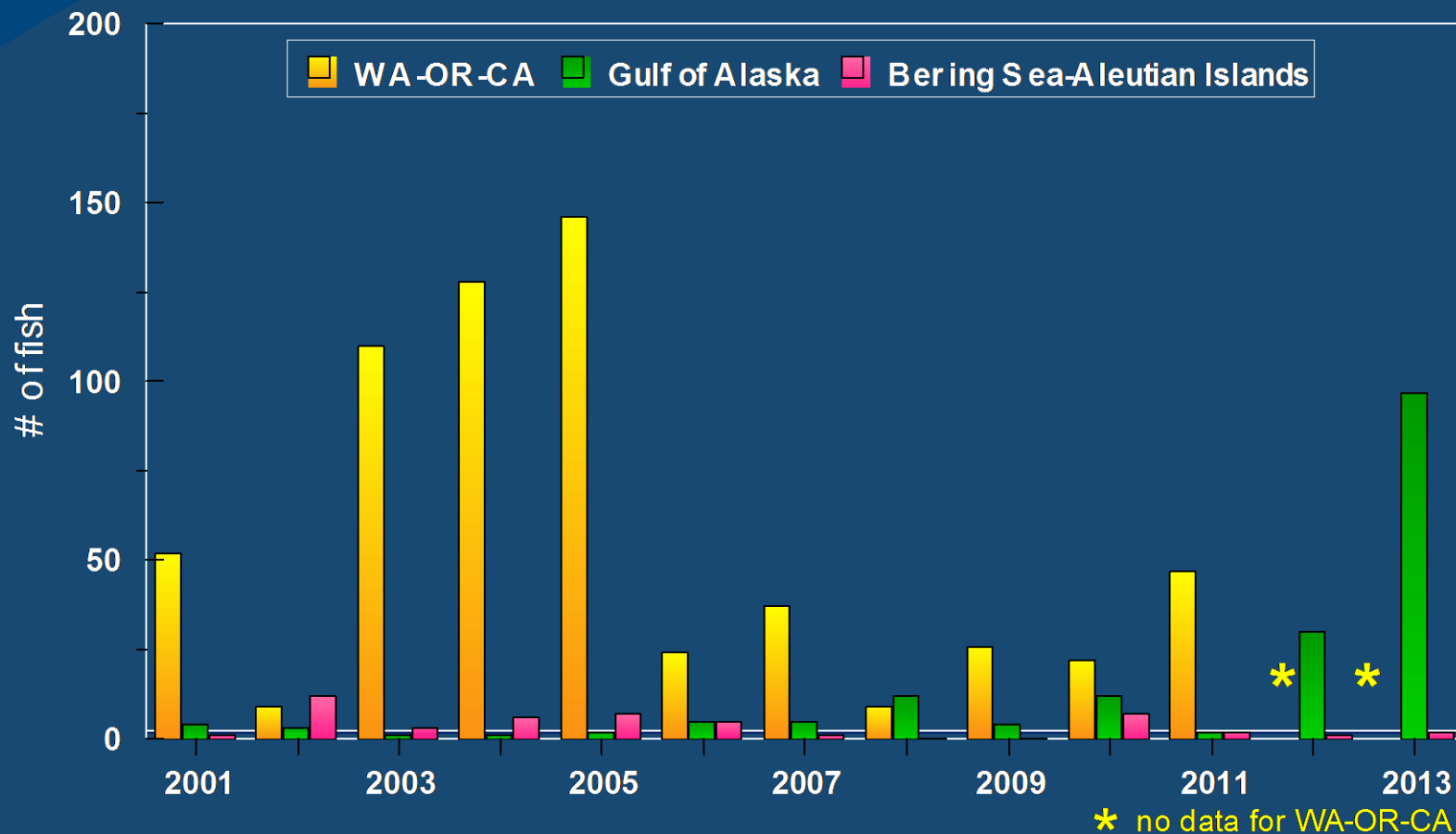
# Occurrence of AK-origin CWT Chinook salmon captured in 3 high seas trawl fisheries, 2001-2013



# Occurrence of BC-origin CWT Chinook salmon captured in 3 high seas trawl fisheries, 2001-2013

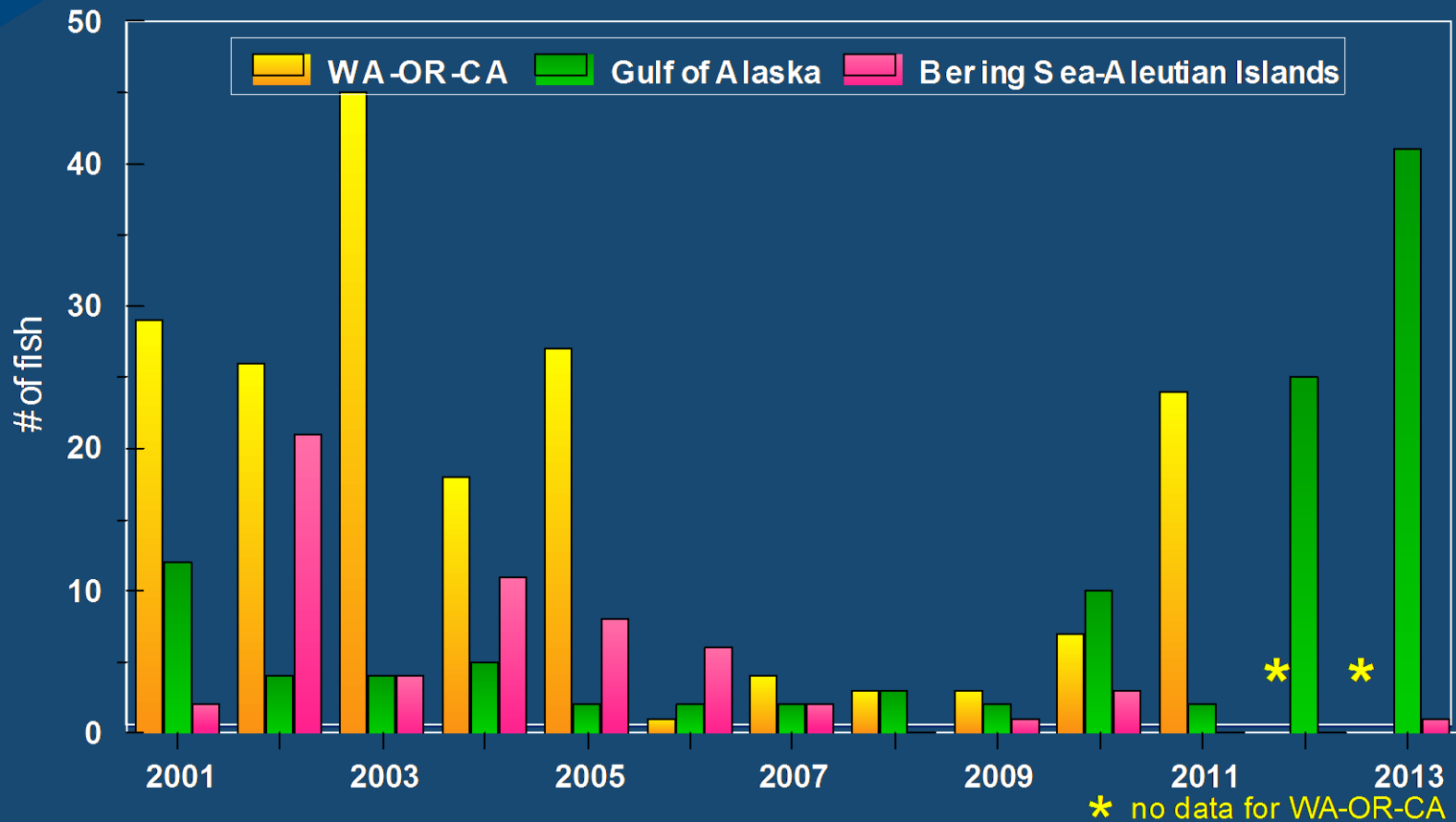


# Occurrence of WA-origin CWT Chinook salmon captured in 3 high seas trawl fisheries, 2001-2013

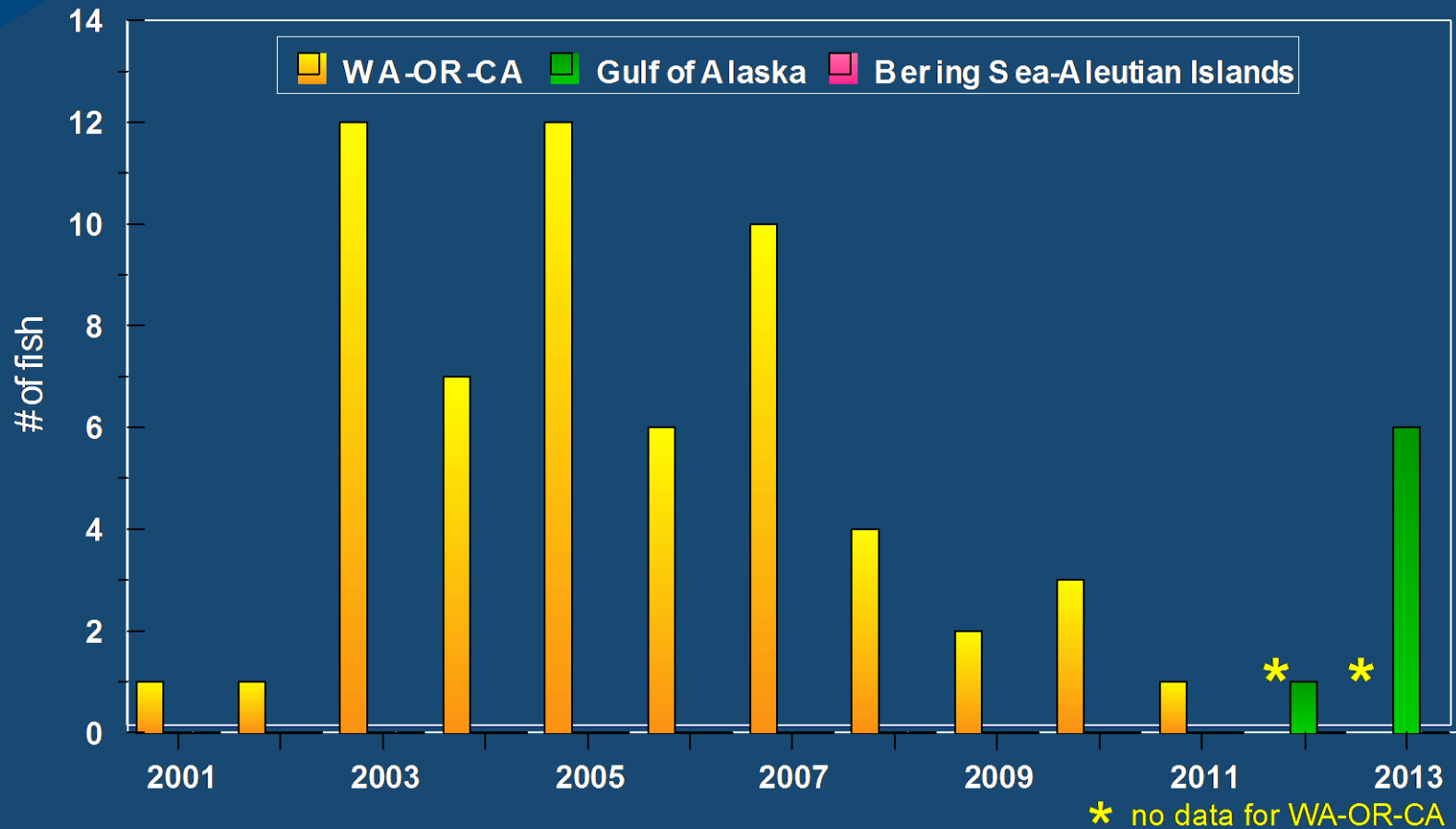




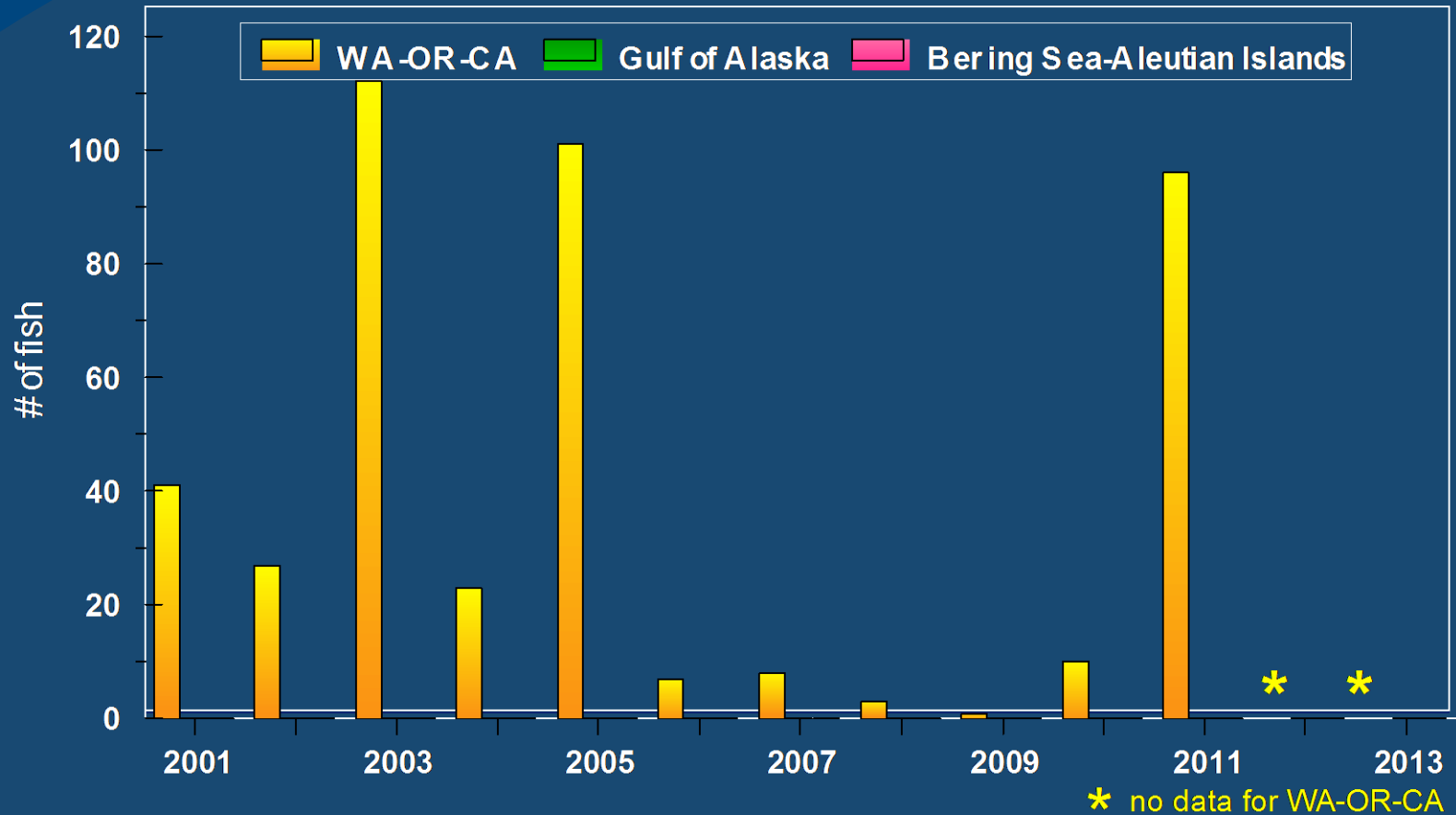
# Occurrence of OR-origin CWT Chinook salmon captured in 3 high seas trawl fisheries, 2001-2013



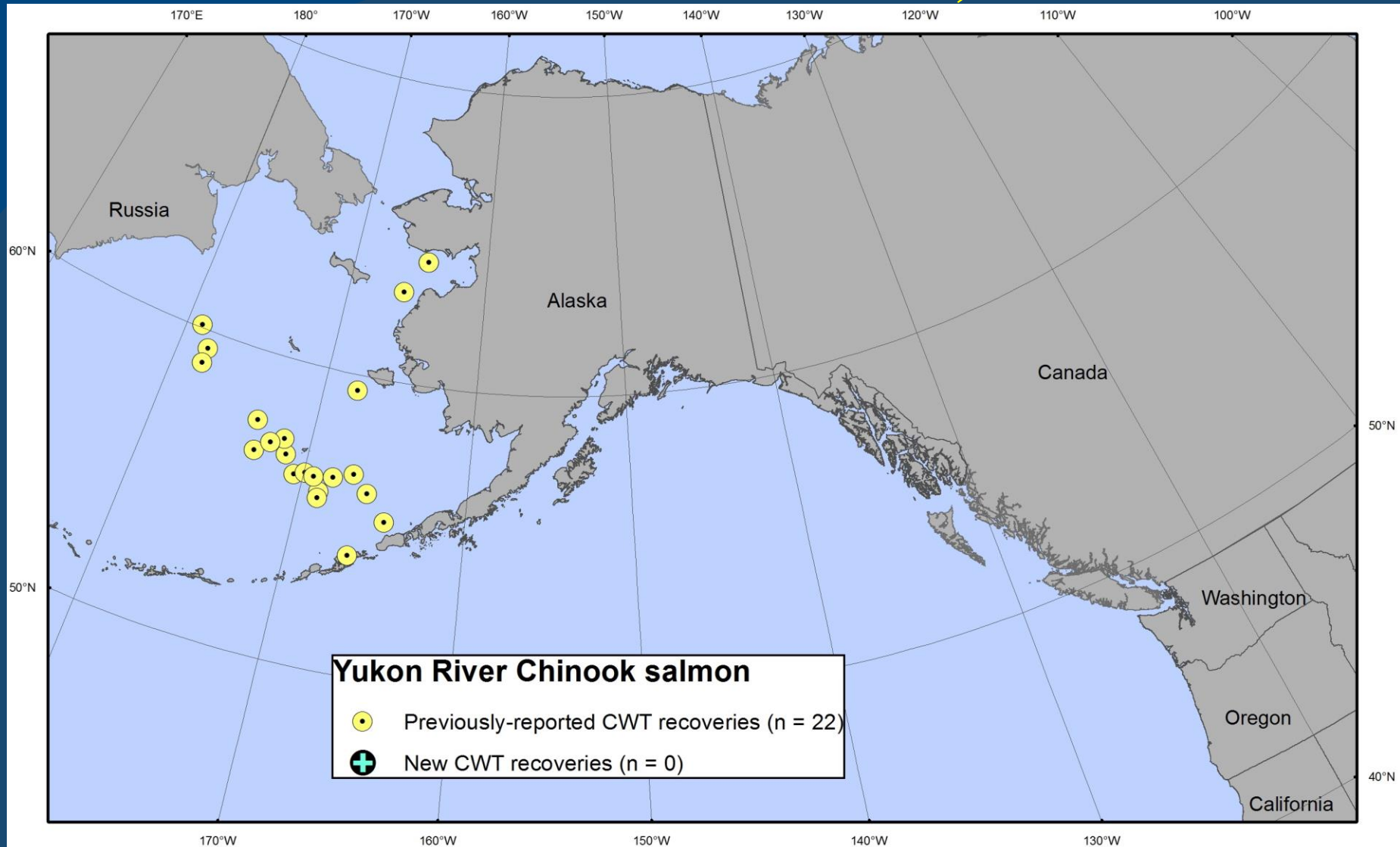
# Occurrence of ID-origin CWT Chinook salmon captured in 3 high seas trawl fisheries, 2001-2013



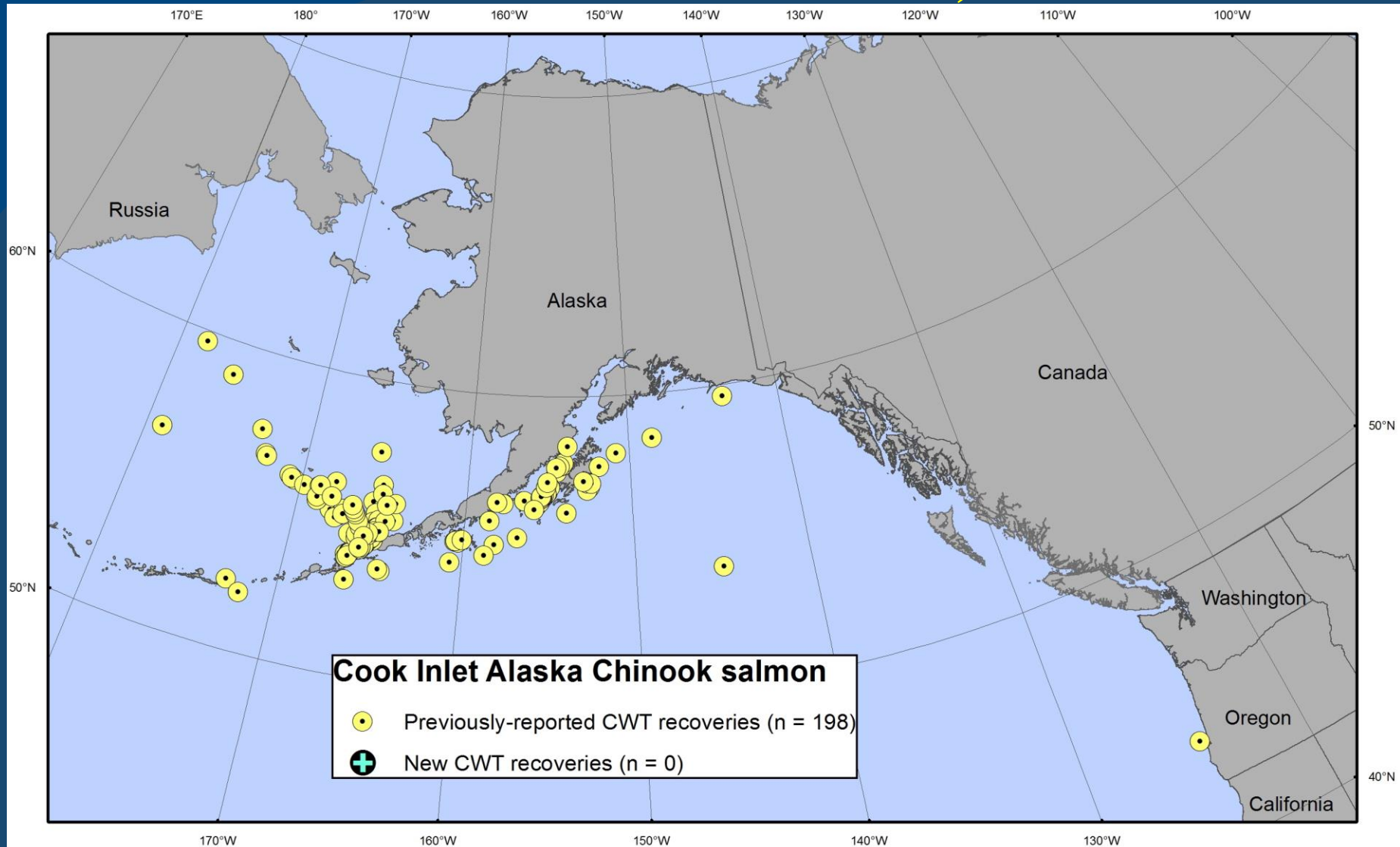
# Occurrence of CA-origin CWT Chinook salmon captured in 3 high seas trawl fisheries, 2001-2013



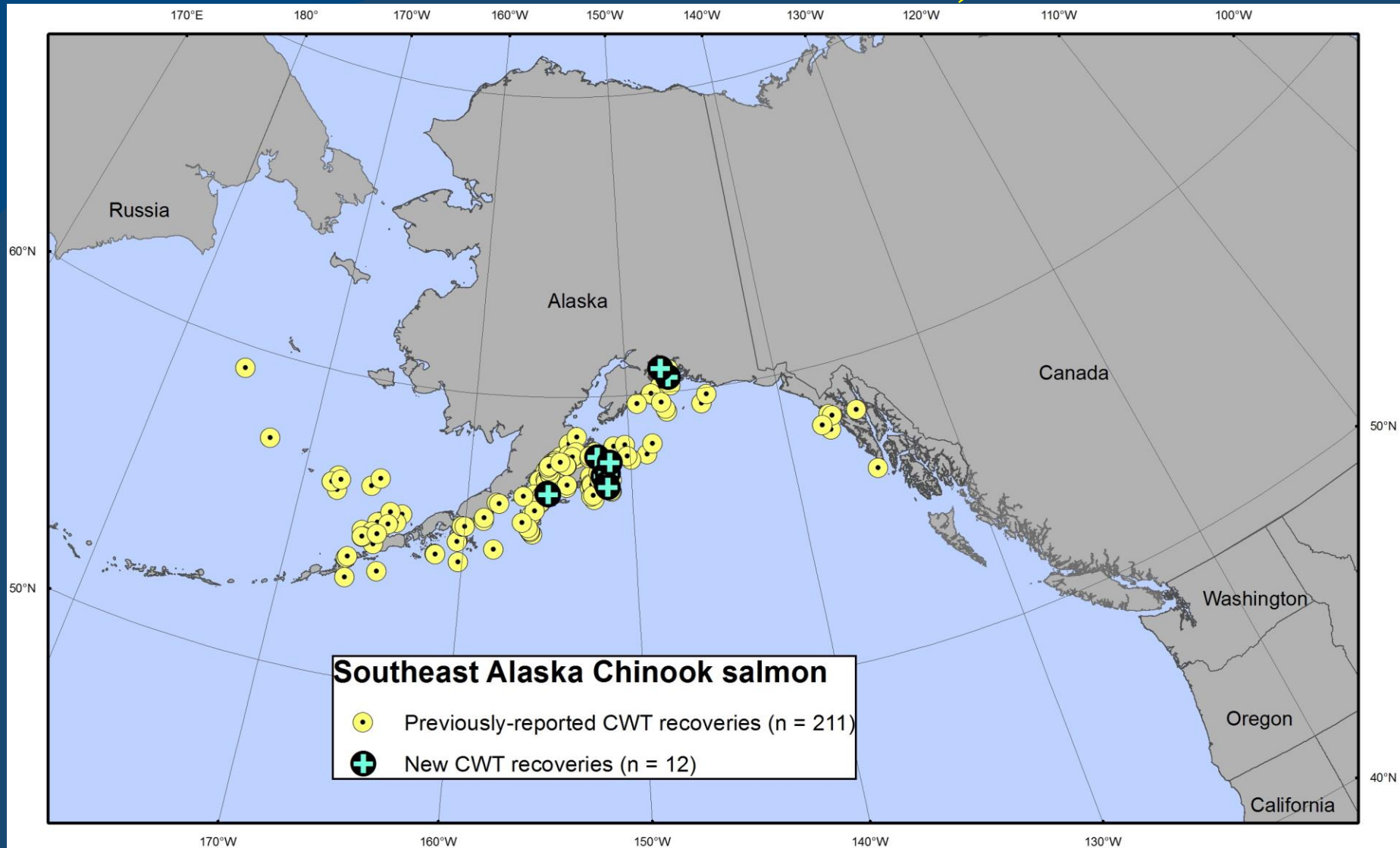
# Ocean distribution of Yukon River Chinook salmon from CWT recoveries, 1981-2013



# Ocean distribution of Cook Inlet, Alaska Chinook salmon from CWT recoveries, 1981-2013



# Ocean distribution of Southeast Alaska Chinook salmon from CWT recoveries, 1981-2013

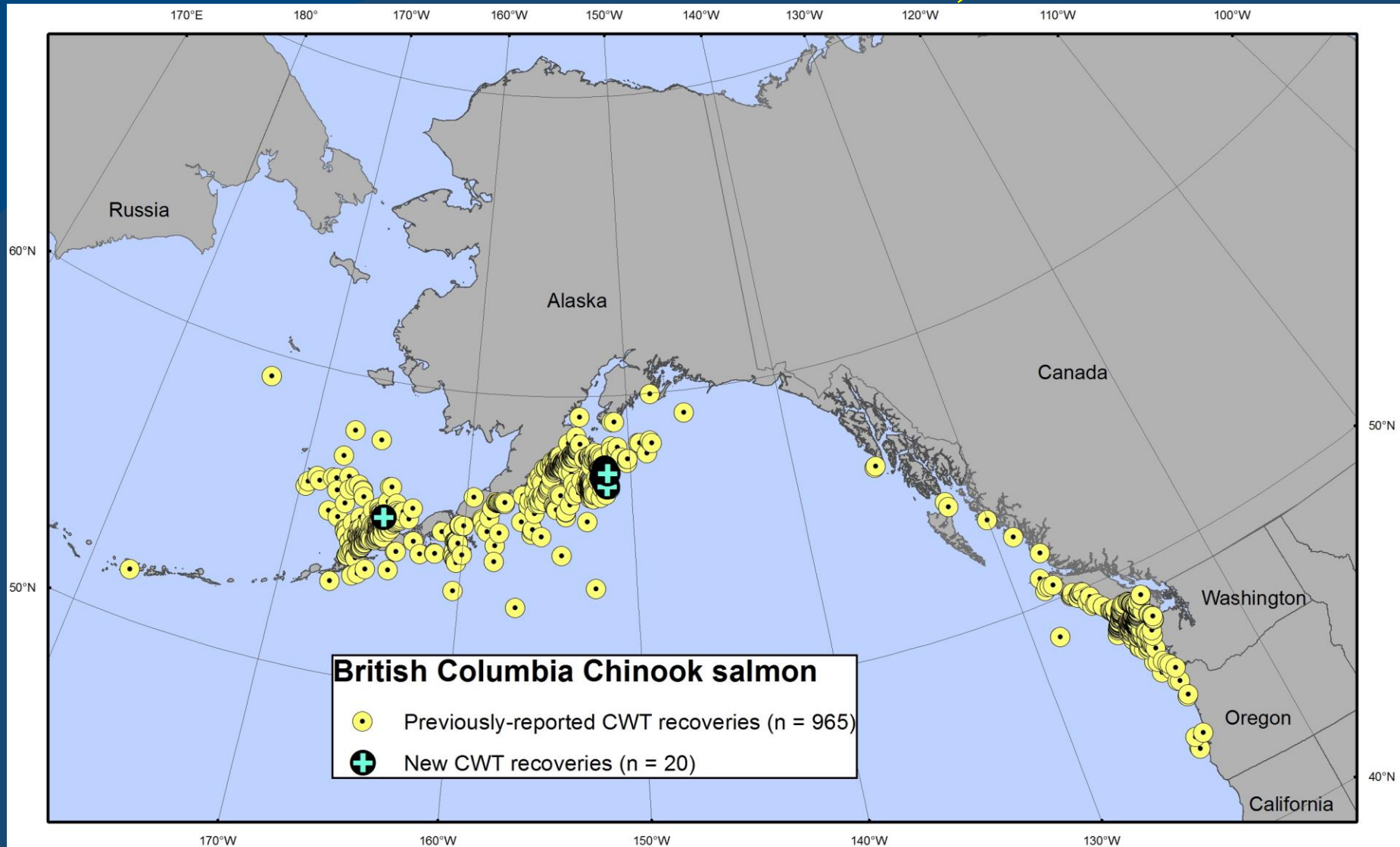


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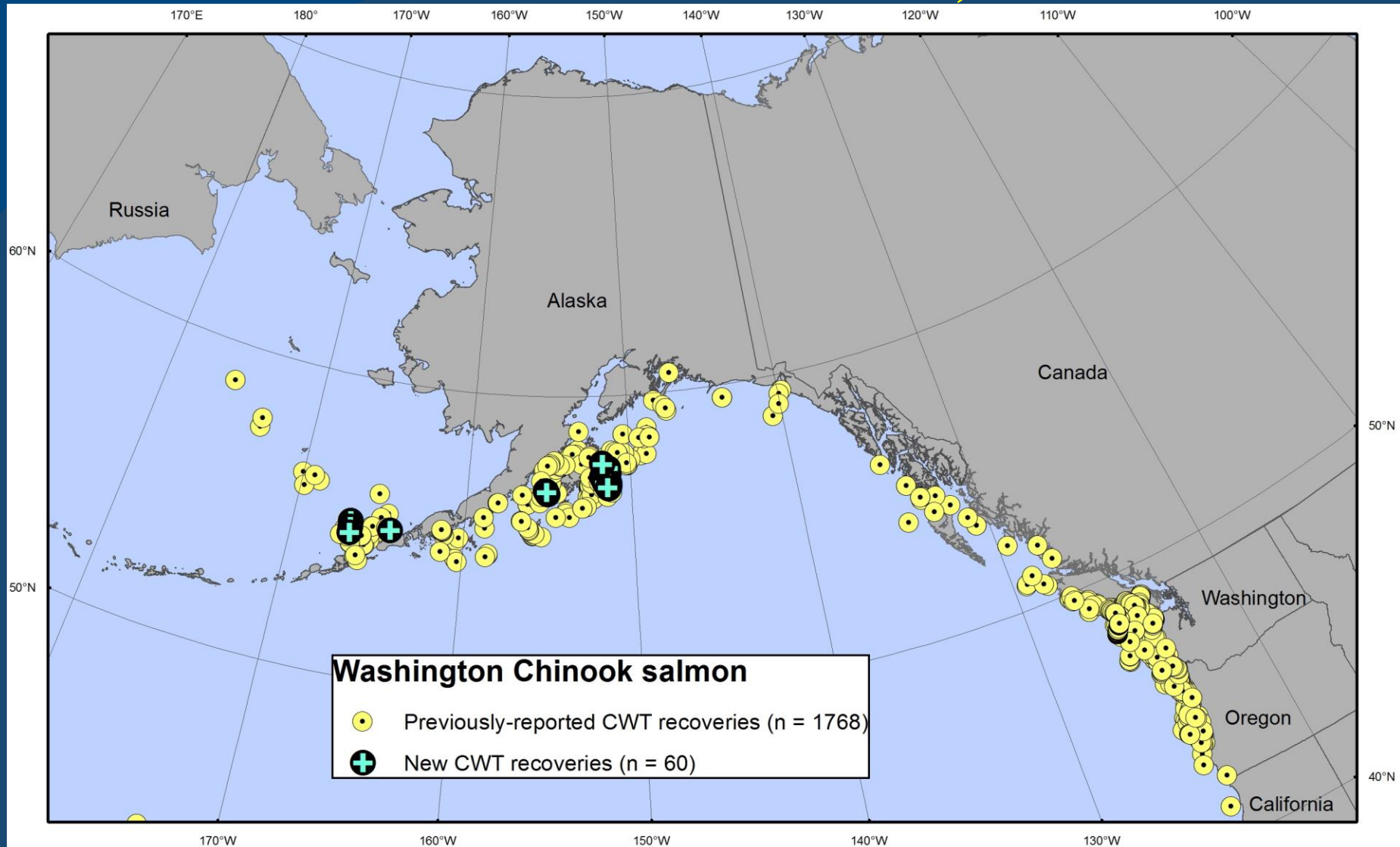
# Ocean distribution of British Columbia Chinook salmon from CWT recoveries, 1981-2013



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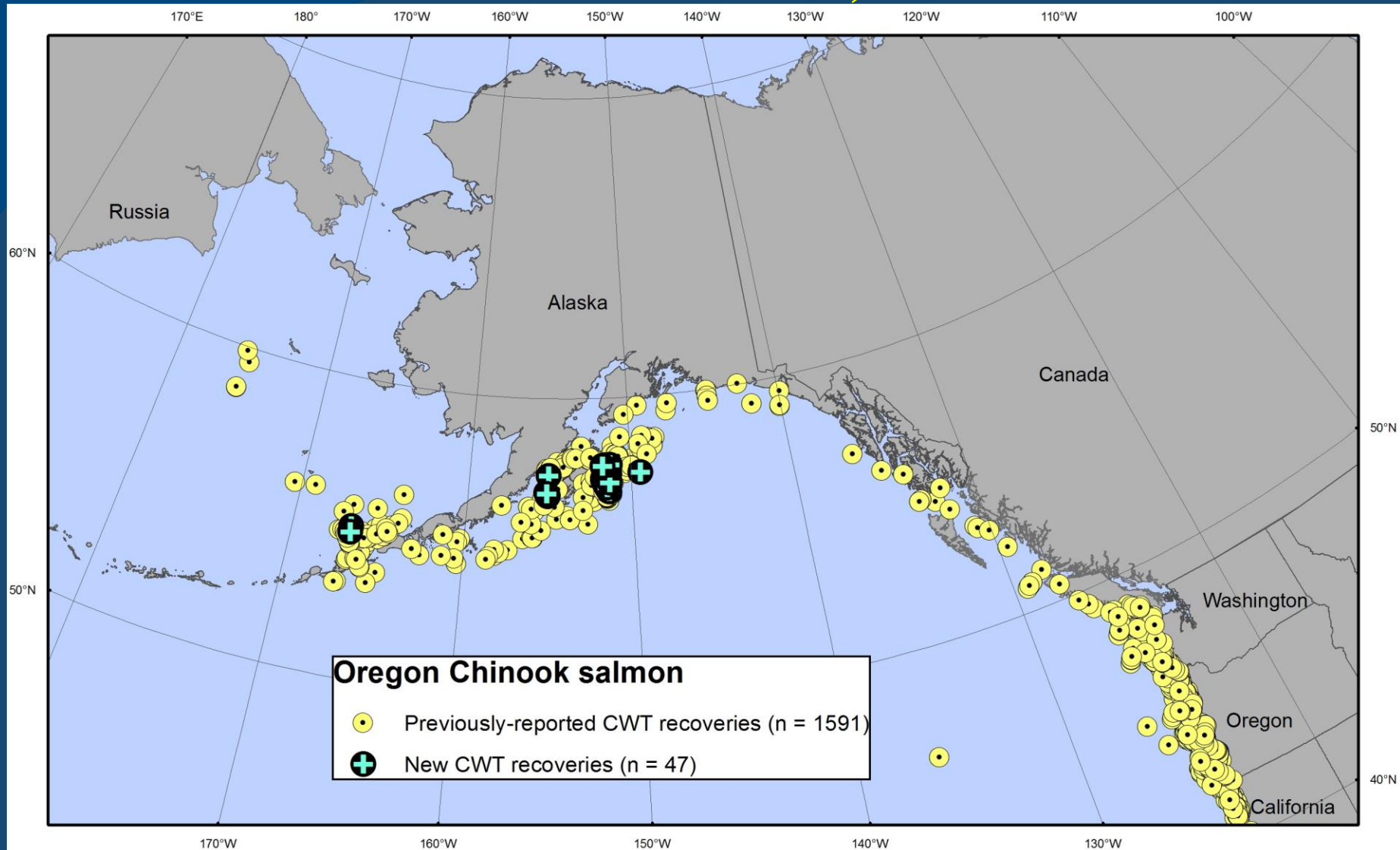
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# Ocean distribution of Washington Chinook salmon from CWT recoveries, 1981-2013

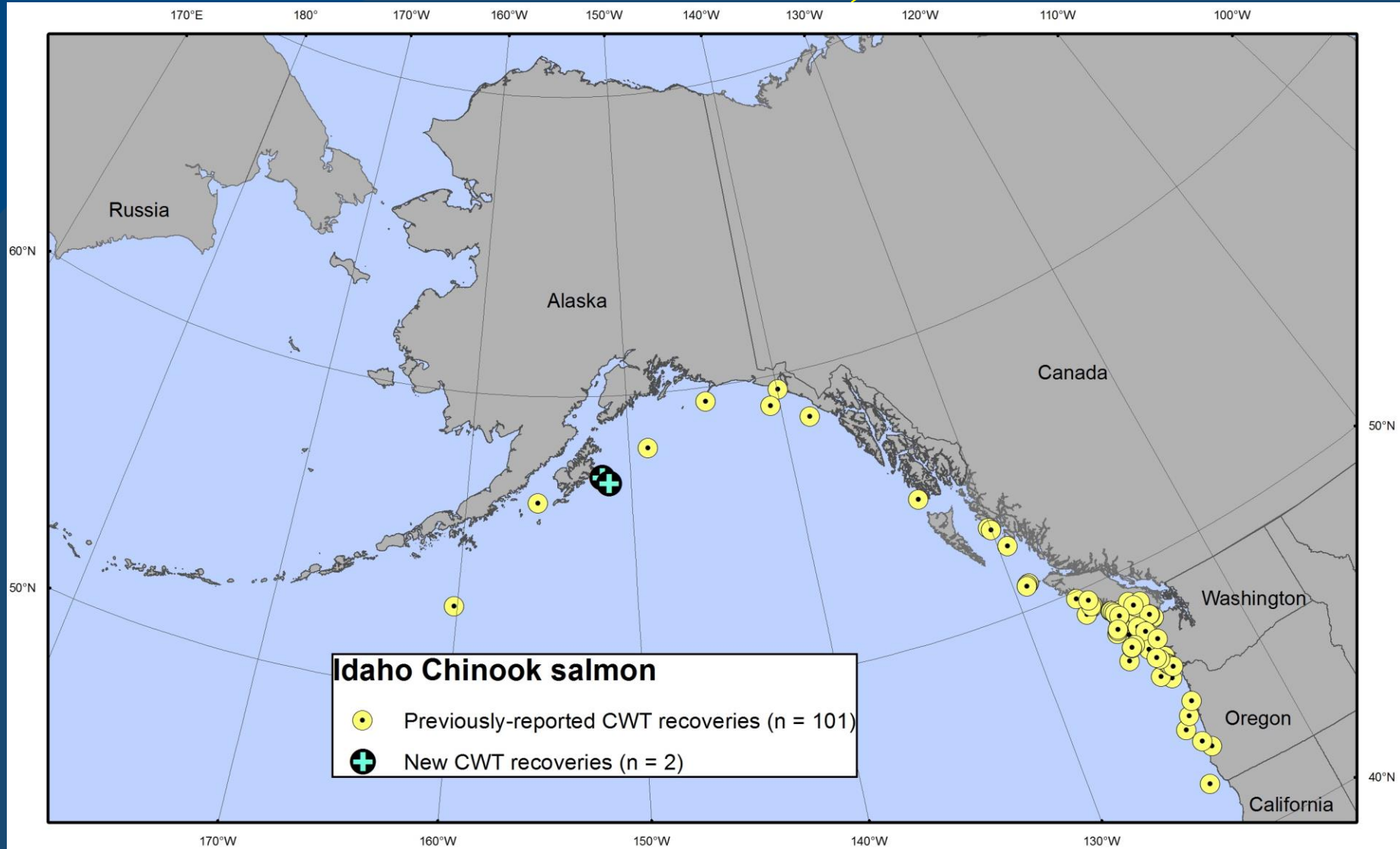




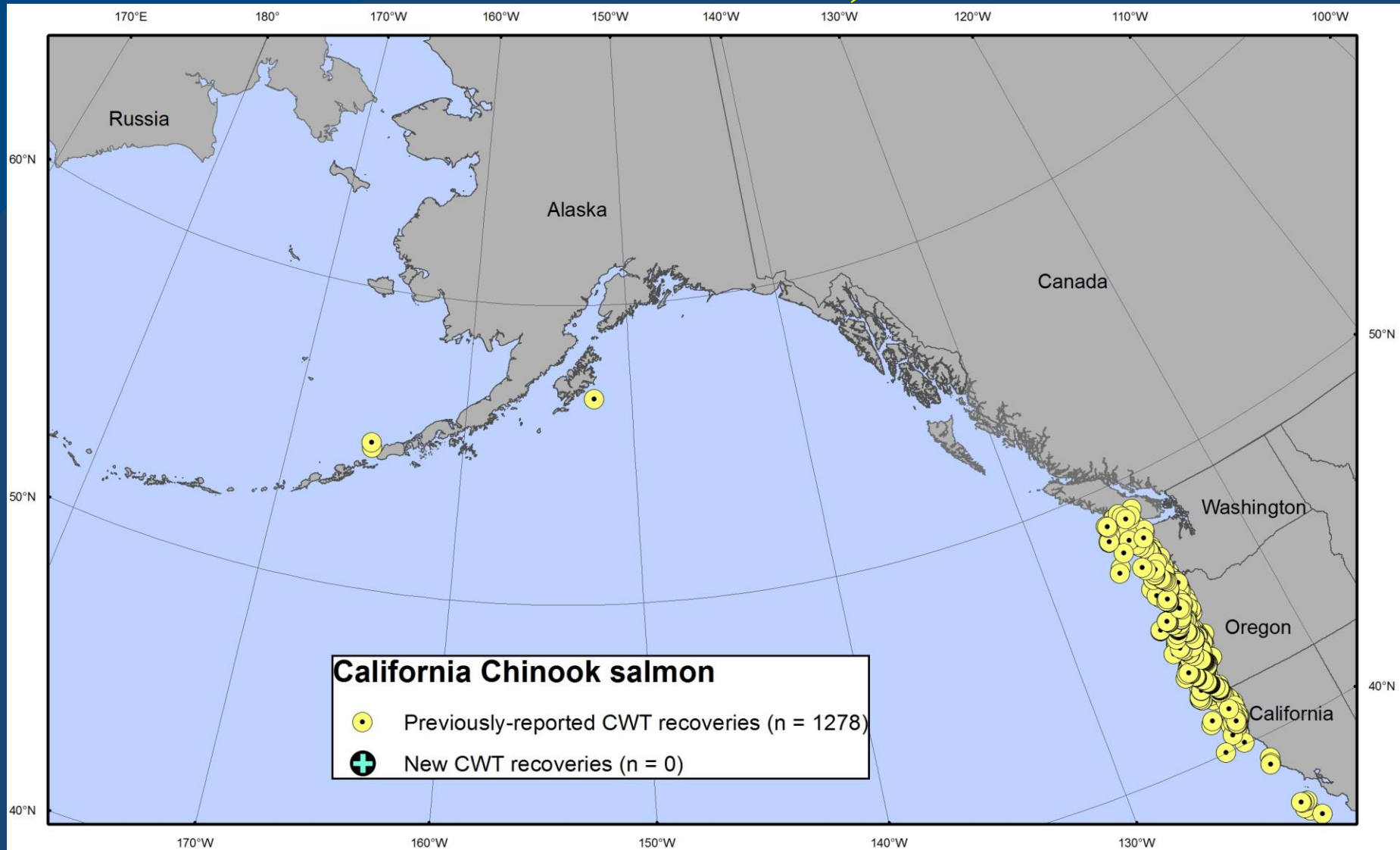
# Ocean distribution of Oregon Chinook salmon from CWT recoveries, 1981-2013



# Ocean distribution of Idaho Chinook salmon from CWT recoveries, 1981-2013



# Ocean distribution of California Chinook salmon from CWT recoveries, 1981-2013





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# The End



(So long, farewell, auf wiedersehen, goodbye!)