



SEDAR 79: Mutton Snapper Data Webinar

FWRI Stock Assessment Group

St. Petersburg, FL

6/29/2023



Outline

- Review Stock Assessment Schedule
- New Data Sources
- Data Sources Received/Expected
- Data Overview
 - Prelim Landings & Discards
 - Prelim Length/Age comps
 - Prelim Indices

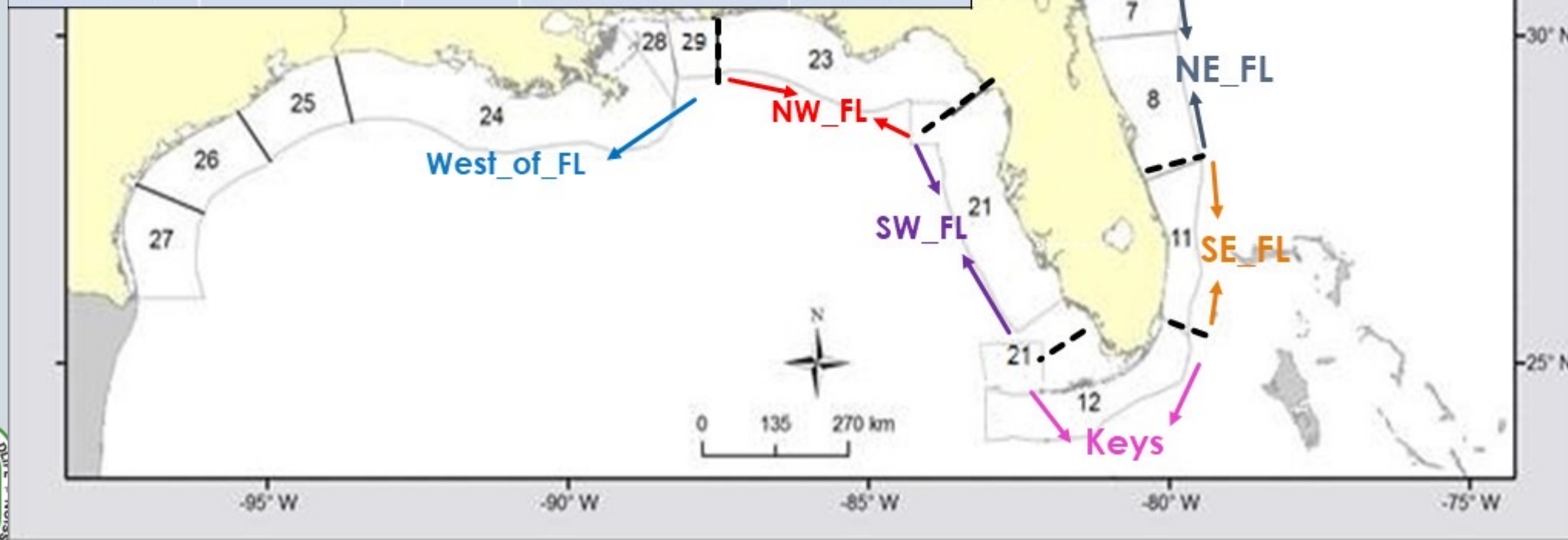


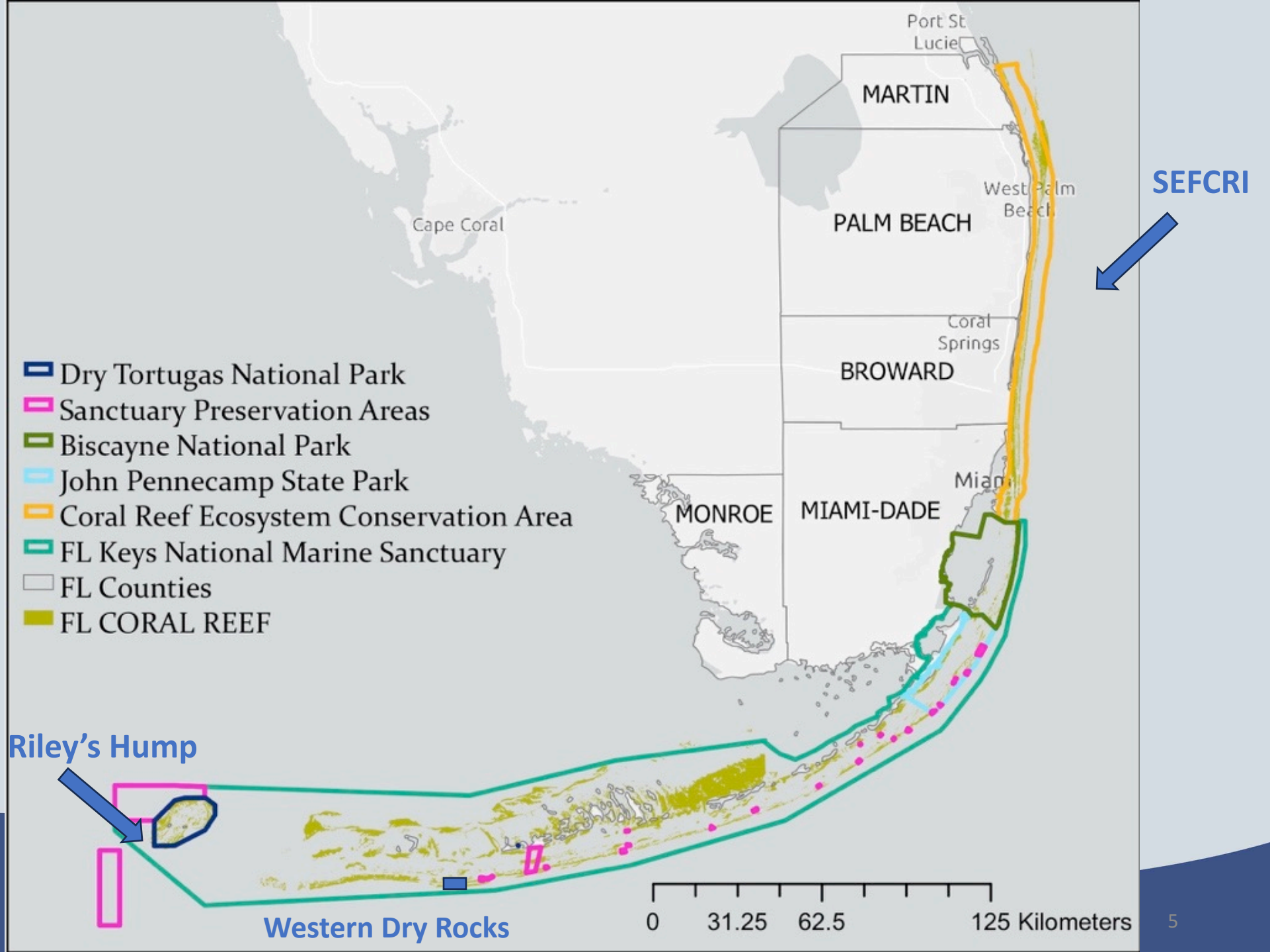
Data Related Deadlines

- **8/4/2023** – DW Working Paper/Processed Data/Preliminary Data Products Due
- **8/21/2023 – 8/25/2023** - Data Evaluation Workshop (St. Pete, FL)
- Week of 9/11/2023 – Post data workshop webinar (if necessary)
- **9/22/2023** – FINAL Data due to data compilers
- 9/29/2023 – Draft DW Reports to DW panel for review & final working papers to SEDAR staff
- 11/3/2023 – Final age and length compositions complete



MTS Region	FL Counties	MRIP	Statistical Grids	SRHS
West_of_FL	-	-	11 - 21	24 -29
NW_FL	Escambia-Dixie	1	7-10	~23
SW_FL	Levy - Collier	2	3-6	21, old 18,22
Keys	Monroe	3	1, 2, 2479-2482	12, old 17
SE_FL	Indian River – Miami-Dade	4	2580,2680,2780, 2579,2679,2779	11
NE_FL	Nassua - Brevard	5	2880,2980,3080, 2879,2979,3079	7, 8
North_of_FL	-	-	North of 31°	1 – 6, 9,10

















New Data Sources Since SEDAR 15A Update

- Biscayne Bay Creel Survey
 - ~1,067 retained lengths from private boats 1993 – 2022
 - Angler Interviews
- Added histological data (FWRI Marathon Lab & FIM, MARMAP/SADL)
- Lengths & ages from SA Deepwater Longline Survey
- Two camera surveys: GOM Combined Video Survey, SA SRFS
- Reef Visual Census (RVC) in SE FL (SEFCRI)
- Electronic Monitoring data from commercial longline vessels on the west coast of Florida, 2016 - 2022
 - Maps of catch and fishing effort provided by Mote Marine Lab (CFEMM)







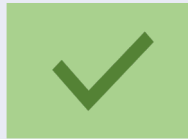





Component	Complete?	Notes	Expected	Working Paper
Management History				NA
Age Data		Need HB, TIP, and Biostat ages for 2021-2022	7/2023	NA
Length/Weight			7/2023	NA
Reproduction Data				NA
Morphometrics/External Growth & Natural Mortality			8/4/2023	
Maturity			8/4/2023	

Data Products	Complete?	Notes	Expected	Working Paper
RVC Indices (Keys, Dry Tortugas, SEFCRI)		In internal review	8/4/2023	
Riley's Hump SSB Index				 ***
Keys Juvenile Index		Insufficient data for index		 ***
SE FL FIM Index		Need QAQC data for 2022	8/4/2023	
Combined Camera Survey		Data complete through 2021. Data for 2022 available in Sept.	8/4/2023	
SA SERFS Video Survey			8/4/2023	

Data Products	Complete?	Notes	Expected	Working Paper
MRIP Indices		In internal review	8/4/2023	
Biscayne Bay Creel Survey Index		In internal review	8/4/2023	
Commercial Indices (LL & H&L)				
Fishery Performance Report/Fishermen Feedback				
GOM Bottom LL Electronic Monitoring Summary		Through October 2021		



Data Products	Complete?	Notes	Expected	Working Paper
MRIP Landings & Discards				
Headboat Landings & Discards		Need discard estimates for 1981-2003	9/22/2020	 ***
FWRI At Sea HB/CH Observer			8/4/2023	
Com Landings				
Com Discards				
Commercial At-Sea Observer				

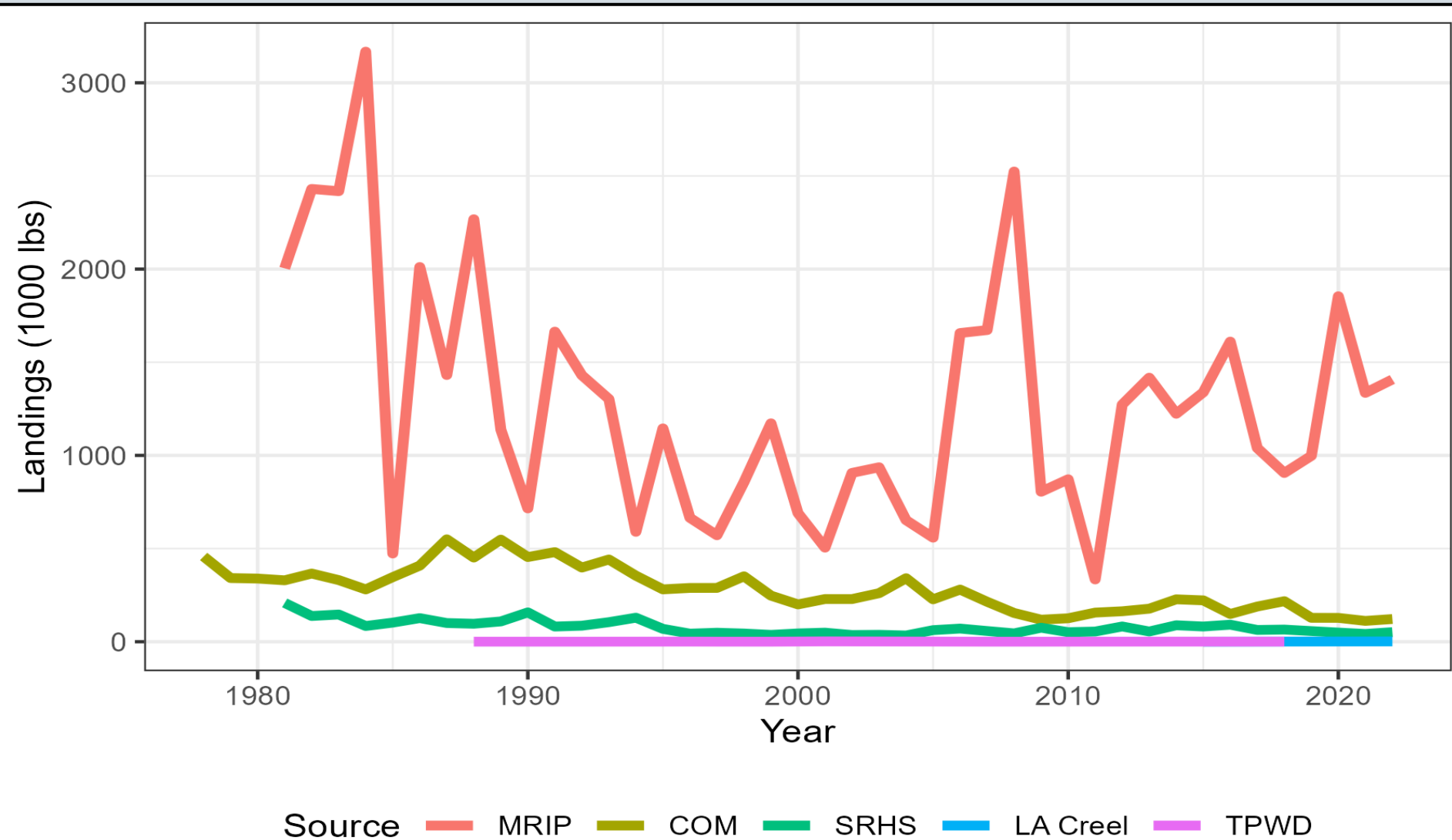


Data Preview

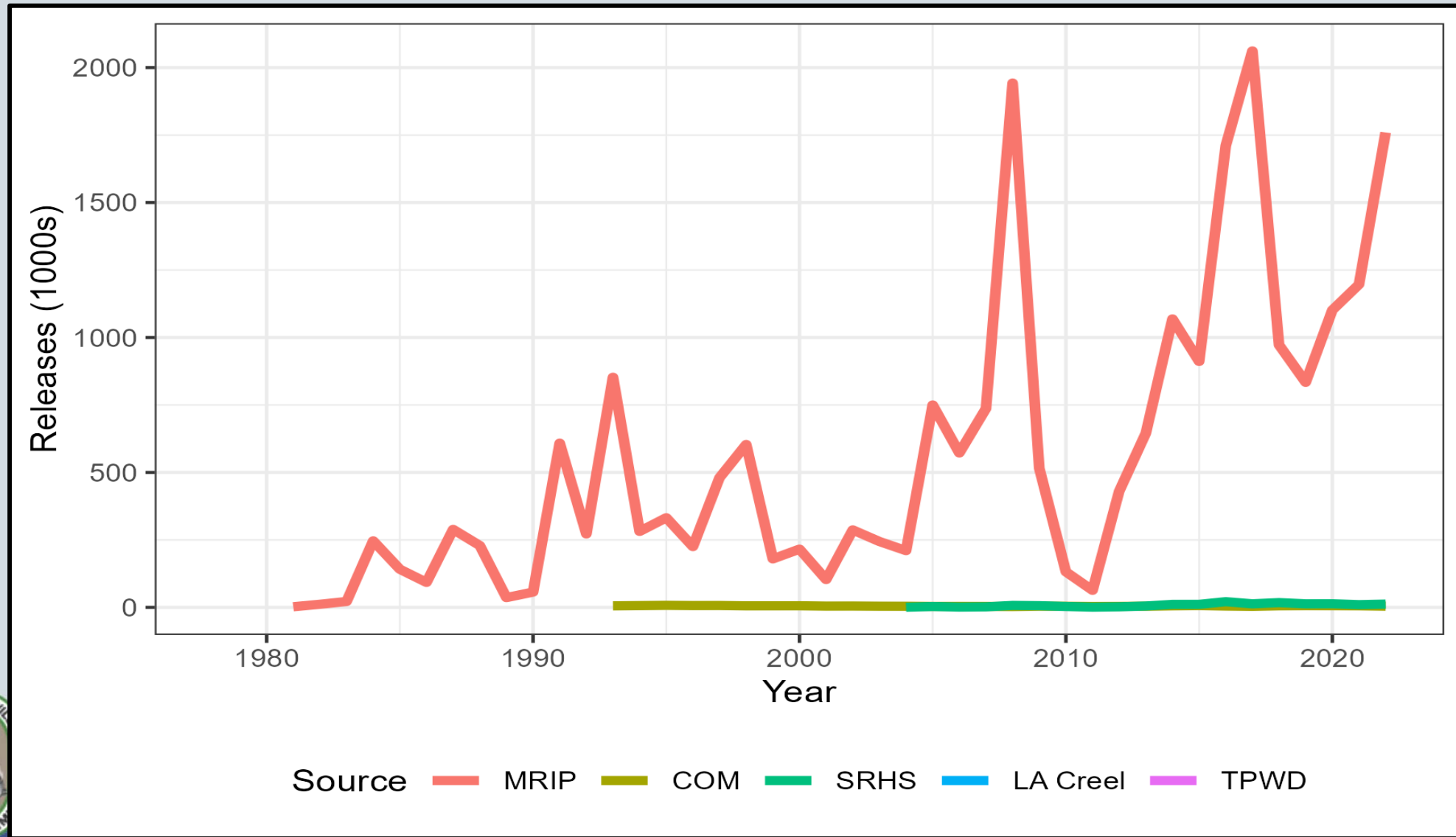
- Landings and Discards
- Length Frequencies
- Indices and CPUE
- Length at age



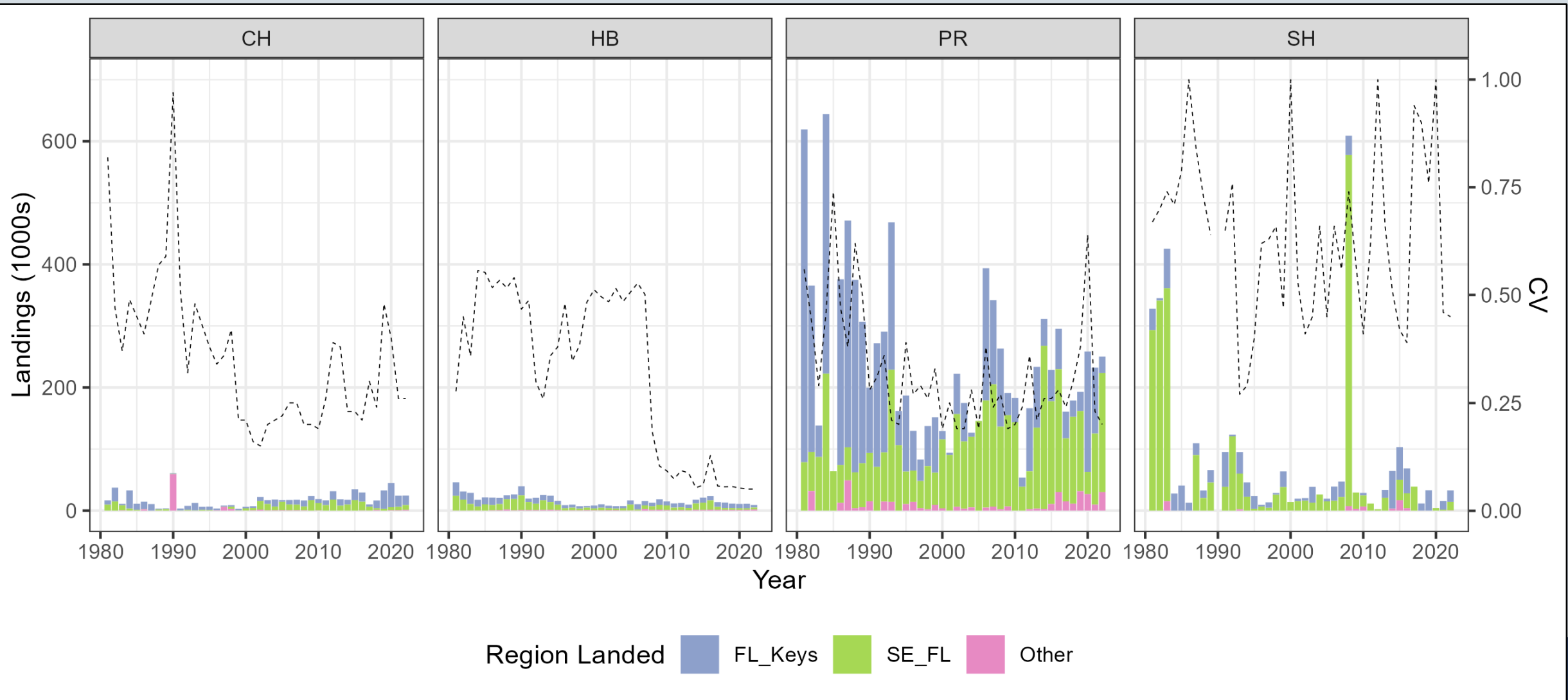
Landings (lbs) By Source



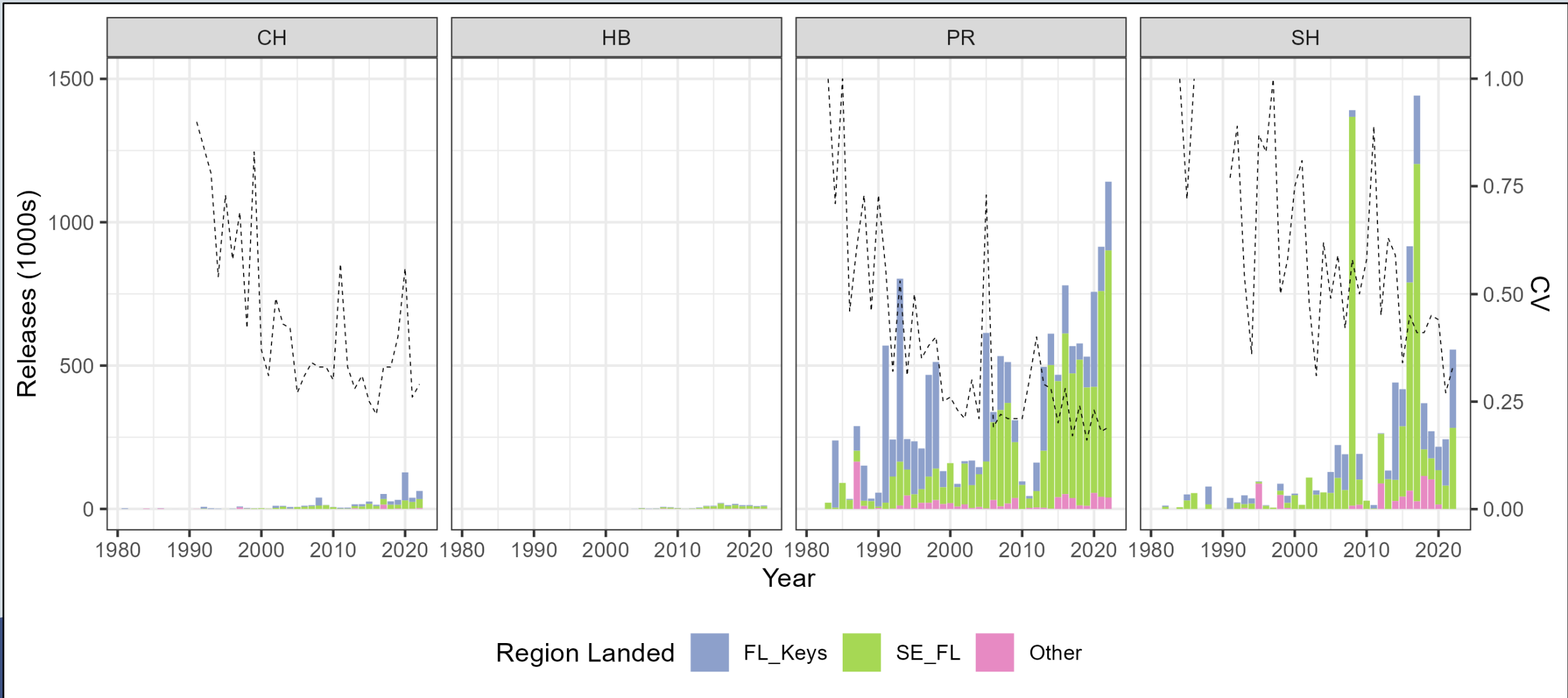
Discards (number) By Source



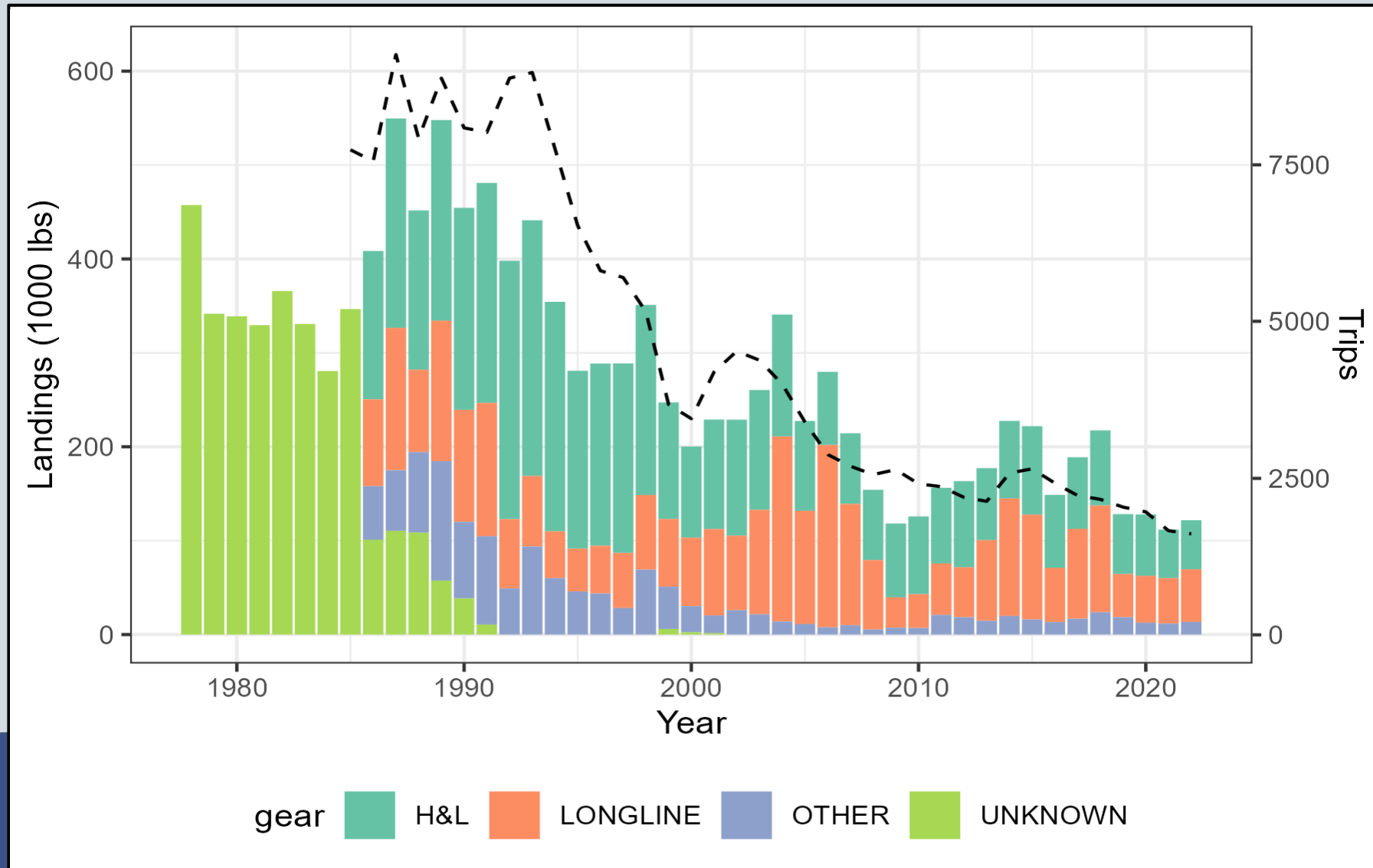
Rec Landings (num) by Region and Mode



Rec Releases (num) by Region and Mode

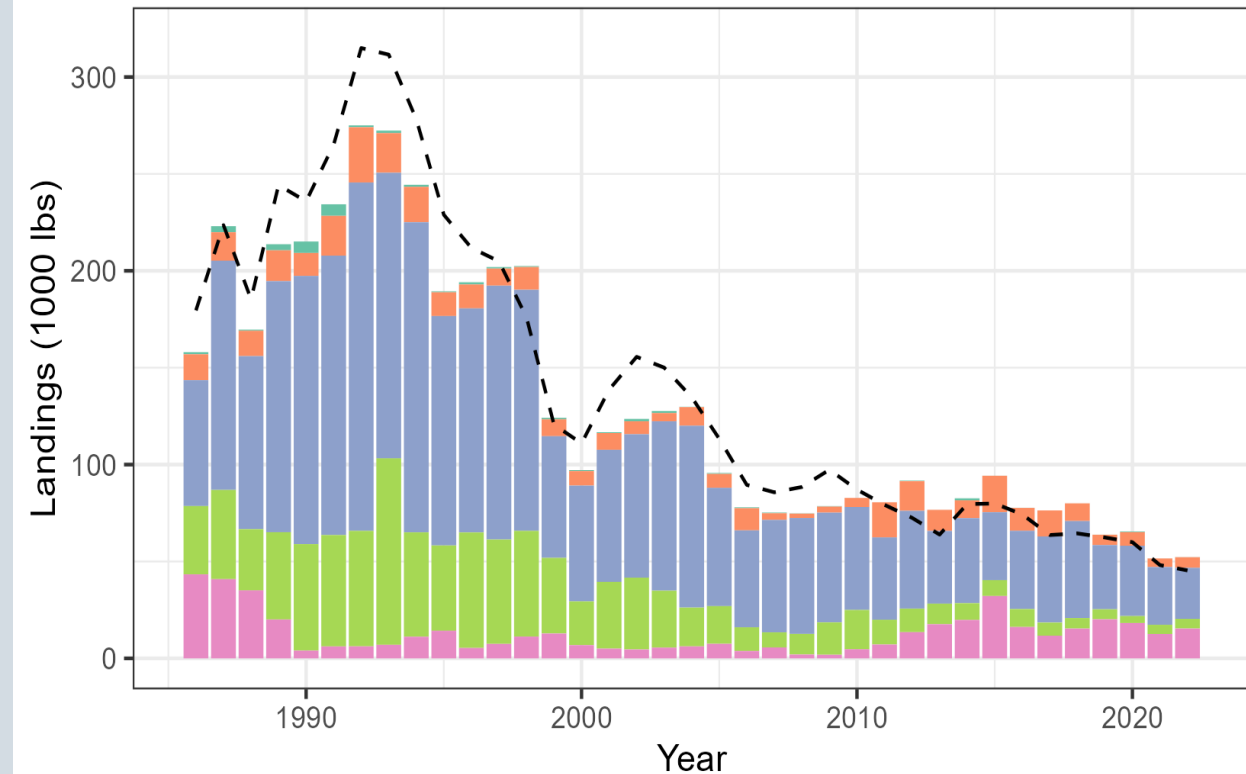


Commercial Landings (lbs) by Gear



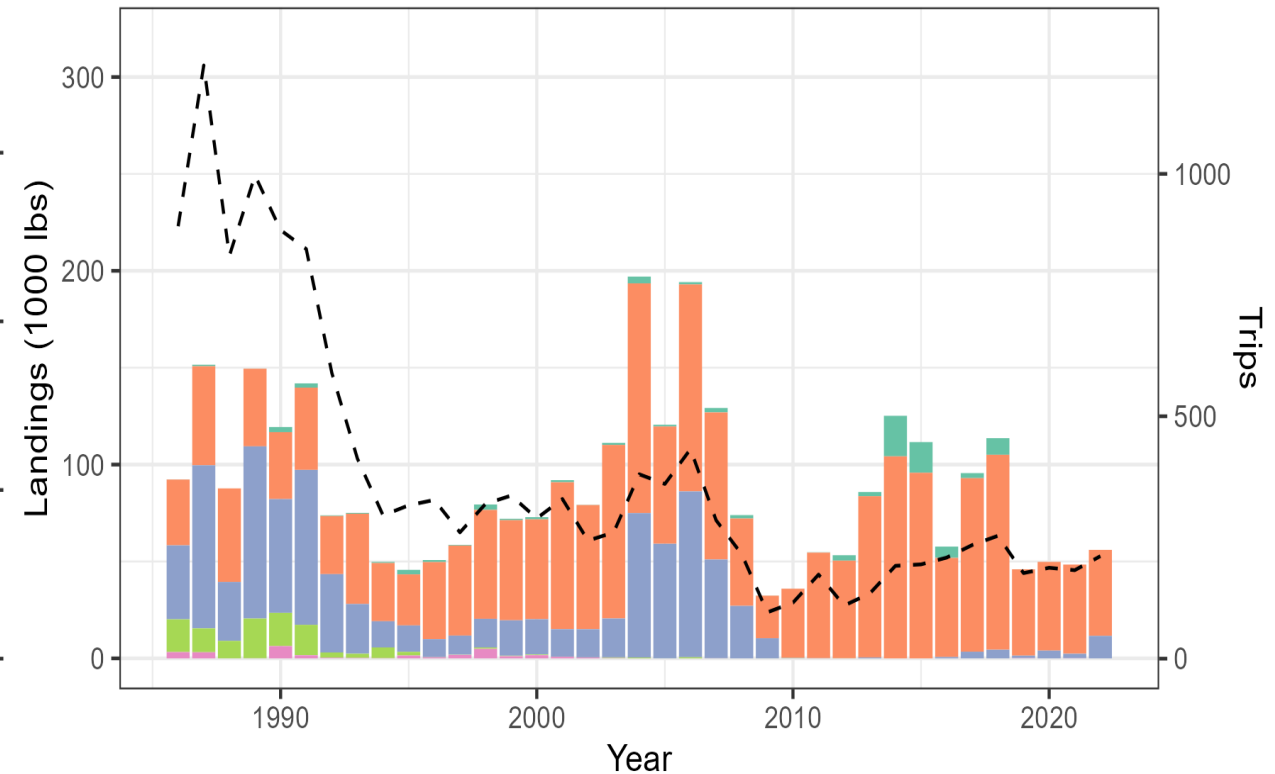
Commercial Landings (lbs) by Region Landed

Hook & Line



Region Landed NW_FL SW_FL FL_Keys SE_FL NE_FL

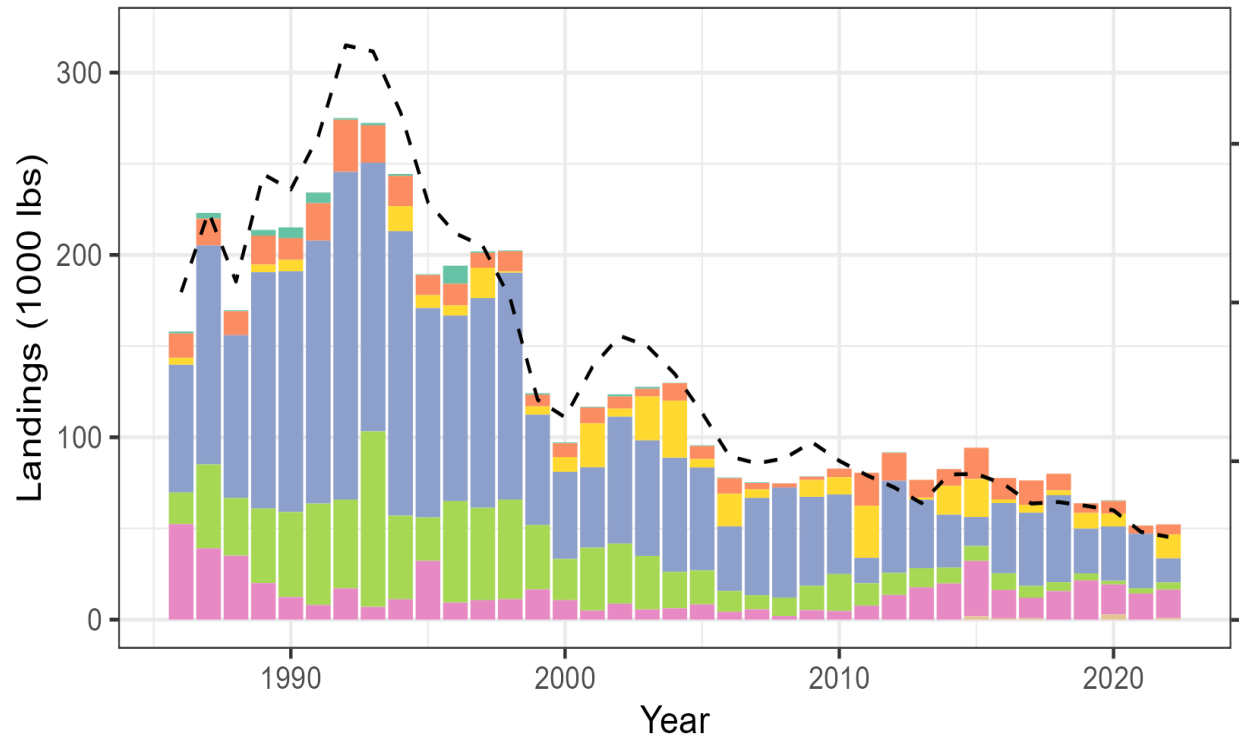
Longline



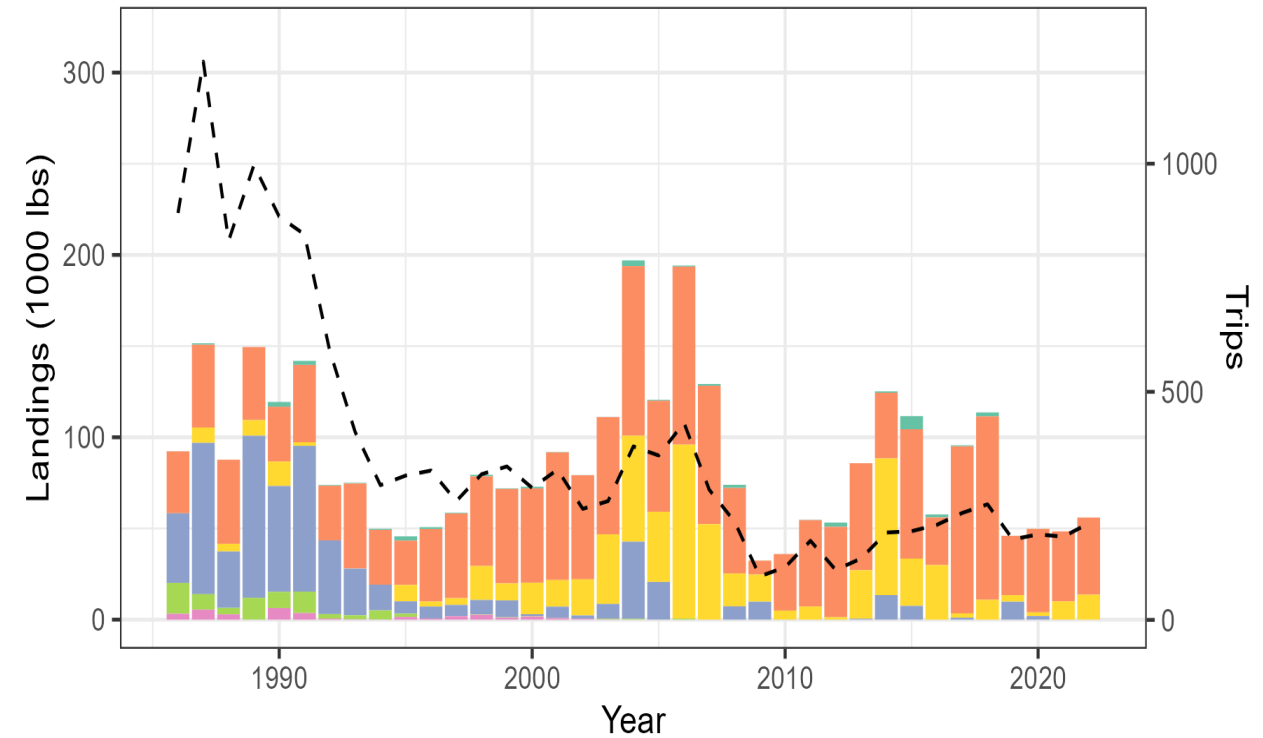
Region Landed NW_FL SW_FL FL_Keys SE_FL NE_FL

Commercial Landings (lbs) by Region Caught

Hook & Line



Longline



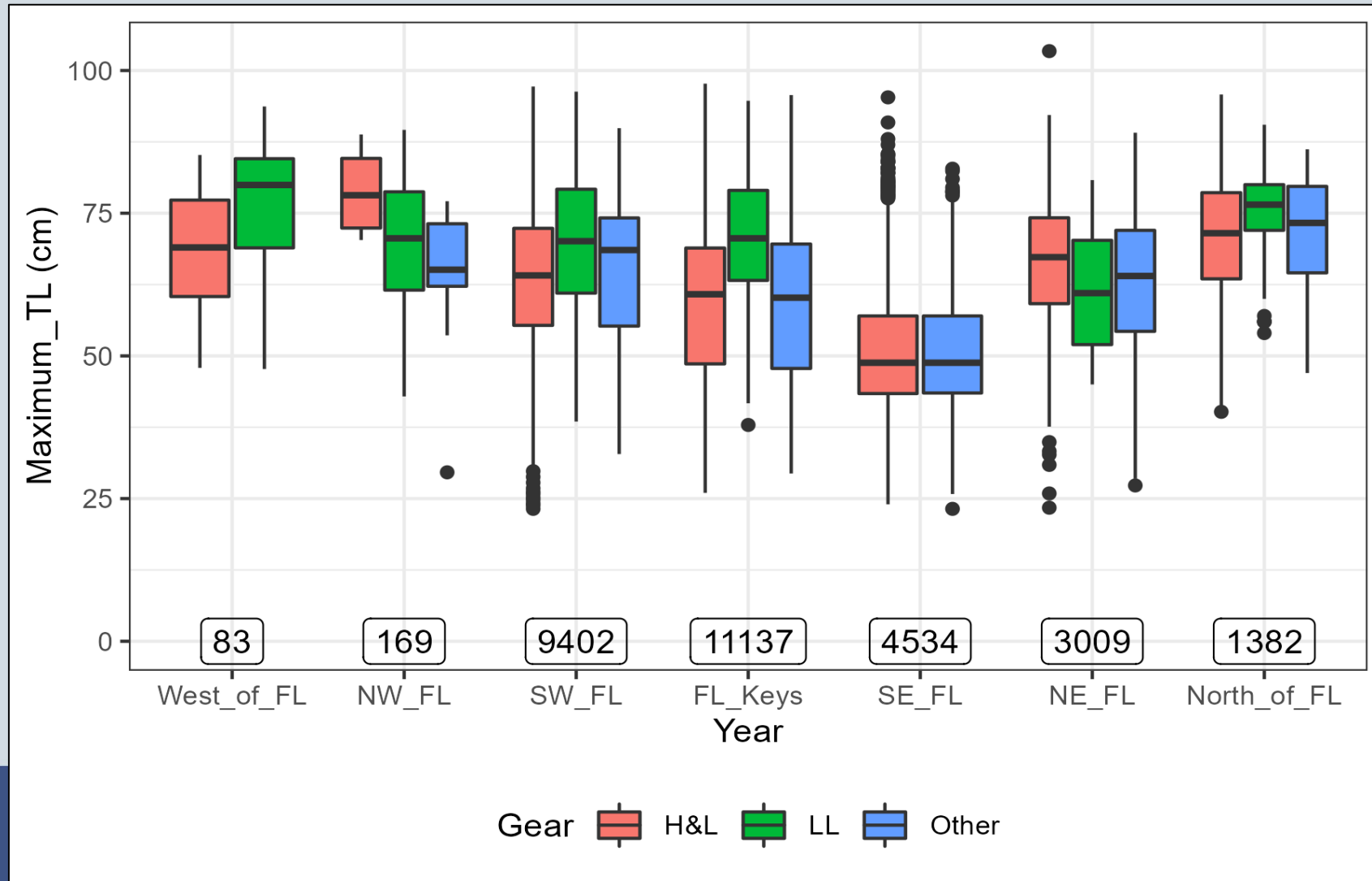


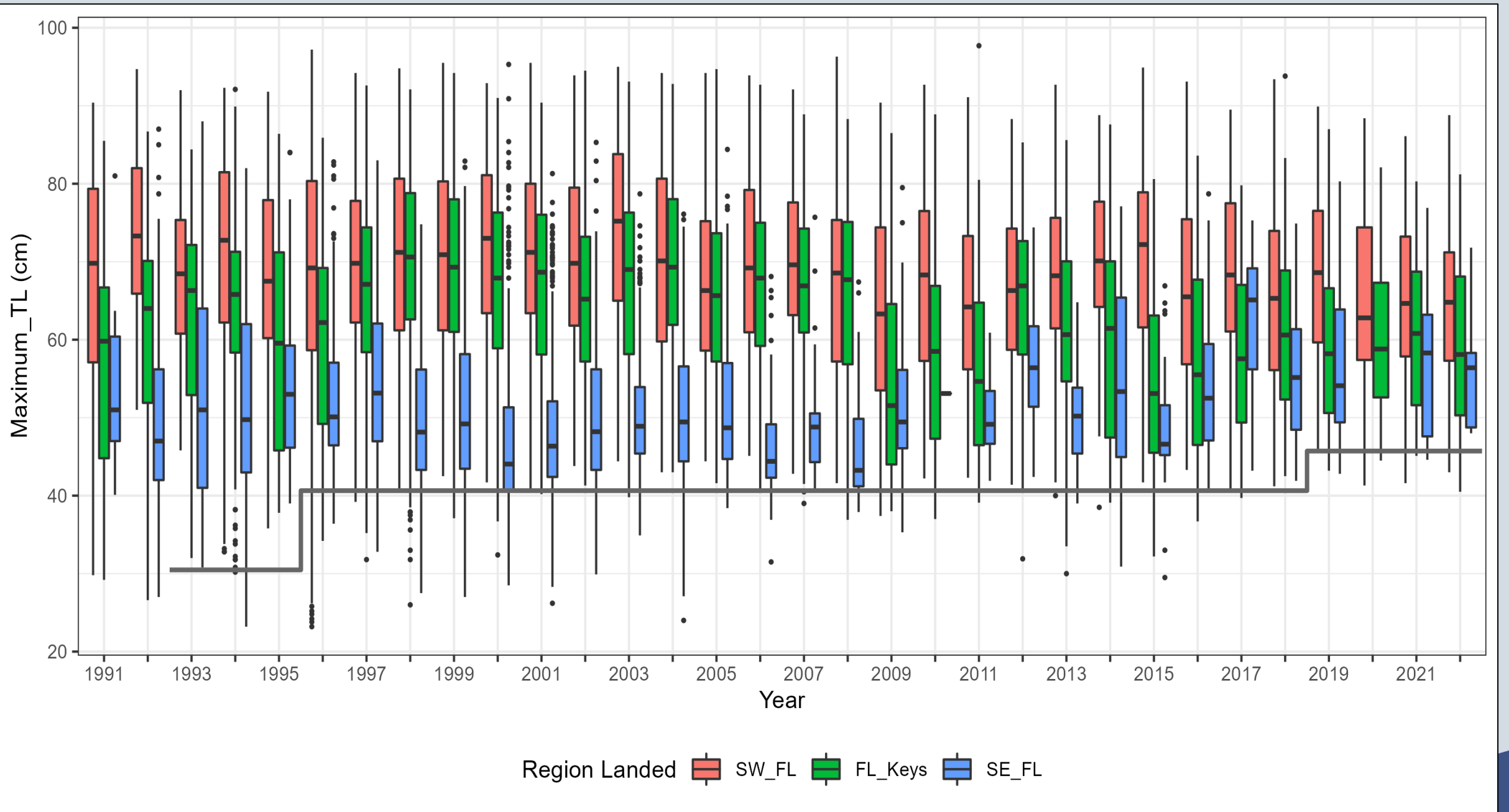
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Length Frequencies

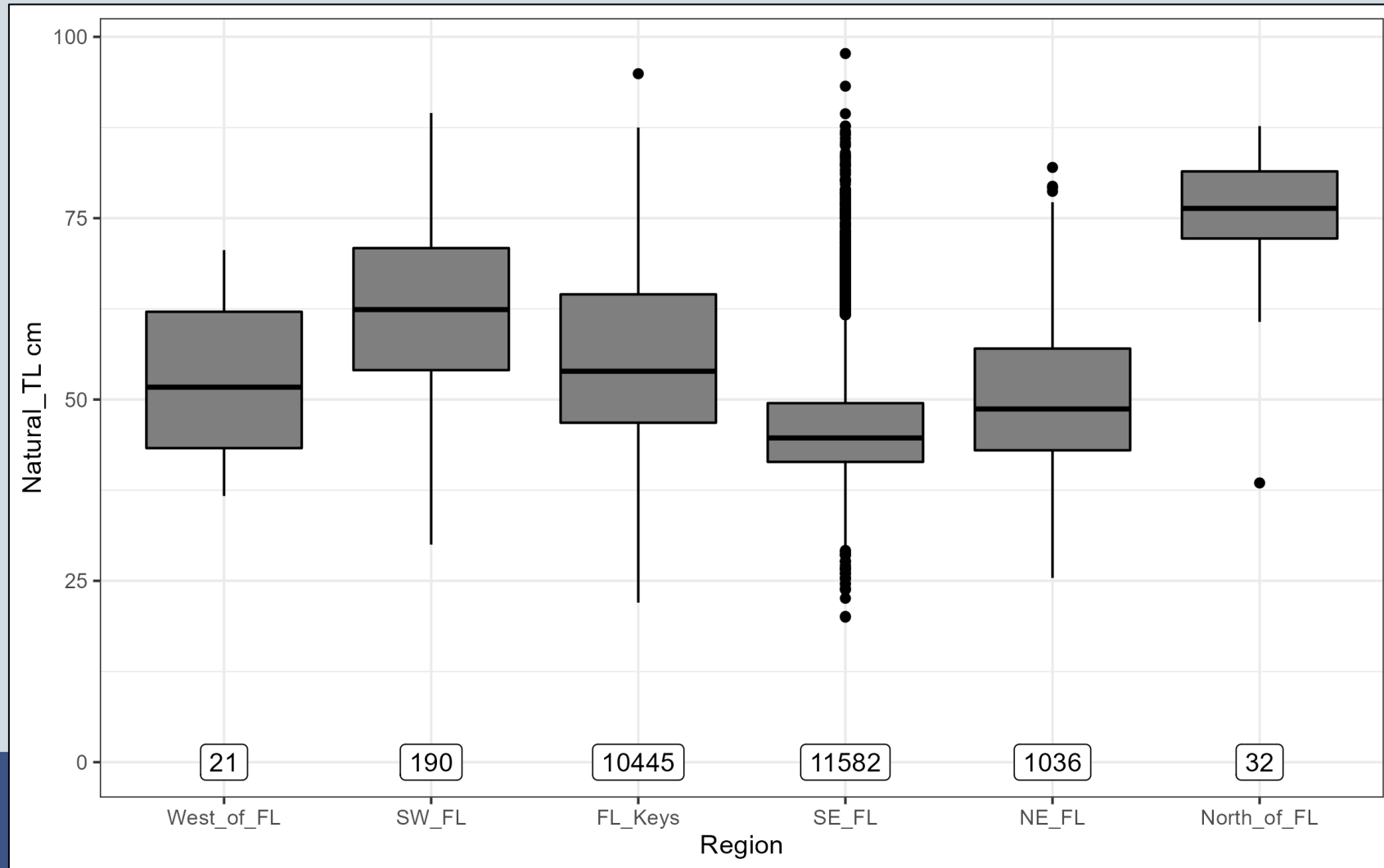


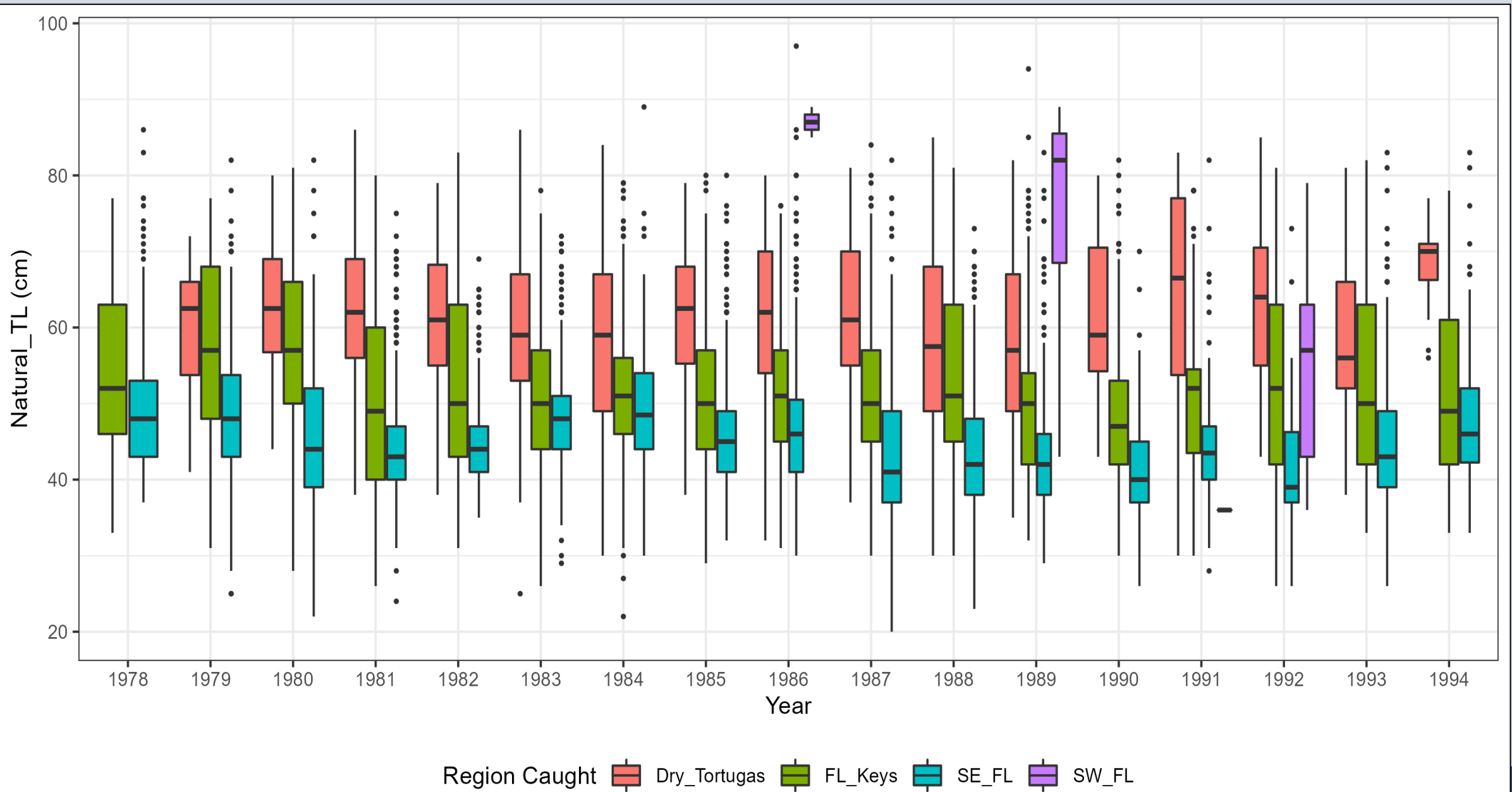
TIP Retained Lengths By Region Landed (1984-2022)

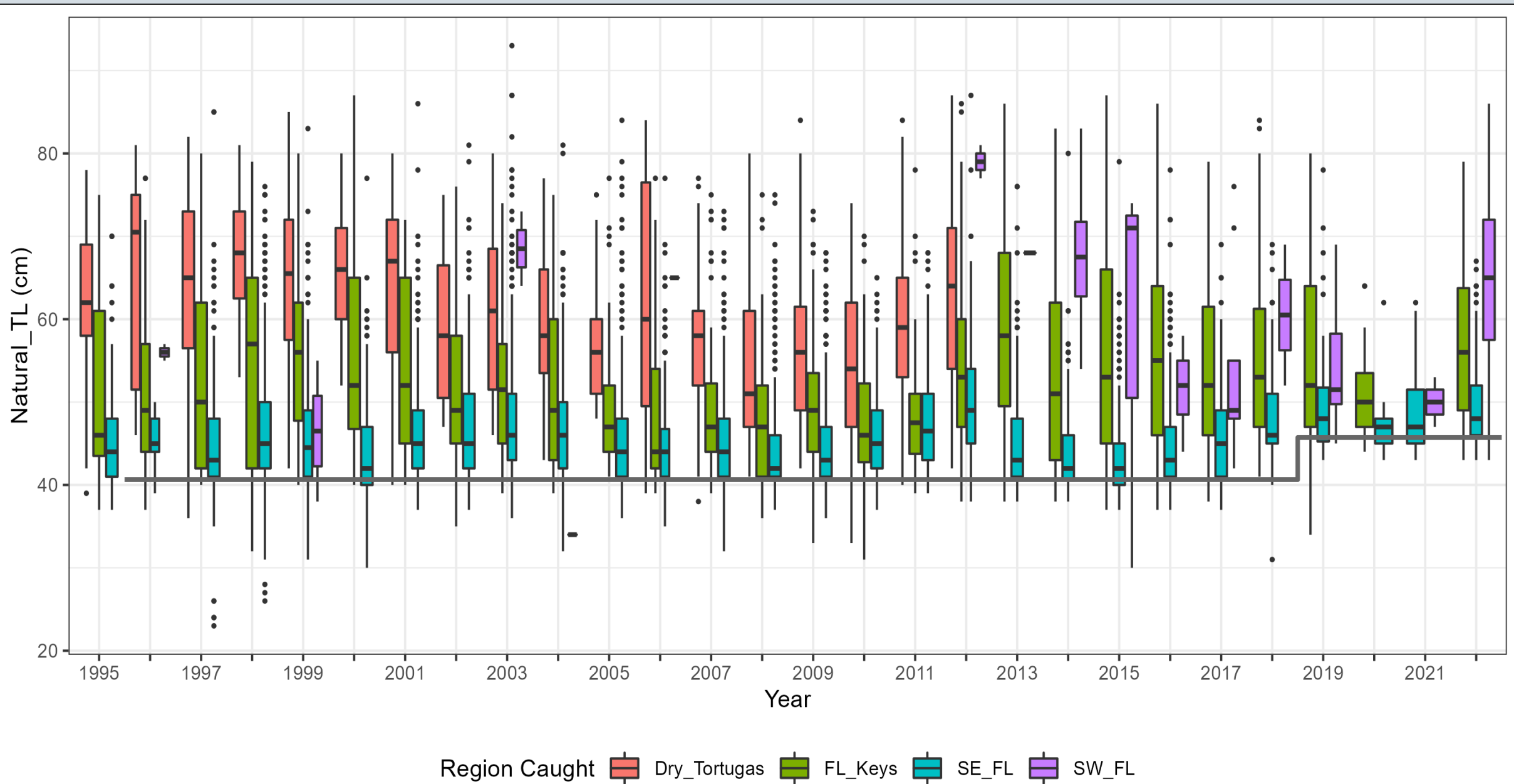




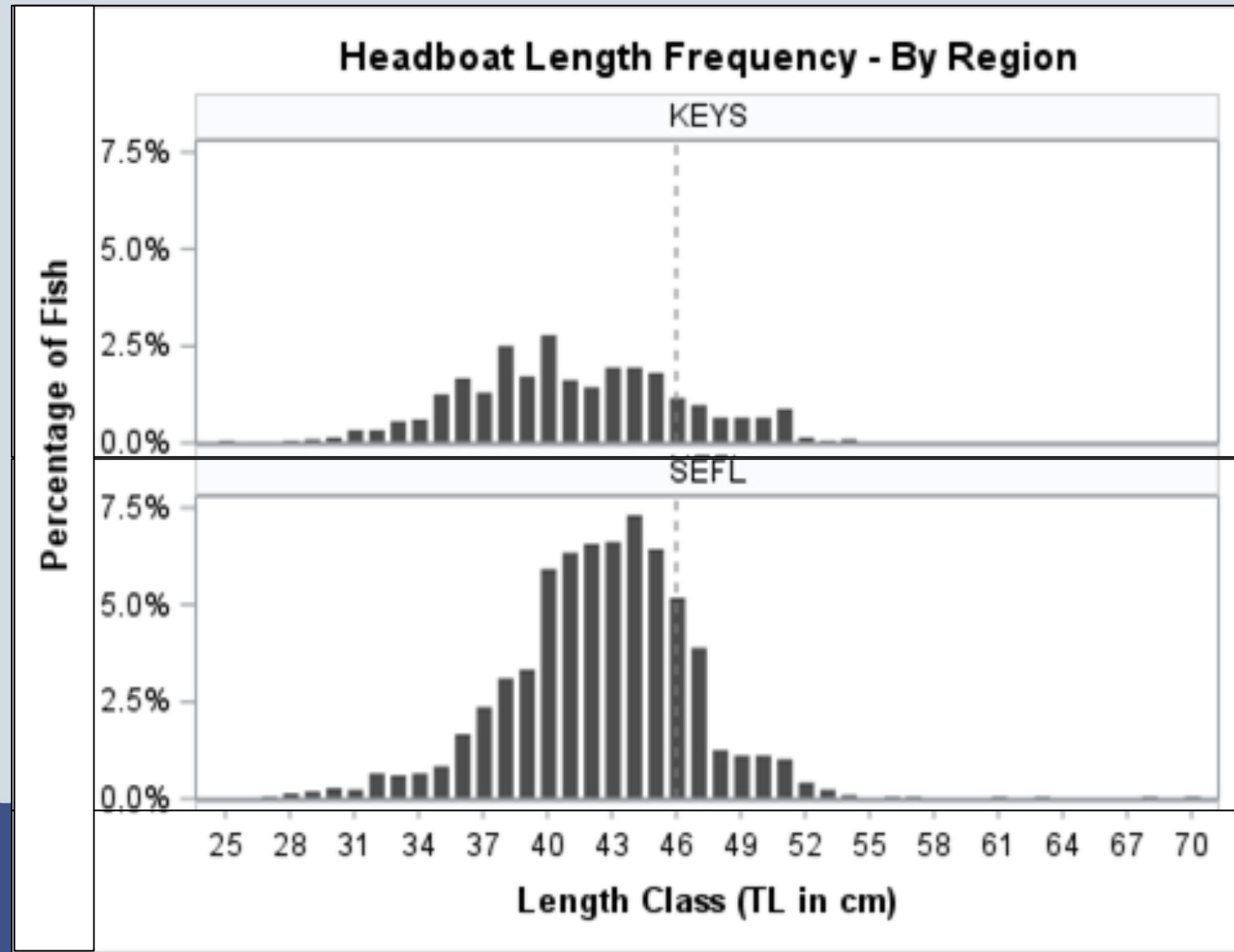
SRHS Retained Lengths By Region (1976-2022)



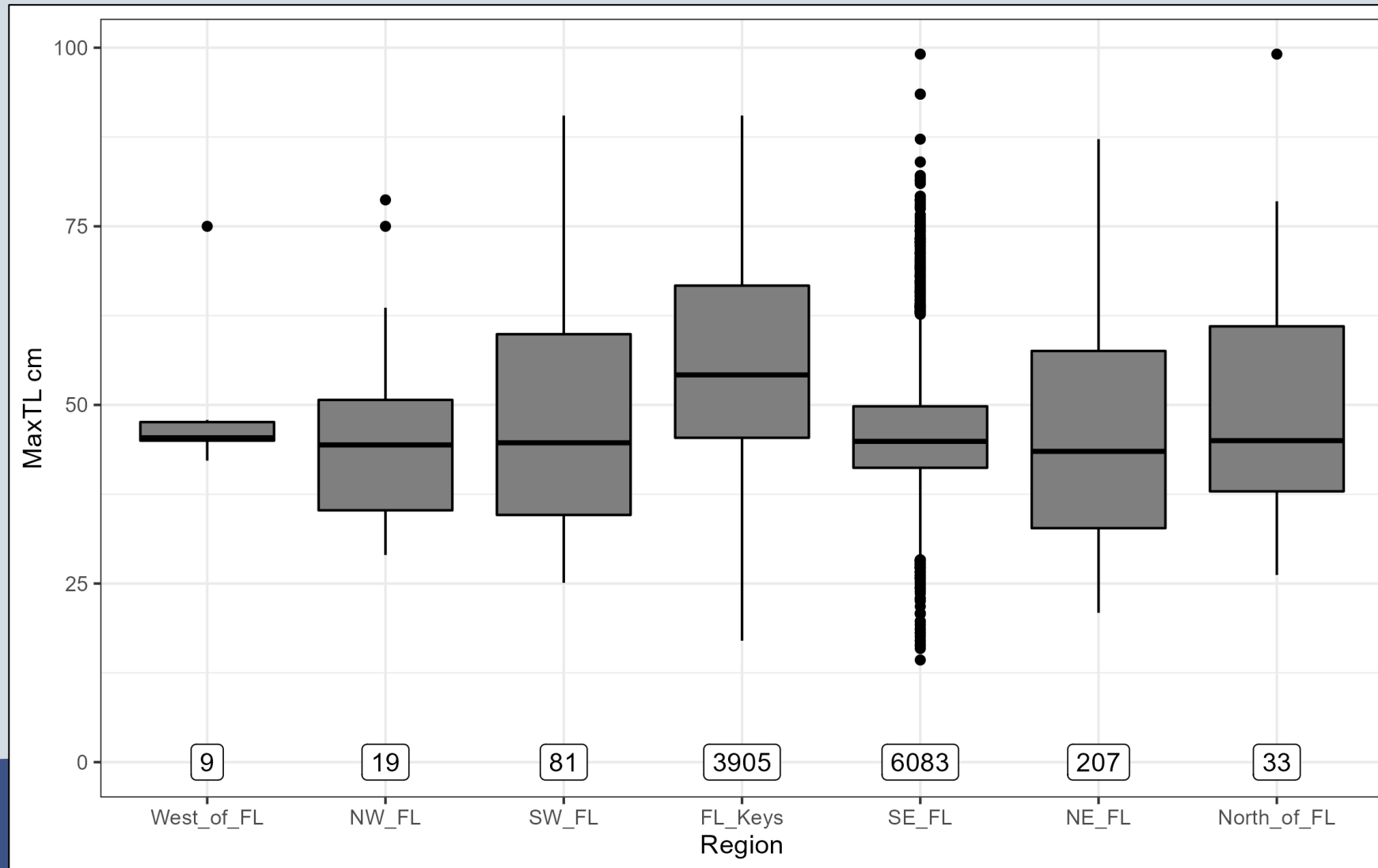


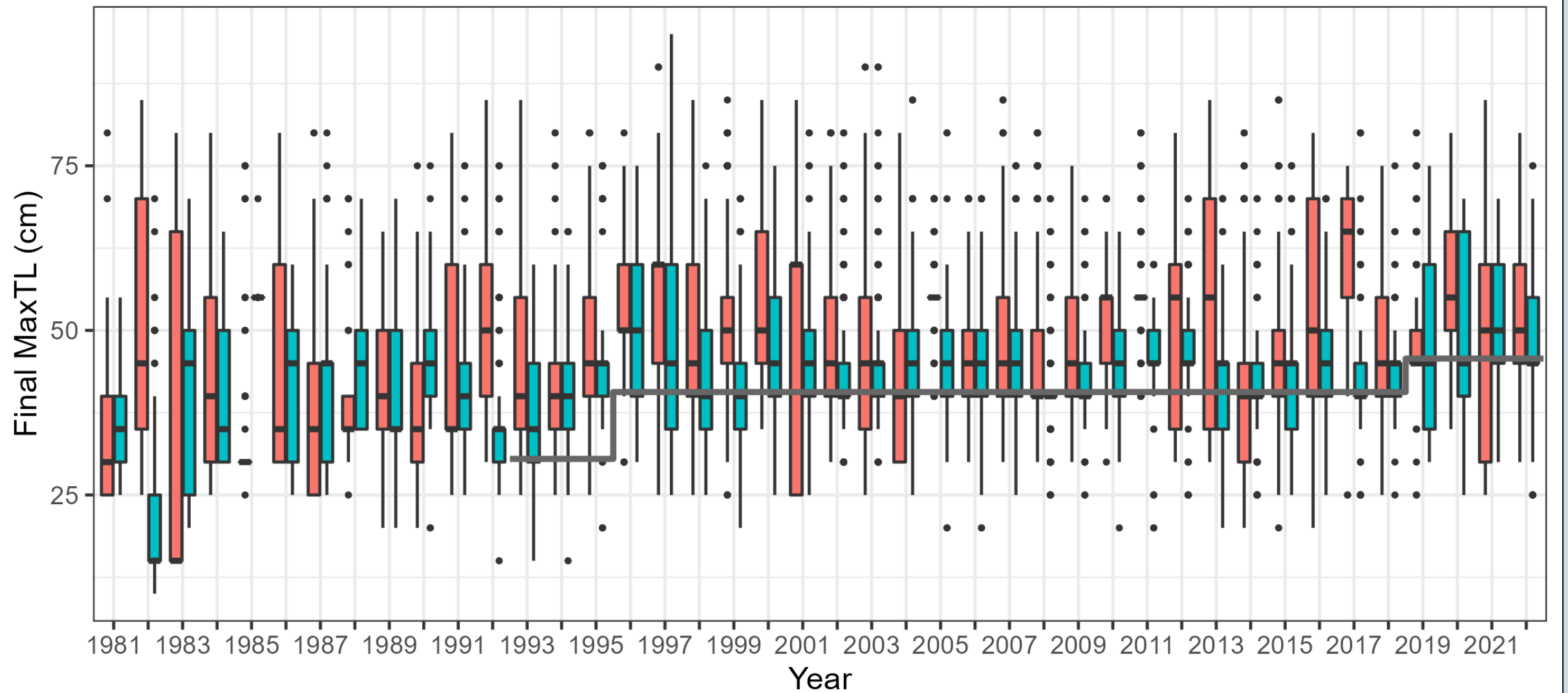


HB Discard Lengths - At-Sea Observer 2005 - 2020

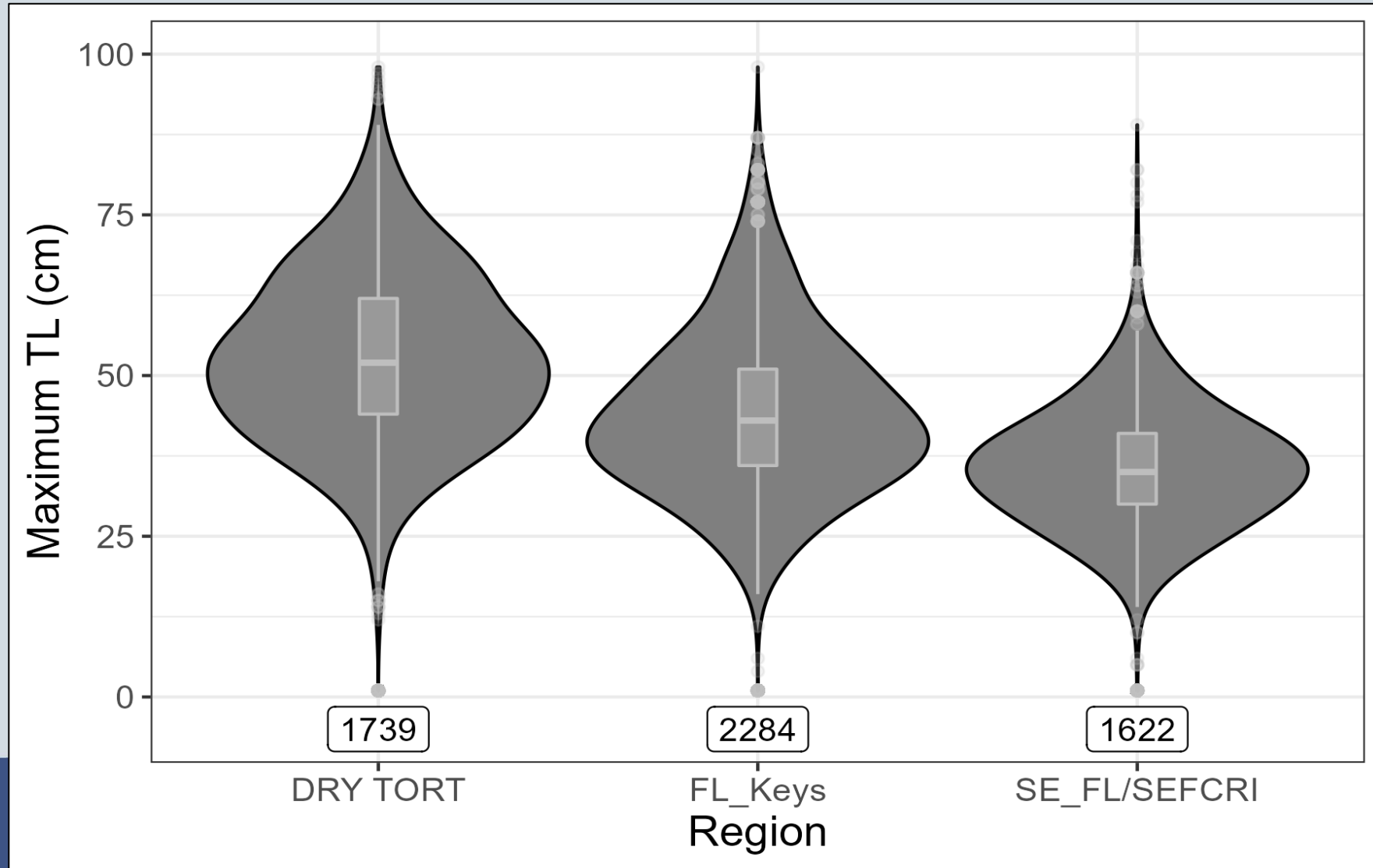


MRIP Retained Lengths (1981 – 2022)

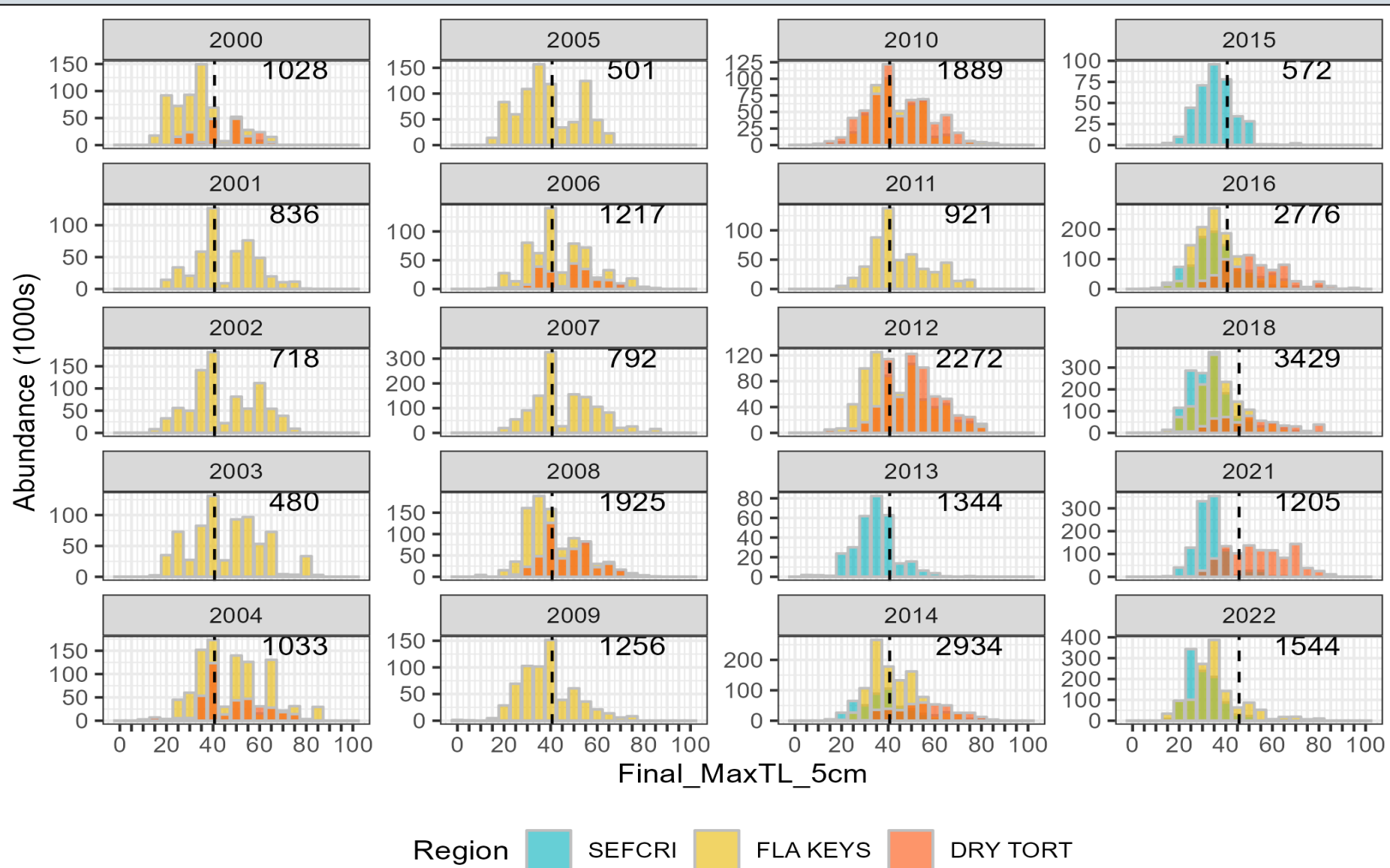




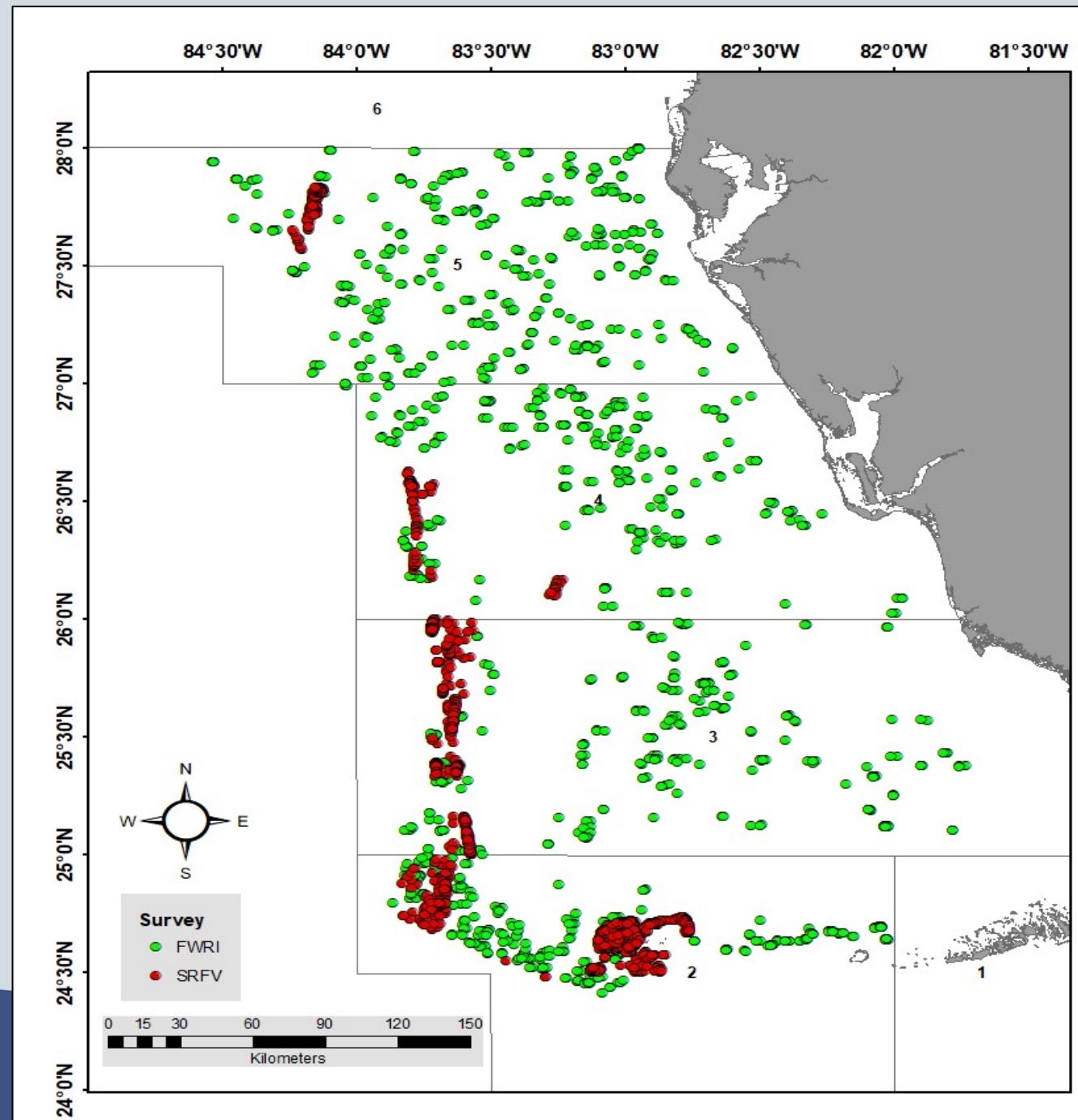
Reef Visual Census 1999-2022



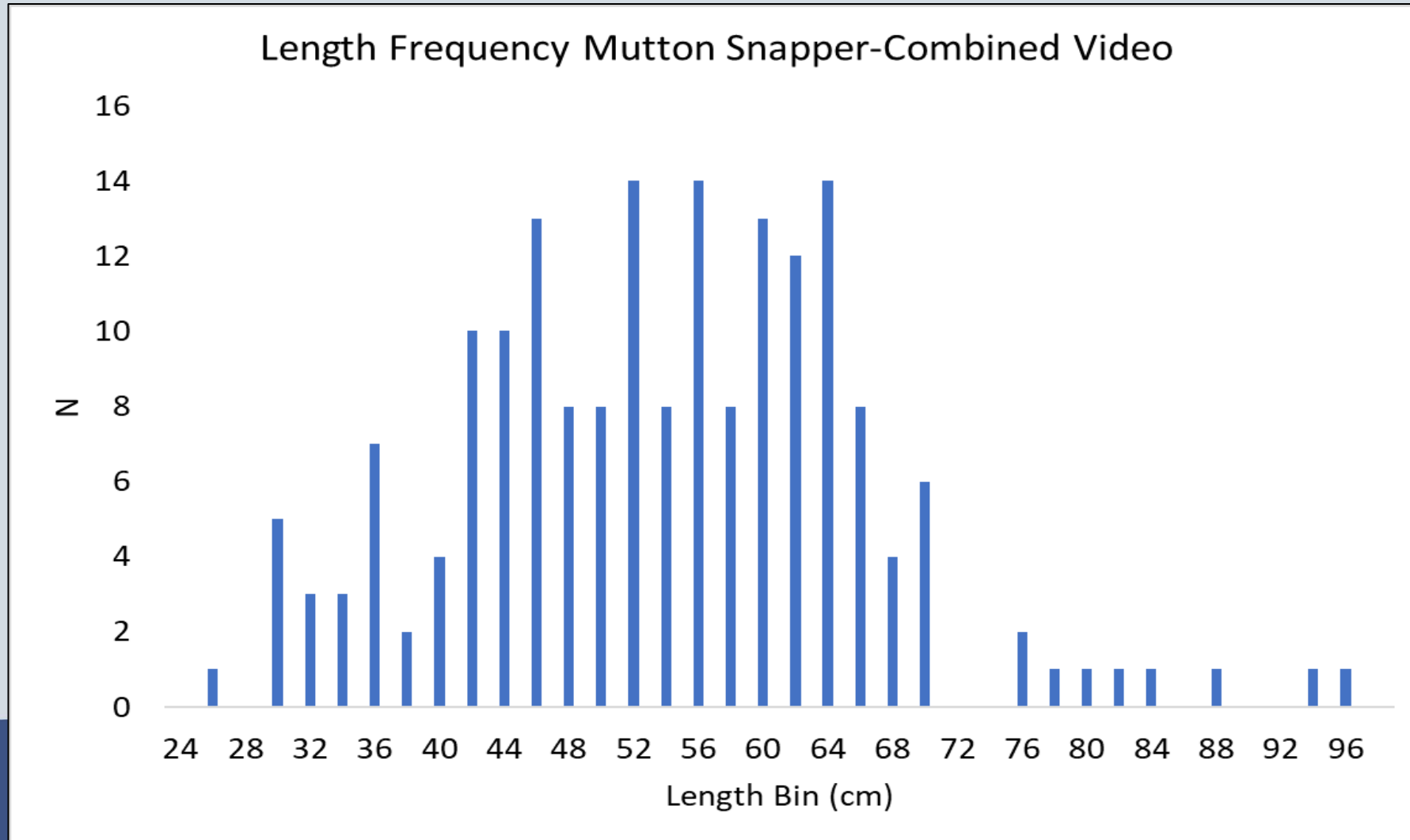
Reef Visual Census 2000-2022



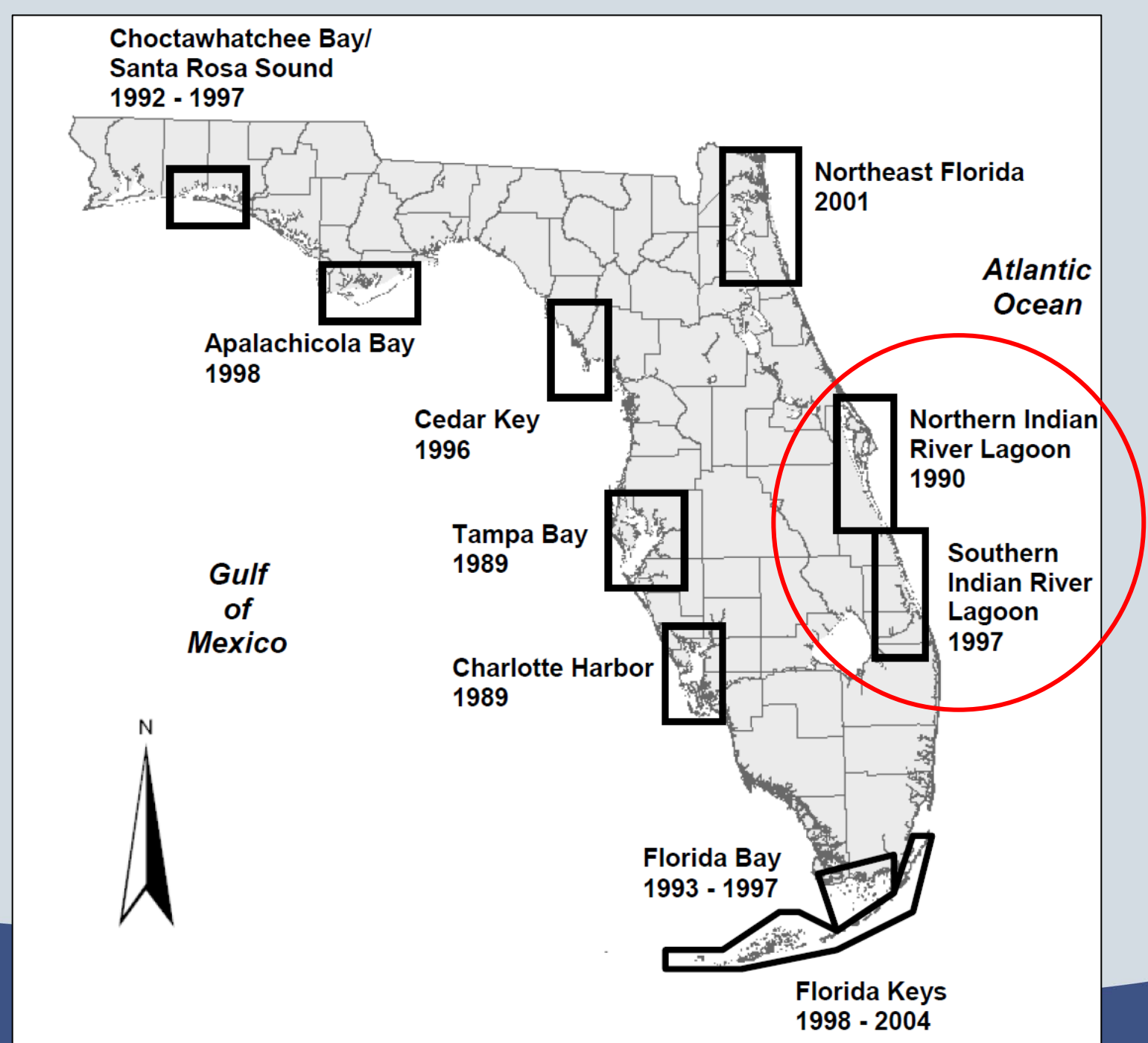
GOM Video Survey WFS Deployment Sites



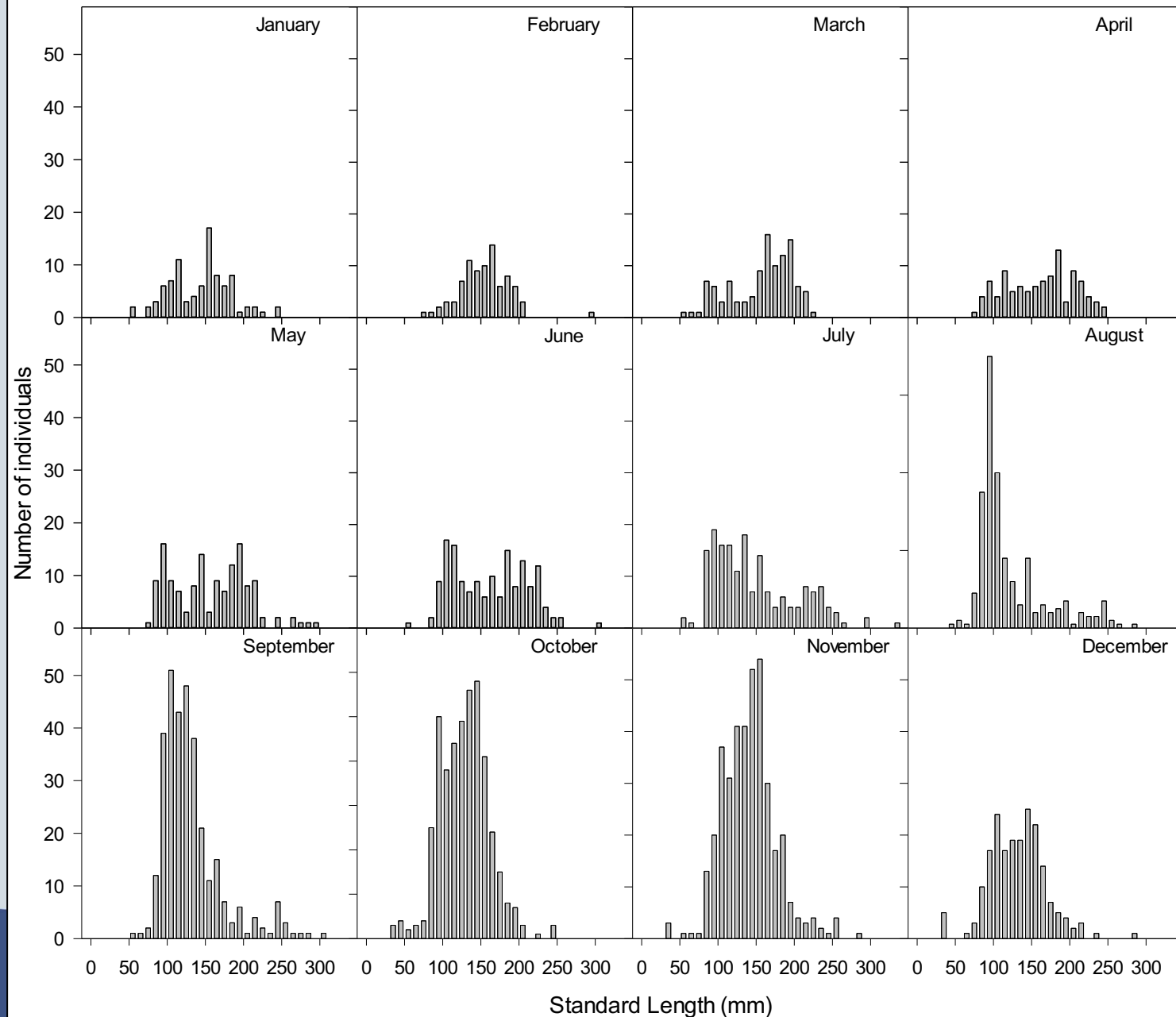
GOM Video Survey Fork Lengths



FWRI FIM Inshore Sampling



FWRI FIM Inshore Sampling



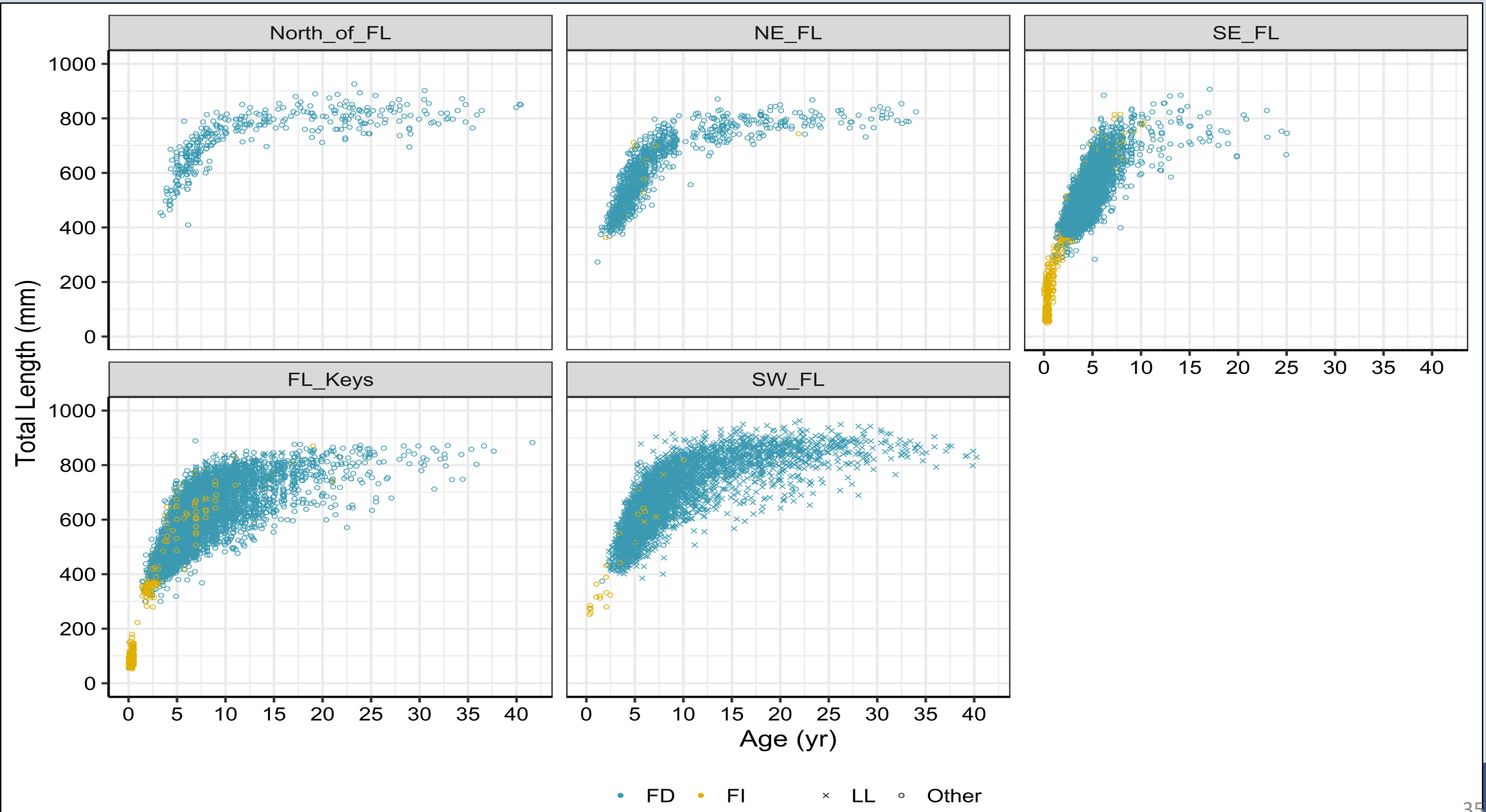


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Length at Age Data



Calendar Ages vs Max Total Length



Questions

- What's driving the differences in length/age comps between regions, particularly SE FL?
 - One-way migration from Dry Tortugas/Keys to northern FL and north of FL?
 - Larval transport?
 - Localized overfishing?
 - Depth-limited sampling?
 - ????
- Can these hypotheses be tested in an assessment model?
- What data or surveys would be needed to answer this?
 - Reproduction
 - Movement/Tagging data
 - ????

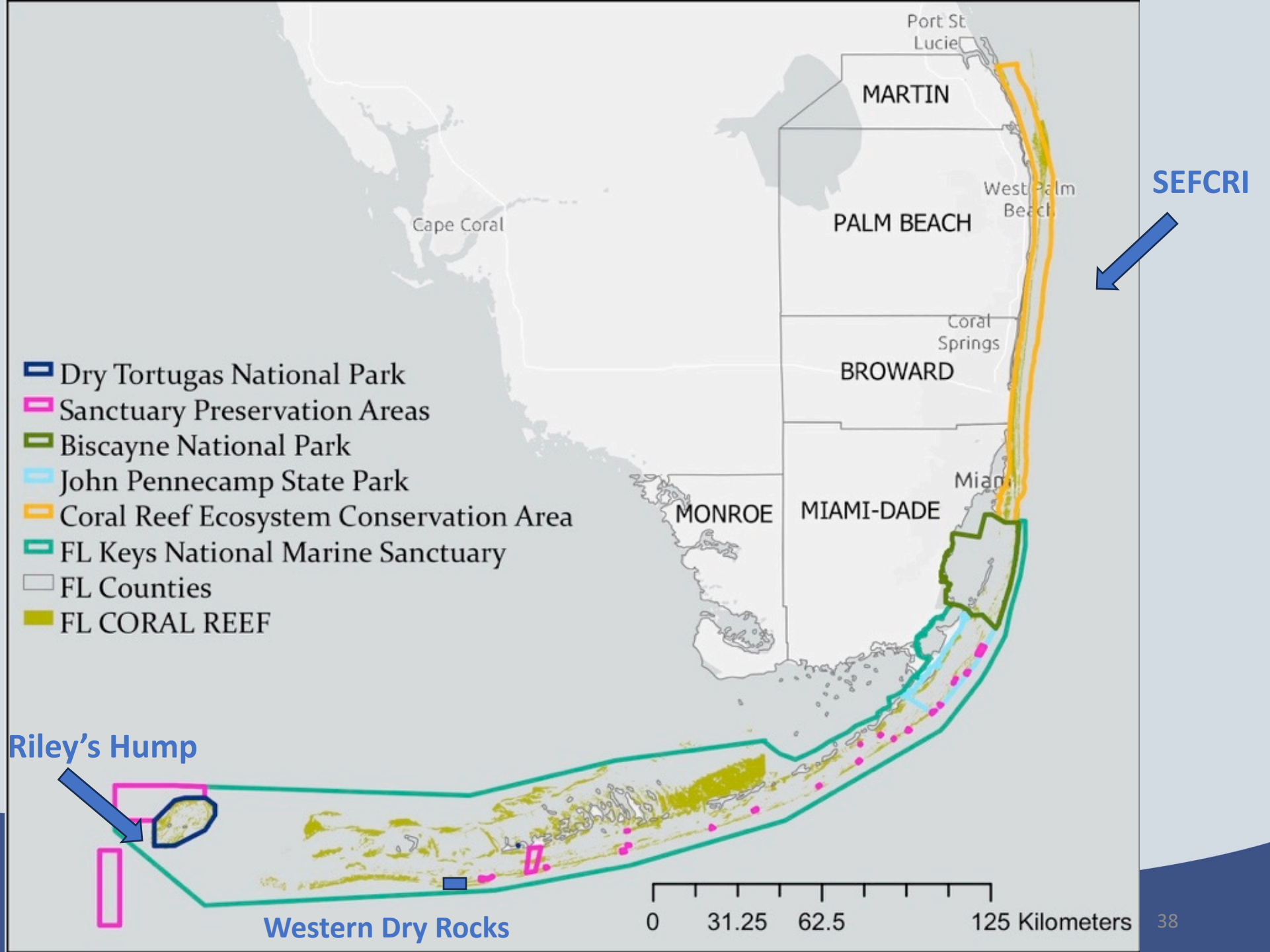




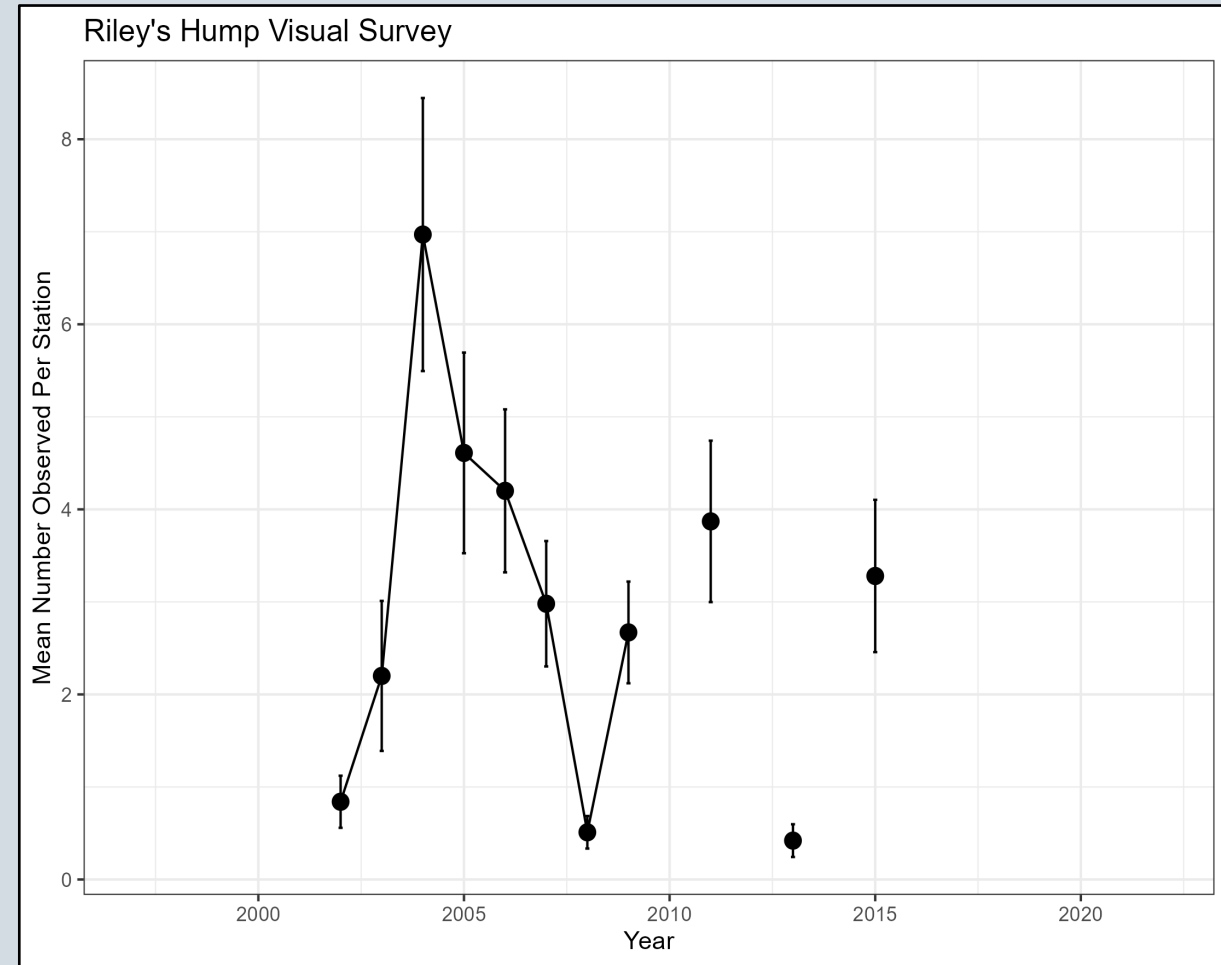
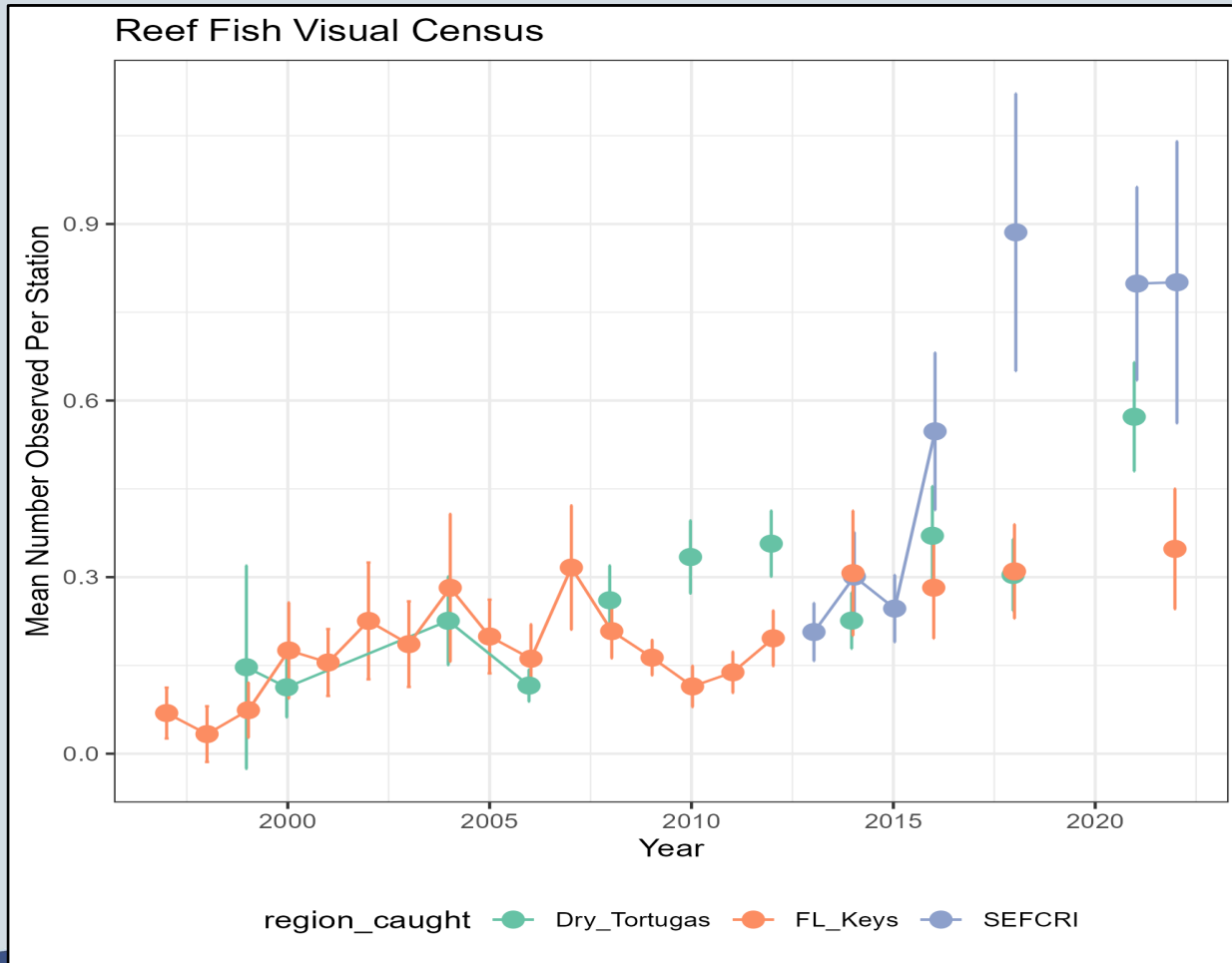
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Preliminary Indices & CPUE

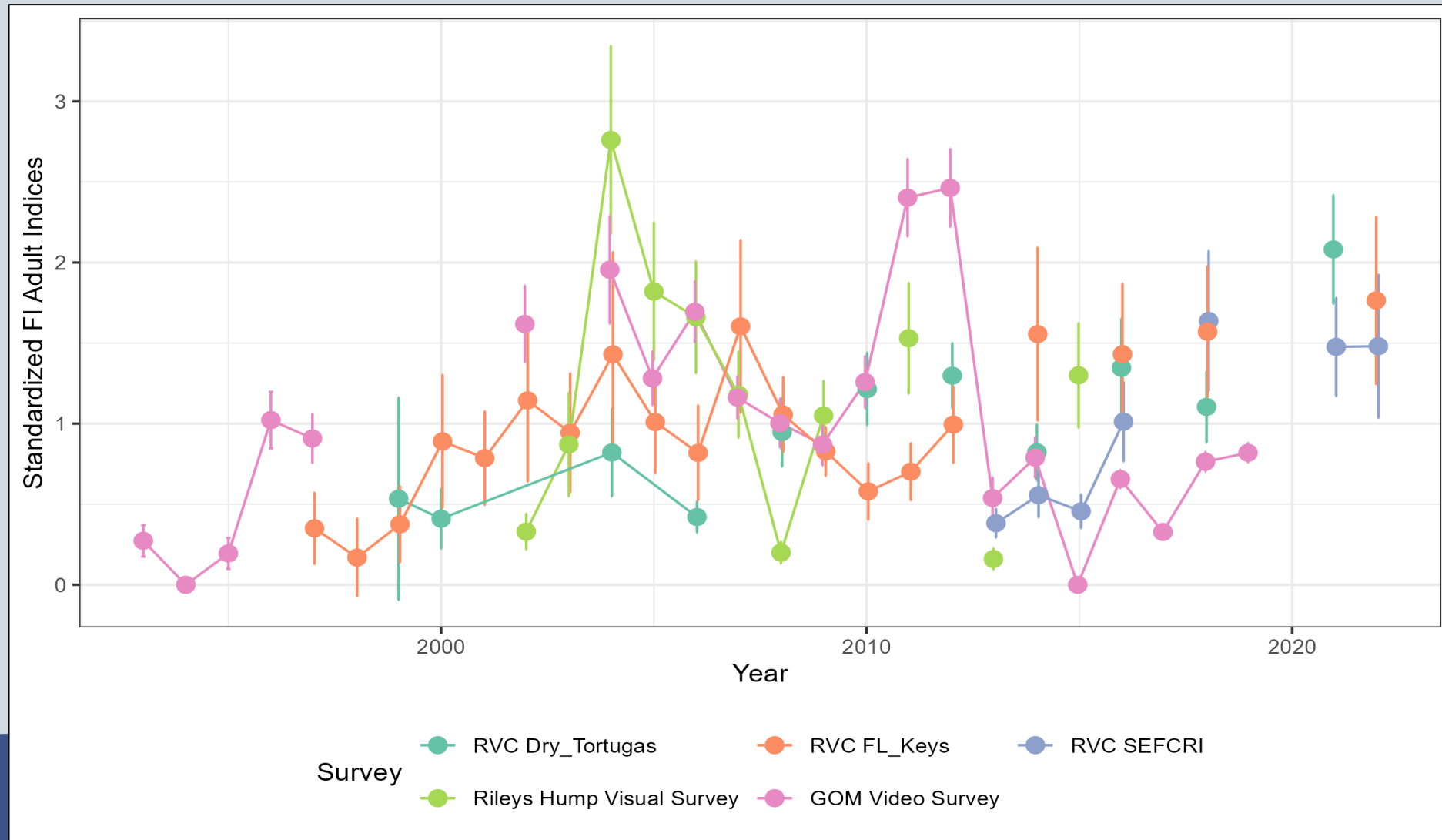




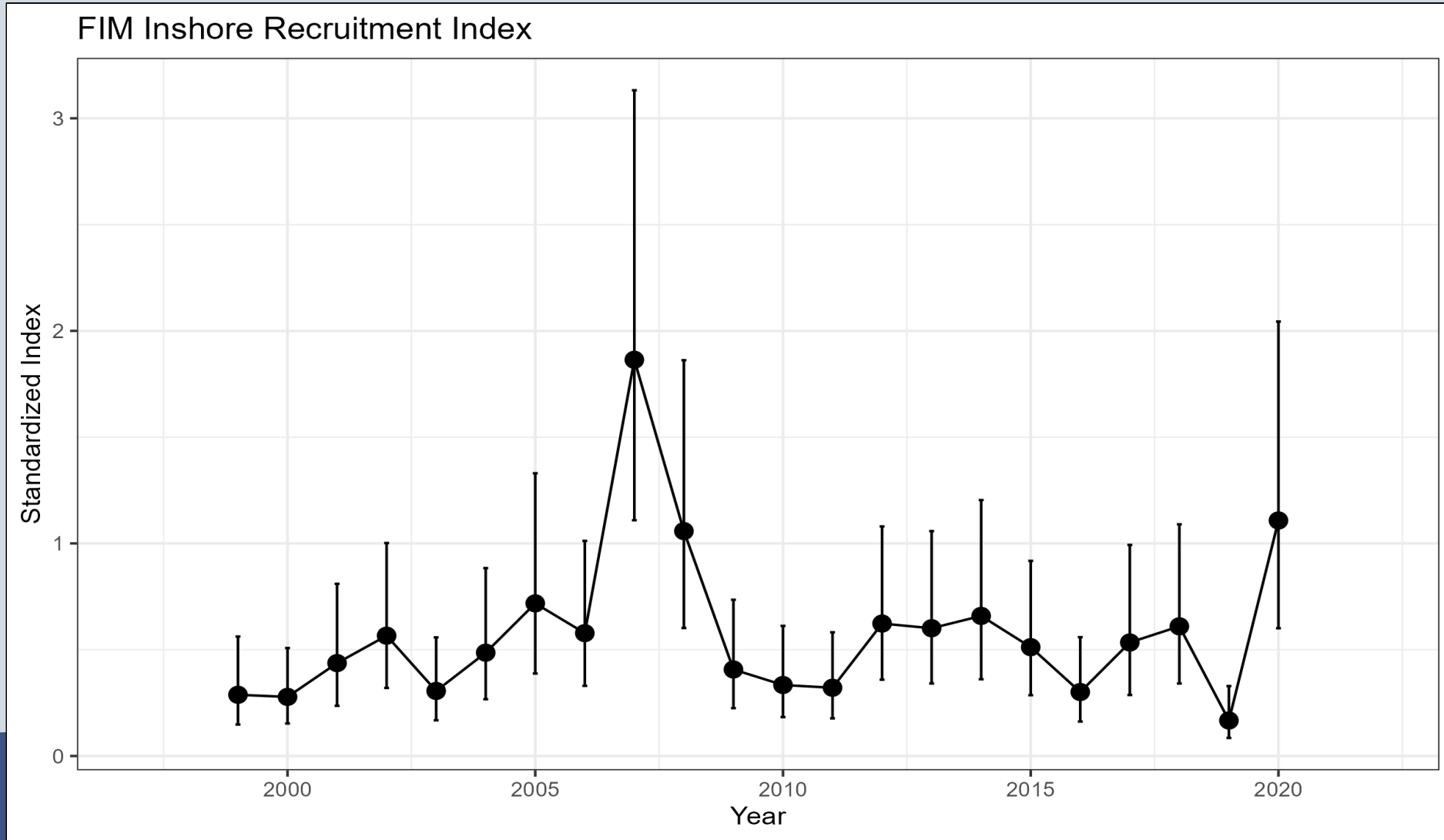
Fishery Independent Index Comparison



Fishery Independent Index Comparison



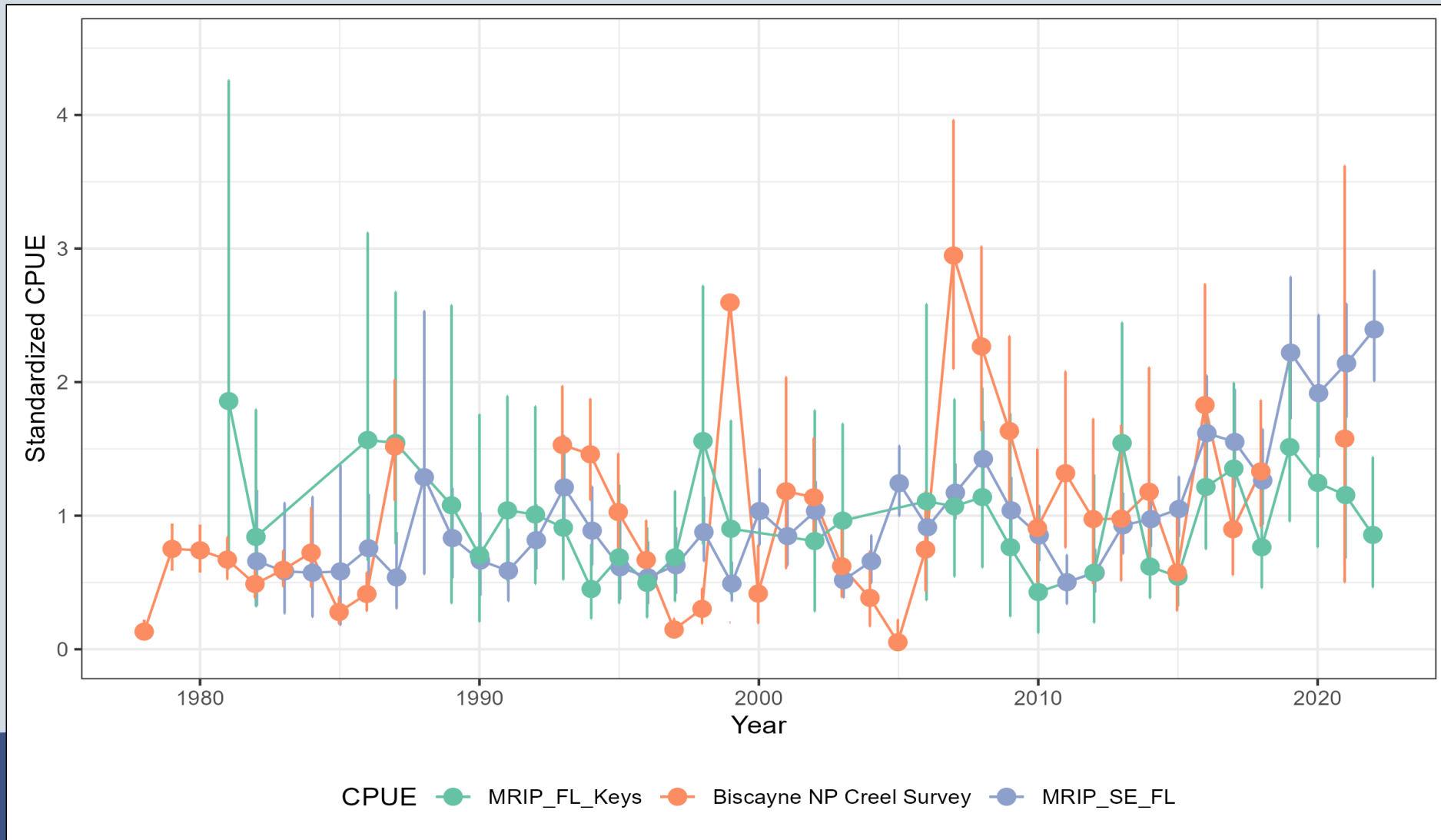
Fishery Independent Recruitment Index



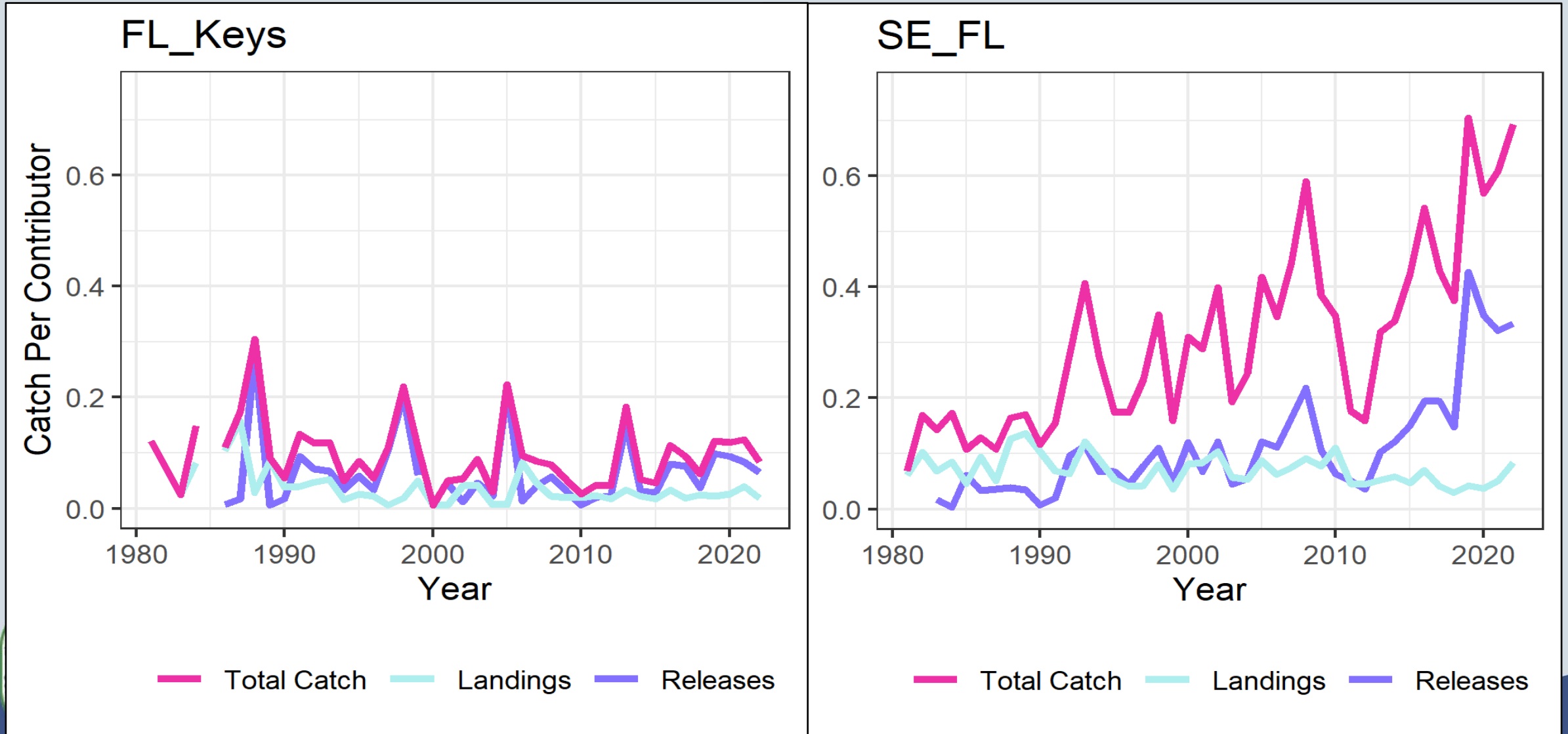
Commercial CPUE Comparison



Rec CPUE Comparison

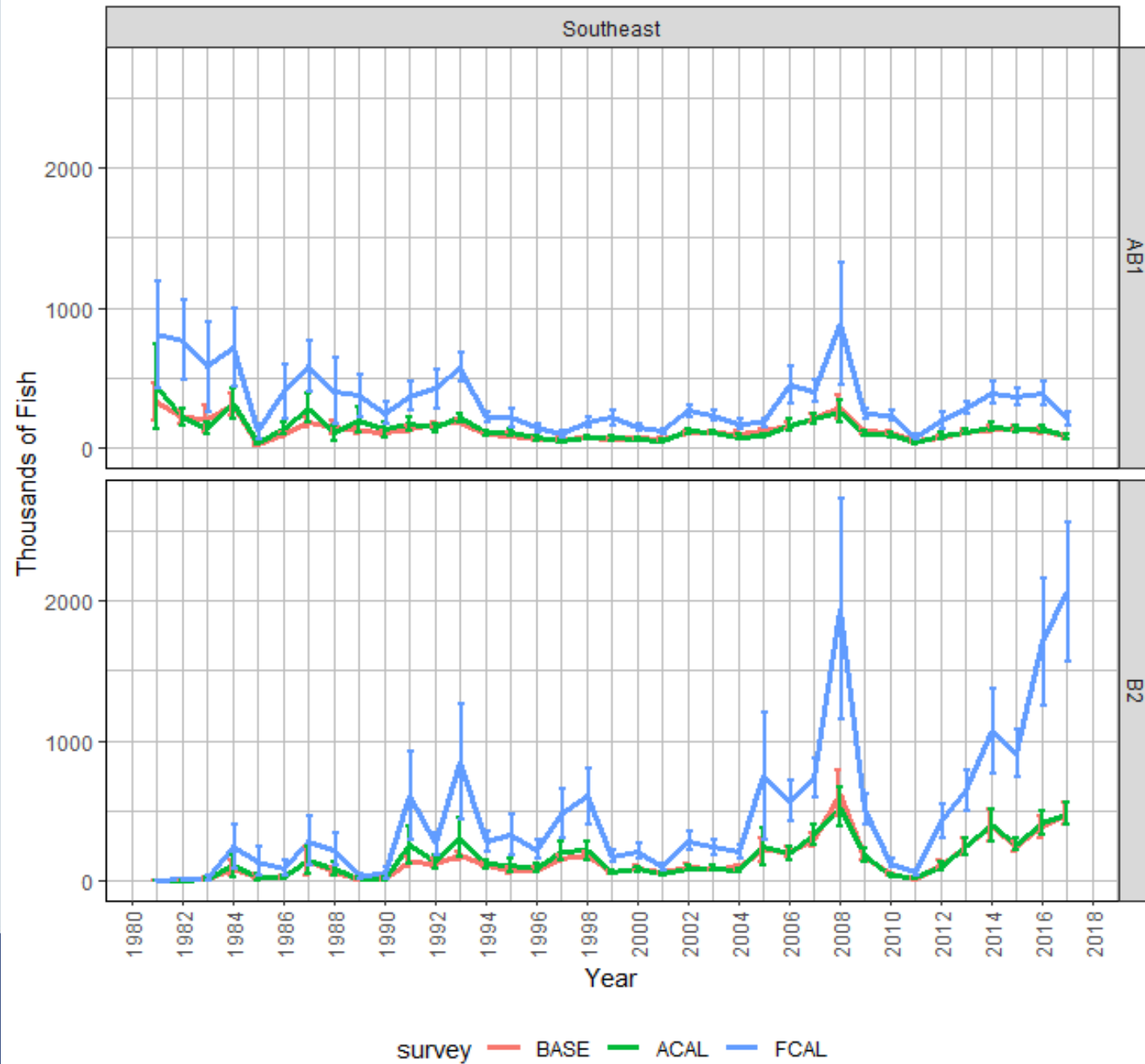


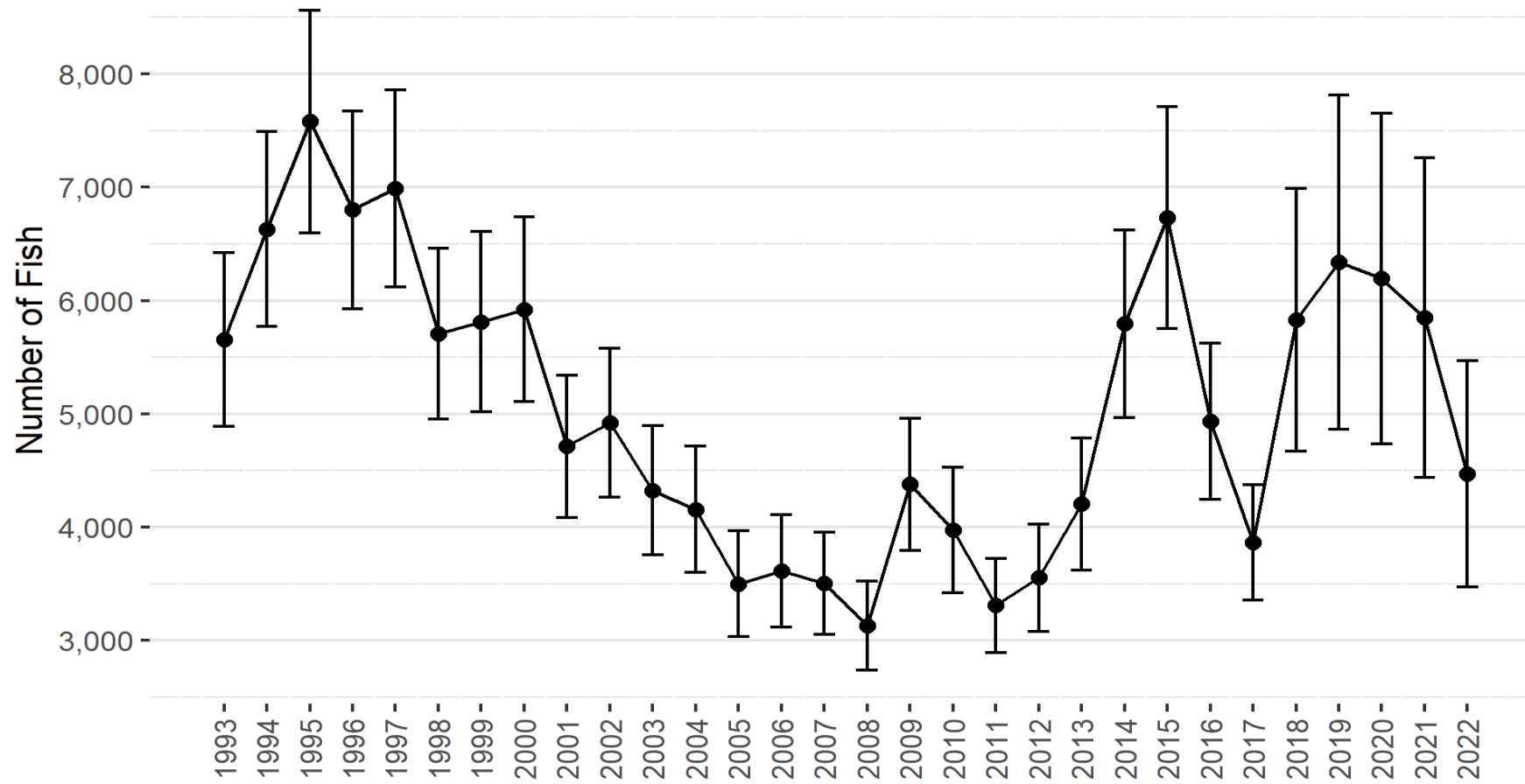
MRIP Nominal Indices (Private Mode)



A large school of fish, likely snappers or groupers, swims in clear blue water above a rocky, algae-covered seabed. The fish are silvery with some darker markings. The text "Thank you for your attention!" and "Questions?" is overlaid in the center in a white serif font.

Thank you for your attention!
Questions?

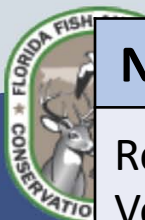




Fishery Independent Surveys

Component	Data Source	Analyst	Working Paper	Data Deadline
RVC (1999-2022)	RVC Tortugas, Keys, and SEFCRI	R Muller/S Allen/ H O'Farrell (FWRI)/ J Blondeau (SEFSC)	R Muller/S Allen/ H O'Farrell (FWRI)	8/4/2023
Riley's Hump SSB Index (2002 – 2015)	Tortugas Visual Survey	R Muller (FWRI)/M Burton (SEFSC)	R Muller (FWRI)	Completed
FWRI FIM inshore SE FL index (1997 – 2022)	FWRI FIM (IR Lagoon)	T Switzer/B Klimek (FWRI)	T Switzer/B Klimek (FWRI)	8/4/2023
Gulf Camera Survey (1993 – 2021)	SEAMAP/FWRI	H Christiansen/K Thompson (FWRI)	H Christiansen/K Thompson (FWRI)	8/4/2023
SA Camera Survey (2011 – 2022)	MARMAP/SERFS	N Bacheler (SEFSC)	N Bacheler (SEFSC)	8/4/2023

Not Considered	Reason
Reef Environmental Education Foundation (REEF) Volunteer Visual Survey Index	Opportunistic sampling, No associated length comps



Fishery Independent Length/Tagging Data

Component	Data Source	Analyst	Data Deadline
SE Length Data	RVC SEFCRI	R Muller/S Allen/H O'Farrell (FWRI)	6/2/2023
	FWRI FIM Camera (Offshore)	H Christiansen/K Thompson (FWRI)	6/2/2023
FL Keys Length Data	RVC FL Keys/Dry Tortugas	R Muller/S Allen (FWRI)	6/2/2023
	FL Bay/FL Keys Juvenile Sampling	A Acosta/J Keller/C Swanson (FWRI)	6/2/2023
Tagging Data	Feeley et al. (2018)		Completed

Not Considered		Reason
GOM SEAMAP Trawl, LL	S Stahl (FWRI)	Only 15 weights in Trawl data
SEAMAP-SA	C McDonough (SC DNR)	Only 11 weights in Trawl data



Fishery Independent Age Data

Component	Data Source	Analyst	Data Deadline
South Atlantic (inc FL Keys) Age Data	MARMAP/SA Deepwater LL (SADL)	M Willis/ W Bublely (SC DNR)	6/2/2023
	Southeast FL Reef Fish Abundance and Biology Study (1998 – 2002, 2004-2005)	J Carroll/E Ault/A Acosta (FWC)	Completed
	M Burton (Keys, 1995-1996)	J Potts/T Mcculloch (SEFSC)	Completed
FL Age Data	FWRI FIM (Offshore)	J Carroll (FWRI)	6/2/2023

Not Considered	Data Source	Reason
GOM Age Data	Murawski et al (2011 – 2017)	Only 13 otoliths



Fishery Dependent Age Data

Component	Data Source	Analyst	Data Deadline
Primarily Commercial & HB Ages	FWRI/NC DENR	J Carrol (FWRI)/M Seward (NC DENR)	6/2/2023
Commercial & HB (1990 – 2000)	M Burton (SEFSC)	J Potts/T McCulloch (SEFSC)	Completed
Primarily Recreational Ages	FWRI/Gulf States	B Cermak (FWRI)/G Bray (Gulf States)	6/2/2023
Rec and Commercial (SE FL and Keys)	A Poholek and R Cody's Cooperative Research Study (2007-2010)	A Poholek (SEFSC)/B Cermak/S Allen (FWRI)	Completed



Life History

Component	Data Source	Analyst	Working Paper	Data Deadline
Timing of Spawning & Maturity	A Poholek and R Cody's Cooperative Research Study (FD, 2007-2010)	S Allen & C Friess (FWRI)/S Lowerre-Barbieri (UF)	C Friess (FWRI)/S Lowerre-Barbieri (UF)	8/4/2023
	Southeast FL Reef Fish Abundance and Biology Study (FI, 1998 – 2002, 2004-2005)			
	MARMAP/SA Deepwater LL (SADL, FI)			
Morphometrics	Length and Weight Data	S Allen (FWRI)	S Allen (FWRI)	8/4/2023
External Growth	Length and Age Data	C Swanson (FWRI)	C Swanson (FWRI)	8/4/2023
Natural Mortality	Length and Age Data	C Swanson (FWRI)	C Swanson (FWRI)	8/4/2023



Fishery Dependent Indices

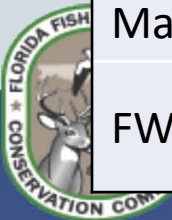
Component	Data Source	Analyst	Working Paper	Data Deadline
MRIP (1991-2022)	MRIP Intercepts	S Allen (FWRI)	S Allen (FWRI)	8/4/2023
Commercial (1990 - ?)	Coastal Fisheries Logbook Prog	E Fitzpatrick/M Pawluk (SEFSC)	E Fitzpatrick/M Pawluk (SEFSC)	8/4/2023
Biscayne Bay NP (1978-2022)	Biscayne Bay NP Creel Survey	R Muller (FWRI)	R Muller (FWRI)	8/4/2023

Not Considered	Reason
Headboat (SRHS)	Low participation in South FL



Commercial Data Sources & Products

Component	Data Source	Analyst	Working Paper	Data Deadline
Landings	FWC TTK, ACCSP	C Bradshaw (FWRI)/M Rinaldi (ACCSP)	C Bradshaw (FWRI)	8/4/2023
Retained Lengths	TIP (1984 - 2022)	L Beerkircher (SEFSC)/C Bradshaw (FWRI)	L Beerkircher (SEFSC)/C Bradshaw (FWRI)	Completed
	NMFS CSBSP (1986-1991)	R Muller/S Allen (FWRI)	R Muller/S Allen (FWRI)	Completed
Effort (TTK vs Logbook)	FWC TTK, Coastal Fisheries Logbook Prog	C Bradshaw (FWRI)	C Bradshaw (FWRI)	8/4/2023
GOM Bottom LL CPUE Maps	GOM Bottom LL Electronic Monitoring	M Lee et al. (Mote)	M Lee et al. (Mote)	8/4/2023
FWC TTK Maps	Landings & Effort	C Swanson (FWRI)	C Swanson (FWRI)	8/4/2023



Commercial Data Sources & Products

Component	Data Source	Analyst	Working Paper	Data Deadline
Discards	Coastal Fisheries Logbook Prog/Reef Fish Observer/Shark BLL/SA VL	S Atkinson/E Fitzpatrick (SEFSC)	S Atkinson/E Fitzpatrick (SEFSC)	8/4/2023
Discard Lengths	Reef Fish Observer/Shark BLL/SA VL	G Decossas/S Atkinson (SEFSC)	G Decossas/S Atkinson (SEFSC)	Completed
Immediate Release Mortality/Depredation	Reef Fish Observer/Shark BLL/SA VL	G Decossas/S Atkinson (SEFSC)	G Decossas/S Atkinson (SEFSC)	8/4/2023
	GOM Bottom LL Electronic Monitoring	M Lee et al. (Mote)	M Lee et al. (Mote)	8/4/2023
Weighted Length Comps	Lengths + Total Landings/Discards	S Allen (FWRI)	S Allen (FWRI)	11/3/2023
Fishery Performance Reports	SAFMC/GMFMFMC Reef Fish AP		SAFMC/GMFMFMC Reef Fish AP	8/4/2023 (SAFMC completed 4/2021)

Recreational Data Sources & Products

Component	Data Source	Analyst	Working Paper	Data Deadline
Landings (#s and lbs.), Discards, CVs, Effort, & Retained Lengths	MRIP, TPWD, LA	M Nuttall/S Binion-Rock/D Cathey (SEFSC)	M Nuttall/S Binion-Rock/D Cathey (SEFSC)	Complete (Final for 1981-2021 and Preliminary but complete for 2022)
	SRHS	R Cheshire/K Brennan (SEFSC)	R Cheshire/K Brennan (SEFSC)	8/4/2023
Retained Lengths	FWC At Sea CH/HB	B Cermak/E Corbett (FWRI)	B Cermak/E Corbett (FWRI)	6/2/2023 (raw lengths received through 2022)
	Biscayne Bay Creel Survey	R Muller (FWRI)	R Muller (FWRI)	6/2/2023
Maps	Landings & Effort	C Swanson (FWRI)	C Swanson (FWRI)	8/4/2023
Fishery Performance Reports	SAFMC/GMFMFMC Reef Fish AP		SAFMC/GMFMFMC Reef Fish AP	8/4/2023 (SAFMC completed 4/2021)



Recreational Data Sources & Products

Component	Data Source	Analyst	Working Paper	Data Deadline
Discard Lengths	FWC At Sea CH/HB (2005 - 2022)	B Cermak/E Corbett (FWRI)	B Cermak/E Corbett/ B Ayala (FWRI)	6/2/2023 (raw lengths received through 2022)
	iAngler/MyFishCount (2012 – 2022?)	B Fitzgerald (Angler Action Foundation)?	S Allen (FWRI)	6/2/2023
Immediate Release Mortality	FWC At Sea CH/HB	B Cermak/E Corbett (FWRI)	B Cermak/E Corbett (FWRI)	8/4/2023
Depredation	FWC At Sea CH/HB	E Corbett (FWRI)	B Cermak/E Corbett (FWRI)	8/4/2023
Tagging Data	FWC At Sea CH/HB	E Corbett (FWRI)	B Cermak/E Corbett (FWRI)	8/4/2023
Weighted Length Comps	Lengths + Total Landings/Discards	S Allen (FWRI)	S Allen (FWRI)	11/3/2023

