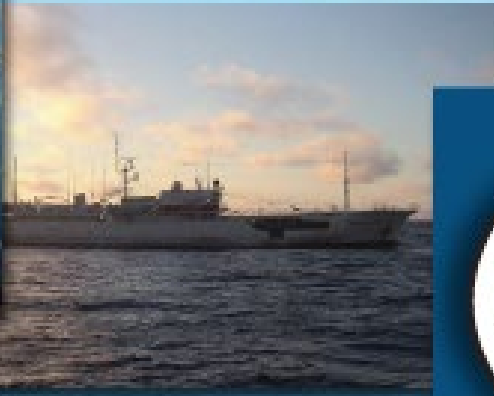


Comisión Interamericana del Atún Tropical Inter-American Tropical Tuna Commission



Floating-object fishery indicators: a 2025 report

Indicadores de la pesquería con objetos-flotantes: un informe de 2025

Jon Lopez*, Marlon Román, Cleridy E. Lennert-Cody, Mark N. Maunder, Nick Vogel, Sylvain Caillot, Leanne Fuller

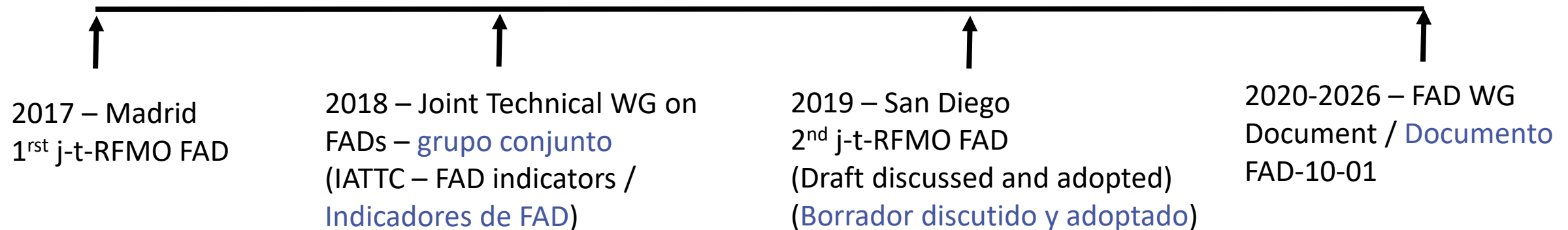
*jlopez@iattc.org

10^a Reunión del Grupo de Trabajo *Ad hoc* sobre plantados - 2026

10th Meeting of the *Ad Hoc* Working Group on FADs - 2026

Background - Introducción

- Multi-dimensional impacts of the fishery, it must be holistically monitored
- Impacto multidimensional de la pesquería que requiere ser monitorizada de manera integral



Outline - Plan

Indicator Type	Priority - Prioridad 1 Major – Mayor, 2 Moderate - Moderada, 3 Minor – Menor	Tipo de indicador
Catch and effort	1	Captura y esfuerzo
Activity	1	Actividades
Buoy/FAD-use	1	Uso de Boyas/FAD
Capacity	1	Capacidad
Technology	2	Tecnología
Ecosystem-Impact	2	Impacto-Ecosistema
Socio-Economico	3	Socio-Economico
Bio-Eco-Behavior	3	Bio-Eco- Comportamiento

Data - Datos

Five main datasets – Cinco bases de datos:

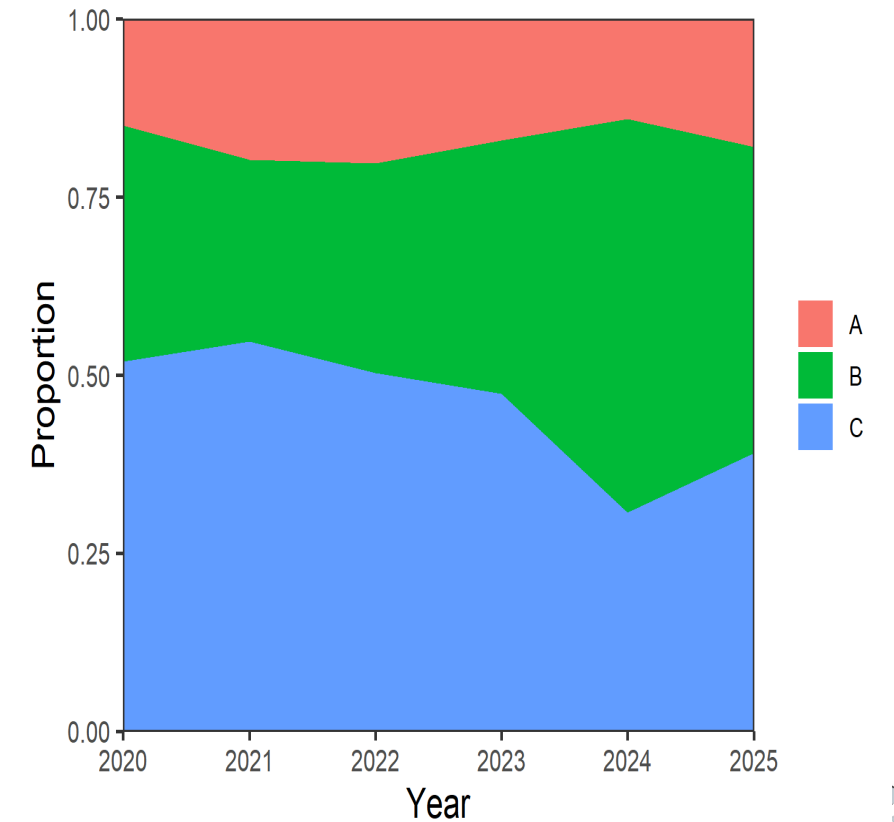
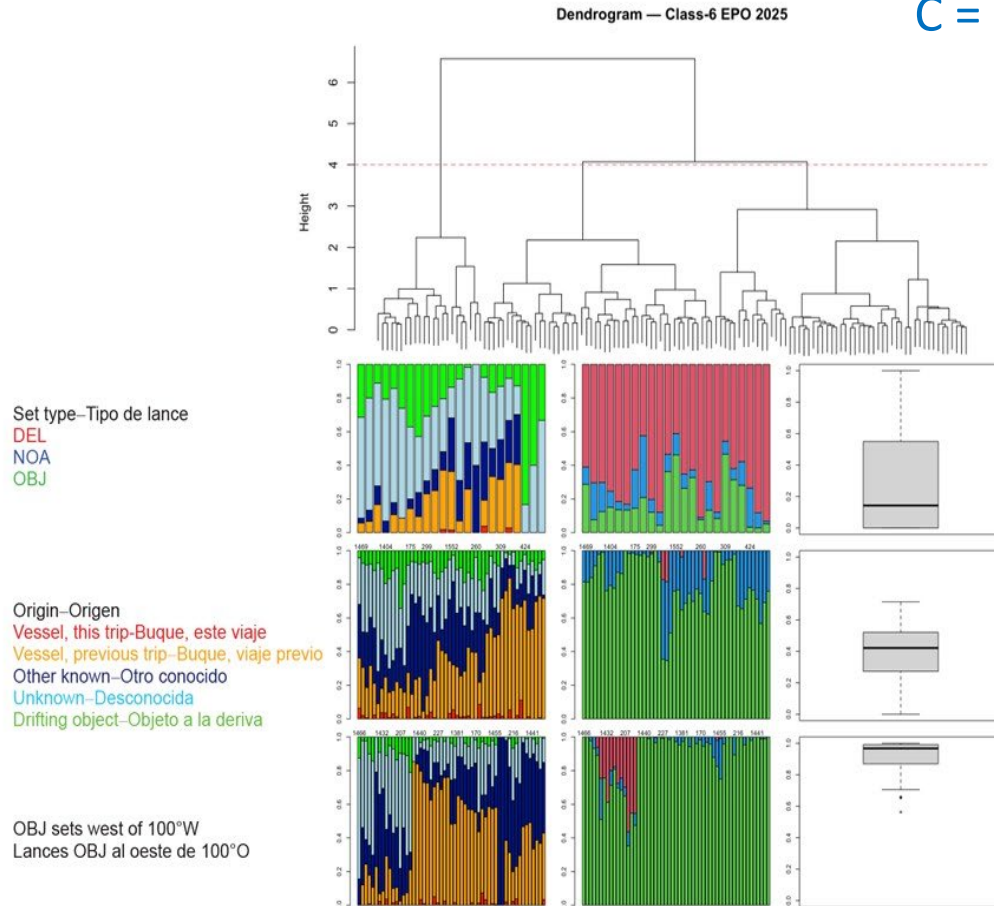
- a. 2020-2025 AIDCP observer data for Class-6 vessels [fleet behavior, activities, and technology].
a. Datos de observadores AIDCP 2020-2025 para buques de clase 6 [comportamiento de la flota, actividades sobre plantados y tecnología]
- b. Catch and effort data for all vessels (Classes 1-6) [catch and effort]
b. Datos de captura y esfuerzo para toda la flota (Clase 1-6) [captura y esfuerzo]
- c. Daily active buoy data for 171 vessels (Classes 1-6) reporting in 2025. [buoy-based indices]
c. Datos de boyas activas proporcionados por 171 buques de clase 1-6 durante 2025. [índices basados en boyas]
- d. 2022-2025 monthly remote deactivation and reactivation data for all vessels (Classes 1-6) [buoy indices]
d. Informes mensuales de desactivación y reactivación remota para toda la flota, 2022-2025 (Clase 1-6) [índices de boyas]
- e. 2020-2025 FAD form data for all vessels without observers (Class 1-5)[activities]
e. Formularios de plantados para los buques sin observadores (Clase 1-5) 2020-2025 [actividades]

Fleet segments – Segmentos de la flota

A = > 100W + DEL and opportunistic OBJ sets (23)

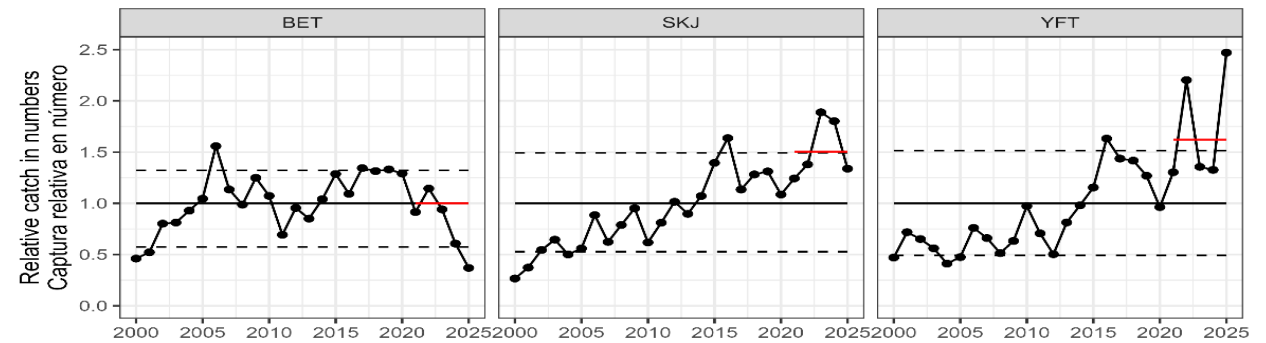
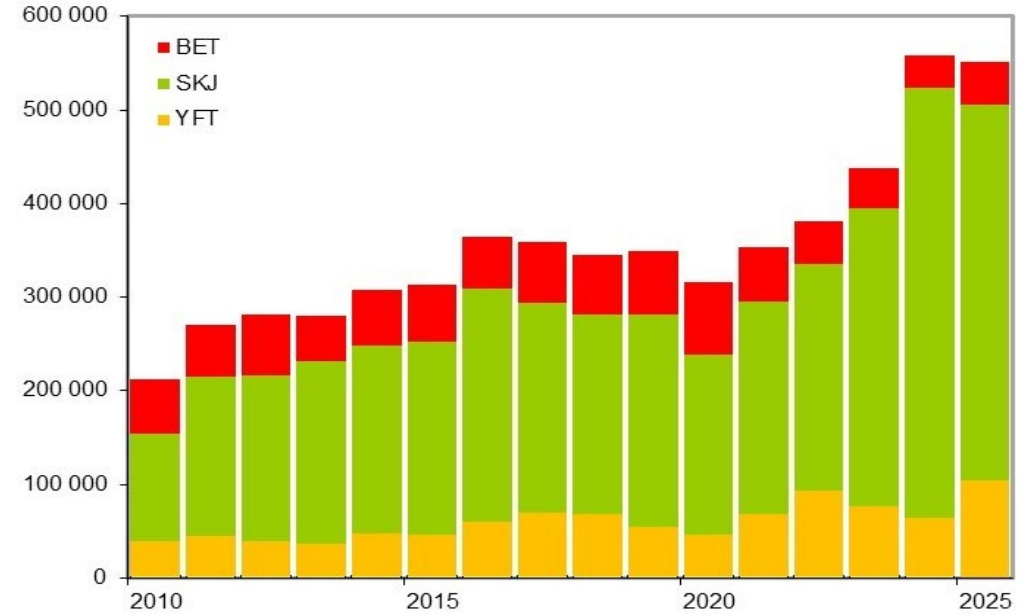
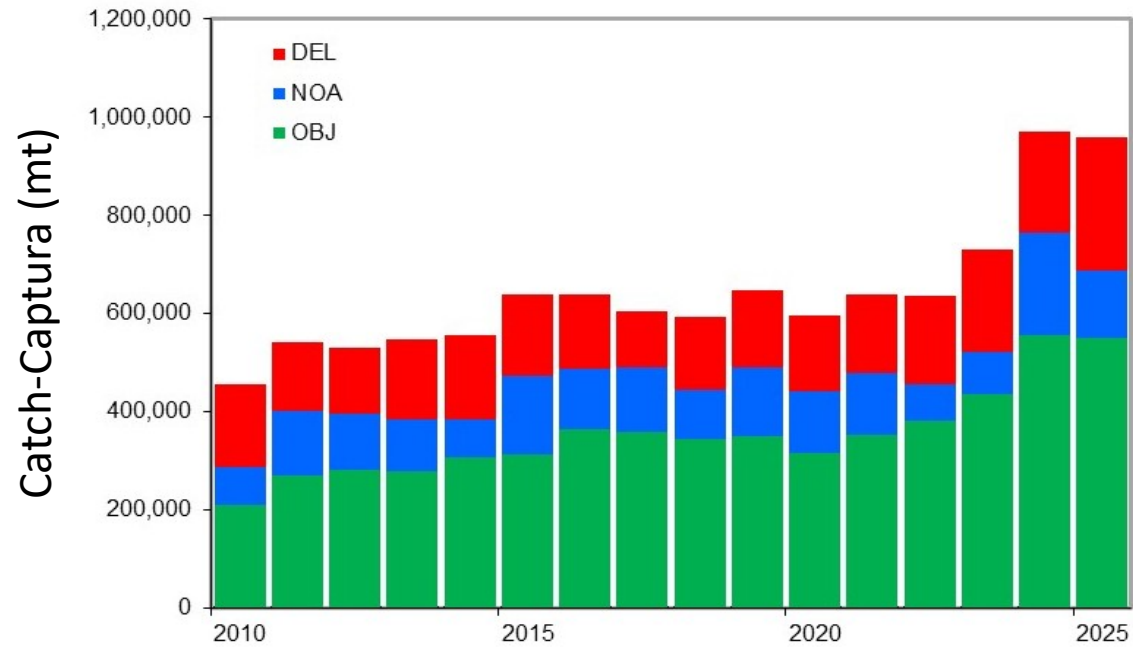
B = >100W + OBJ sets (monitored) (55)

C = <100W + mix of set types (50)

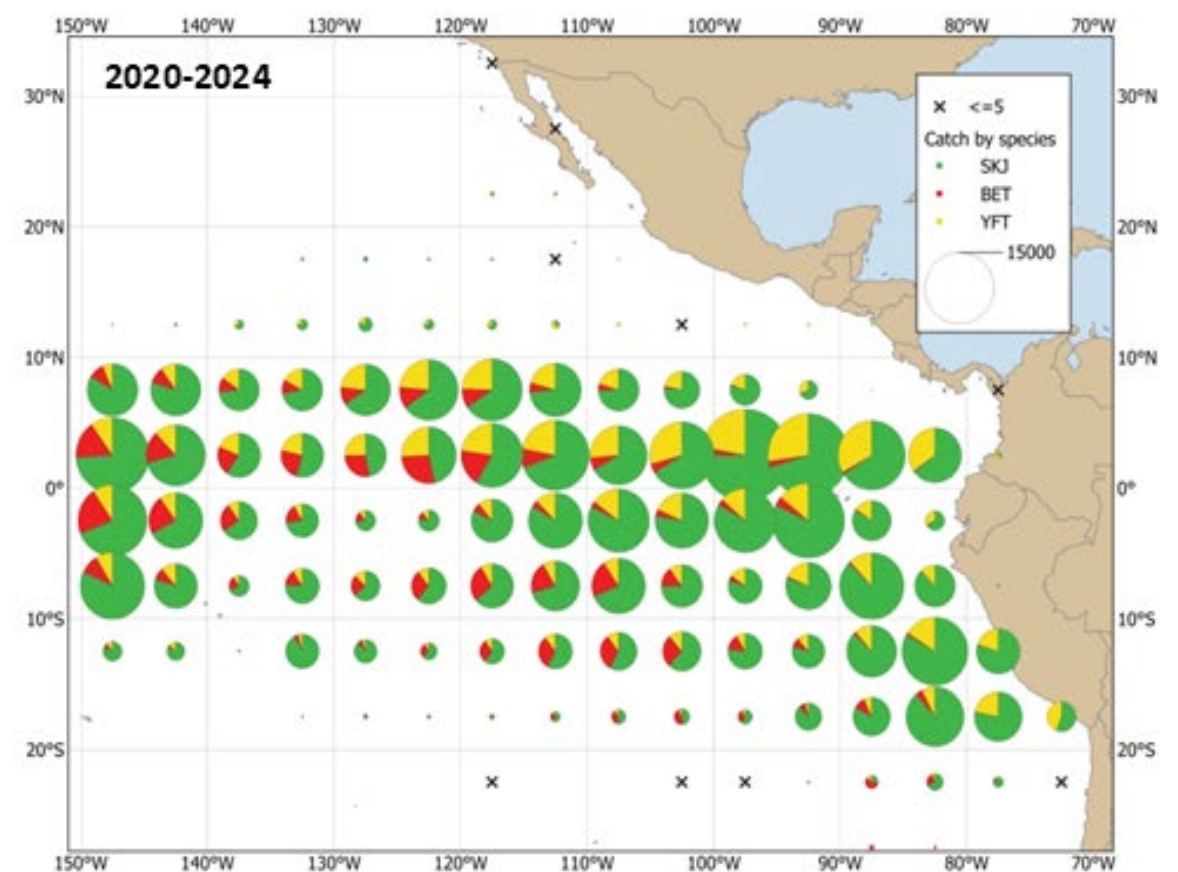
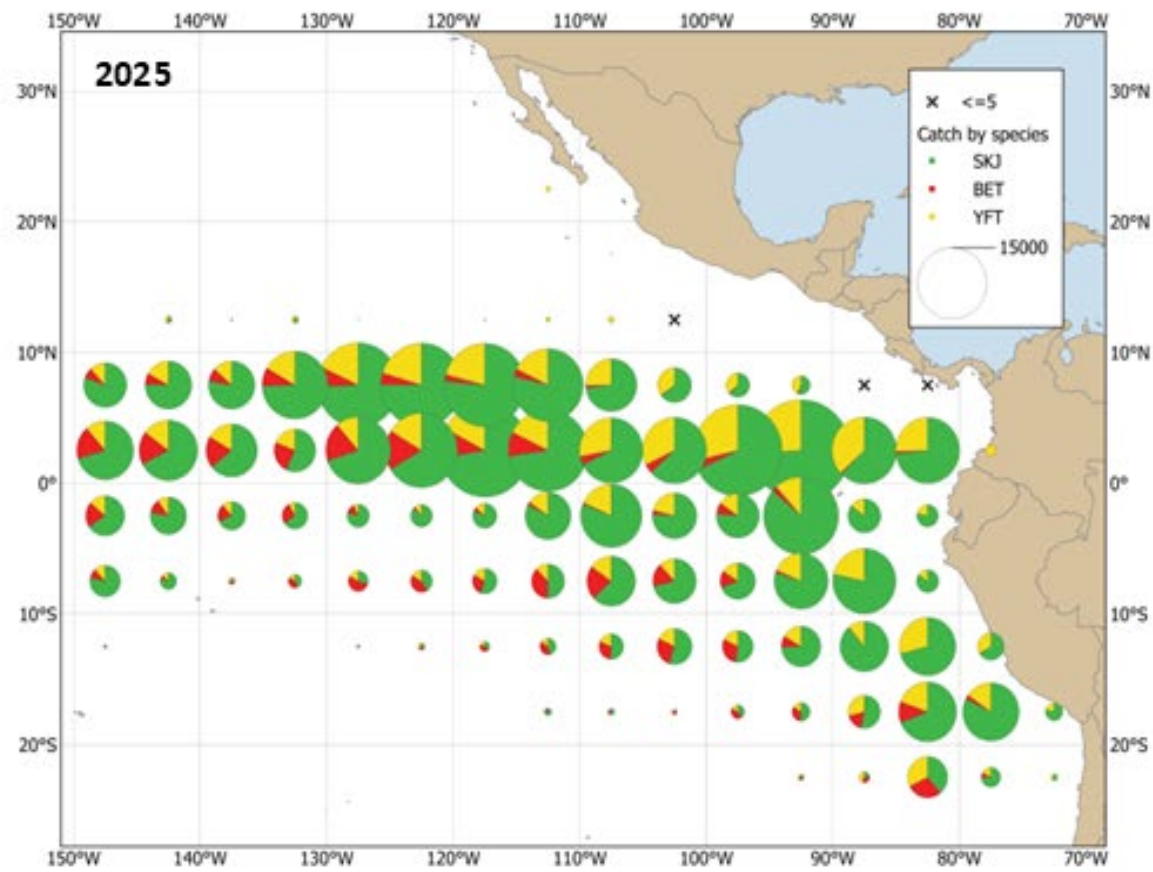


Catch and effort - Captura y esfuerzo

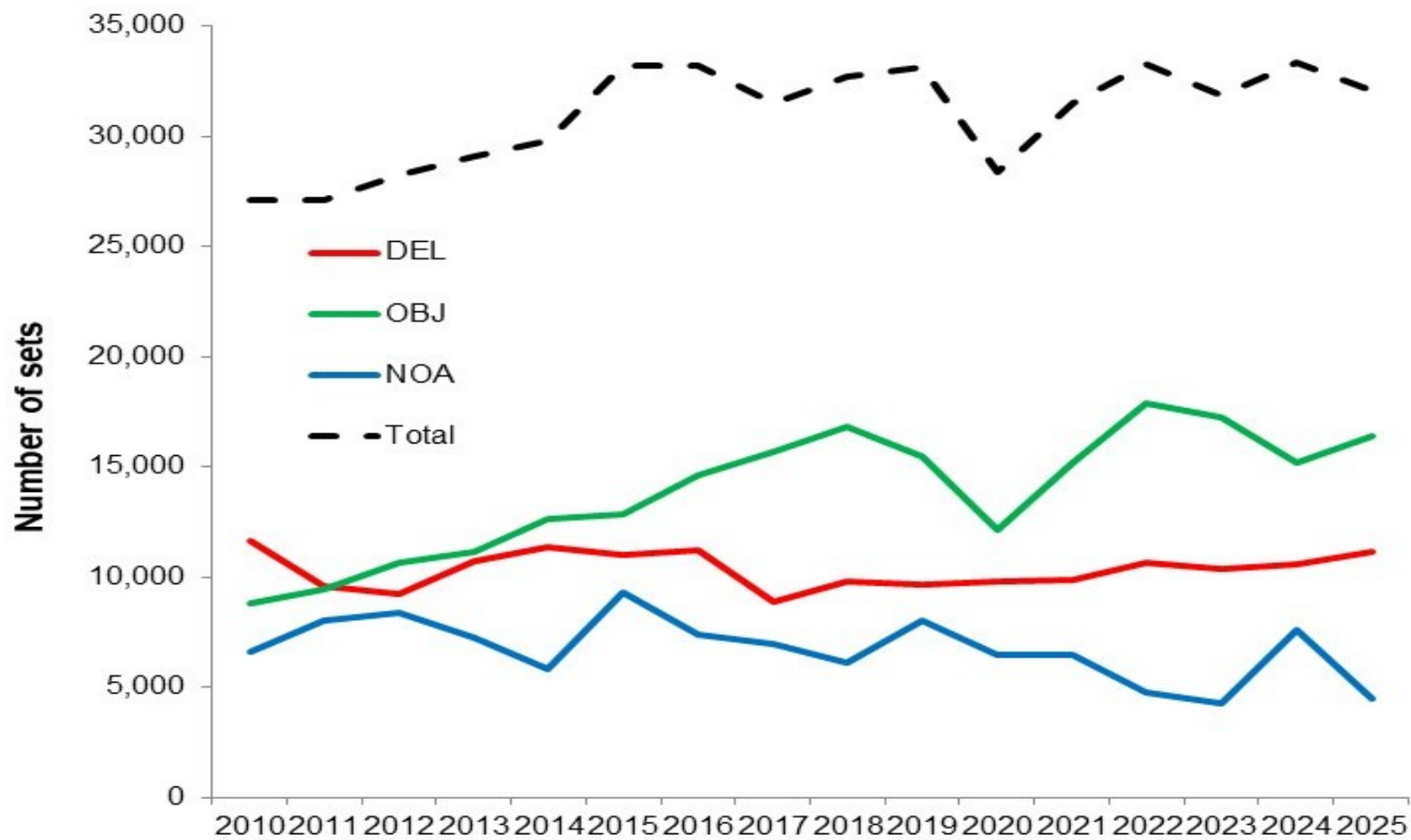
Catch by set type (and species) – Captura por tipo de lance (y especie)



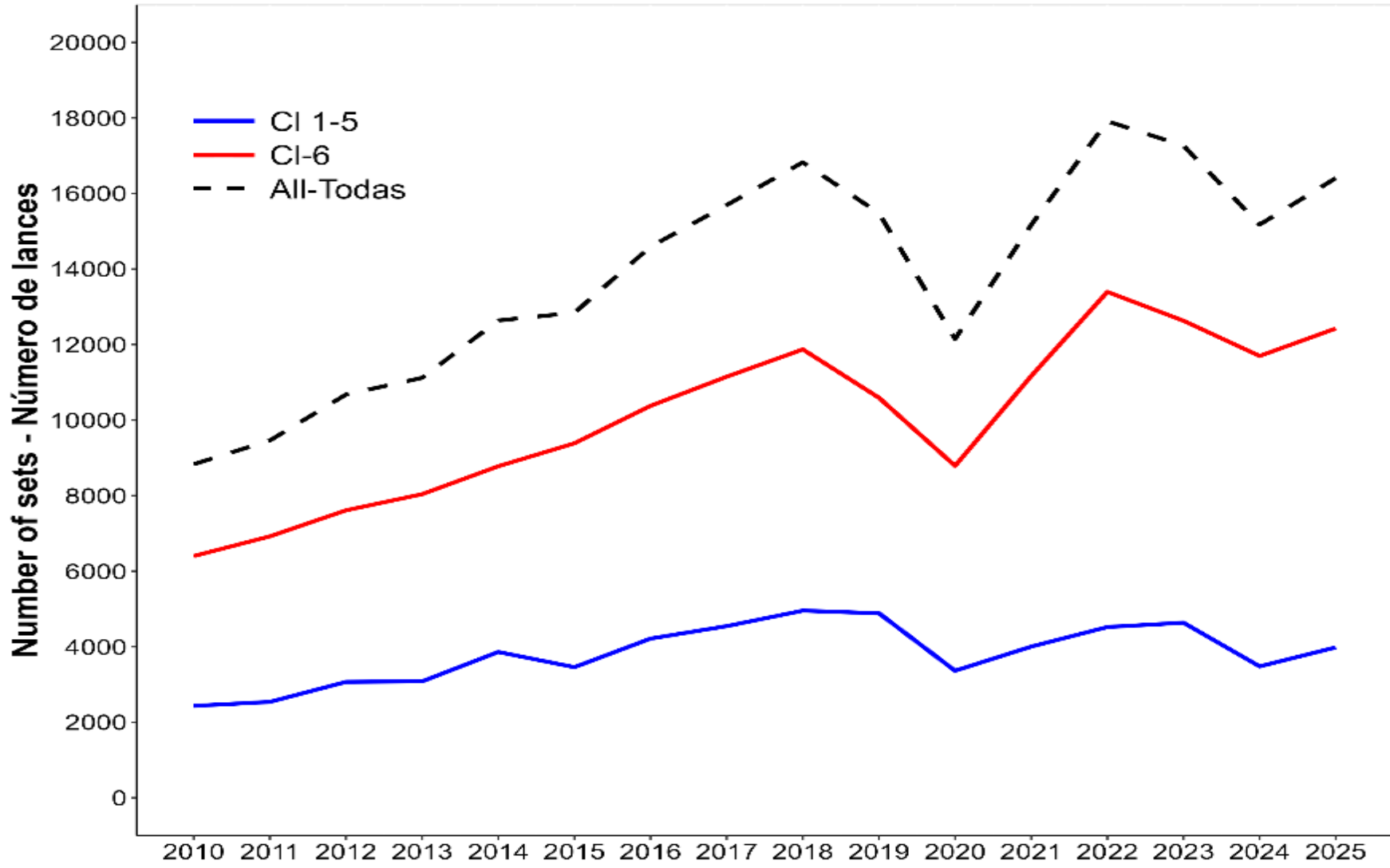
Spatial distribution of catches– Distribución espacial de las capturas



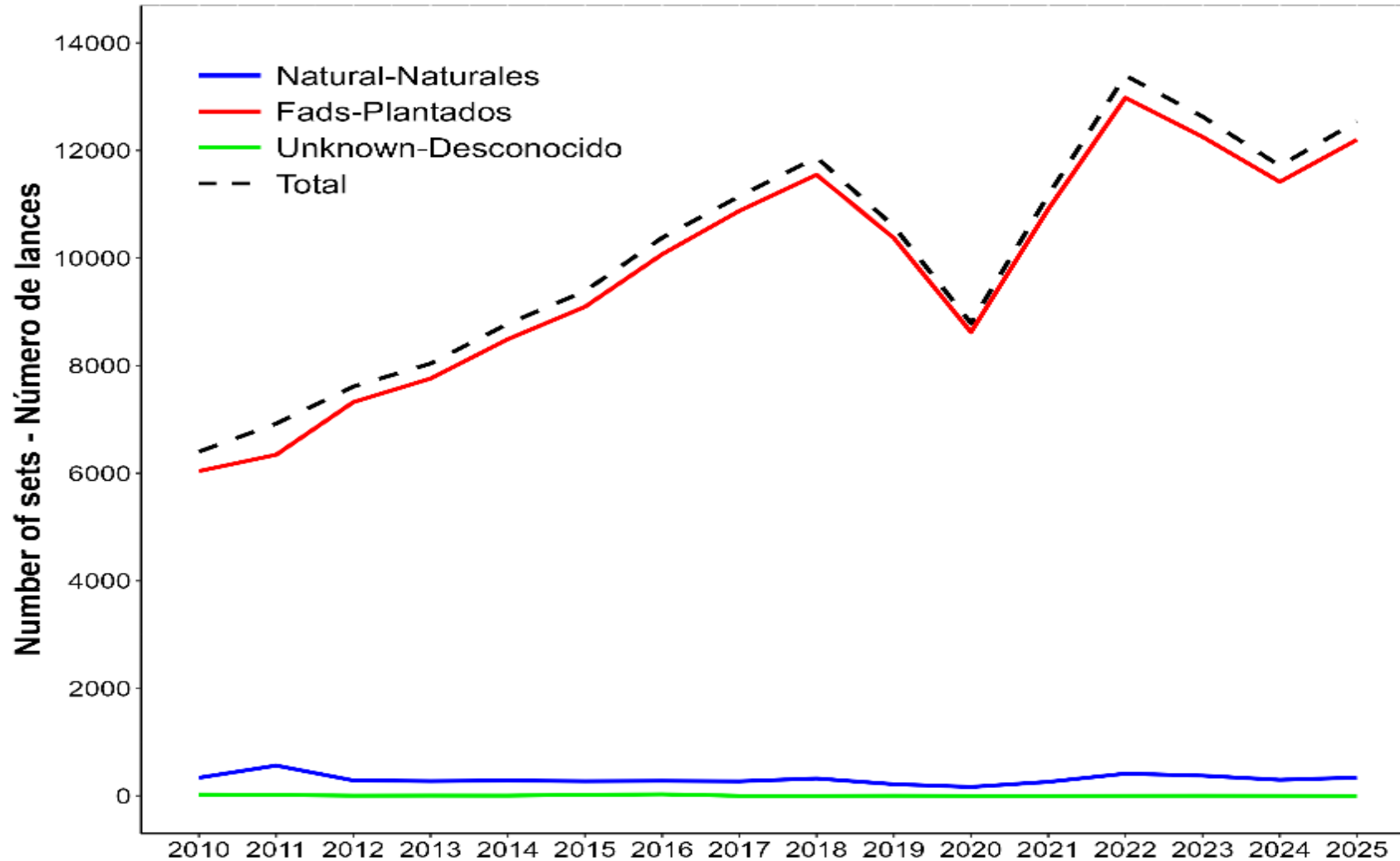
Total number of sets by set type – Numero total de lances por tipo de lance



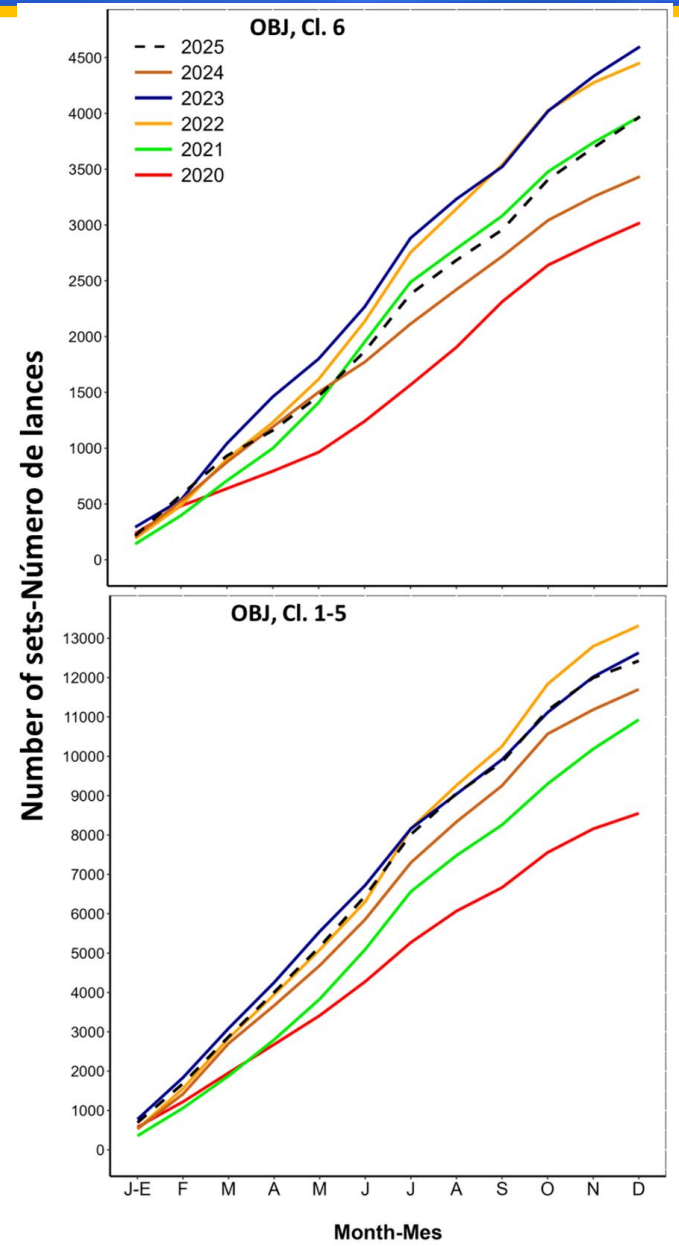
Number of sets on floating object by Class-size vessel – Numero de lances sobre OBJ por clase



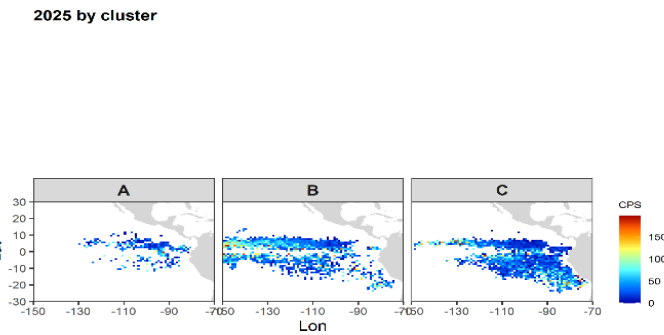
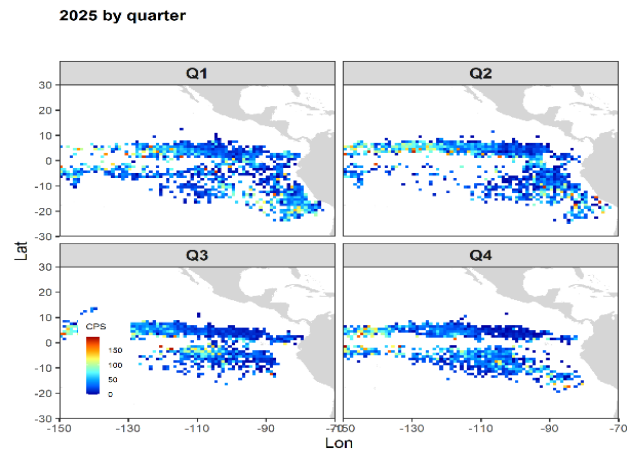
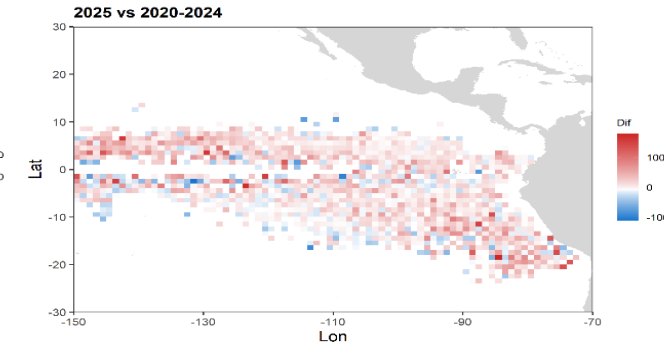
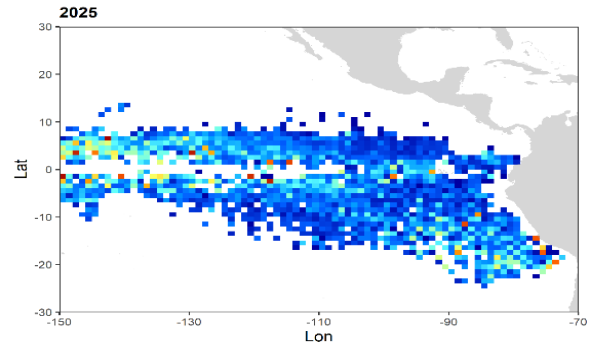
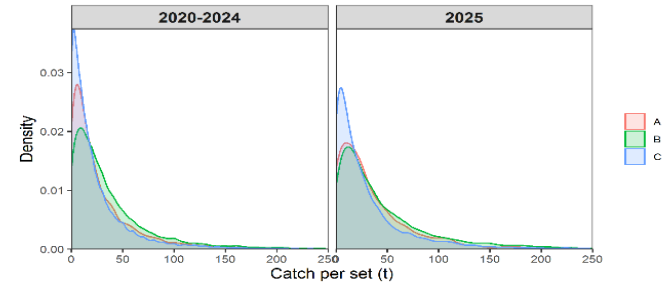
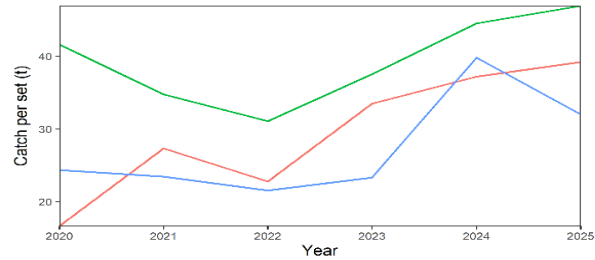
Sets by type of floating object made by Class-6 vessels – Lances sobre diferentes tipo de objeto para los buques de clase 6



Cumulative sets by Class-size vessel and set type – Lances acumulados para las diferentes clases de buques y tipo de lance



Catch per set – Captura por lance



Activity on FAD – Actividad sobre FAD

General OBJ activity table – Tabla de actividad general sobre OBJ

Only class 6 vessels > 5 OBJ sets – Solo buques clase 6 con > 5 lances sobre OBJ

Year	Own Now	Own Prev	Dep	Given	Taken	Adrift	Unk	Oth	Enc	Sets	Ves	Trips
2020–2024	15	6,390	26,176	3,884	7,232	2,748	6	5	49,025	10,964	139	685
2025	3	7,274	31,208	4,087	8,609	2,453	11	11	55,140	12,035	128	749

Year	Deployments		Encounters		Sets	
	Vessel	Trip	Vessel	Trip	Vessel	Trip
2020–2024	188.3	38.2	352.7	71.6	78.9	16.0
2025	243.8	41.7	430.8	73.6	94.0	16.1

Year	Cluster	Deployments		Encounters		Sets	
		Vessel	Trip	Vessel	Trip	Vessel	Trip
2020–2024	A	3.0	0.8	26.0	7.3	16.0	4.5
	B	378.3	78.2	589.5	121.8	100.0	20.7
	C	111.4	20.3	292.1	53.1	85.9	15.6
2025	A	25.3	4.7	89.5	16.6	32.0	5.9
	B	358.0	76.6	545.1	116.6	101.2	21.6
	C	218.8	29.7	462.1	62.8	114.7	15.6

General OBJ activity table Class 1-5 – Tabla de actividad general sobre OBJ Clase 1-5

Only class 1-5 vessels– Solo buques clase 1-5

Year	Dep	Enc	Sets	Ves	Trips
2020–2024	867	3636	1858	29	164
2025	568	2478	1148	17	107

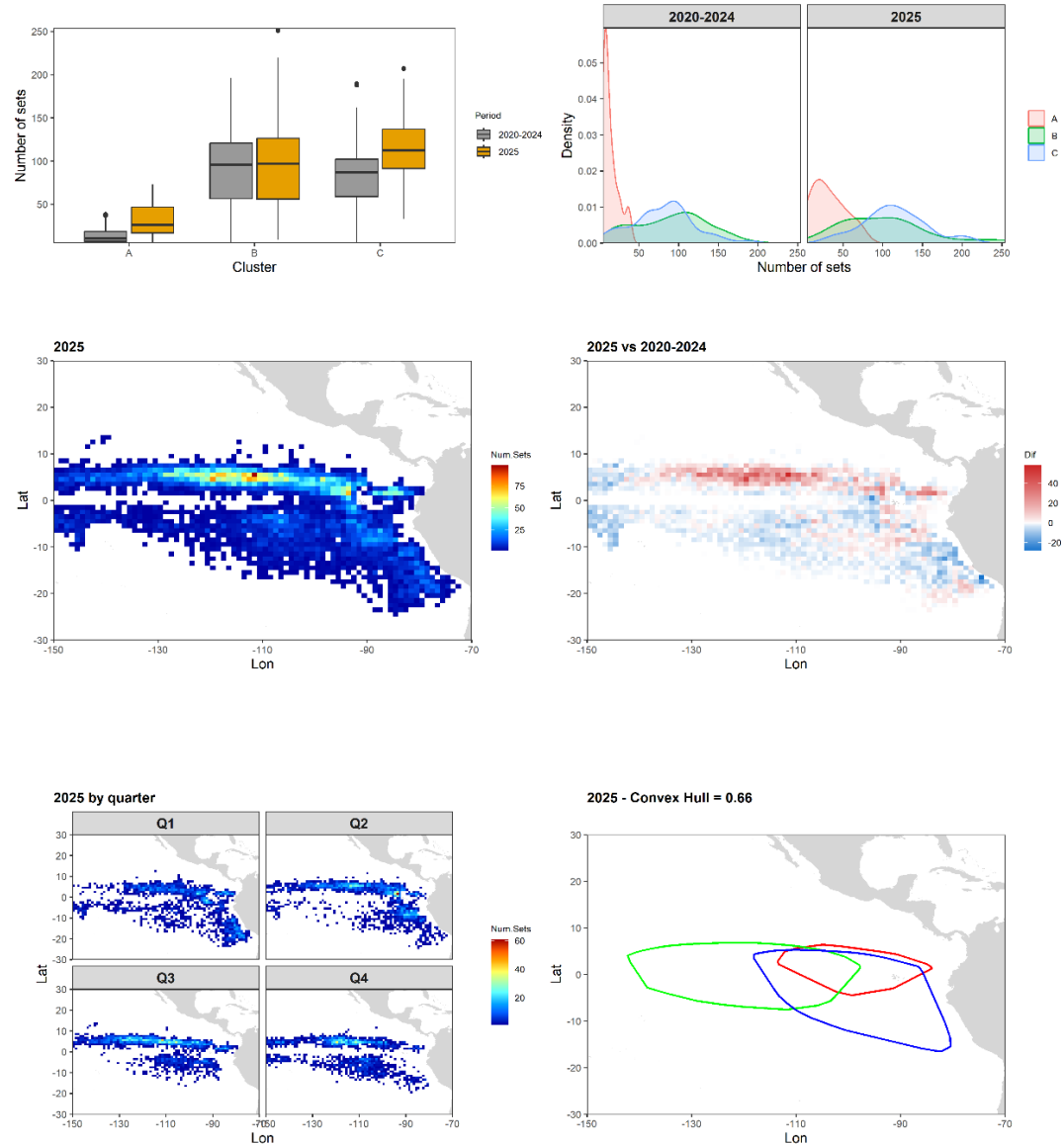
Year	Deployments		Encounters		Sets	
	Vessel	Trip	Vessel	Trip	Vessel	Trip
2020–2024	29.8	5.3	126.2	21.9	64.4	11.2
2025	145.8	5.3	145.8	23.2	67.5	16.4

General OBJ activity evolution – Evolución de actividad general sobre OBJ

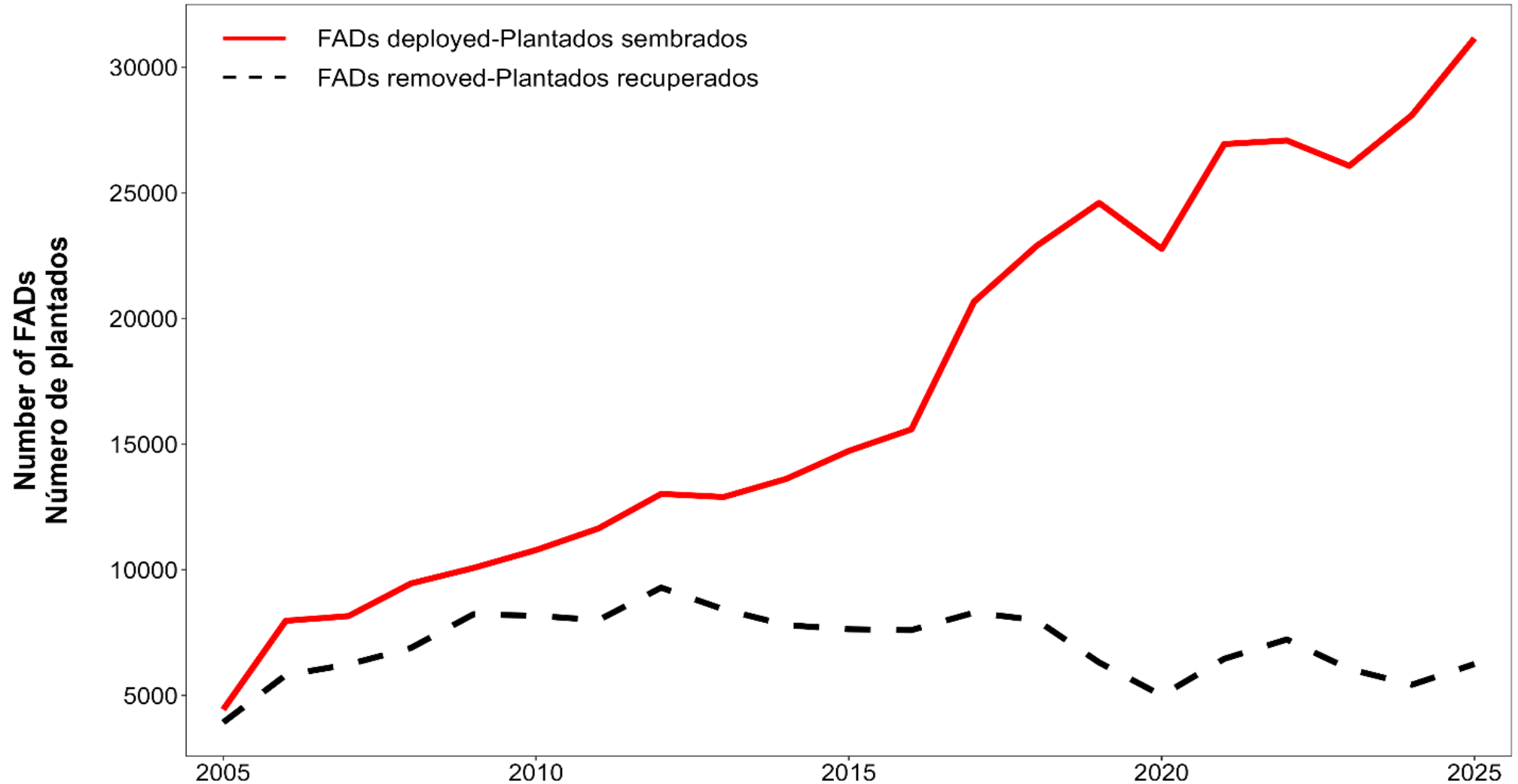


OBJ sets – Lances sobre OBJ

Figure 13. OBJ sets, 2025

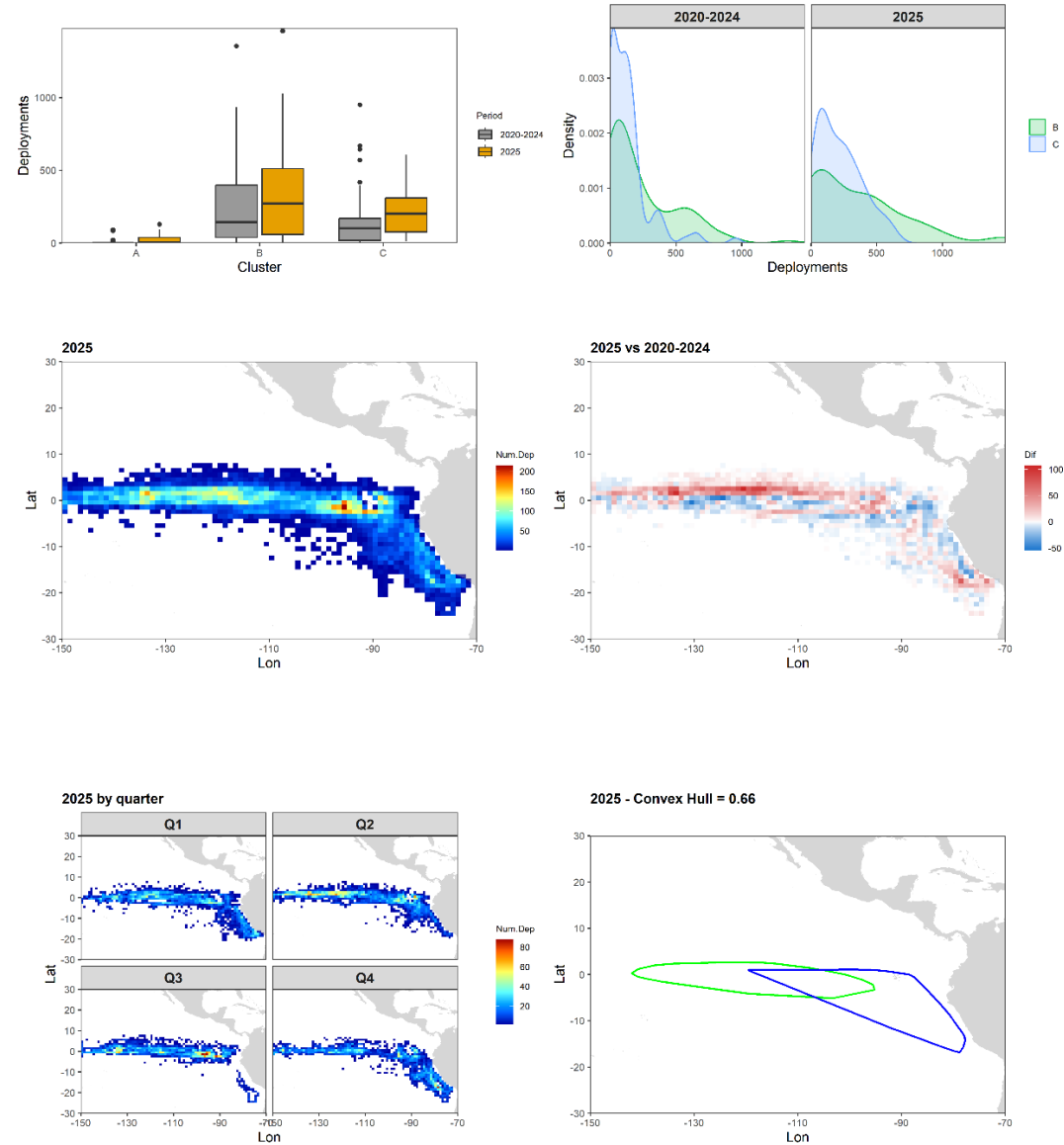


Deployments – Plantaciones



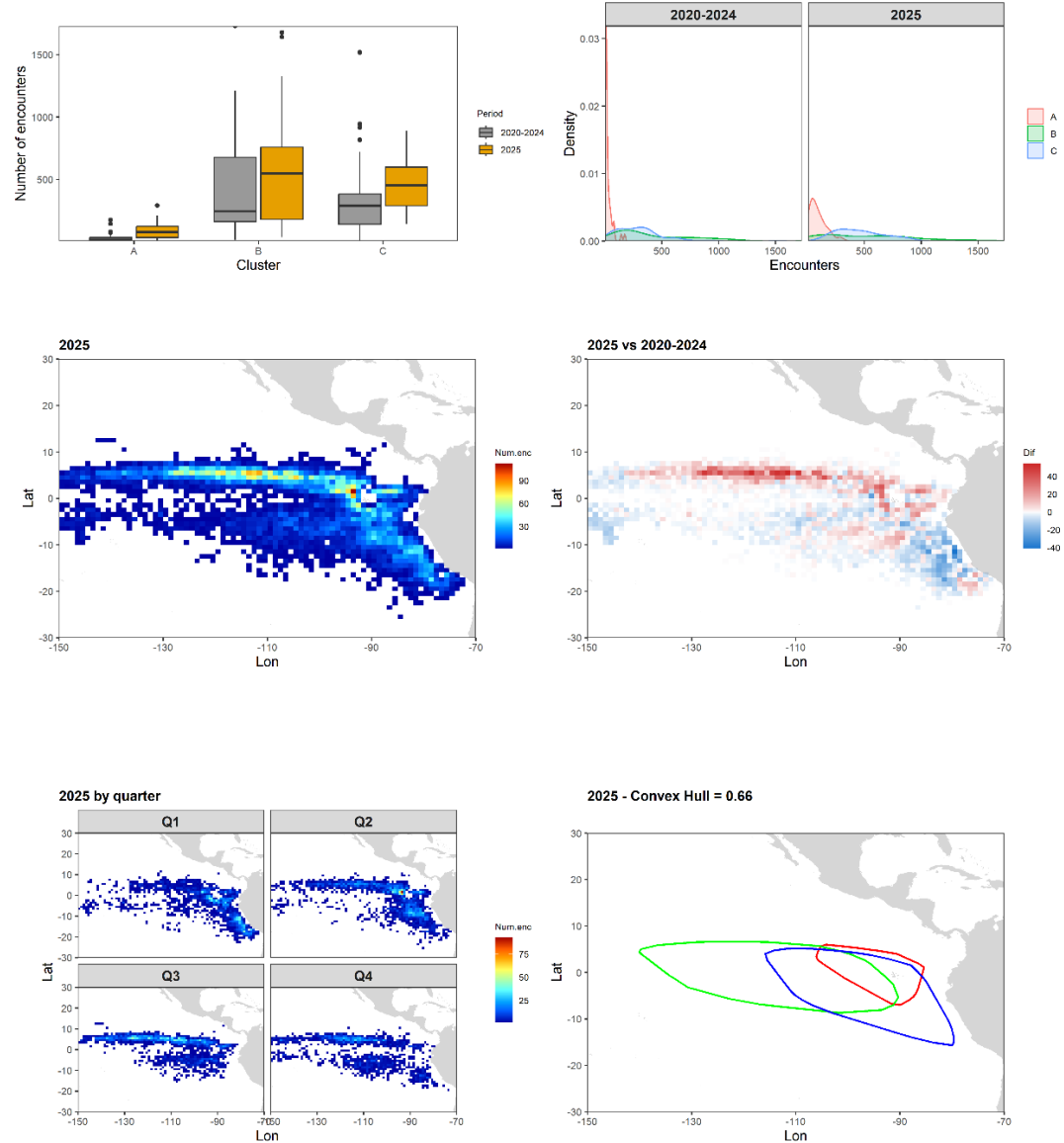
Deployments – Plantaciones

Figure 15. Deployments, 2025

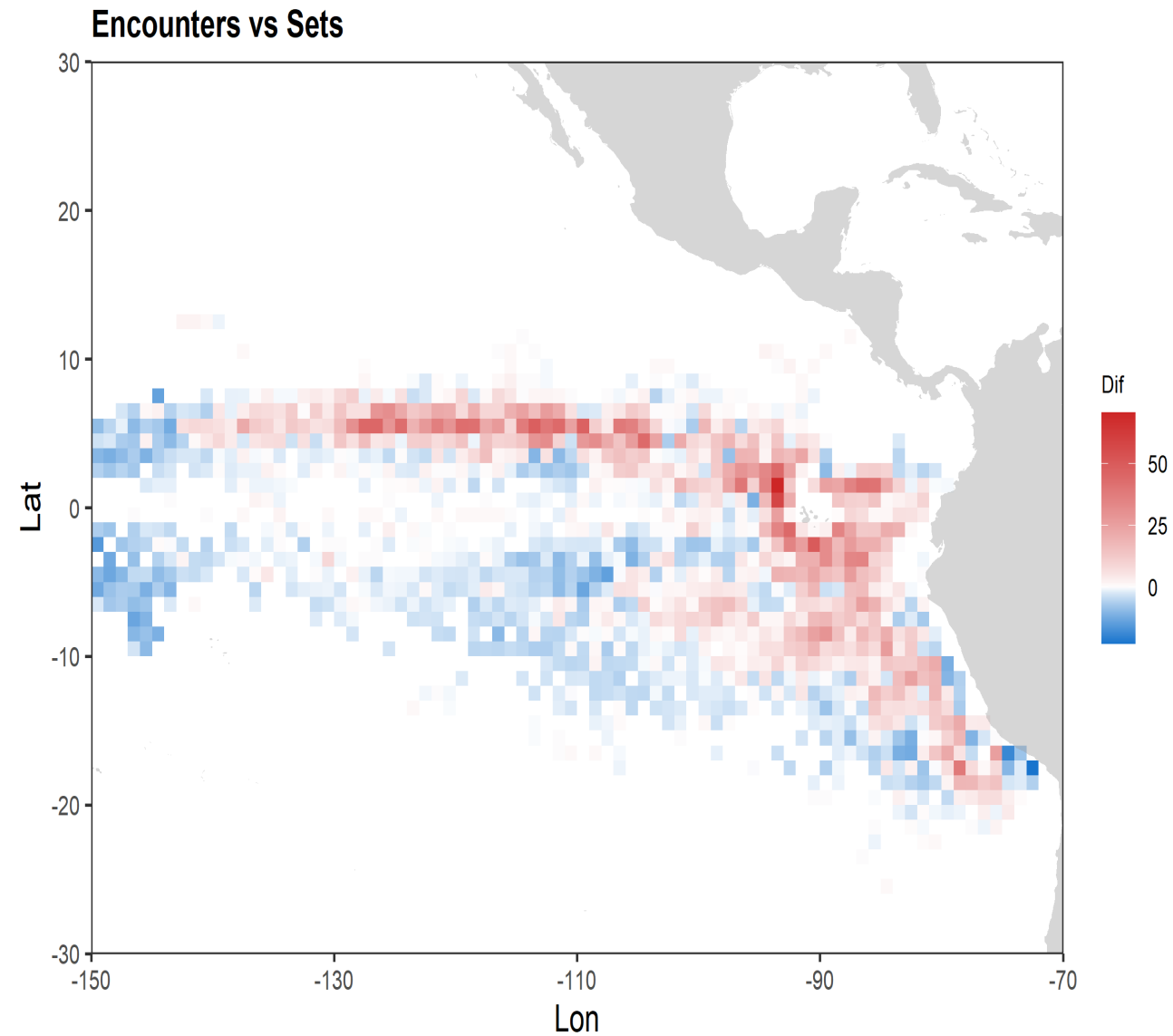


Encounters – Interacciones

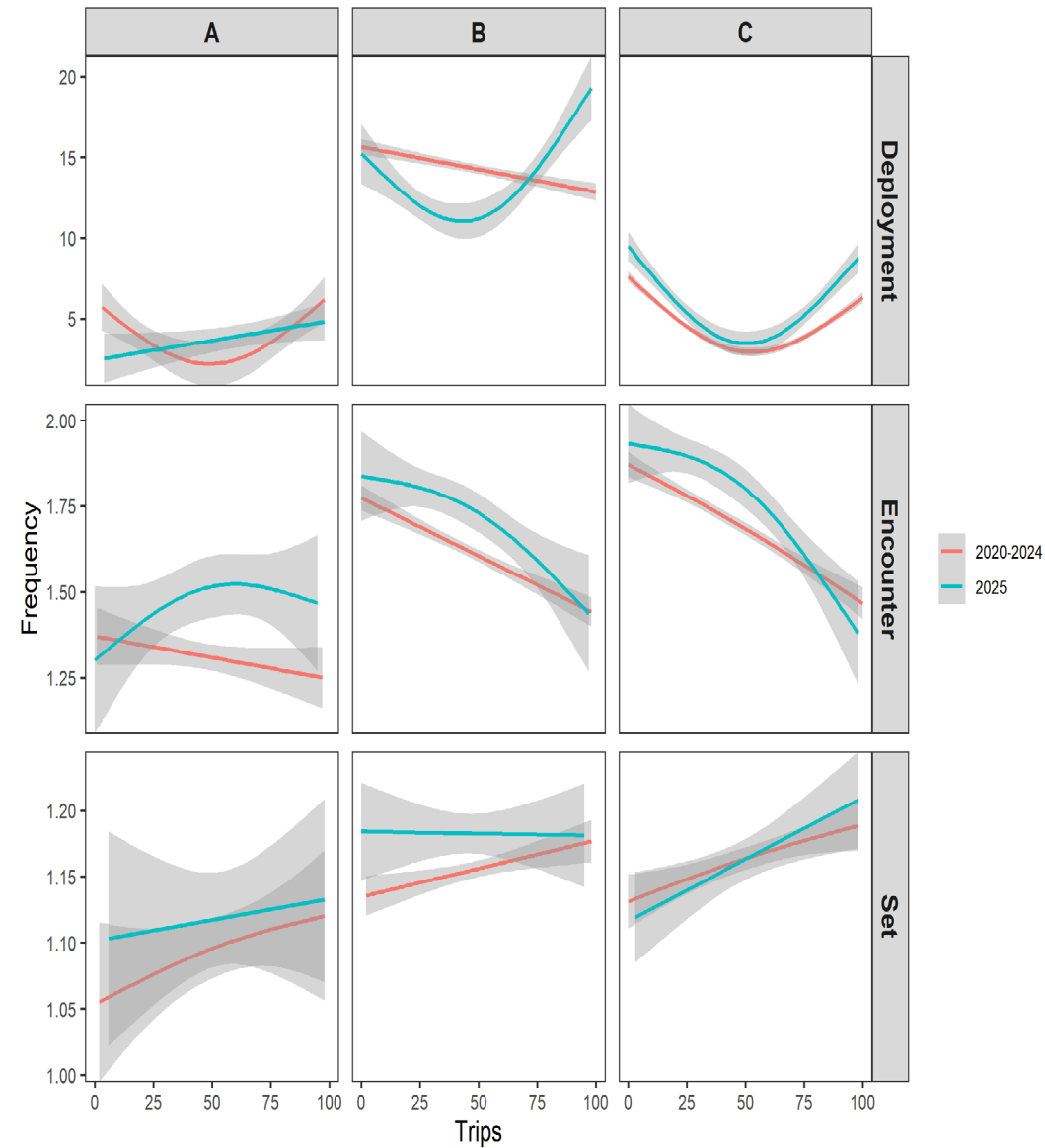
Figure 17. Encounters, 2025



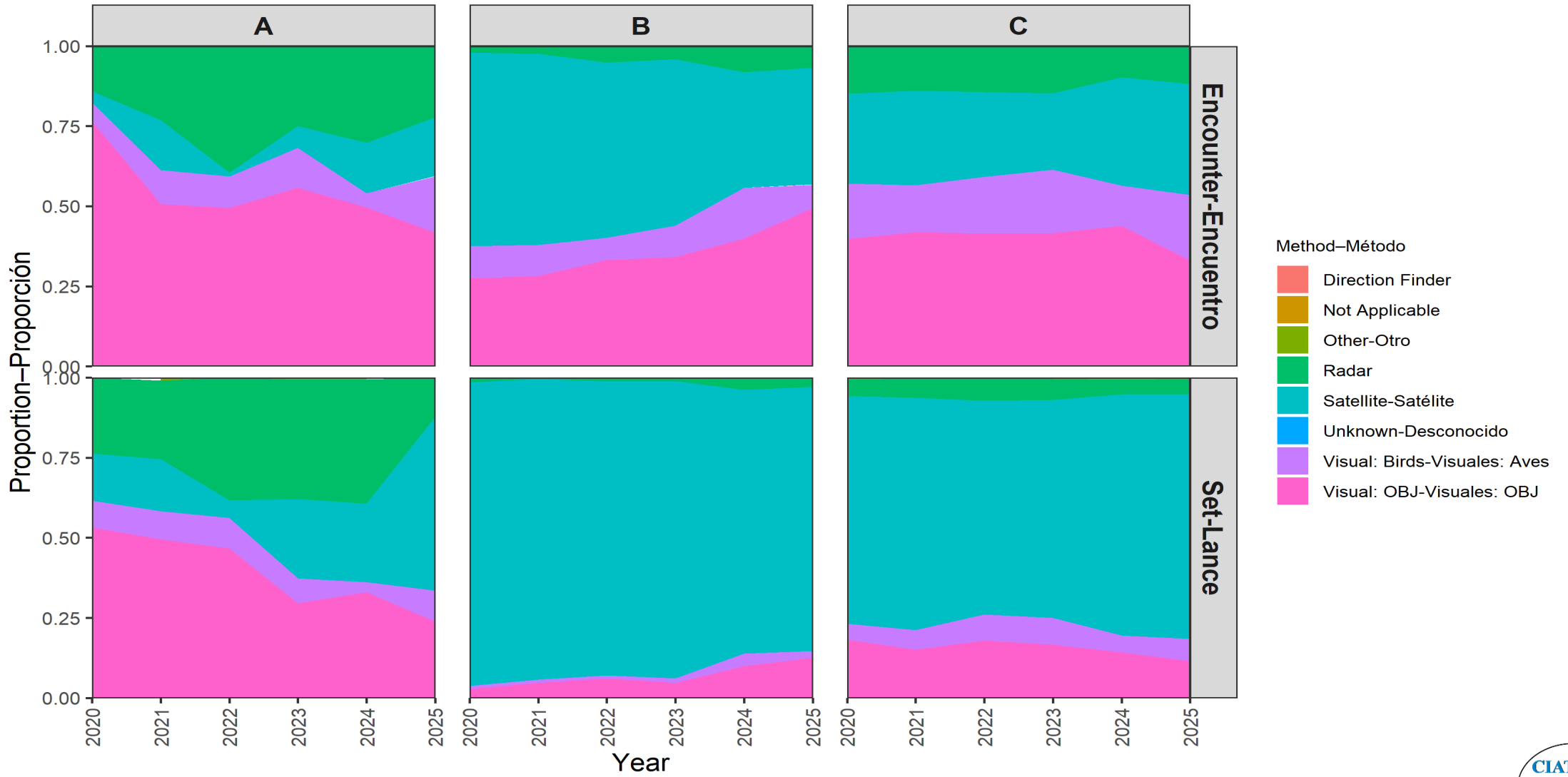
Encounters vs Sets – Interacciones vs Lances



Activities within the trip – Actividades durante el crucero



OBJ Location method – Método de localización de OBJ

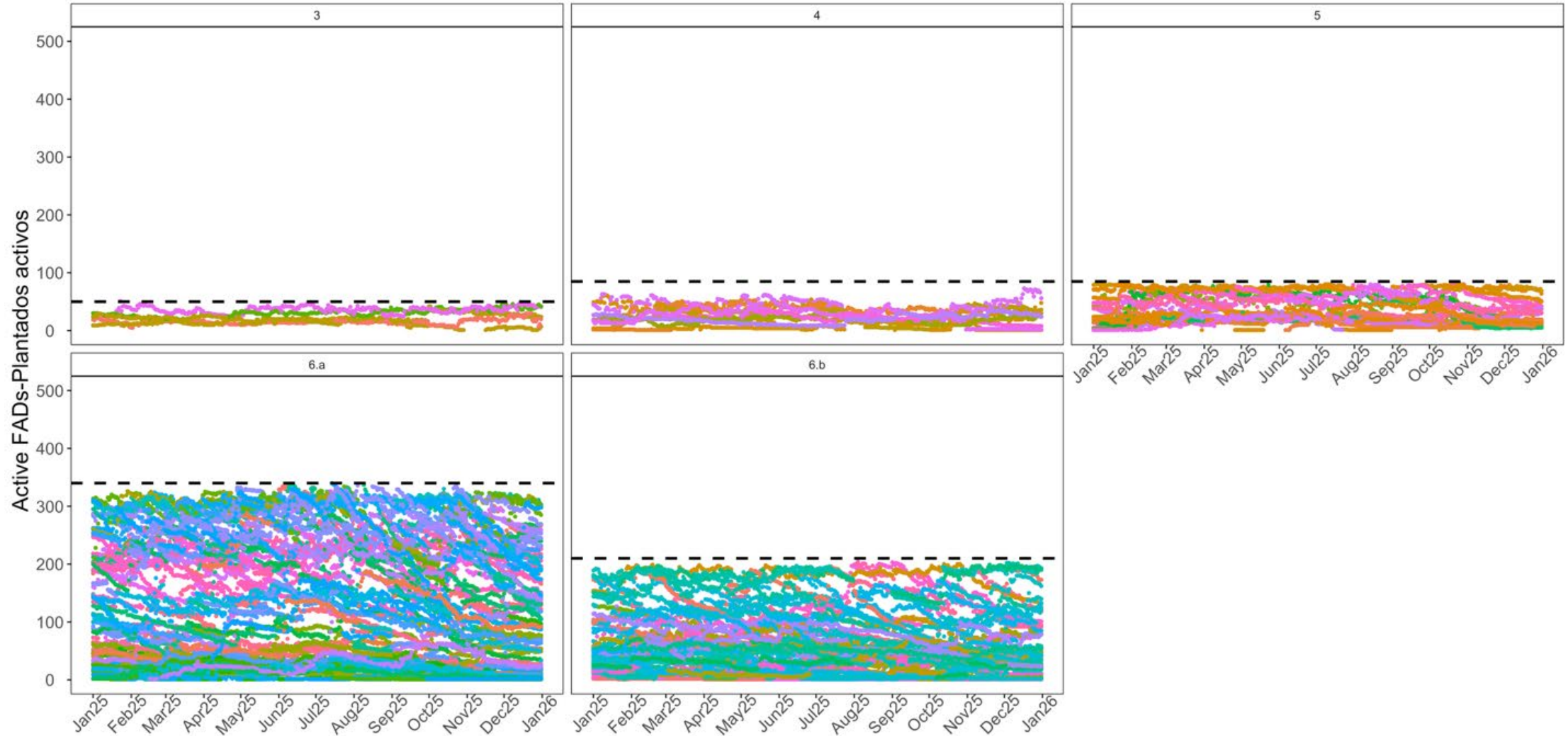


Buoy-based – Basados en boyas

Daily active FADs – Plantados activos diarios

Res. C-24-01

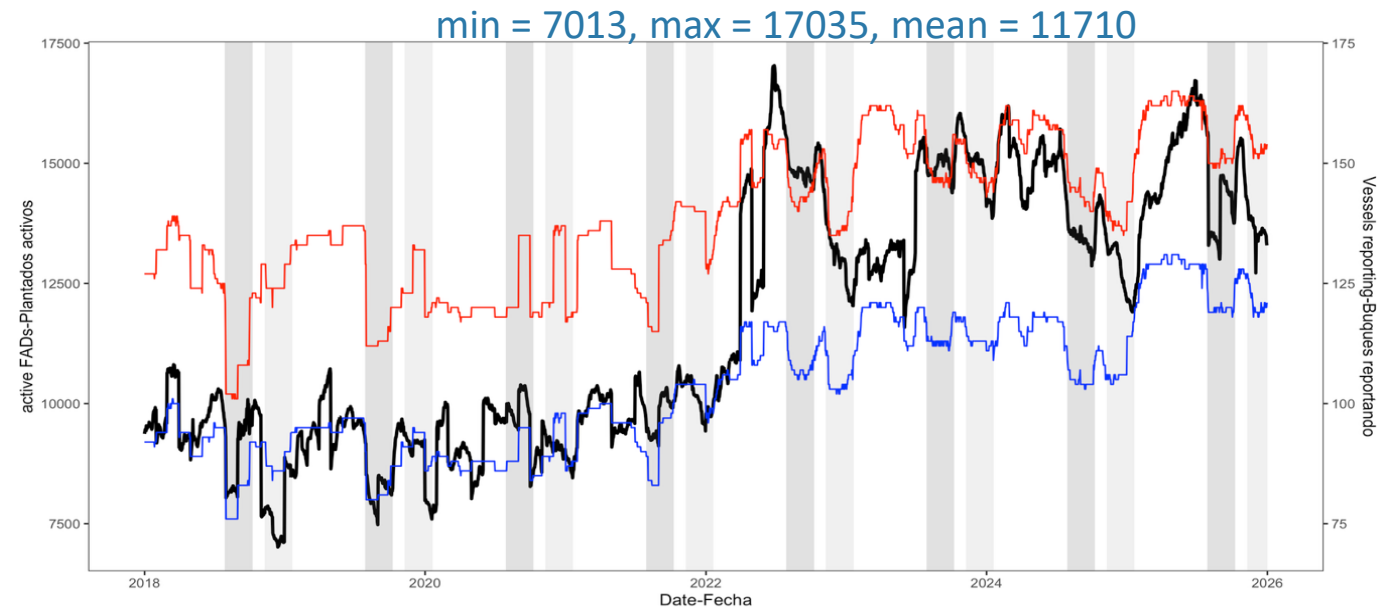
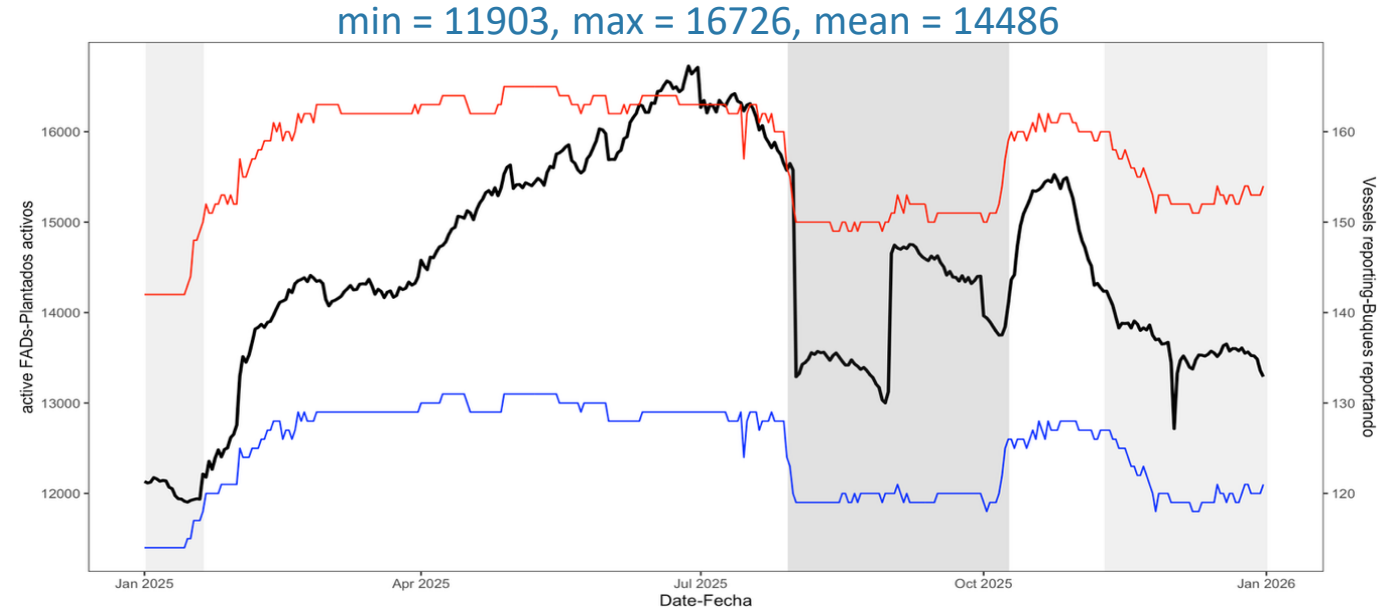
(171 buques-vessels)



2025

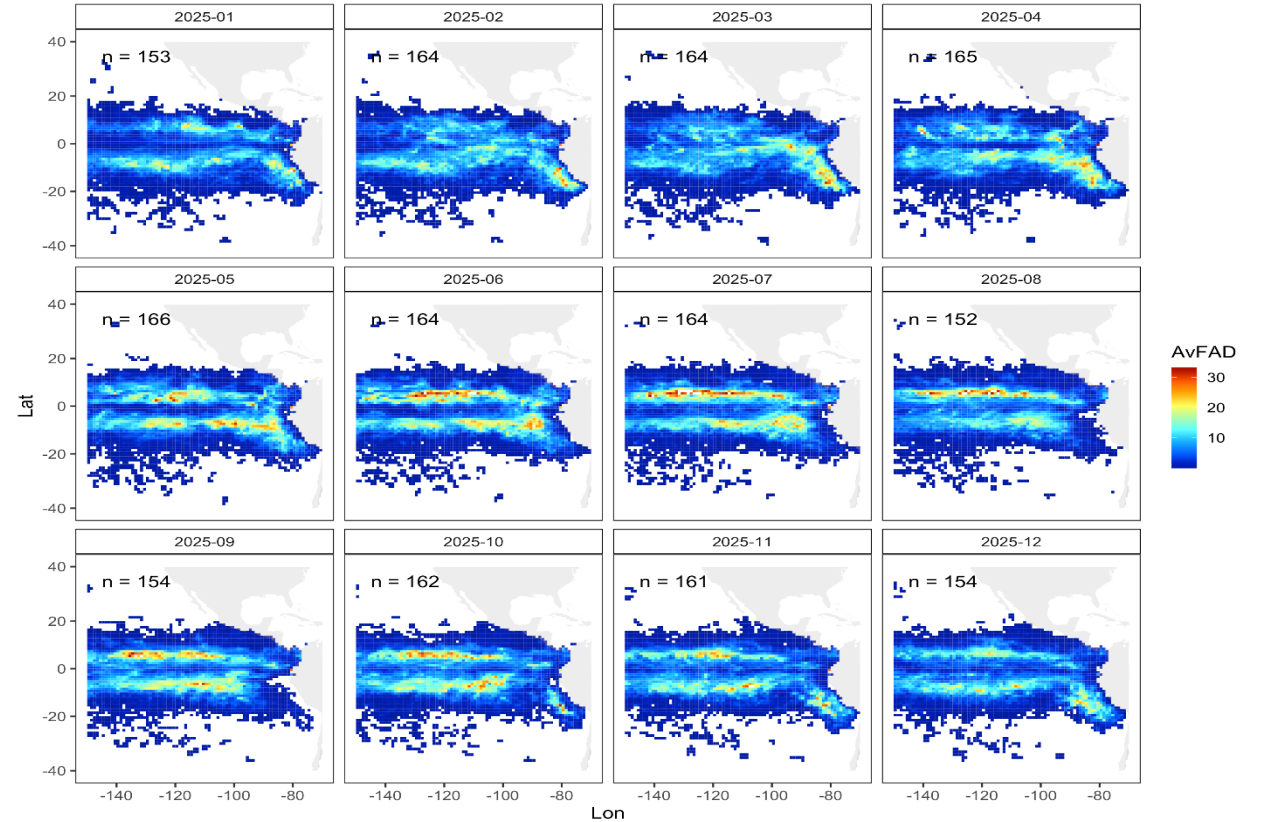
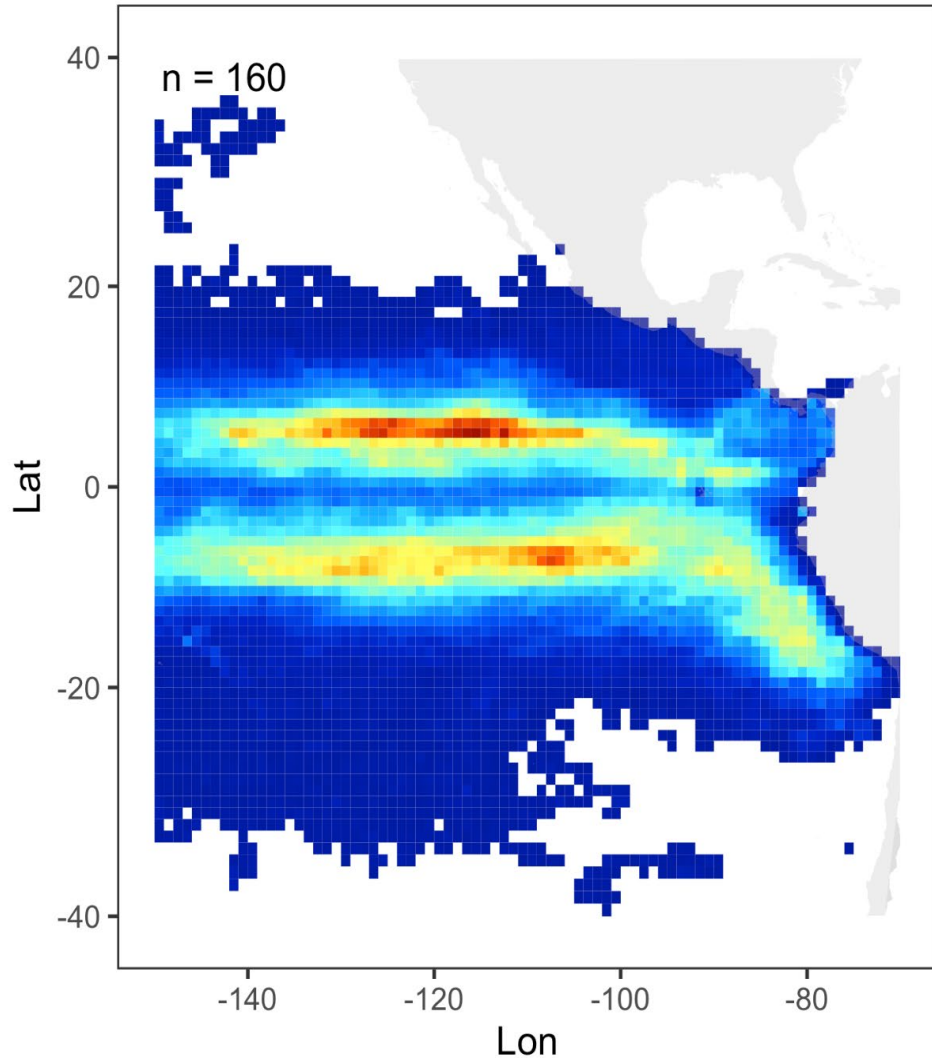
Daily total active buoys – Boyas activas diarias

171 vessels-buques
(134 Class 6
37 Class 1-5)



Active FADs densities – Densidades de plantados activos

Mean-Media 2025



153-166 vessels-buques
12192-16279 FADs-DCPs

FAD reactivation/deactivation – Reactivación/desactivación de Plantados

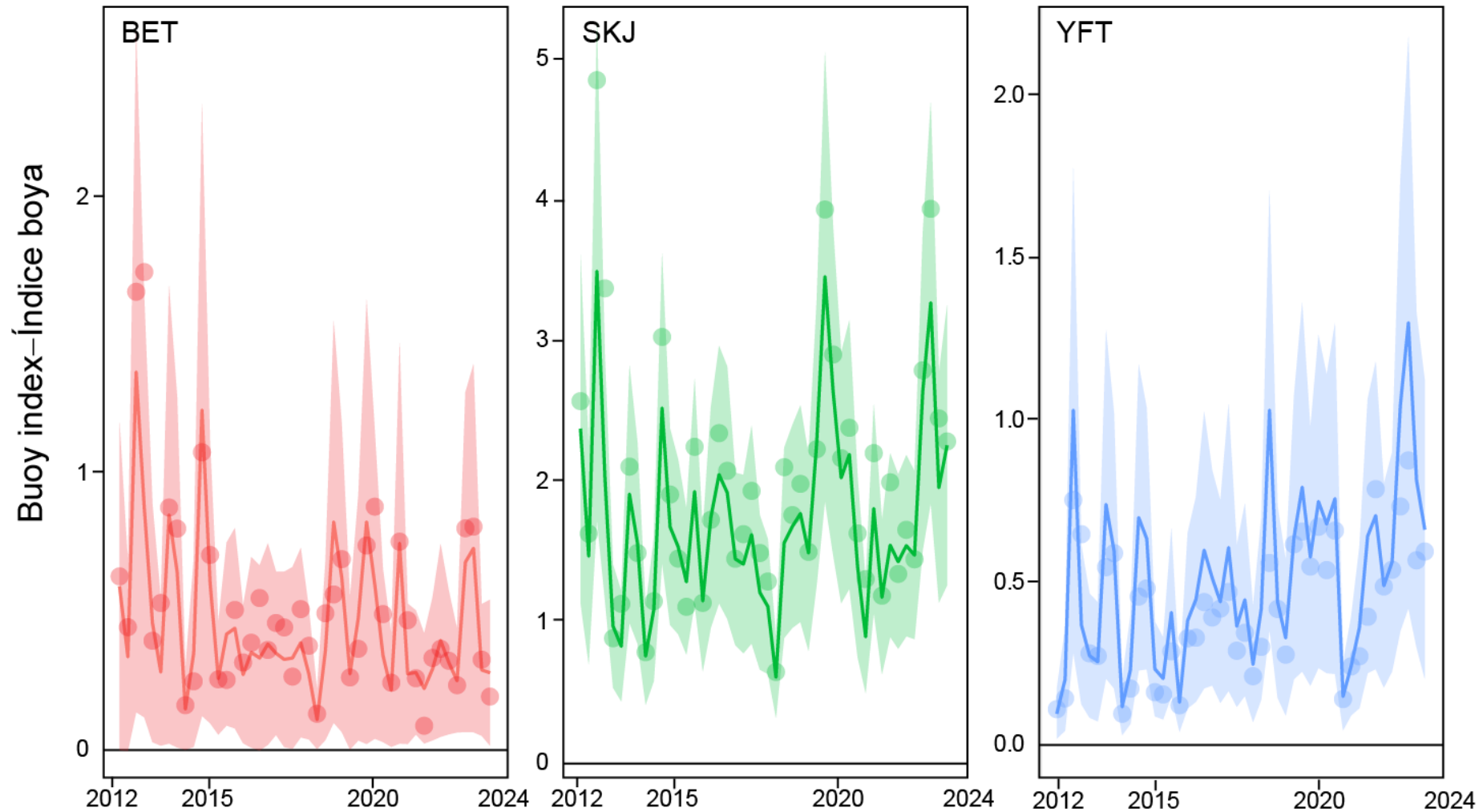
2025: 179 buques-vessels (40 clases 1-5, 139 clase 6) y 2589 ficheros-files (14.4 files per month and vessel)

2022-2024: promedio-vessels - 2022-2024: 134-178 buques y 1439-2400 ficheros (month and vessel)

Type	Reason	2025		2022-2024	
		No. records	%	No. records	%
Deactivation	Beaching	124	0.4%	89	0.5%
	FAD outside the areas (par. 20; c-21-04)	7724	27.7%	5690	29.9%
	Other	2531	9.1%	1709	10.0%
	Signal loss	8136	29.2%	6251	34.2%
	Stolen FAD	7456	26.7%	3258	16.3%
	Temporarily during closure periods	343	1.2%	250	1.1%
	Transferred ownership	1569	5.6%	1608	7.8%

Type	Reason	2025		2022-2024	
		No. records	%	No. records	%
Reactivation	After a temporary deactivation during the closure period	28	0.6%	120	2.2%
	Other	1423	32.6%	1223	22.5%
	Recovery of a signal loss	1984	45.5%	2395	43.9%
	Transfer of ownership	928	21.3%	1711	31.4%

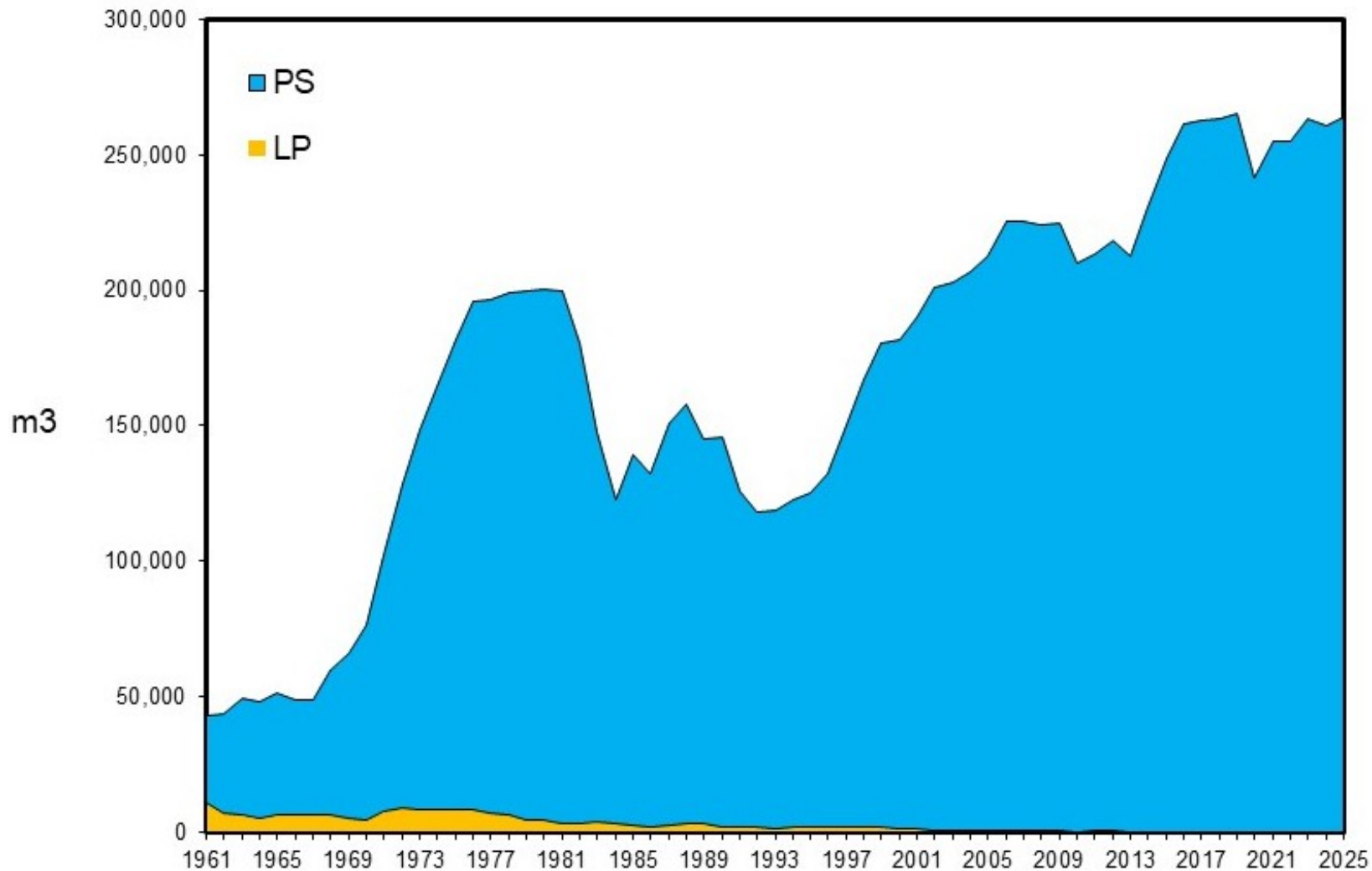
Buoy Abundance Index – Índice de abundancia derivado de boyas



FAD-08-03 – BAI indices / IAB tropicales
SAC-15-04 - SKJ assessment / evaluación de barrilete

Capacity – Capacidad

Carrying Capacity – Capacidad de la flota



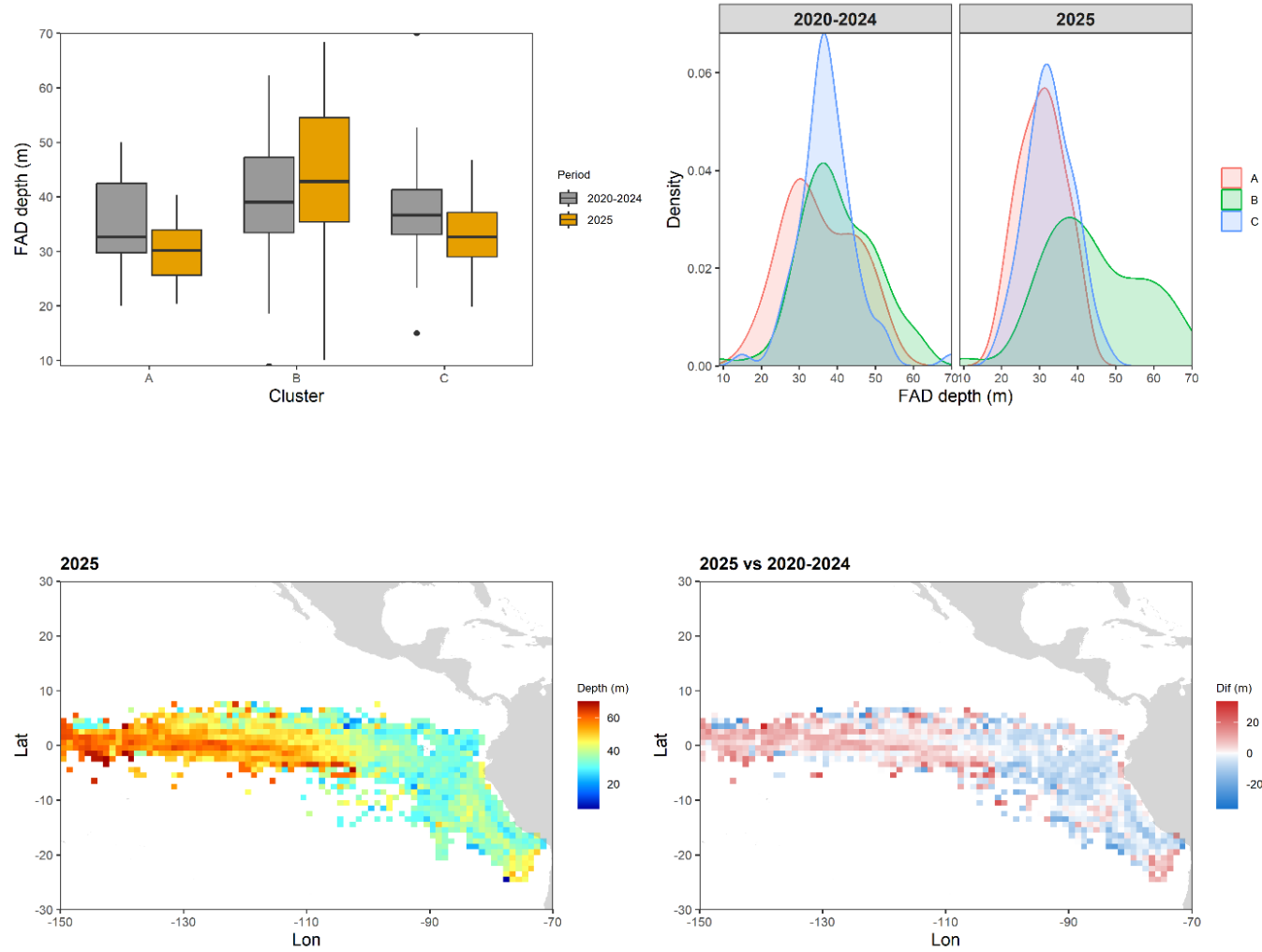
~264K annual/annual
(230
vessels/buques)buqu
es)

~137K/monthly-
mensual (~52%)

Technology – Tecnología

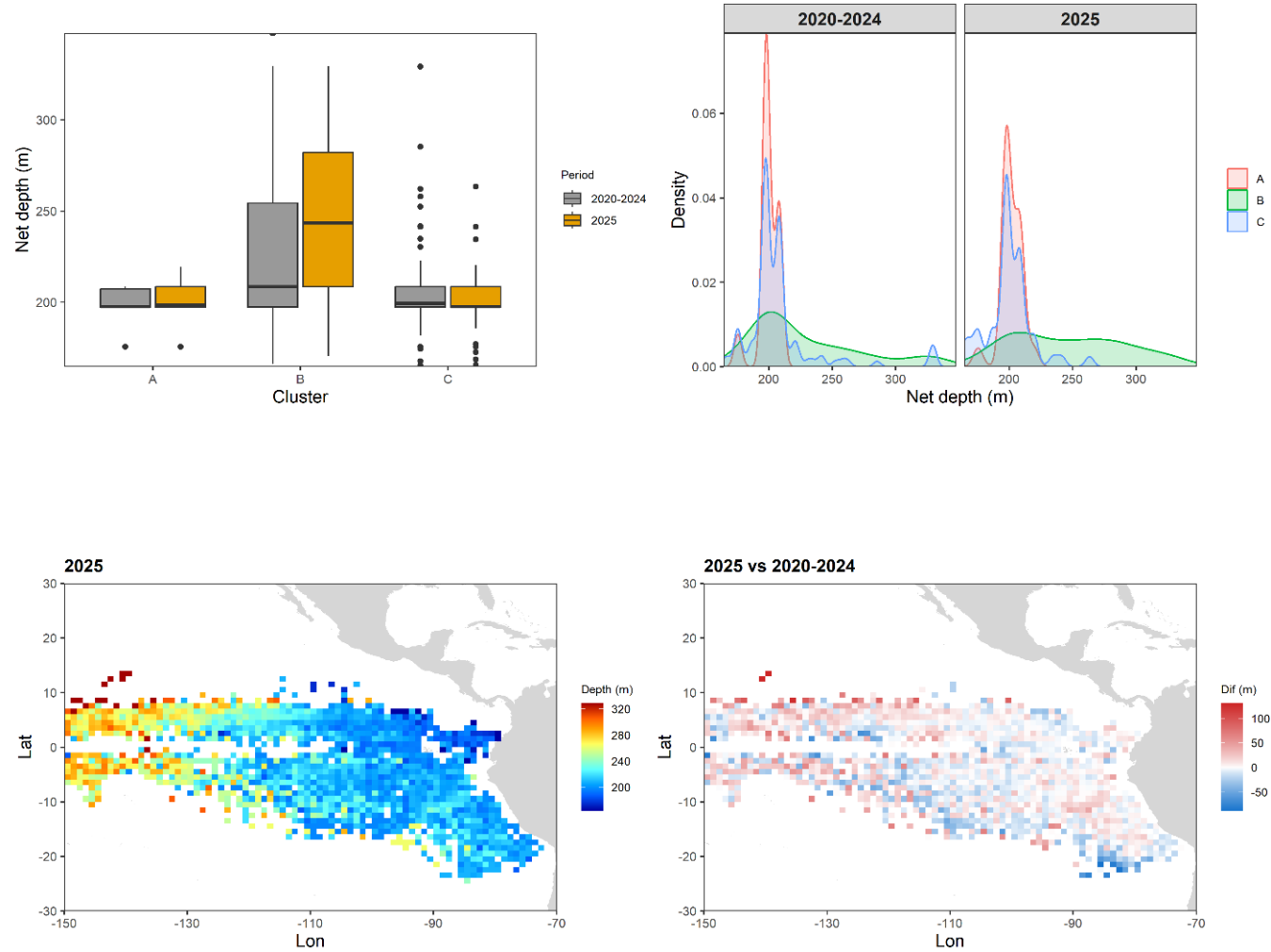
FAD depth – Profundidad de plantados

Figure 28. FAD depth, 2025

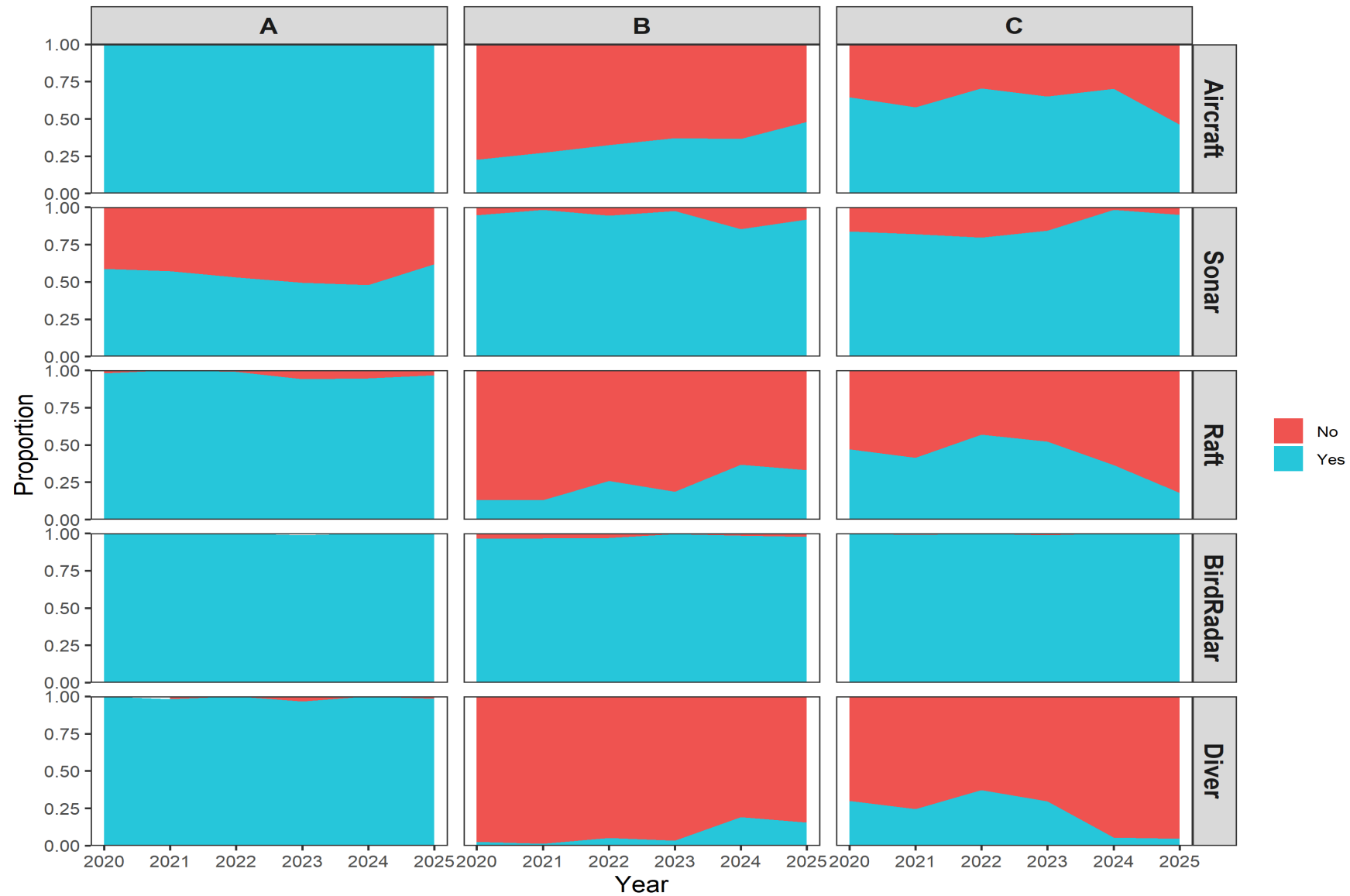


Net depth – Profundidad de red

Figure 29. Net depth, 2025



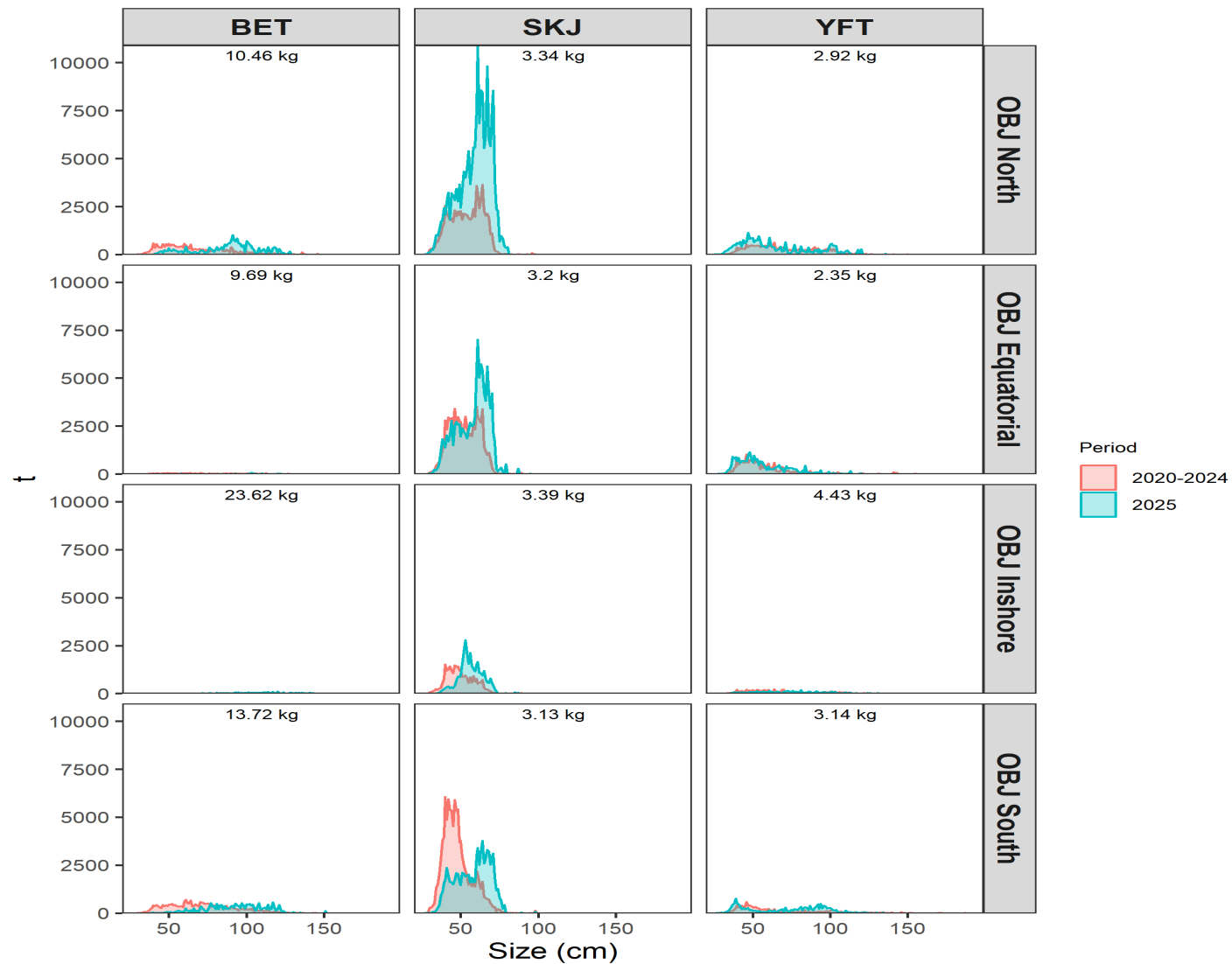
Onboard technology – Tecnología a bordo



Ecosystem impacts – Impacto sobre el ecosistema
(see/ver EB-04-01)

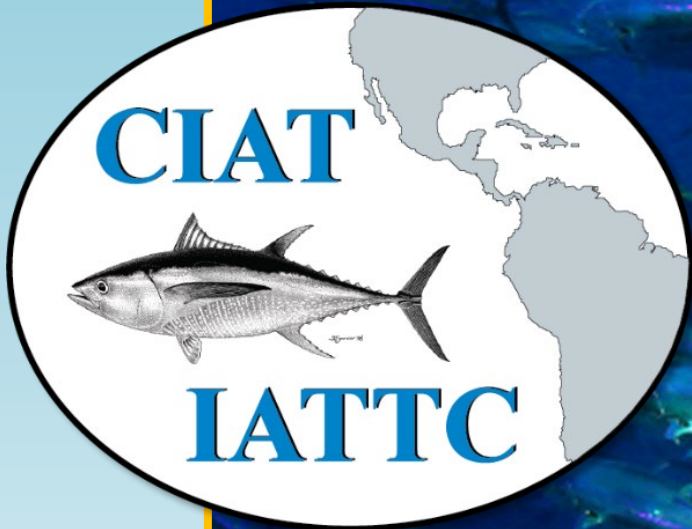
Biology – Biología

Size composition of tuna – Composición de tallas de atún



Future prospects – Trabajo futuro

- Extend to include other indicators of interest: e.g., stranding and recovery events (M.5.b).
- Incluir otros indicadores de interés: e.g., cuantificación de varamientos y recogida (M.5.b).
- Use fishers workshops for capacity building and collect near-real time information of fishery dynamics (started in 2020-2021)
- Usar los talleres de capitanes para mejorar las aptitudes de los pescadores pero a su vez, recolectar información de primera mano sobre las dinámicas de la pesquería (comenzado en 2020-2021)
- Support science/indicators-based decision making – see new FAD workplan in the SSP 2026-2030.
- Promover decisiones de manejo apoyadas en ciencia e indicadores – i.e. nuevo plan de trabajo sobre FADs para el SSP 2026-2030.
- IATTC staff recommends: to provide to the IATTC staff the historic raw buoy data received by original users.
- El personal de la CIAT recomienda: suministrar al personal de la CIAT los mismos datos históricos crudos que reciben los usuarios originales.



Preguntas—Questions

