

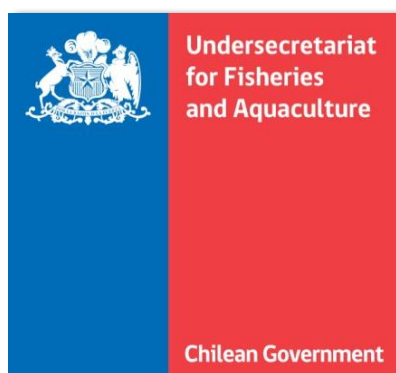
14th MEETING OF THE SCIENTIFIC COMMITTEE

7 to 12 September 2026, Tórshavn, Faroe Islands

SC14 - Doc 18

Annual Report of Chile to the Scientific Committee – Squid

Chile

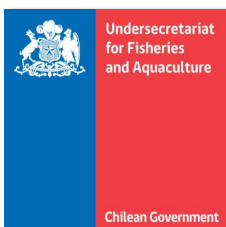


CHILE ANNUAL REPORT

SPRFMO-SCIENTIFIC COMMITTEE

Jumbo squid (*Dosidicus gigas*)

August 2026.



1 SUMMARY

The jumbo squid (*Dosidicus gigas*) fishery in Chile continues to operate under the regulatory framework established by Law No. 21.134, which since 2020 has allowed directed fishing for jumbo squid exclusively using jigging gear or handline. Catches were taken within Chile's Exclusive Economic Zone (EEZ), with the fishery conducted primarily by the artisanal fleet, while the industrial fleet caught the species only as bycatch. During 2025, a global catch quota was set at 200,000 tons, without allocation between the artisanal and industrial sectors.

Fishing activity followed the pattern observed in previous years, with catches concentrated during the first half of the year and a marked decline in the second half. The fishery also continued to develop mainly between the Coquimbo and Biobío regions, with no incidental catch of marine mammals, seabirds, or turtles recorded.

Indicators for the artisanal fleet show relatively stable fishing effort over the recent period, while CPUE has shown an overall declining trend compared with the early years of the series. Regarding size structure, the catch continued to be dominated by individuals above the reference size at sexual maturity, with a mode of approximately 70 cm mantle length (ML) in 2025.

Fishery monitoring was carried out by the Chilean Fisheries Development Institute (IFOP) through biological and fishery monitoring programs, providing the background information necessary for the annual assessment of the resource and technical advice to the Technical Scientific Committee.

2 INTRODUCTION

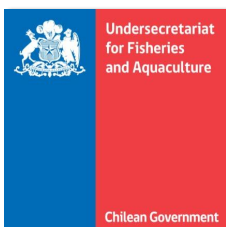
Since 2020, following the amendments introduced by Law No. 21.134 of 2019, directed fishing for jumbo squid (*Dosidicus gigas*) has been permitted exclusively using jigging gear or handline. This regulatory change is reflected in the composition of catches recorded since 2020, with targeted fishing conducted exclusively by the artisanal fleet. In contrast, catches carried out by the industrial fleet have consisted solely of bycatch. A global catch quota is established annually for this resource, and in 2025 the quota was set at 200,000 tons.

3 DESCRIPTION OF THE FISHERY

3.1 Composition of the Fleet

During 2025, the artisanal fleet operating within Chile's Exclusive Economic Zone (EEZ) comprised 1,723 vessels measuring 18 m or less in length. Regarding the fishing gears used by the artisanal fleet, gillnets and longlines were reported only in association with bycatch, whereas directed fishing for jumbo squid was carried out exclusively using jigging gear.

Unlike years prior to the entry into force of Law No. 21.134, during 2025 the fishing activity of the industrial fleet was carried out mainly as bycatch, landing a total of 608 tons, corresponding to less than 1% of the total landings made in Chile during that year. Likewise, due to this regulatory change, a progressive decrease has been observed in the number of industrial vessels operating in this fishery.



3.2 Catches, Seasonality of Catches, Fishing Grounds and B-catch

3.2.1 Catches

Catches of *Dosidicus gigas* are conducted within Chile's Exclusive Economic Zone (EEZ). The 2015–2025 time series shows a structural shift in catch composition between fleets. Between 2015 and 2018, industrial catches remained relatively stable, whereas the artisanal fleet exhibited greater interannual variability.

The year 2019 represented a turning point in the series: the industrial fleet reached its highest historical contribution, while the artisanal fleet recorded its historical minimum, reflecting the transition towards the full implementation of the amendments to national legislation. Consequently, from 2020 onward, industrial participation declined sharply and consistently.

By contrast, the artisanal fleet showed a gradual recovery between 2020 and 2024, approaching the highest catches recorded in the series during the latter year, followed by a decline in 2025. Overall, the recovery in total landings observed since 2022 has been driven almost entirely by the artisanal fleet (Figure 1).

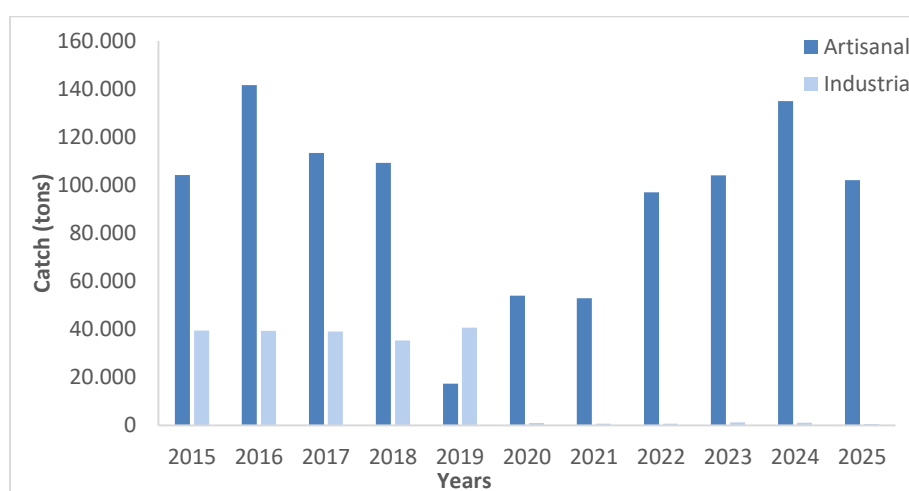
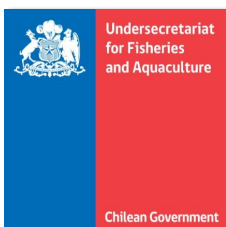


Figure 1. Tons landed in Chile of *D. gigas* during the 2015-2025 period, by the artisanal and industrial fleets. Source: SERNAPESCA.

3.2.2 Seasonality of catches during 2015-2025

In general, jumbo squid catches were concentrated during the first half of the year, declining steadily during the second half, a pattern that remained consistent throughout the 2015–2025 period (Figure 2). Clear seasonal patterns were observed, reflecting the fisherie's operational, biological and economic characteristics. May accounted for the highest cumulative catches over the series, followed by April and March. In contrast, from September to December consistently recorded the lowest monthly catch volumes throughout the period analyzed.

Furthermore, the series shows a change in the magnitude of catches from 2019 onward, particularly during January-April, a period that historically accounts for the largest proportion of annual landings.



Although a gradual recovery in landings has been observed since 2022, it is concentrated mainly in the January-April and May-August periods, without reaching the levels recorded before 2019; likewise, September and December continue to show a low contribution throughout the subsequent period.

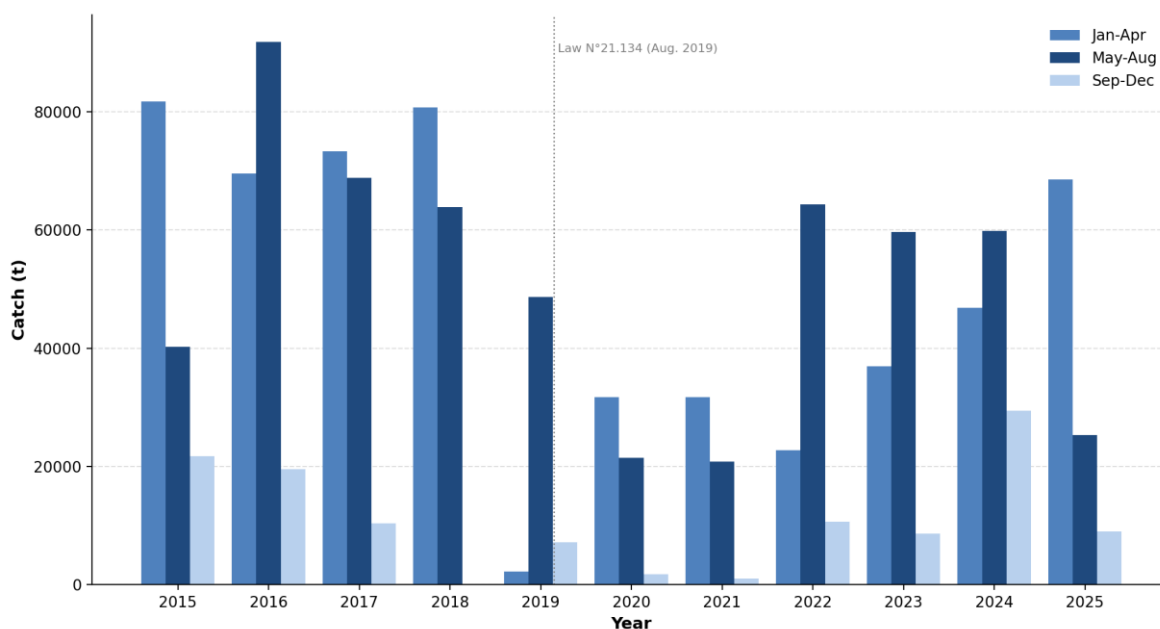


Figure 2. Tons landed in Chile of *D. gigas* during the 2015-2025 period, distributed monthly. Source: SERNAPESCA.

3.2.3 Spatial Distribution of Catches

During 2025, the geographic distribution of fishing sets of the industrial fleet that recorded jumbo squid catch as bycatch extended between the Maule Region (34.7°S) and Biobío Region (38.7°S), with the largest percentage of catch concentrated between 35°30'S and 38°39'S, consistent with what was reported in previous seasons. Operations were concentrated mainly in coastal areas over the continental shelf (Figure 3).

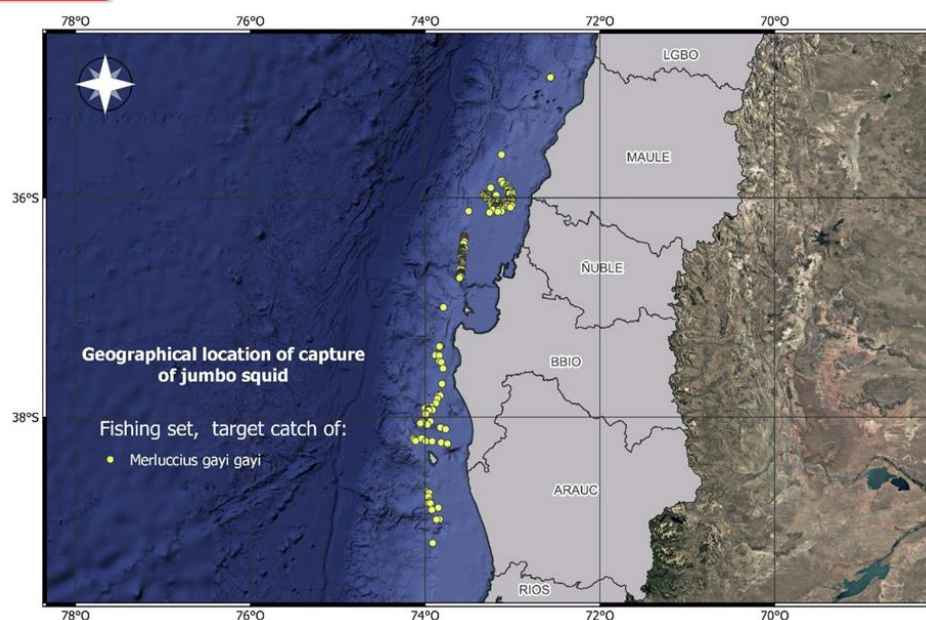
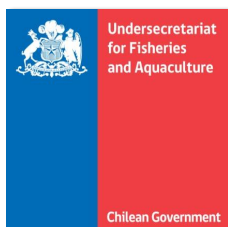


Figure 3. Spatial distribution of monitored fishing sets deployed by the industrial fleet with catches of *D. gigas* as bycatch in the hake target fishery during 2025. Source: IFOP.

Regarding the artisanal fleet, and as in other years, operations were concentrated mainly between Coquimbo Region (29°21'S) and Biobío Region (38°30'S) (Figure 4). However, the largest landings were recorded in the Valparaíso Region (33°03'S), the Maule Region (35°26'S), and the Biobío Region.

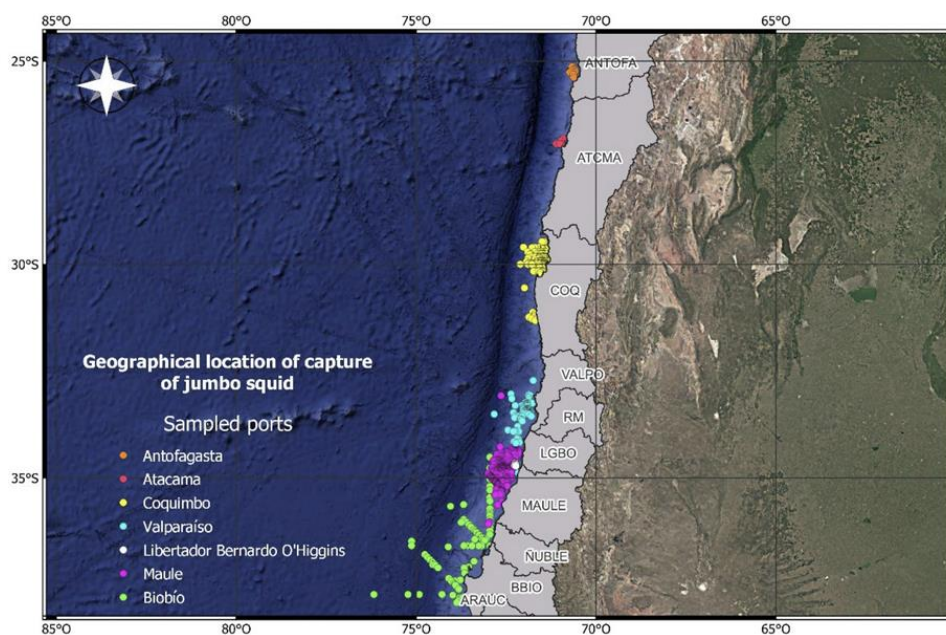
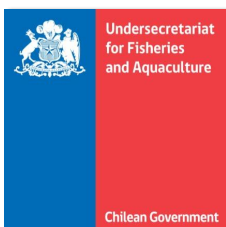


Figure 4. Spatial distribution of monitored fishing of Jumbo squids. Artisanal fleet 2025. Source: IFOP.



3.2.4 Fishing Grounds and Bycatch

As in previous years, no incidental catches of marine mammals, seabirds or sea turtles were recorded during 2025. This is consistent with the high selectivity of the jigging gear. Consequently, no bycatch or incidental catch was recorded in the artisanal jumbo squid fishery.

Likewise, the industrial fleet caught jumbo squid only as bycatch while targeting other fisheries. Therefore, the assessment of interactions with marine mammals, seabirds and sea turtles is not applicable to the jumbo squid fishery itself.

4 EFFORT AND CPUE FOR *DOSIDICUS GIGAS* FISHERY

4.1 Effort

It was not possible to estimate industrial fishing effort for 2025 in a manner consistent with the historical series available through 2019, since catches by the industrial fleet now consist exclusively of bycatch. This situation is expected to remain under the current Chilean regulatory framework.

As in previous years, effective fishing hours using jigging gear were used as an indirect indicator of fishing effort for the artisanal fleet. The indicator showed interannual fluctuations between 2018 and 2021 without a sustained trend. From 2022 onwards, however, a slight increasing trend was observed, continuing through the end of the series in 2025 (Figure 5).

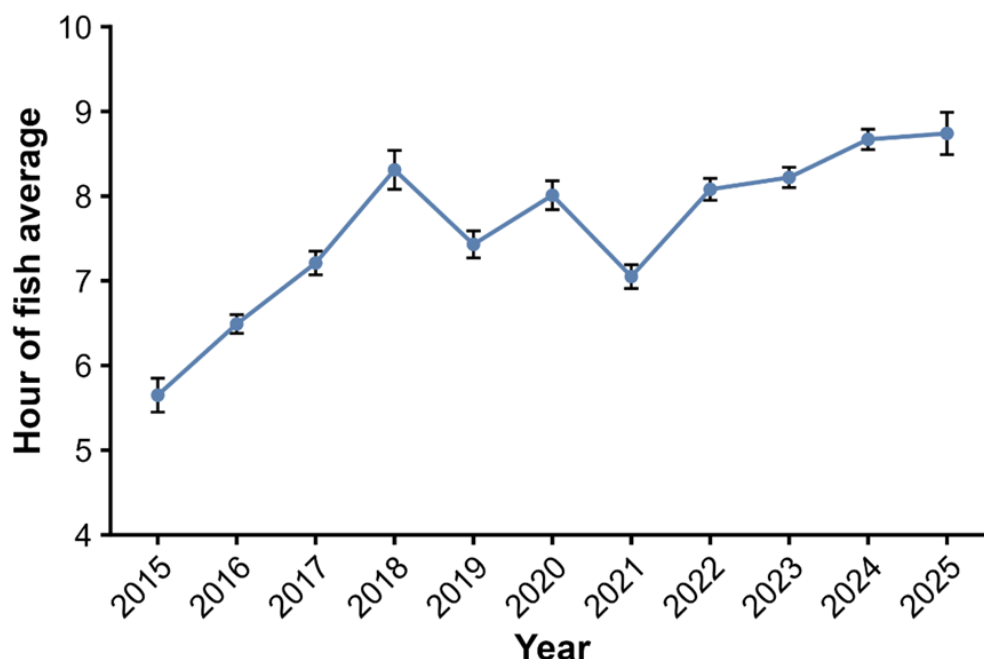
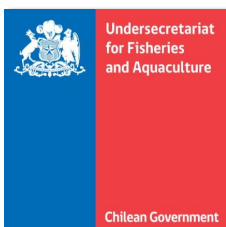


Figure 5. Average fishing effort per trip, expressed in effective fishing hours, per year. Fleet of vessels smaller than 12 m in length. period 2015-2025. Confidence interval. Source: IFOP.



4.2 Yield

As with fishing effort, CPUE for the industrial fleet cannot be updated in a manner that maintains continuity with the historical series available through 2019, since catches are now recorded exclusively as bycatch under current Chilean legislation.

The CPUE of the artisanal jumbo squid fleet between 2015 and 2025 shows a general downward trend, with marked intra-annual seasonality characterized by peaks between late summer and autumn, and troughs toward the end of the year. The highest yields were recorded between 2015 and 2017, with 2016 standing out as the year with the highest values. CPUE subsequently declined steadily until reaching its lowest level in 2019. A partial recovery was observed between 2021 and 2022, within the broader 2020-2023 period, followed by a further decline in 2024 and 2025, with yields among the lowest of the entire series. Overall, the figures show that, despite seasonal fluctuations, fishery yield declined over the period analyzed (Figure 6 and 7).

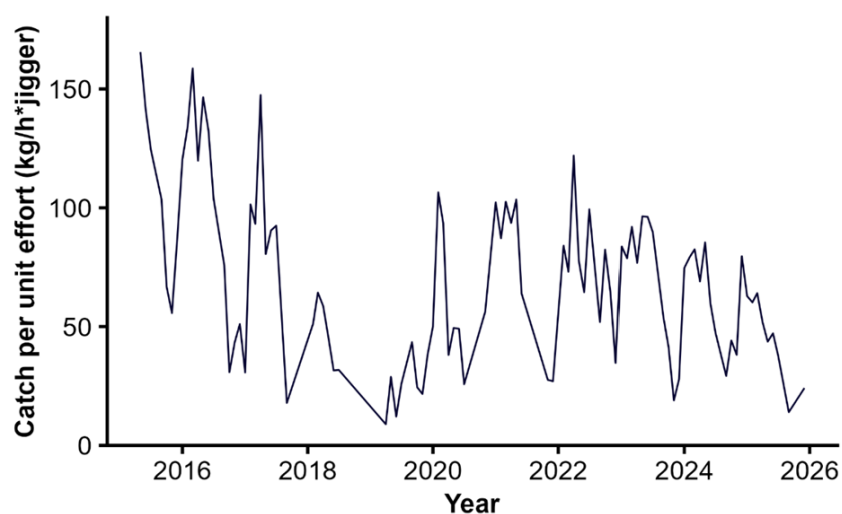


Figure 6. Historical yield, expressed in kilograms/ (hours of fishing*jiggers) per year and month, of the artisanal fleet targeting jumbo squid, period 2015-2025. Source: IFOP.

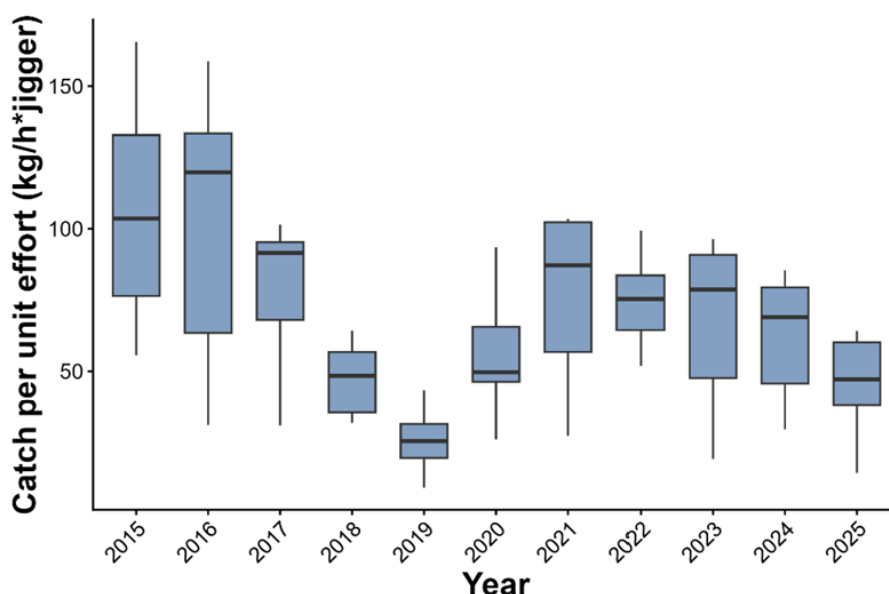
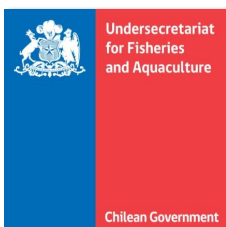


Figure 7. Boxplot of fishing CPUE (kg / (hour * jigging)) between the period 2015 and 2025 in Chile, artisanal fleet. The center line in the boxes represents the median of the data, the bottom horizontal line represents the 1st quartile, while the upper horizontal line represents the 3rd quarter, the vertical lines represent the maximum minimum values. Source: IFOP.

5 RESEARCH PROGRAMS

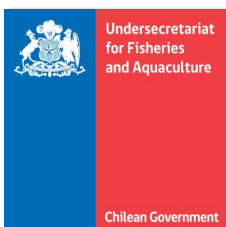
The research program for 2025 is composed mainly of projects developed with IFOP. The projects prepared annually by IFOP include:

- **Monitoring of the jumbo squid (*Dosidicus gigas*) fishery**

This study allows for the collection of information on the evolution of the main biological and fishing indicators associated with the fishery for jumbo squid and its bycatch. Monitoring was concentrated in the main regions of the country where the fishery takes place, which in the particular case of artisanal fishing is carried out mainly in the Coquimbo, Valparaíso, and Biobío regions, the latter being the region where nearly all the industrial fishing fleet operates.

- **Assessment of stock status and exploitation possibilities**

This project provides the Technical Scientific Committee with the scientific information and technical advice required to assess stock status and evaluate exploitation possibilities, including the estimation of the Acceptable Biologically Catch (ABC) for the following annual fishing season.



6 BIOLOGICAL SAMPLING, AND CATCH LENGTH AND AGE COMPOSITION.

6.1 Biological sampling

The collection of biological data from the industrial fleet was carried out primarily in the Biobío Region (36°49'S) through onboard scientific observer programs. All specimens sampled originated from catches taken as bycatch.

Biological data from the artisanal fleet were collected by scientific observers either onboard fishing vessels, when feasible, or at landing sites. Additional biological sampling was conducted at processing plants or during landing operations whenever possible.

Tables 1 and 2 show the number of specimens sampled (length and biological) for the industrial and artisanal fleets, respectively.

Table 1. Number of trips, sets and specimens sampled from the catches of jumbo squid as bycatch for the industrial fleet, according to the type of sampling in 2025.

Year	Type of sampling					
	Length			Biological		
	Fishing trips	Fishing sets	Specimens	Fishing trips	Fishing set	Specimens
2025	8	6	315	26	27	273

Source: IFOP.

Table 2. Number of trips, sets and specimens sampled from the artisanal fleet targeting jumbo squid, according to the type of sampling in 2025.

Region	Type of sampling			
	Length		Biological	
	Fishing trips	Specimens	Fishing trips	Specimens
Coquimbo	12	380		
Valparaiso	65	1.997	16	480
Maule	92	3.115	4	120
Biobío	10	290	9	279
Total	179	5.782	29	879

Source: IFOP.

6.2 Length and age composition of catches

When analyzing the length composition of jumbo squid captured by the industrial fleet since 2020, it should be noted that all specimens originated from bycatch while targeting other species. During 2025, mantle lengths ranged from 34.5 to 88.5 cm ML, with most individuals between 64.5 and 84.5 cm ML and a modal length of approximately 69–70 cm ML (Figure 8).

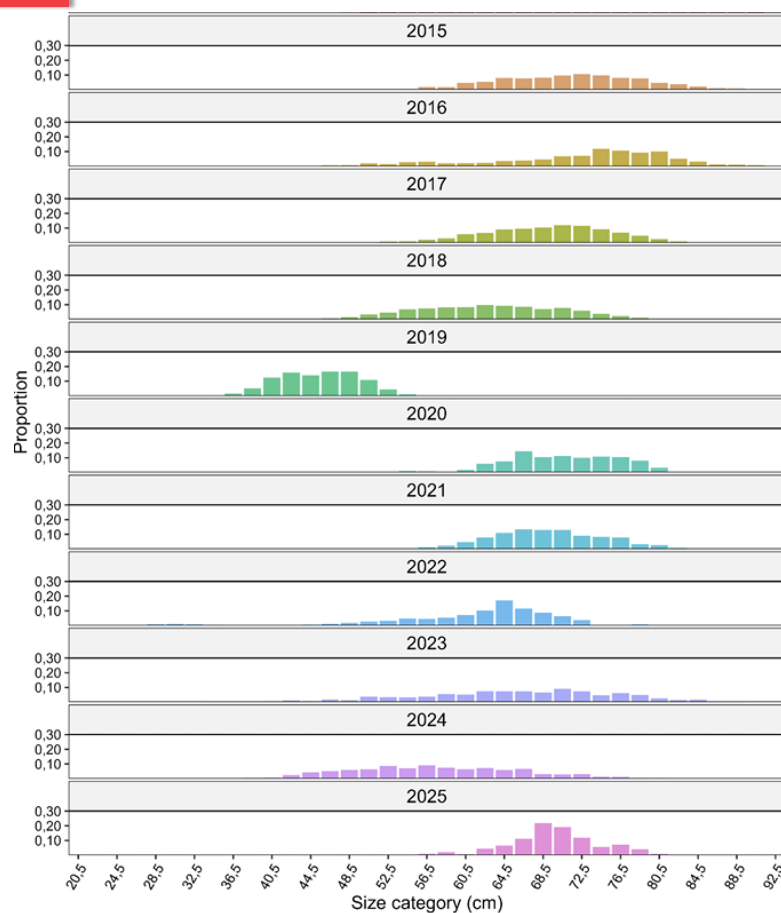


Figure 8. Composition of mantle length ML (cm) weighted to industrial catches of jumbo squid (both sexes combined). Period 2015-2025. As of 2020, jumbo squid catches correspond to those obtained as bycatch while targeting other resources. Source: IFOP.

For the 2015-2025 period, the size composition of the artisanal fleet shows that the size mode was located, in most years, above the sexual maturity reference size of 63.8 cm ML, with the exception of 2019, when the distribution shifted toward smaller size classes. In 2025, the information available corresponded to the first half of the year, a period in which the size distribution showed a mode located around 70 cm ML. Likewise, the presence of individuals sampled between 34.5 cm and 88.5 cm ML stands out (Figure 9).

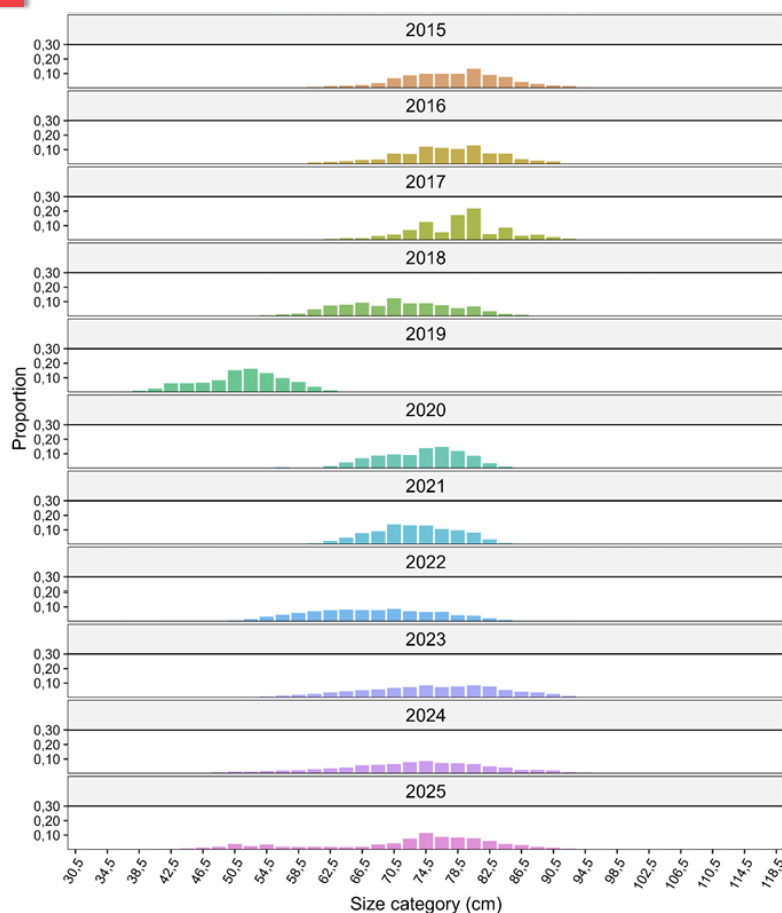
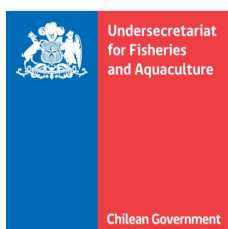


Figure 9. Composition of mantle length (cm) weighted to artisanal catches of jumbo squid (both sexes combined) Period 2015-2025. Source: IFOP.

7 AT-SEA AND PORT SAMPLING PROGRAM

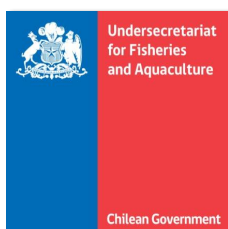
Sampling was conducted by scientific observers both at sea and in port, covering the artisanal and industrial fleets.

No directed jumbo squid fishing trips were monitored in the industrial fleet during 2025, as all information collected from this fleet originated from onboard observer programs during fishing operations targeting other species, with jumbo squid occurring exclusively as bycatch.

For the artisanal fleet, sampling coverage was achieved across all regions where the fishery operates, reaching an overall coverage of 3.8% during 2025 (Table 3).

Table 3. Number of trips monitored (land-based and onboard), total trips and sampling coverage in the artisanal jumbo squid fishery, by region. 2025.

Region	Trips		
	Monitored	Total	% coverage
Coquimbo	354	6.771	5,2



Valparaíso	82	10.729	0,8
Maule	456	5.779	7,9
Biobío	126	3.342	3,8
Total	1.018	26.621	3,8

Source: IFOP.