

Time and space diagrams of the Indian Ocean purse seine fisheries during the period 1982-2006

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Summary

This document presents a visual representation of the time and space variability of the purse seine fisheries active in the Indian ocean since the beginning of this fishery in 1982 (and until 2006). The data base used is the IOTC catch and effort file on March 2007, updated by the EU data for 2006. Pie diagrams are used to show the monthly and yearly catches by the large area used by EU scientists in their data processing (the so-called ET areas). All these diagrams are made by fishing mode (free schools and FADs), and the two major fishing countries, Spain and France. It appears that such visual representation allows a quick understanding of the major seasonal and interannual changes in the history of the Indian Ocean purse seine fishery.

Résumé

Ce document présente une représentation visuelle de la variabilité spatio temporelle des captures de la pêcherie de senneurs opérant dans l'Océan Indien. Ces figures couvrent la période 1982-2006, donc depuis le début de la pêcherie. Les données employées sont celles de l'IOTC jusqu'en 2005, les données de 2006 étant seulement celles des senneurs européens. Des diagrammes camemberts sont employés pour montrer cette variabilité. Ces figures utilisent les 7 zones employées dans les traitements des données des senneurs par les scientifiques européens. Toutes ces figures sont faites pour les prises totales ou pour celles sous objets flottants. Et pour les deux principaux pays, Espagne et France. Une telle représentation permet une visualisation rapide des changements saisonniers et interannuels des zones de pêche des senneurs durant toute l'histoire de la pêche thonière à la senne dans l'Océan Indien.

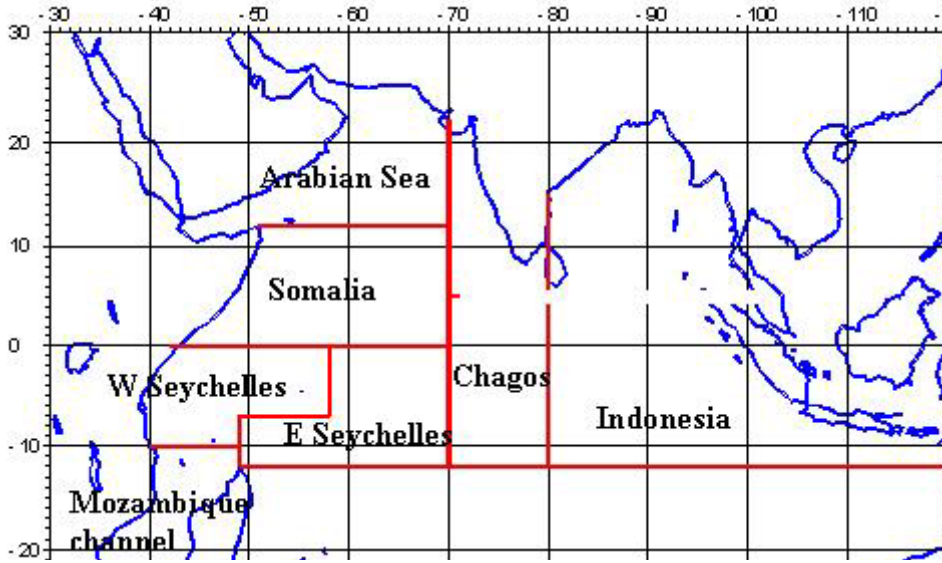


Figure 1: Areas used to plot the catches by the purse seine fleet

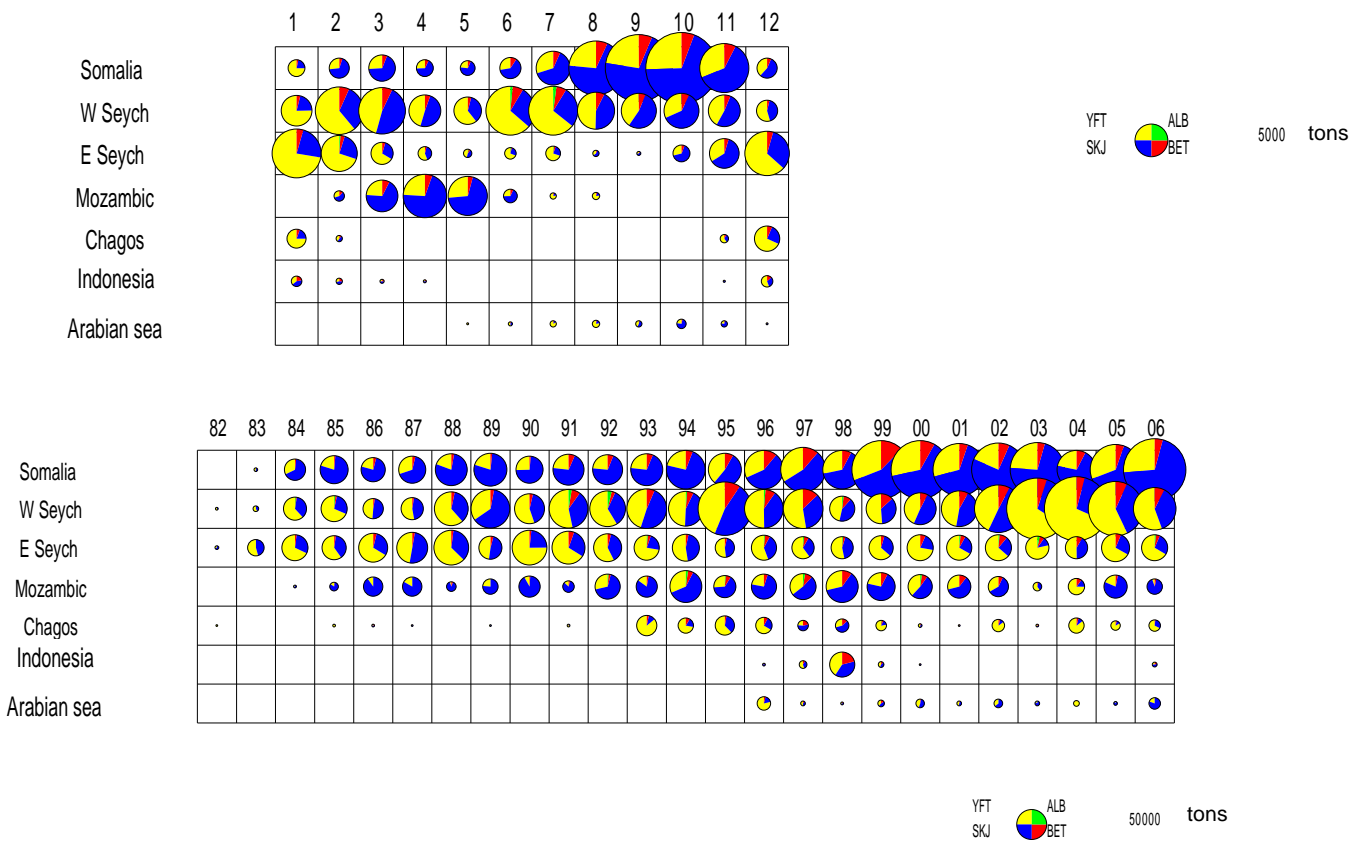


Figure 2: Monthly and yearly catches by areas of purse seiners (upper and lower figure), during the period 1982-2006

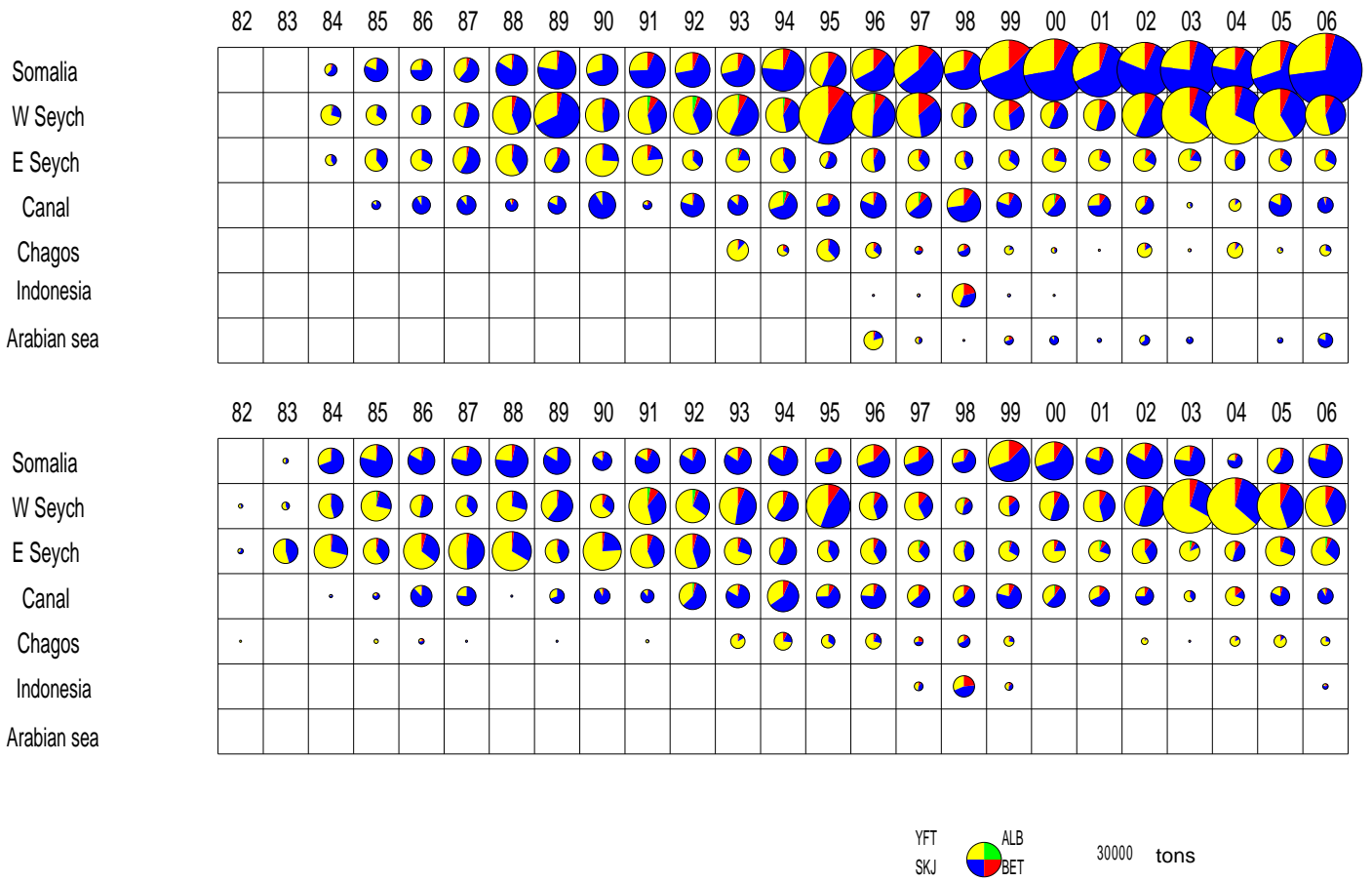


Figure 3: Yearly catches by areas of Spanish and French purse seiners (upper and lower figure)

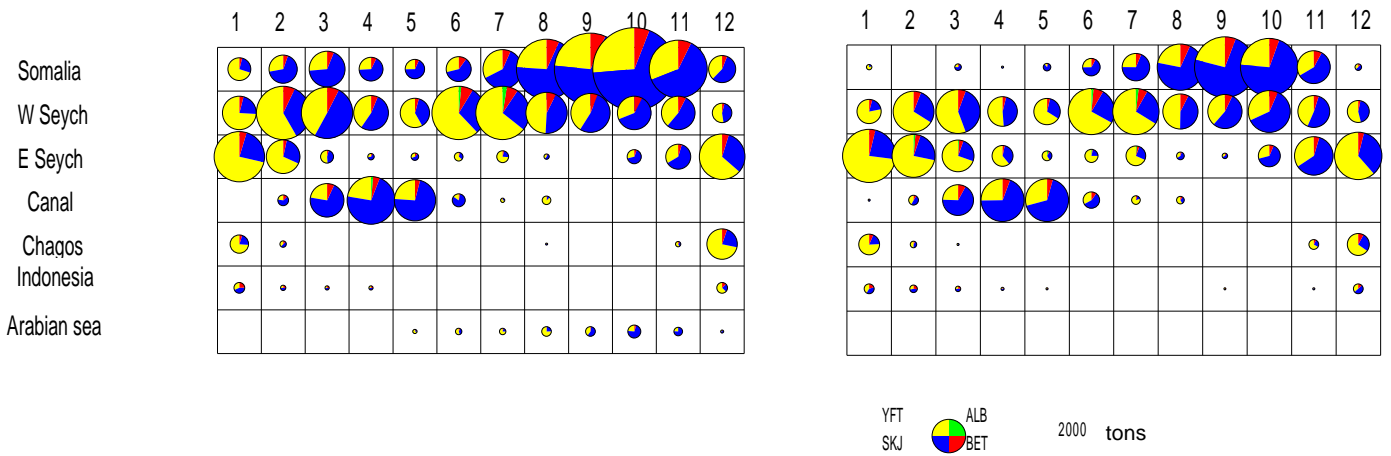
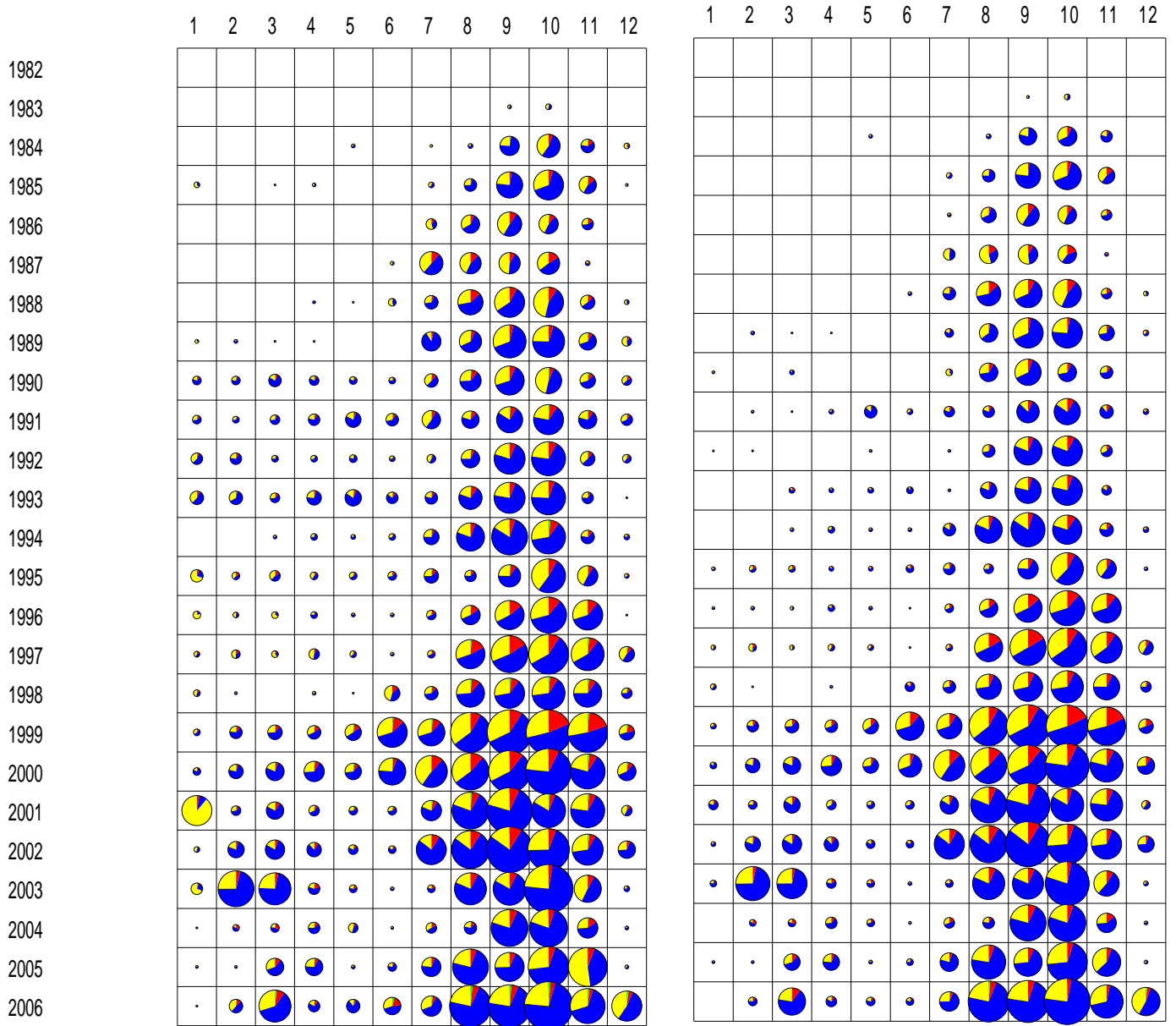


Figure 4: Monthly catches by areas of Spanish and French purse seiners (left and right figure), average of period 1982-2006



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Figure 5: Tuna catches by purse seiners in the **Somalia** area, total (left) and on FADs (right)

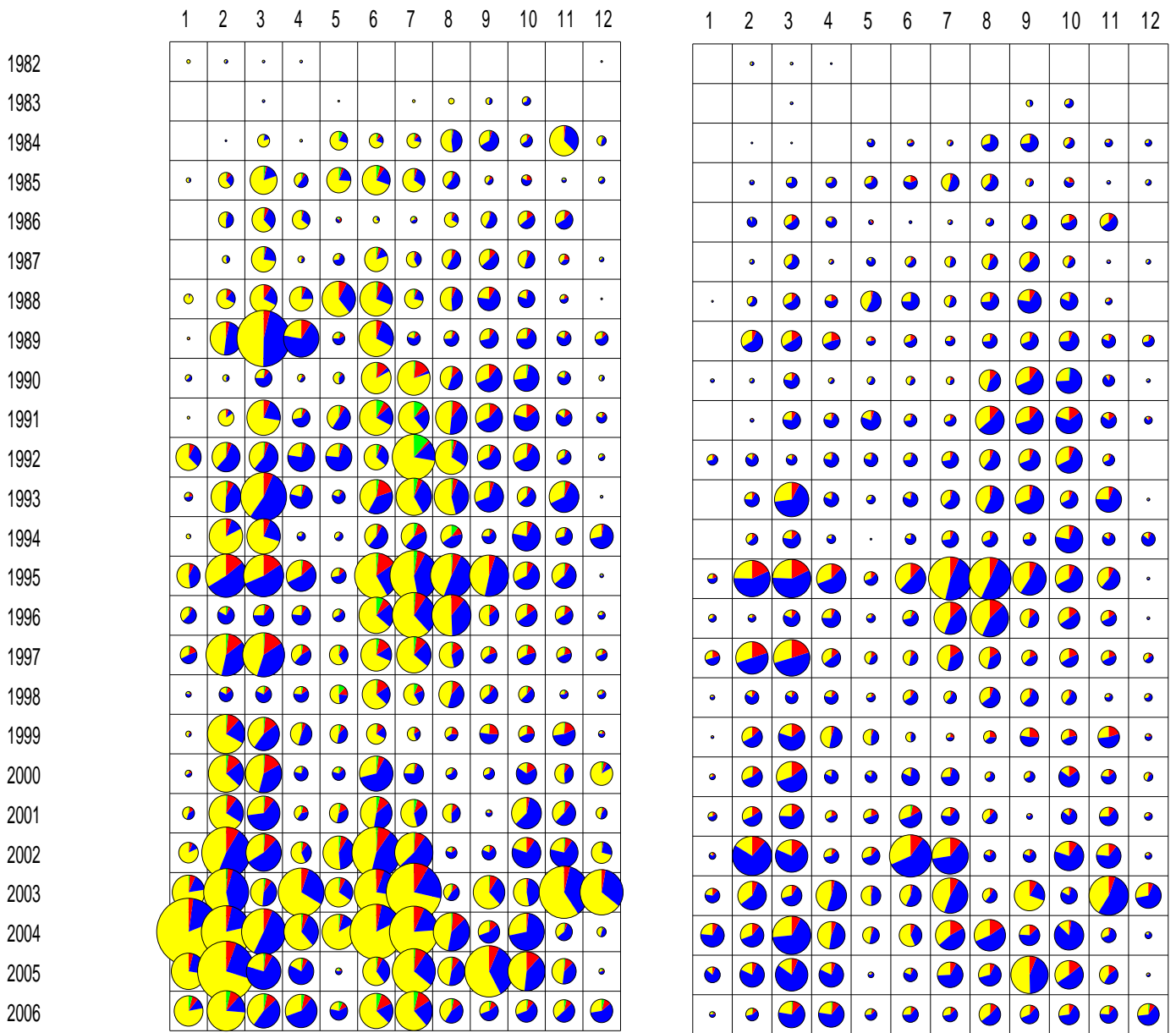


Figure 6: Tuna catches by purse seiners in the **West Seychelles area**, total (left) and on FADs (right)

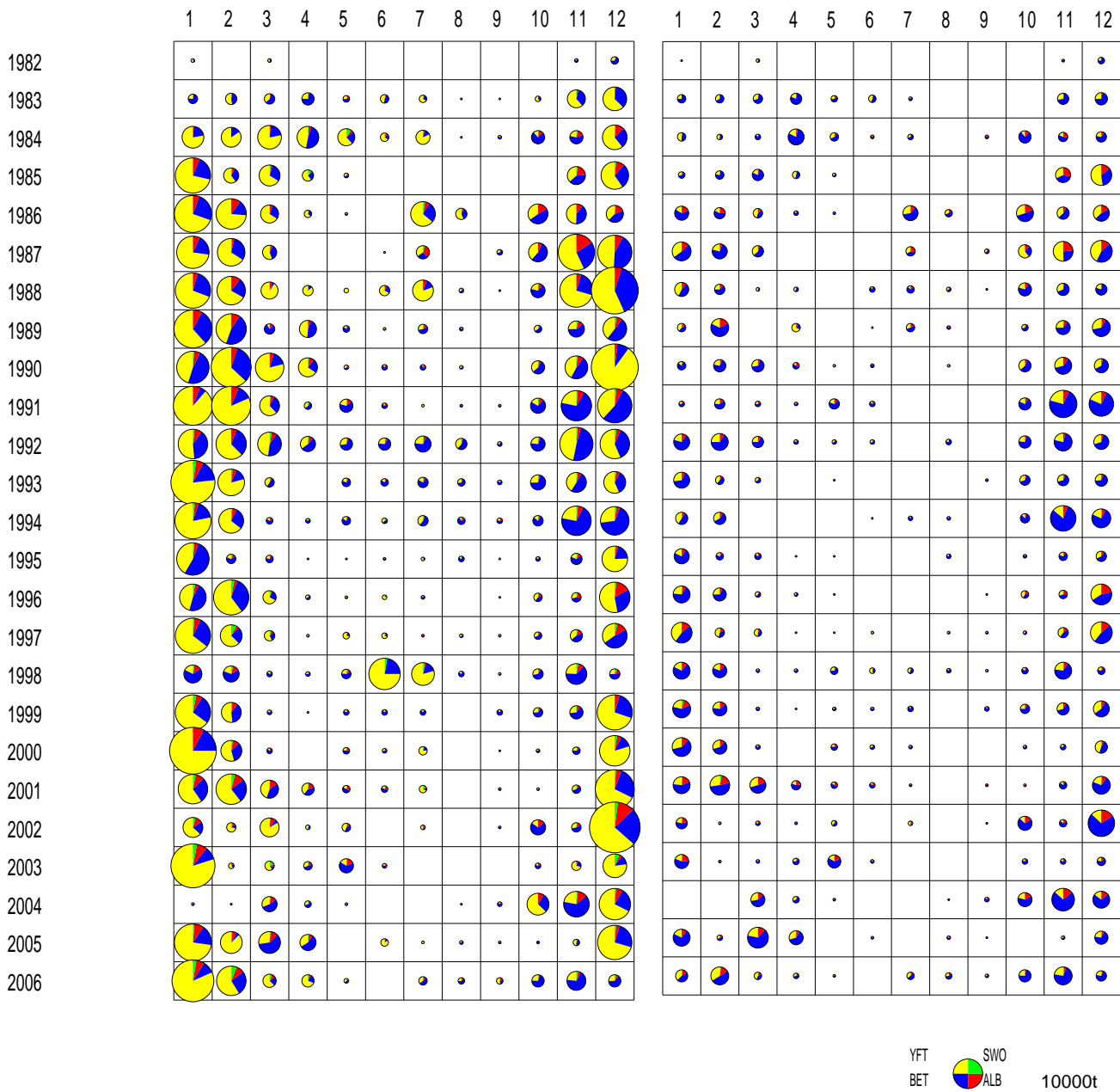


Figure 8: Tuna catches by purse seiners in the **East Seychelles area**, total (left) and on FADs (right)

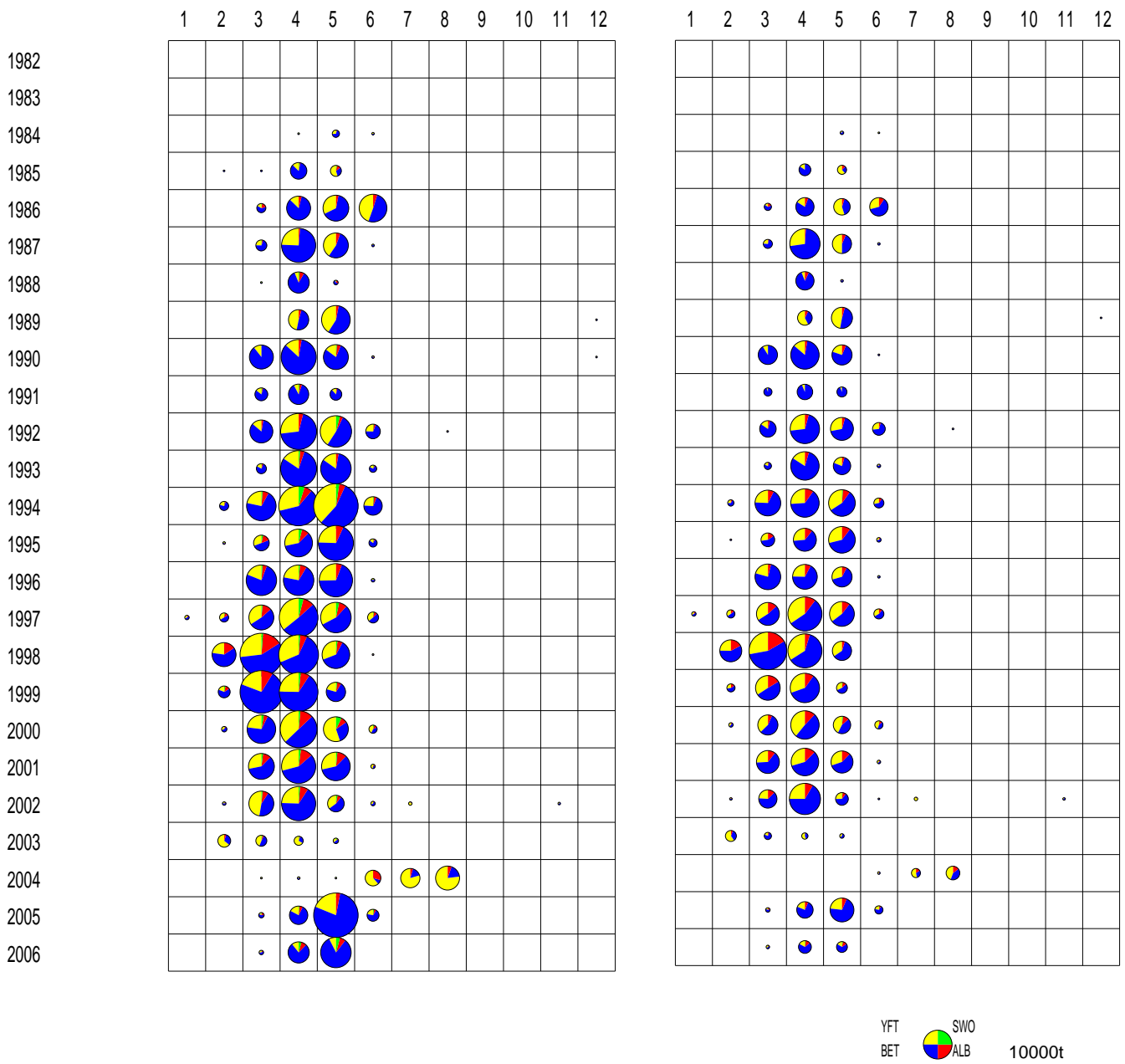


Figure 9: Tuna catches by purse seiners in the **Mozambique Channel area**, total (left) and on FADs (right)

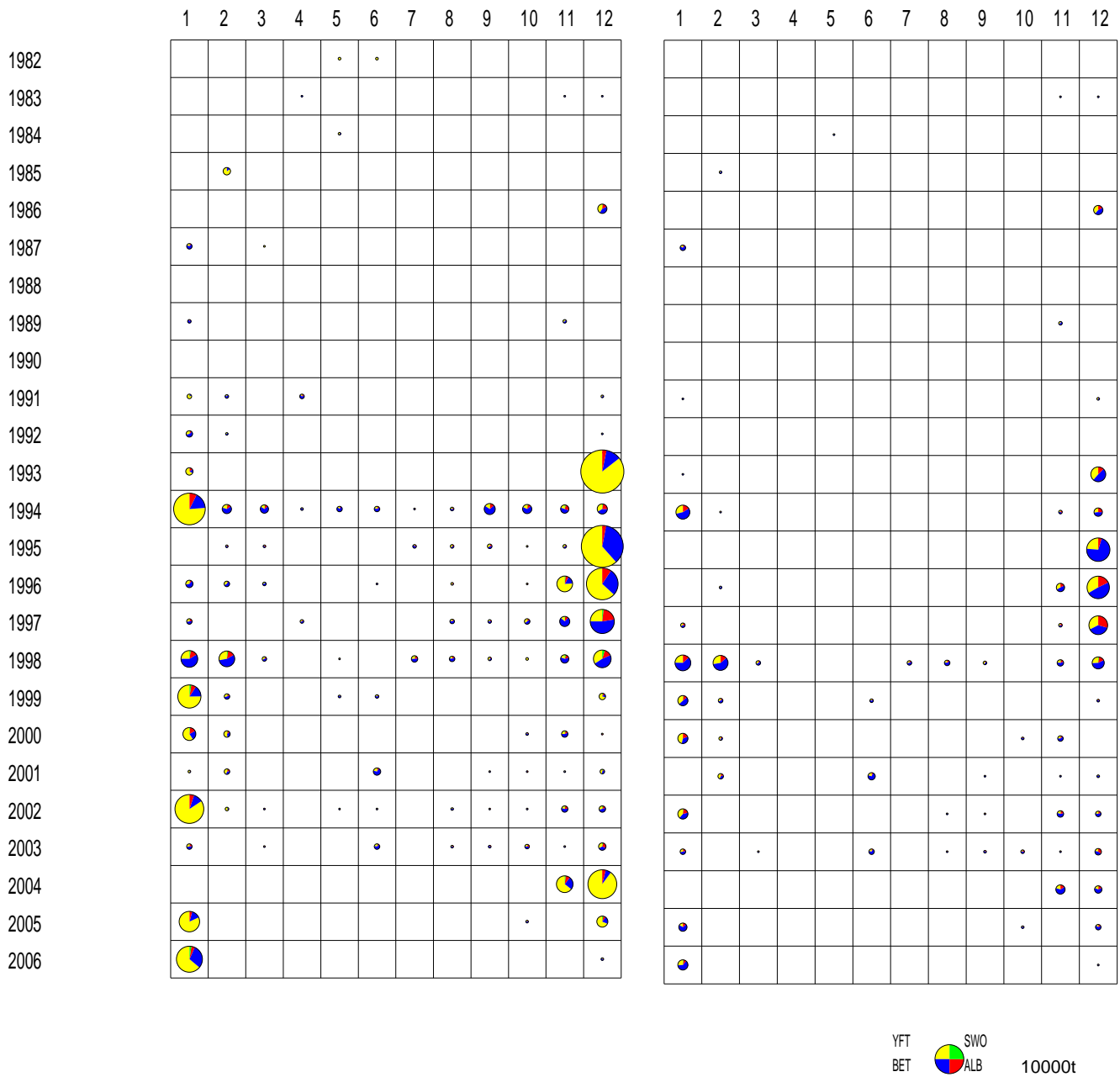


Figure 10: Tuna catches by purse seiners in the **Chagos area**, total (left) and on FADs (right)

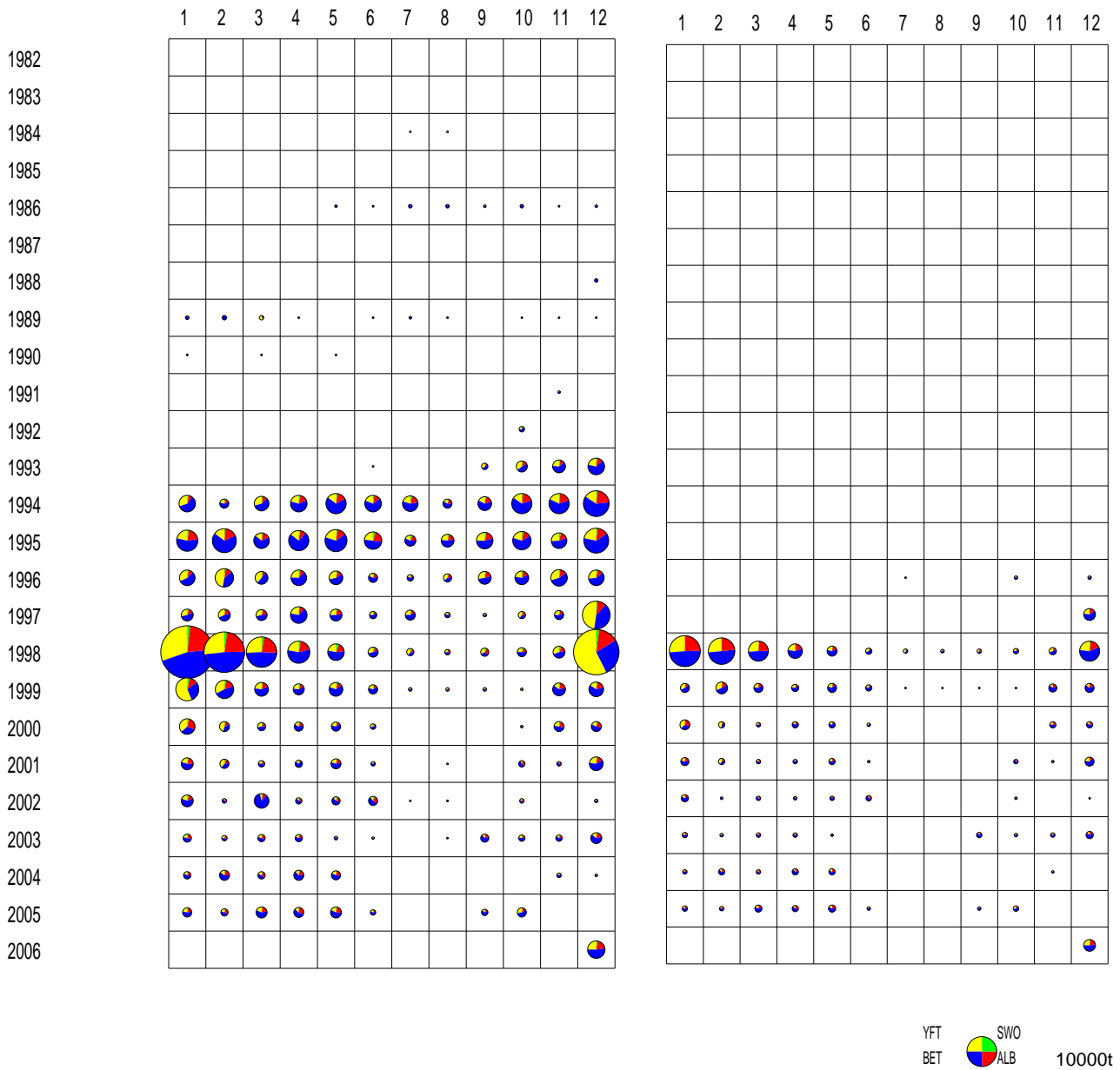


Figure 11: Tuna catches by purse seiners in the **Eastern Indian Ocean**, total (left) and on FADs (right)

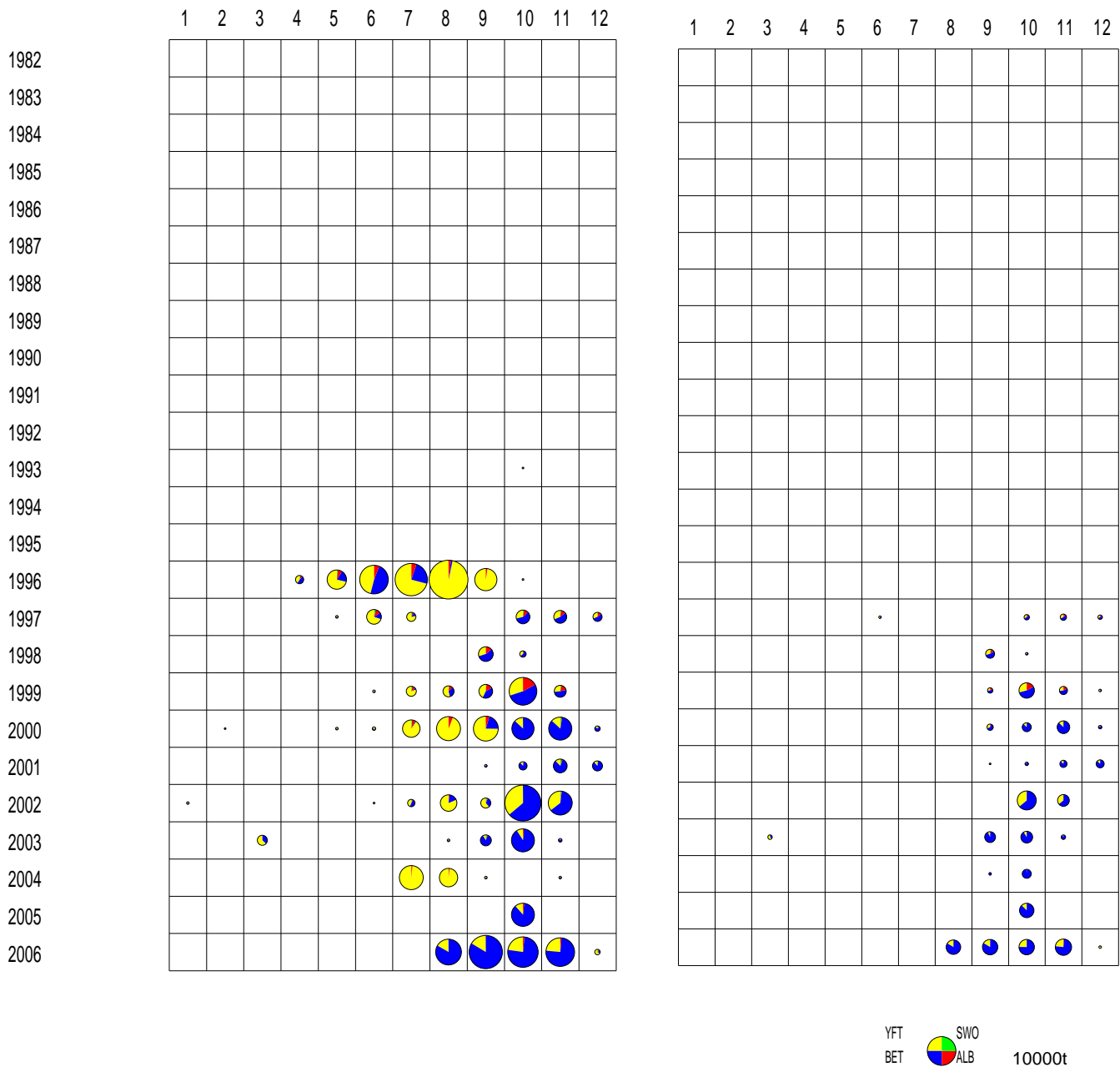


Figure 12: Tuna catches by purse seiners in the **Arabian Sea area**, total (left) and on FADs (right)