

FIGURES

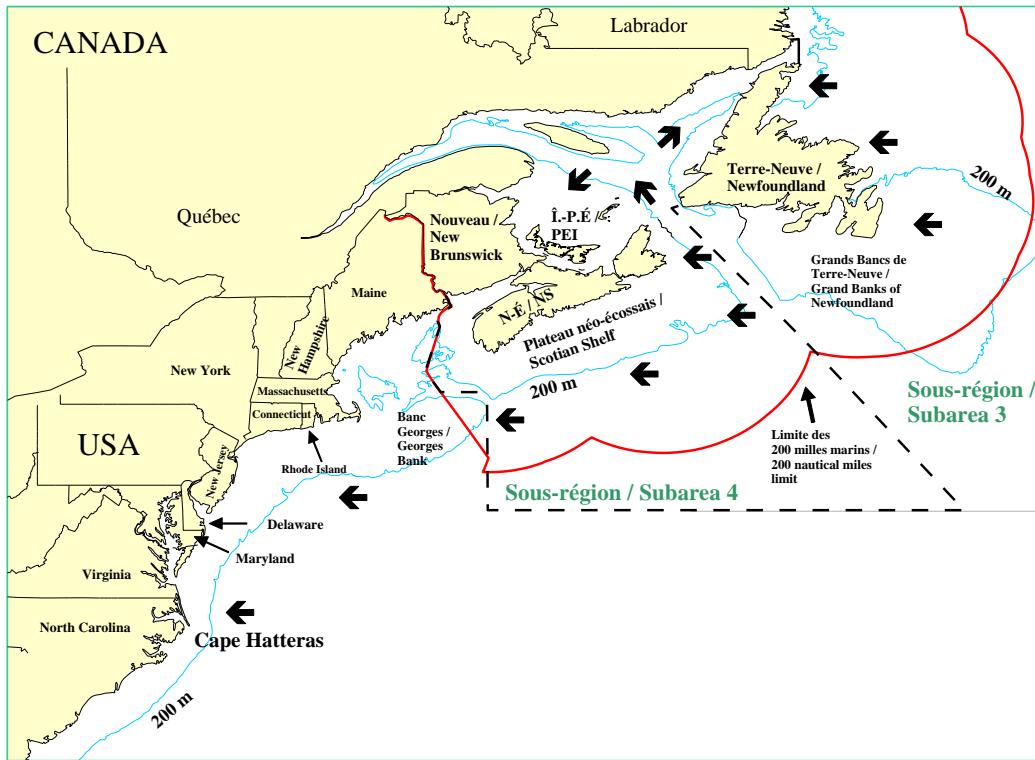


Figure 1. Presence and distribution (←) of Atlantic mackerel (*Scomber scombrus* L.) in the Northwest Atlantic. NAFO subareas 3 and 4 are indicated.

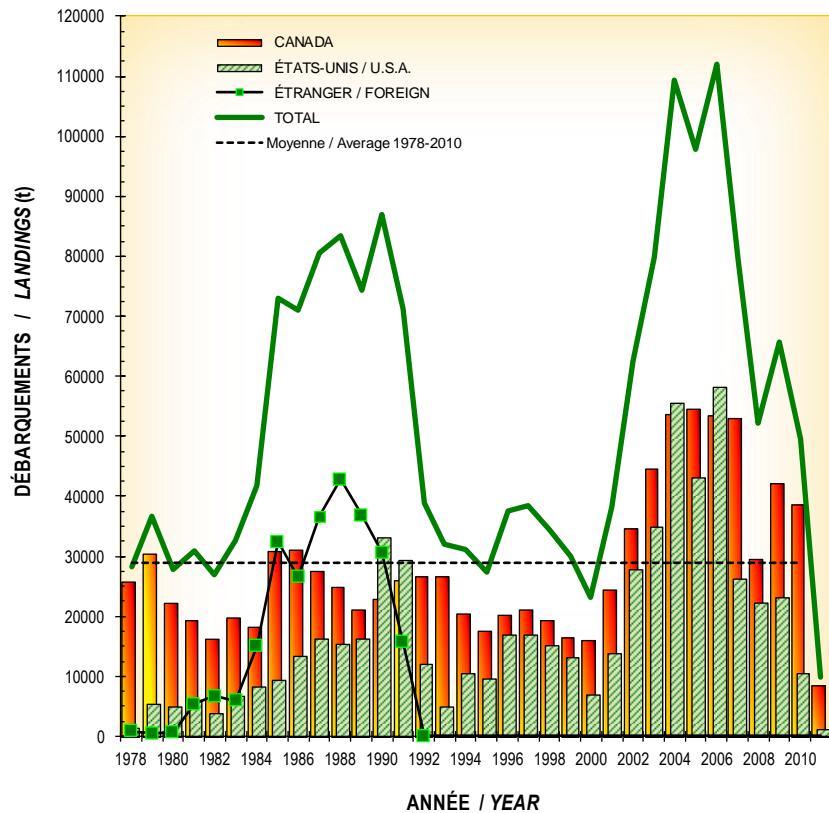
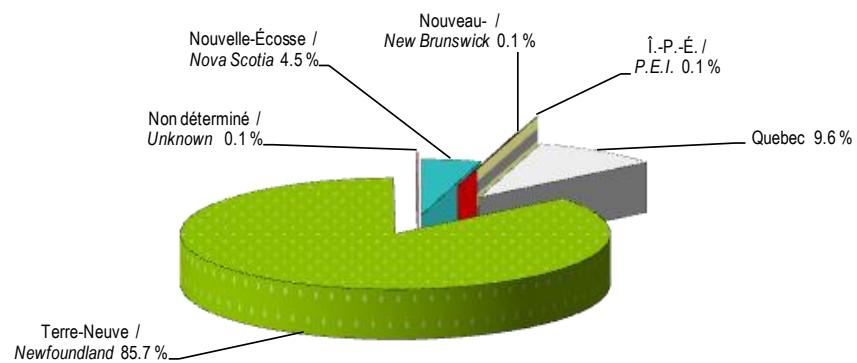


Figure 2. Landings (t) of Atlantic mackerel since 1978 (first complete year under the 200 nautical mile Exclusive Economic Zone -EEZ-). The horizontal line represents the average of Canadian landings for the 1978-2010 period.

(A)

DÉBARQUEMENTS - PROVINCE / LANDINGS - PROVINCE -2011-



(B)

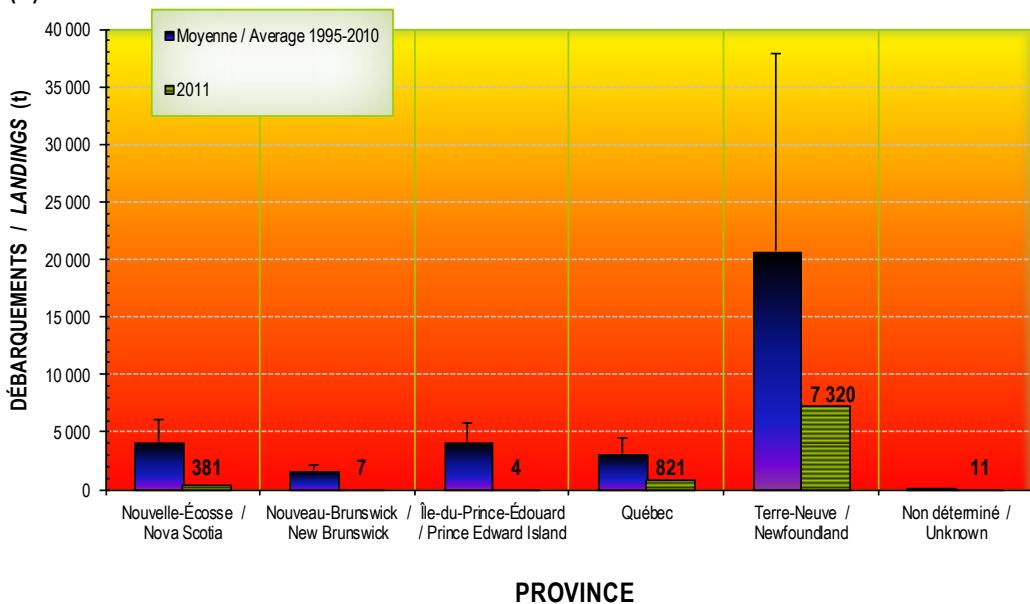


Figure 3. Atlantic mackerel landings (%) by province in 2011 (A) and annual averages (t) for the 1995-2010 period (B).

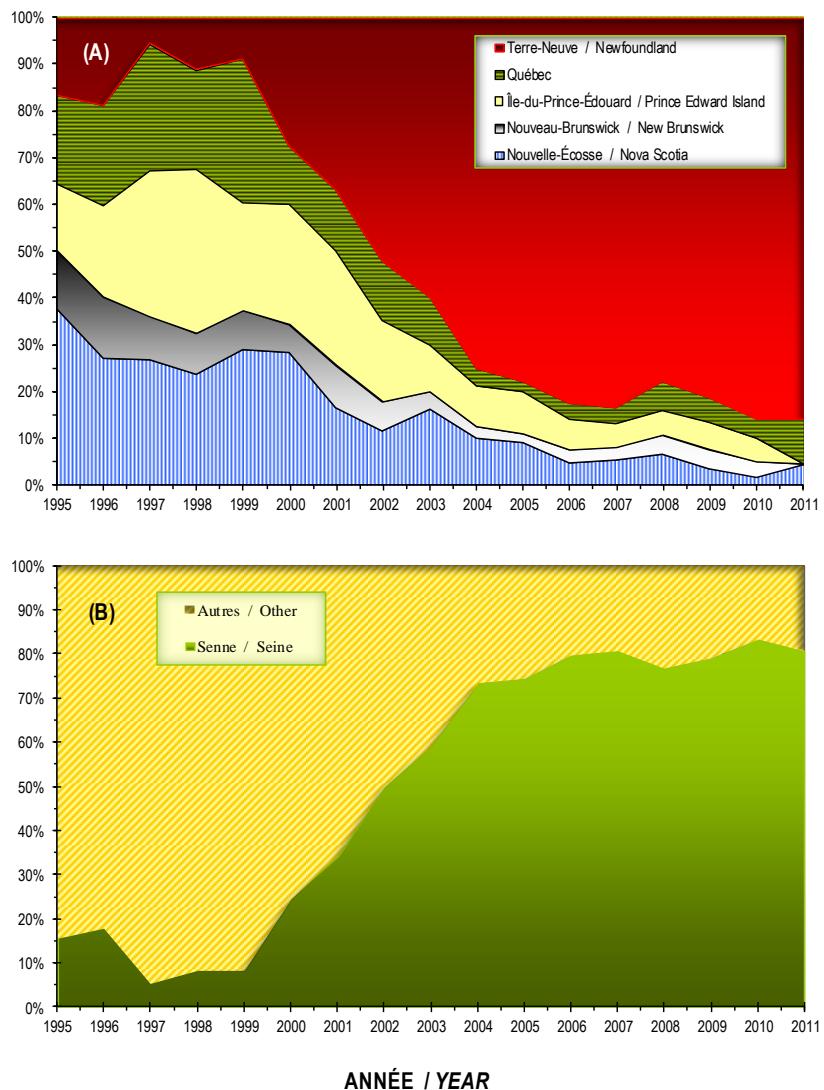


Figure 4. Annual landings (%) of Atlantic mackerel by province (A) and annual percentages of the catches made by seines (purse, Tuck-Ring, and other) since 1995 (B).

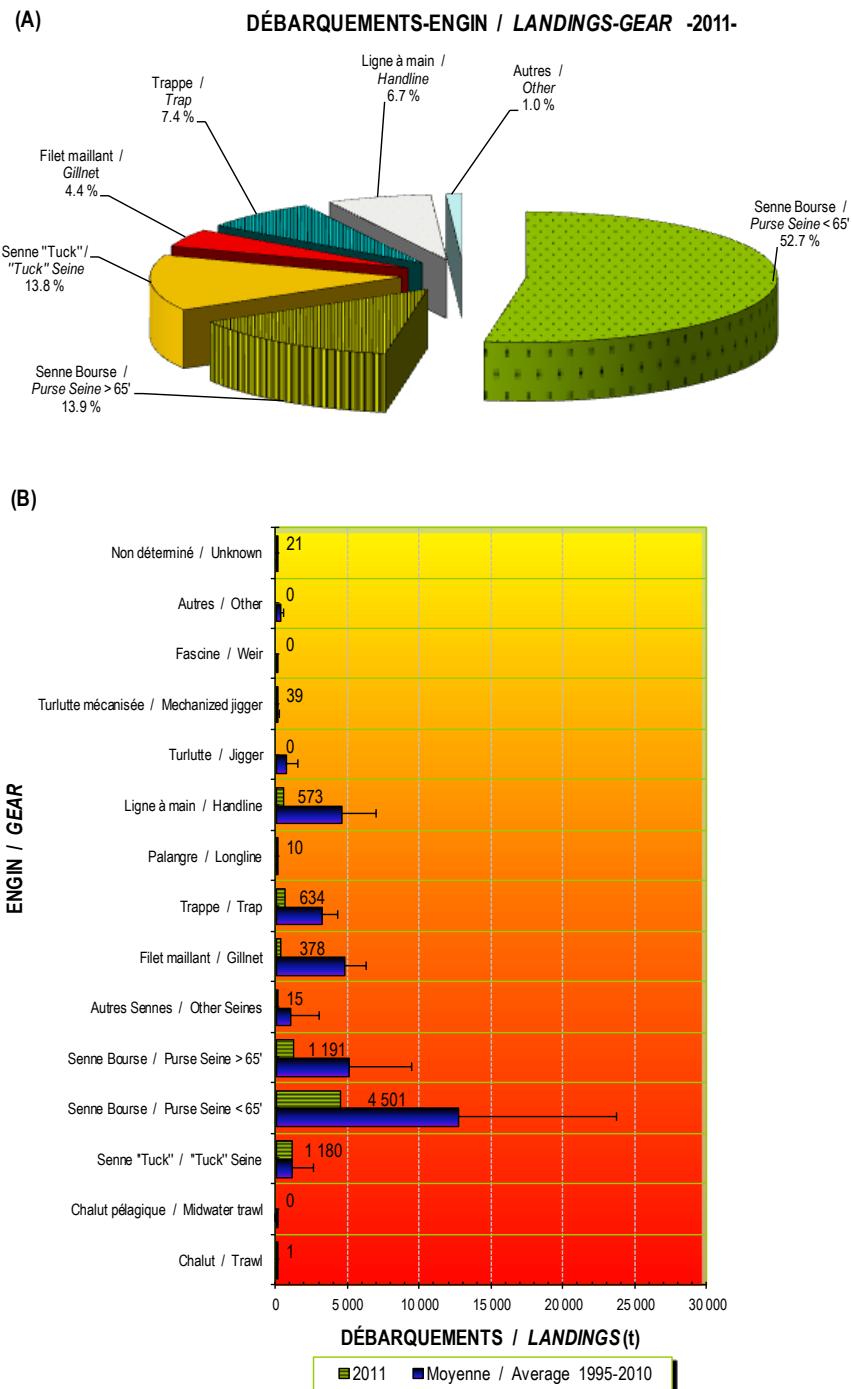


Figure 5. Atlantic mackerel landings (%) by fishing gear in 2011 (A) and annual averages (t) for the 1995-2010 period (B).

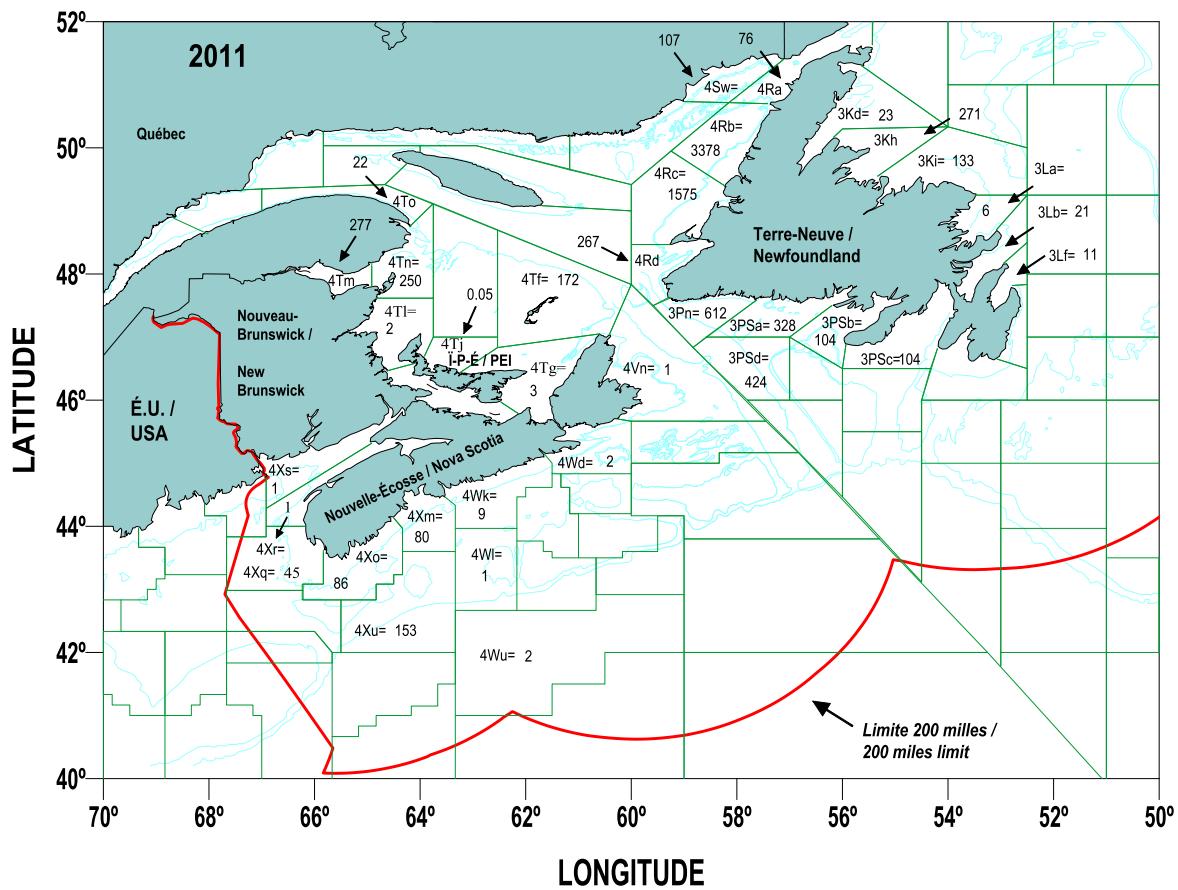


Figure 6. Map of the Atlantic mackerel catches (t) in 2011 by NAFO subdivision and unit area (u = unknown unit area).

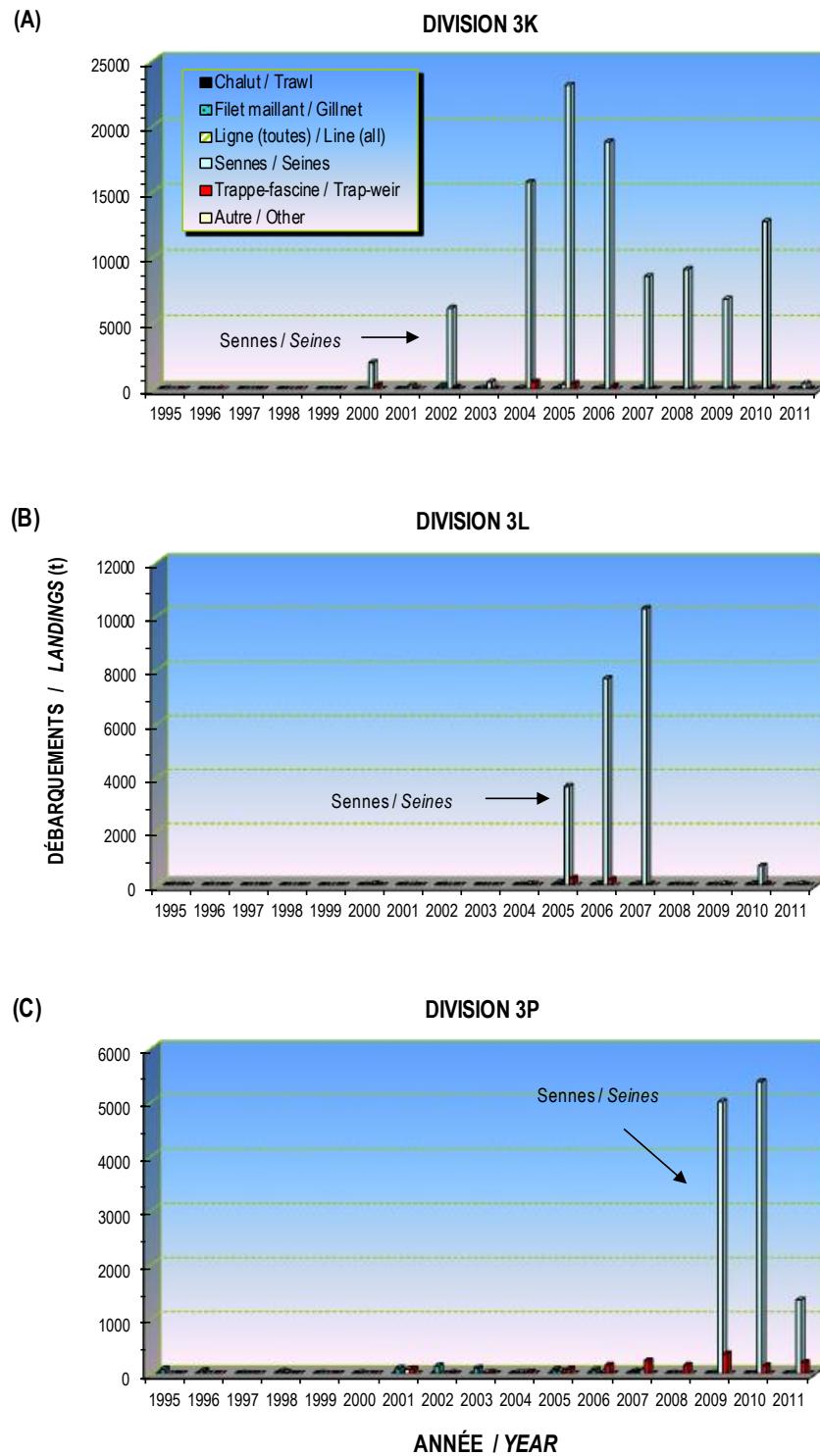
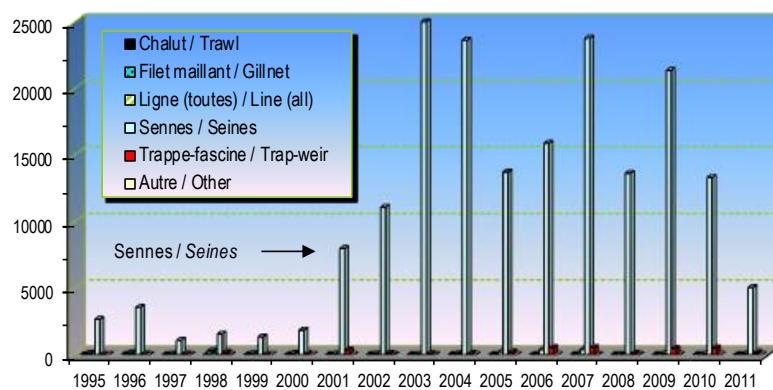


Figure 7. Atlantic mackerel landings (t) by NAFO Division and fishing gear since 1995 (the most important fishing gears are indicated).

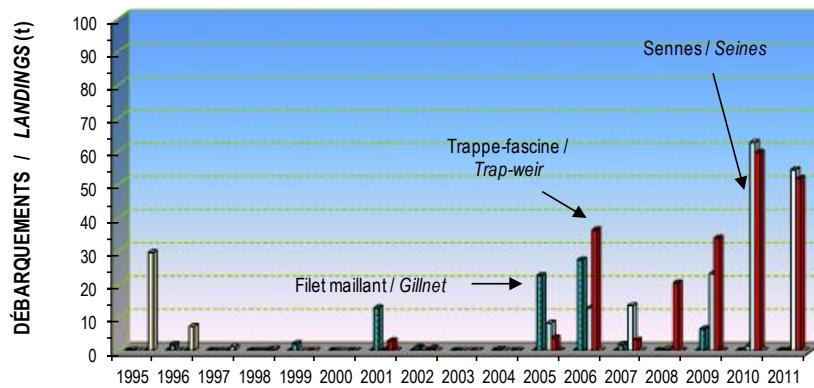
(D)

DIVISION 4R



(E)

DIVISION 4S



(F)

DIVISION 4T

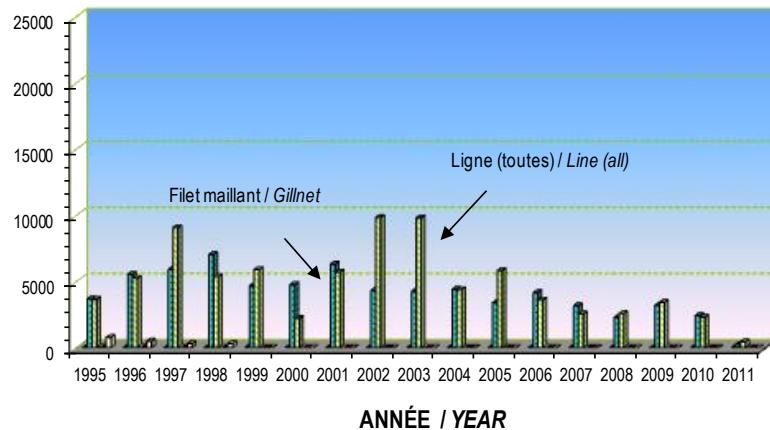
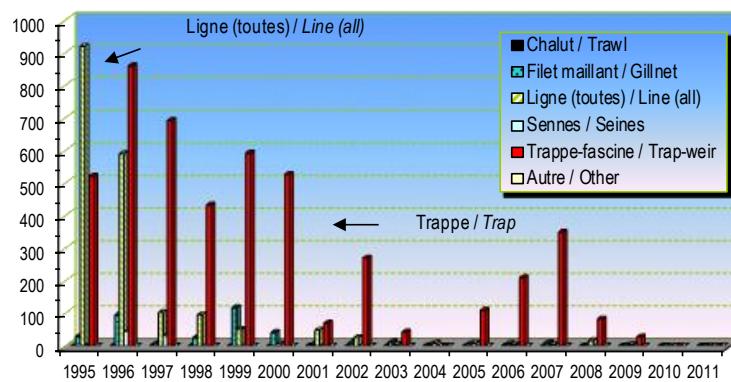


Figure 7. (Continued).

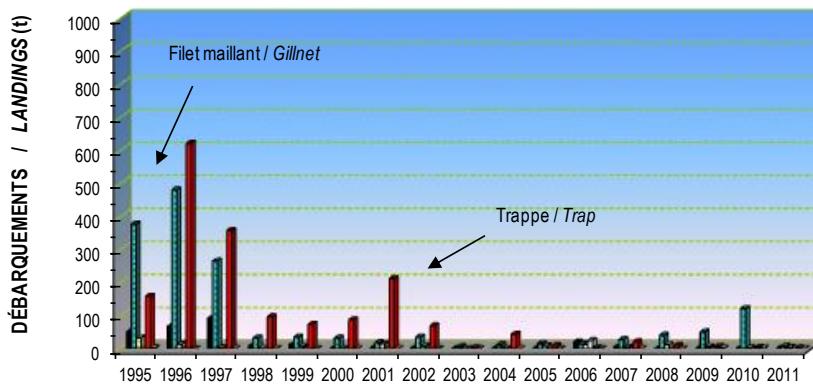
(G)

DIVISION 4V



(H)

DIVISION 4W



(I)

DIVISION 4X

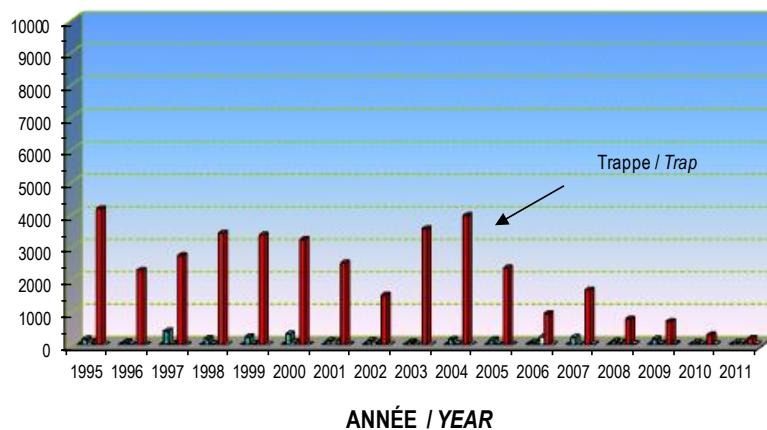
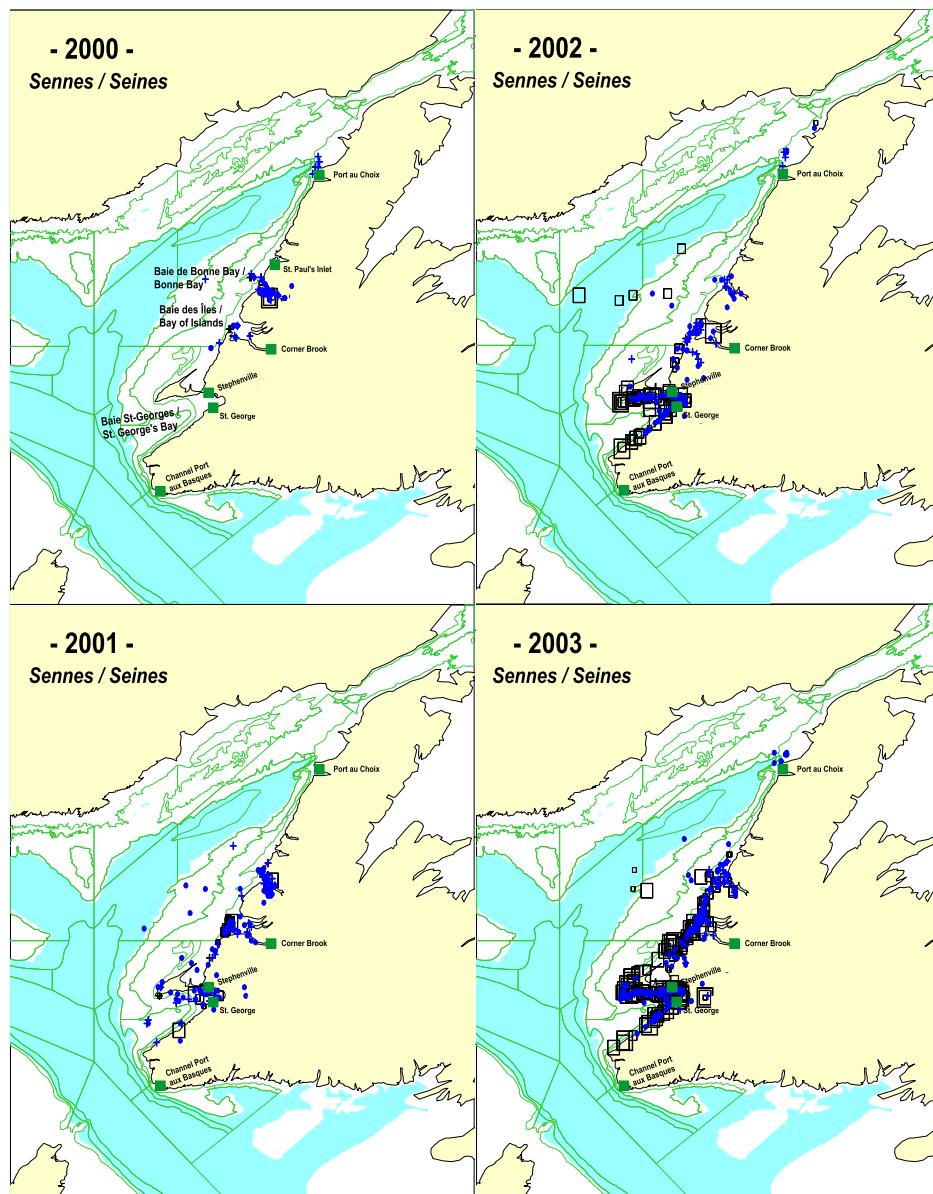


Figure 7. (Continued).



LÉGENDE / LEGEND:

Grand senneur / Large seiner

+ 0 - 10 □ 10 - 50 □ 50 - 100 □ 100 - 150 □ > 150 t

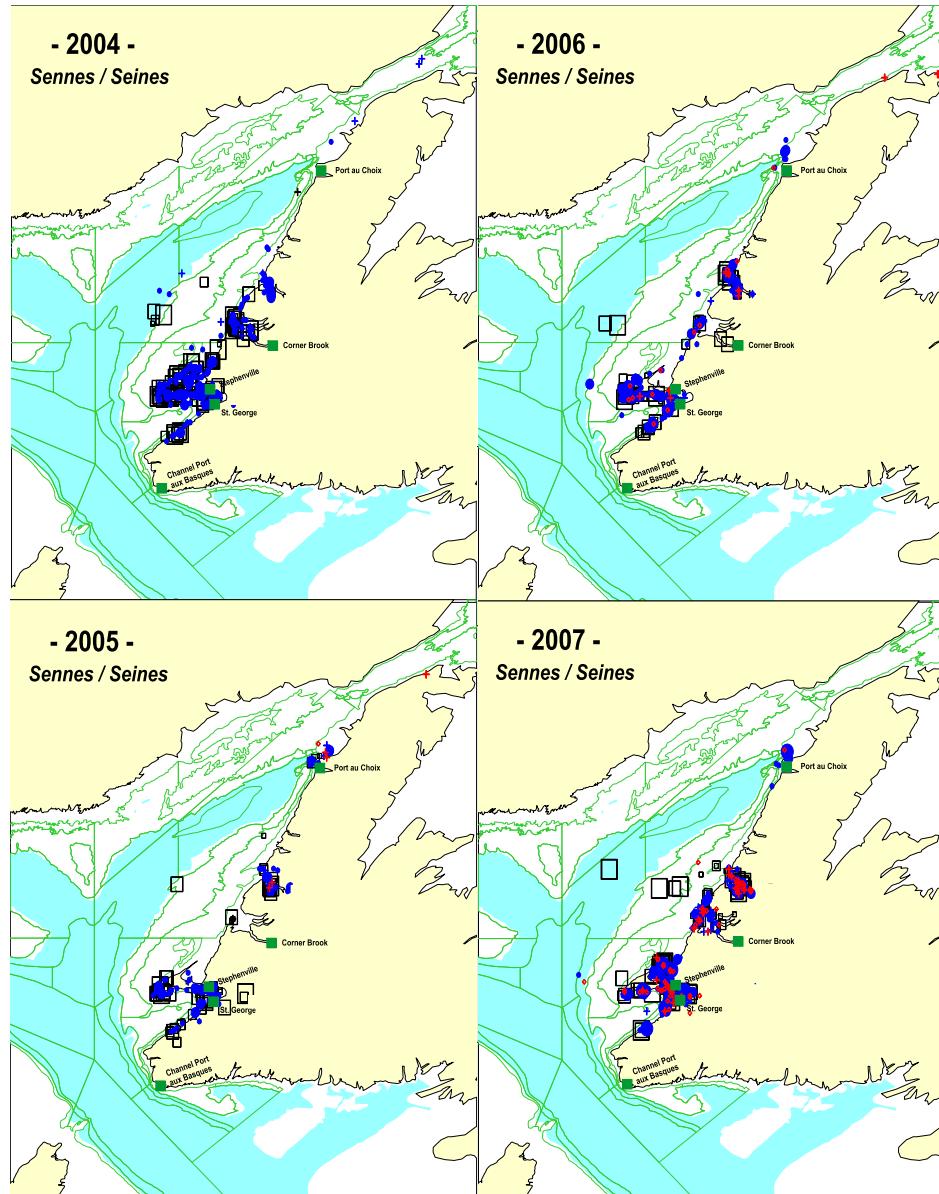
Petit senneur / Small seiner

+ 0 - 10 ● 10 - 50 ● 50 - 100 ● 100 - 150 ● > 150 t

Senne Tuck / Tuck seine

* 0 - 10 ◊ 10 - 50 ◊ 50 - 100 ◊ 100 - 150 ◊ > 150 t

Figure 8. Locations of the Atlantic mackerel annual catches (t) for the large and small seiners (2000-2011) and Tuck-Ring seine (2005-2011) of NAFO Division 4R.



LÉGENDE / LEGEND:

Grand senneur / Large seiner

- + 0 - 10
- 10 - 50
- 50 - 100
- 100 - 150
- > 150 t

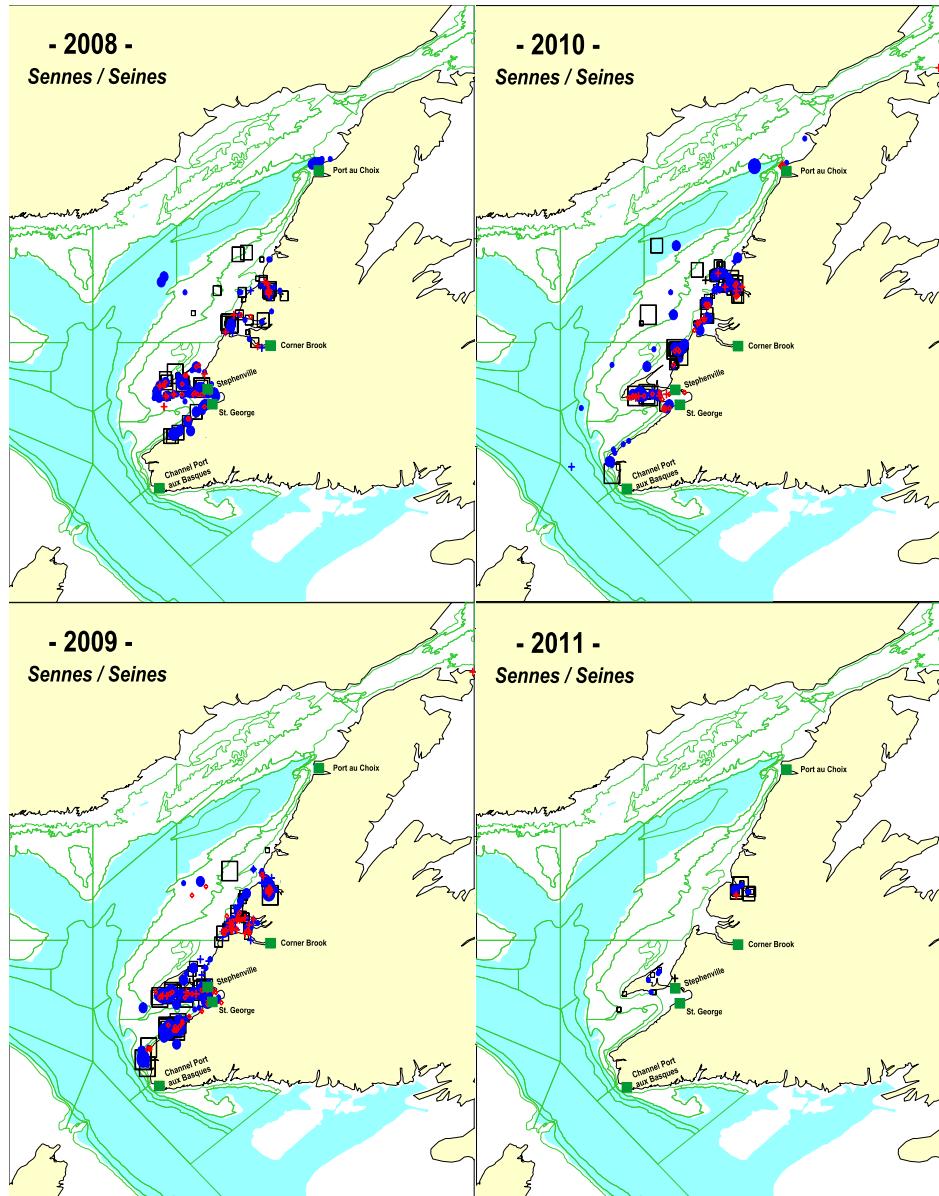
Petit senneur / Small seiner

- + 0 - 10
- 10 - 50
- 50 - 100
- 100 - 150
- > 150 t

Senne Tuck / Tuck seine

- + 0 - 10
- 10 - 50
- ◊ 50 - 100
- ◊ 100 - 150
- ◊ > 150 t

Figure 8. (Continued).



LÉGENDE / LEGEND:

Grand senneur / Large seiner

- 0 - 10 □ 10 - 50 □ 50 - 100 □ 100 - 150 □ > 150 t

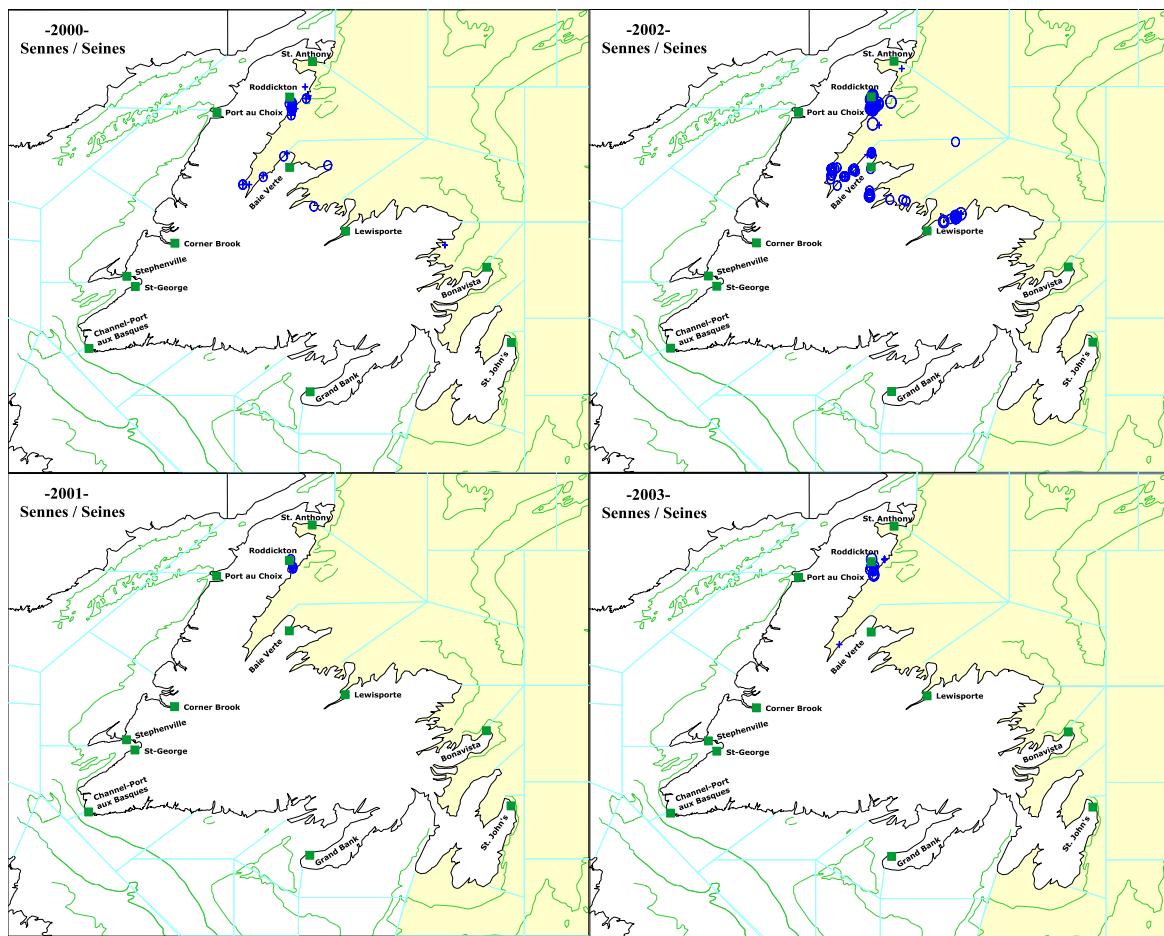
Petit senneur / Small seiner

- + 0 - 10 • 10 - 50 ● 50 - 100 ● 100 - 150 ● > 150 t

Senne Tuck / Tuck seine

- * 0 - 10 ◊ 10 - 50 ◊ 50 - 100 ◊ 100 - 150 ◊ > 150 t

Figure 8. (Continued).



LÉGENDE / LEGEND:

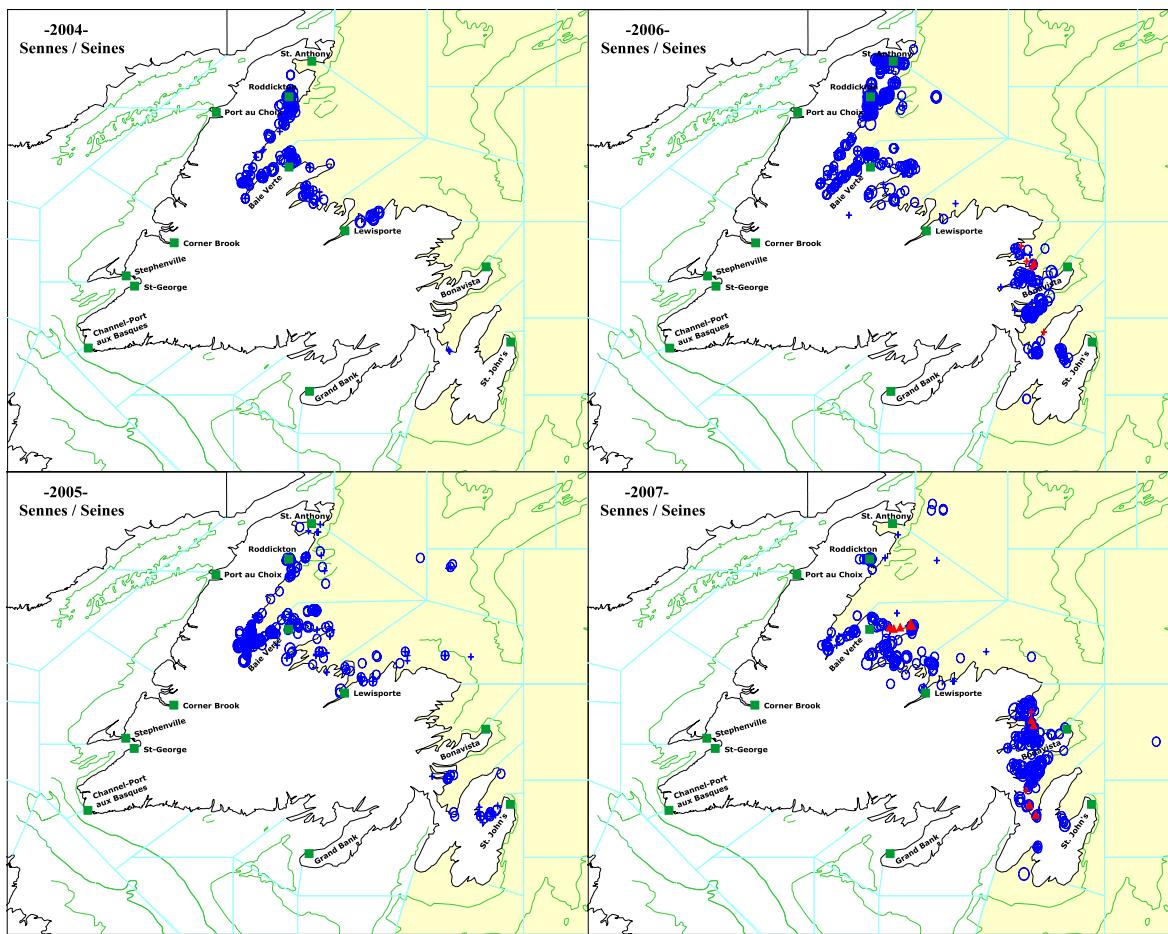
Petit senneur / Small seiner

+ 0 - 10 • 10 - 50 ● 50 - 100 ● 100 - 150 ● > 150 t

Senne Tuck / Tuck seine

+ 0 - 10 • 10 - 50 ▲ 50 - 100 ▲ 100 - 150 ▲ > 150 t

Figure 9. Locations of the Atlantic mackerel annual catches (t) of the small seiners (2000-2011) and Tuck-Ring seine (2005-2011) of NAFO Divisions 3KL.



LÉGENDE / LEGEND:

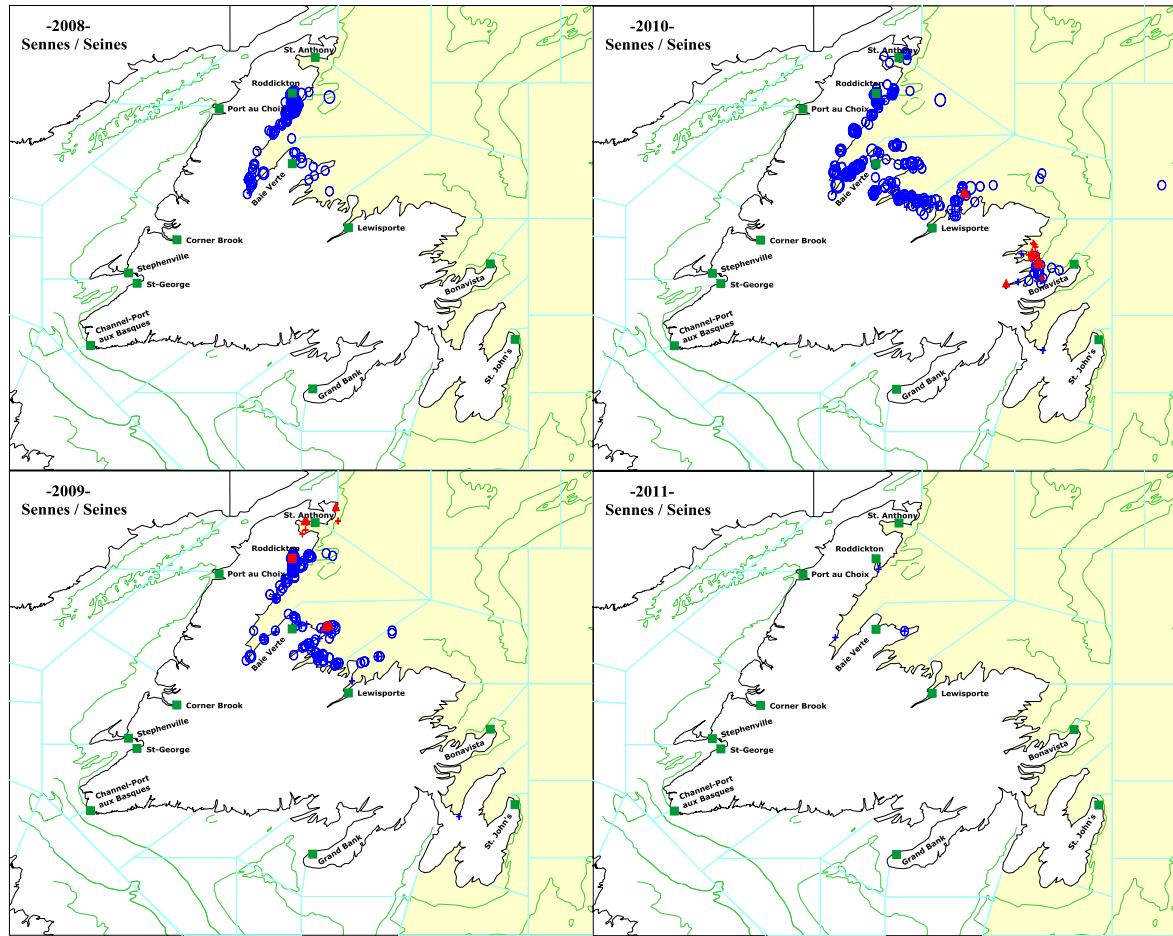
Petit senneur / Small seiner

- + 0 - 10 • 10 - 50 • 50 - 100 • 100 - 150 • > 150 t

Senne Tuck / Tuck seine

- + 0 - 10 • 10 - 50 • 50 - 100 ▲ 100 - 150 ▲ > 150 t

Figure 9. (Continued).



LÉGENDE / LEGEND:

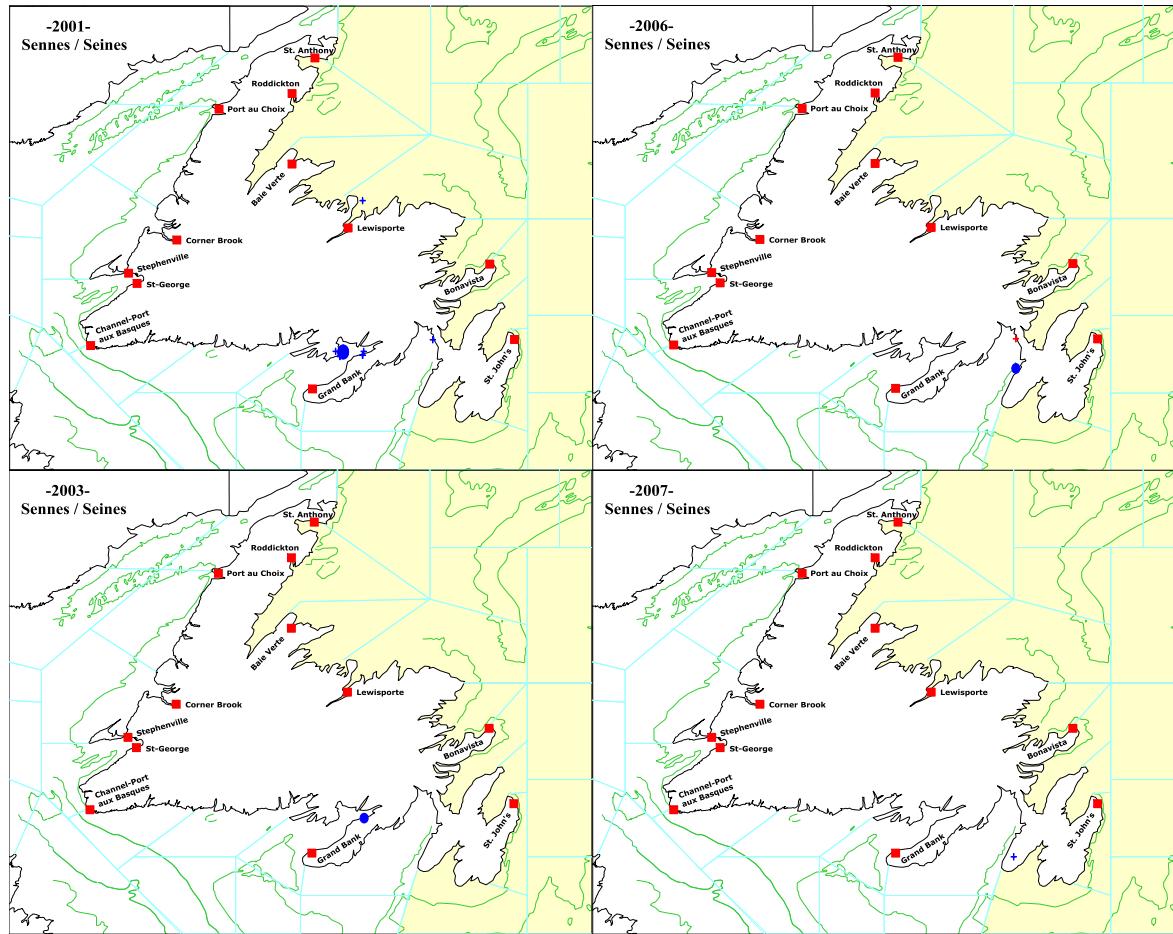
Petit senneur / Small seiner

- + 0 - 10
- 10 - 50
- 50 - 100
- 100 - 150
- > 150 t

Senne Tuck / Tuck seine

- ♦ 0 - 10
- ◆ 10 - 50
- ▲ 50 - 100
- ▲ 100 - 150
- ▲ > 150 t

Figure 9. (Continued).



LÉGENDE / LEGEND:

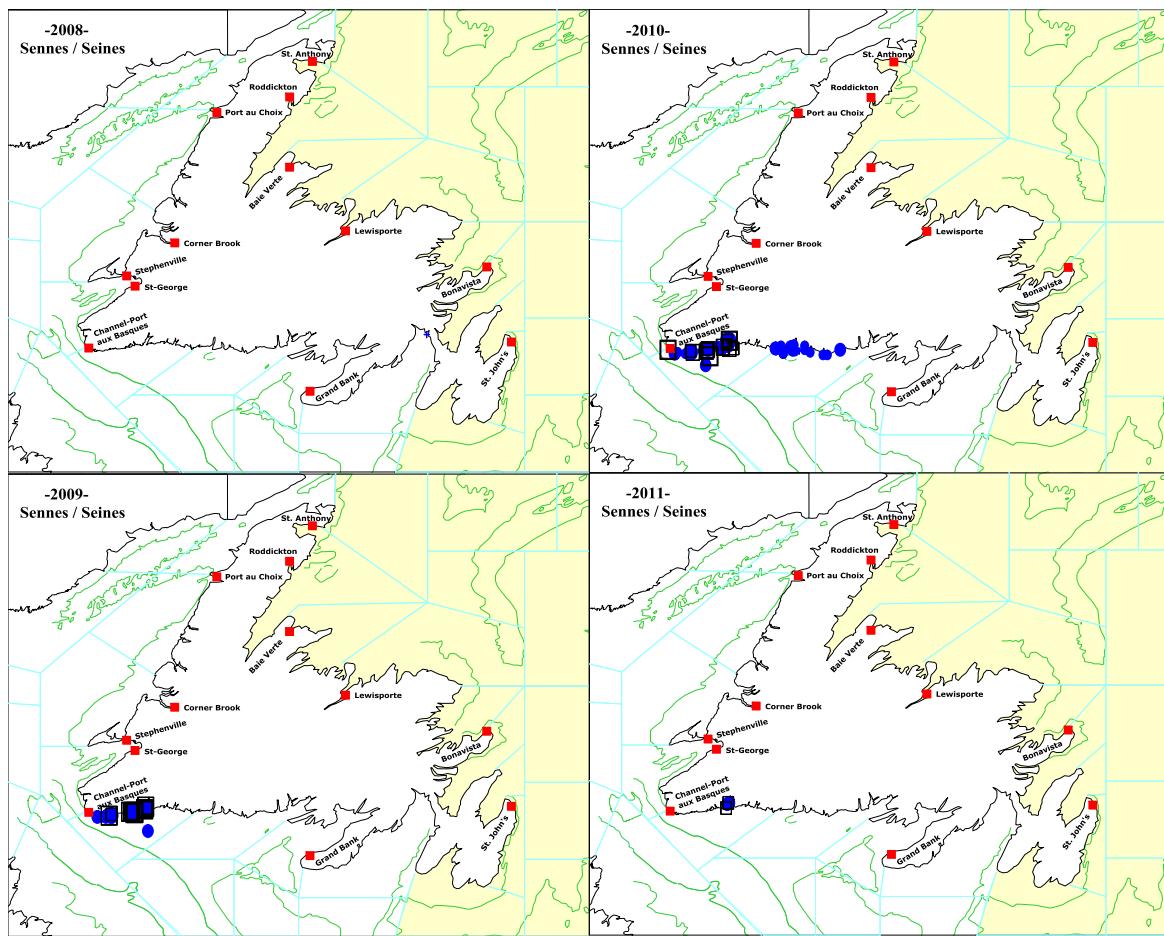
Grand senneur / Large seiner

+ 0 - 10 □ 10 - 50 □ 50 - 100 □ 100 - 150 □ > 150 t

Petit senneur / Small seiner

+ 0 - 10 • 10 - 50 ● 50 - 100 ● 100 - 150 ● > 150 t

Figure 10. Locations of the Atlantic mackerel annual catches (t) of the large (2009-2011) and small seiners (2001-2011) of NAFO Division 3P.



LÉGENDE / LEGEND:

Grand senneur / Large seiner

+ 0 - 10 □ 10 - 50 □ 50 - 100 □ 100 - 150 □ > 150 t

Petit senneur / Small seiner

+ 0 - 10 • 10 - 50 ● 50 - 100 ● 100 - 150 ● > 150 t

Figure 10. (Continued).

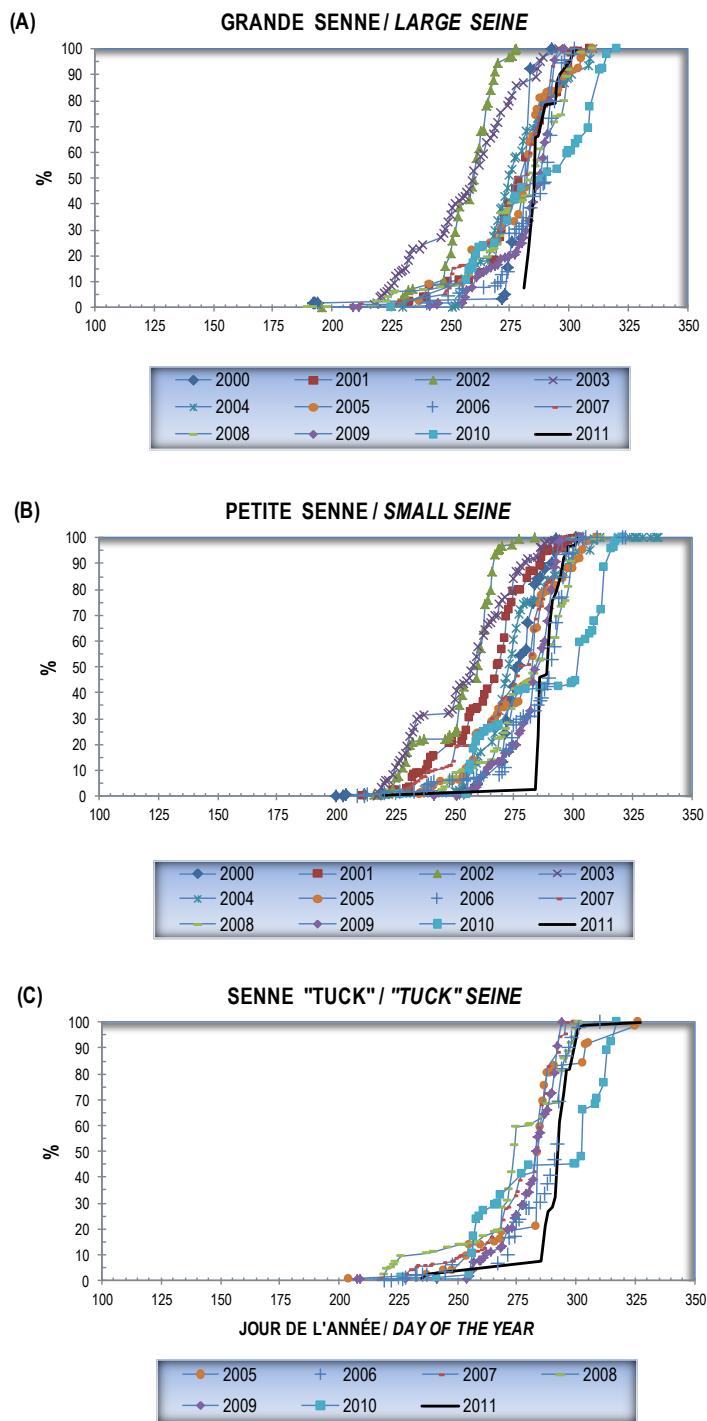


Figure 11. Cumulative landings (%) for each type of seine (A : large; B : small; C : Tuck-Ring) of the Atlantic mackerel fishery of NAFO Division 4R (Tuck-Ring seine is considered as a fixed gear) since 2000.

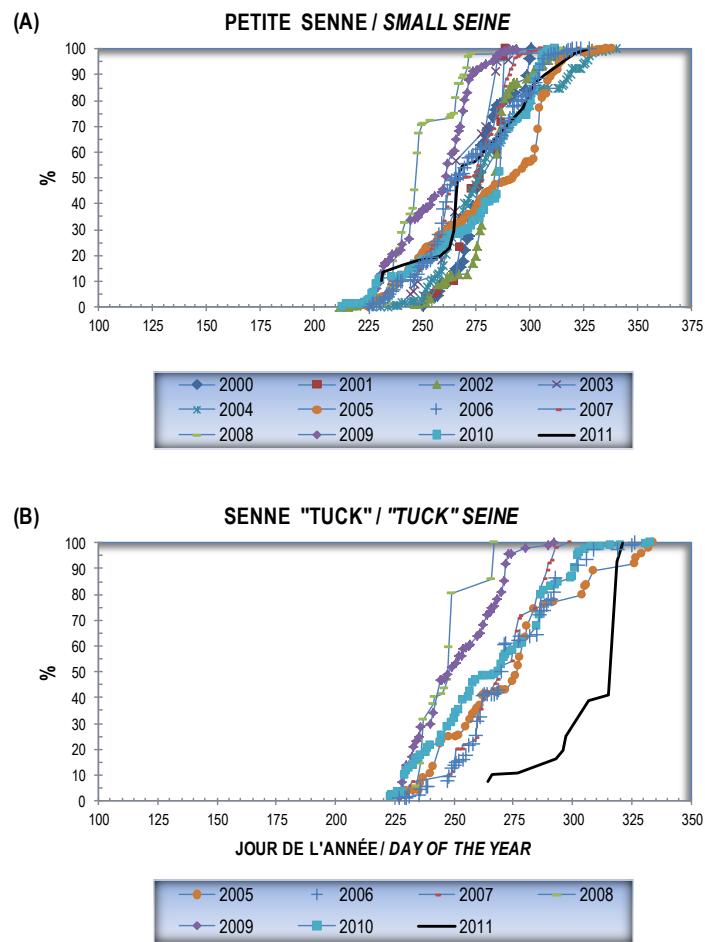


Figure 12. Cumulative landings (%) for each type of seine (A : small; B : Tuck-Ring) of the Atlantic mackerel fishery of NAFO Divisions 3KL (Tuck-Ring seine is considered as a fixed gear) since 2000.

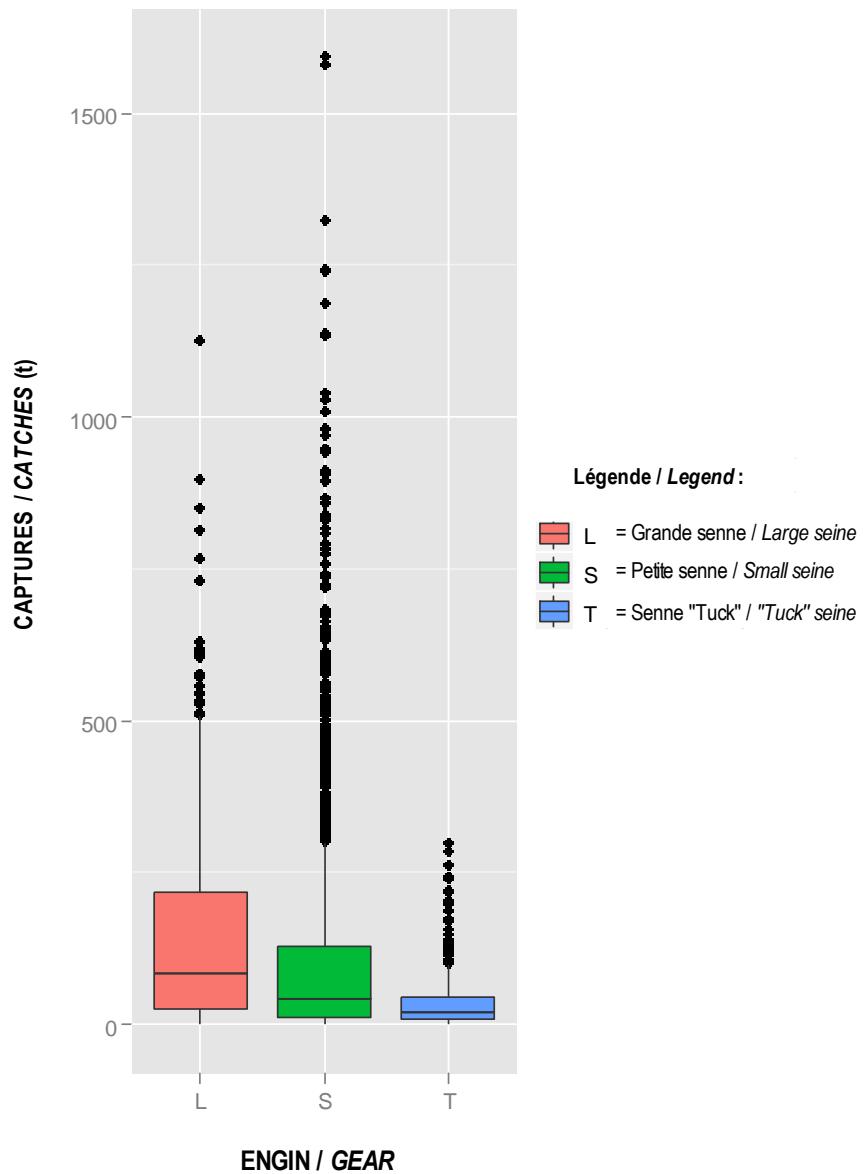


Figure 13. Box and whisker plots of the Atlantic mackerel catches (t) of the large and small seines (1985-2011) and Tuck-Ring seine (2005-2011) of NAFO Divisions 4R, 3KL, and 3P.

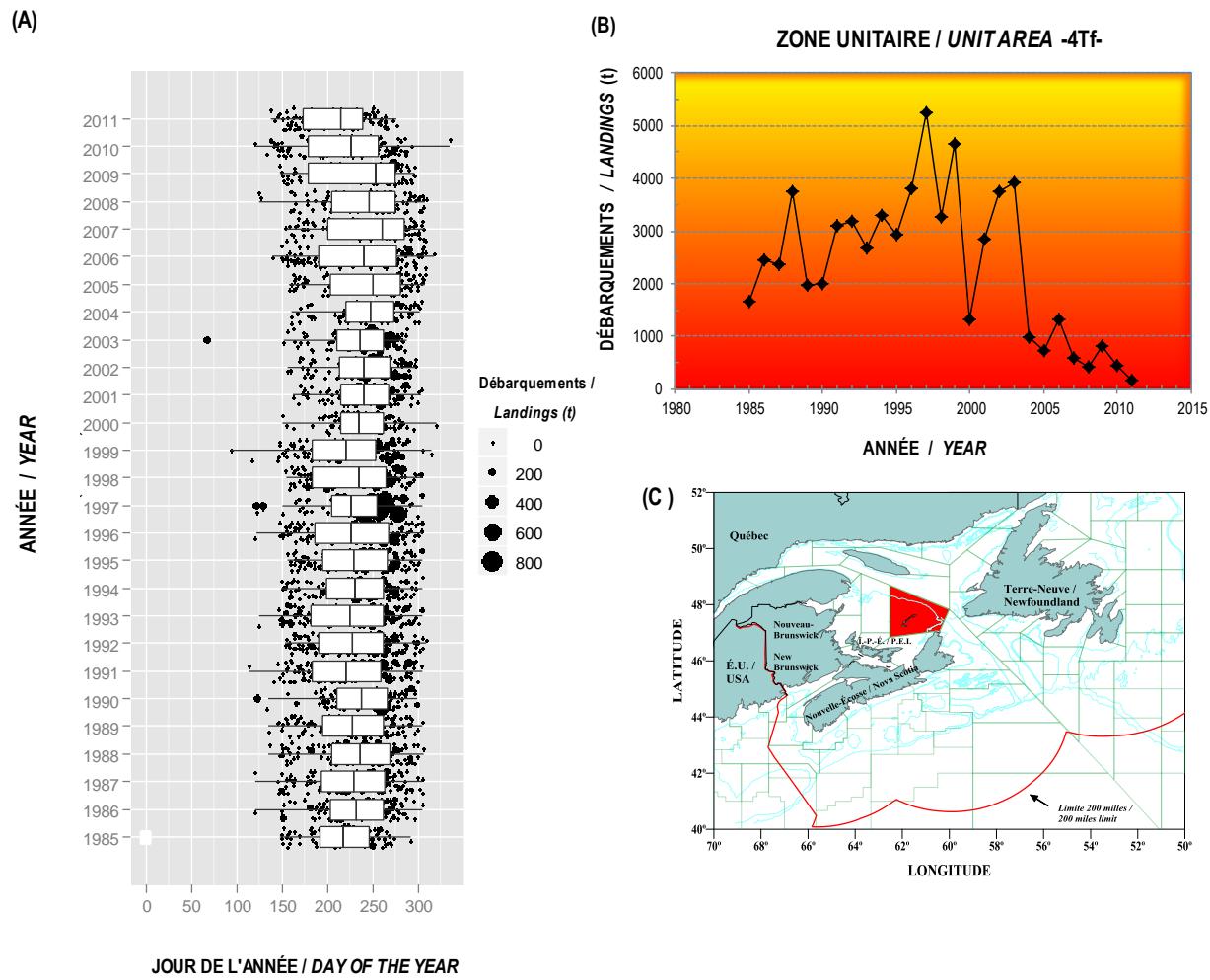


Figure 14. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in unit area 4Tf. Unit area 4Tf is indicated by the coloured area of the map (C).

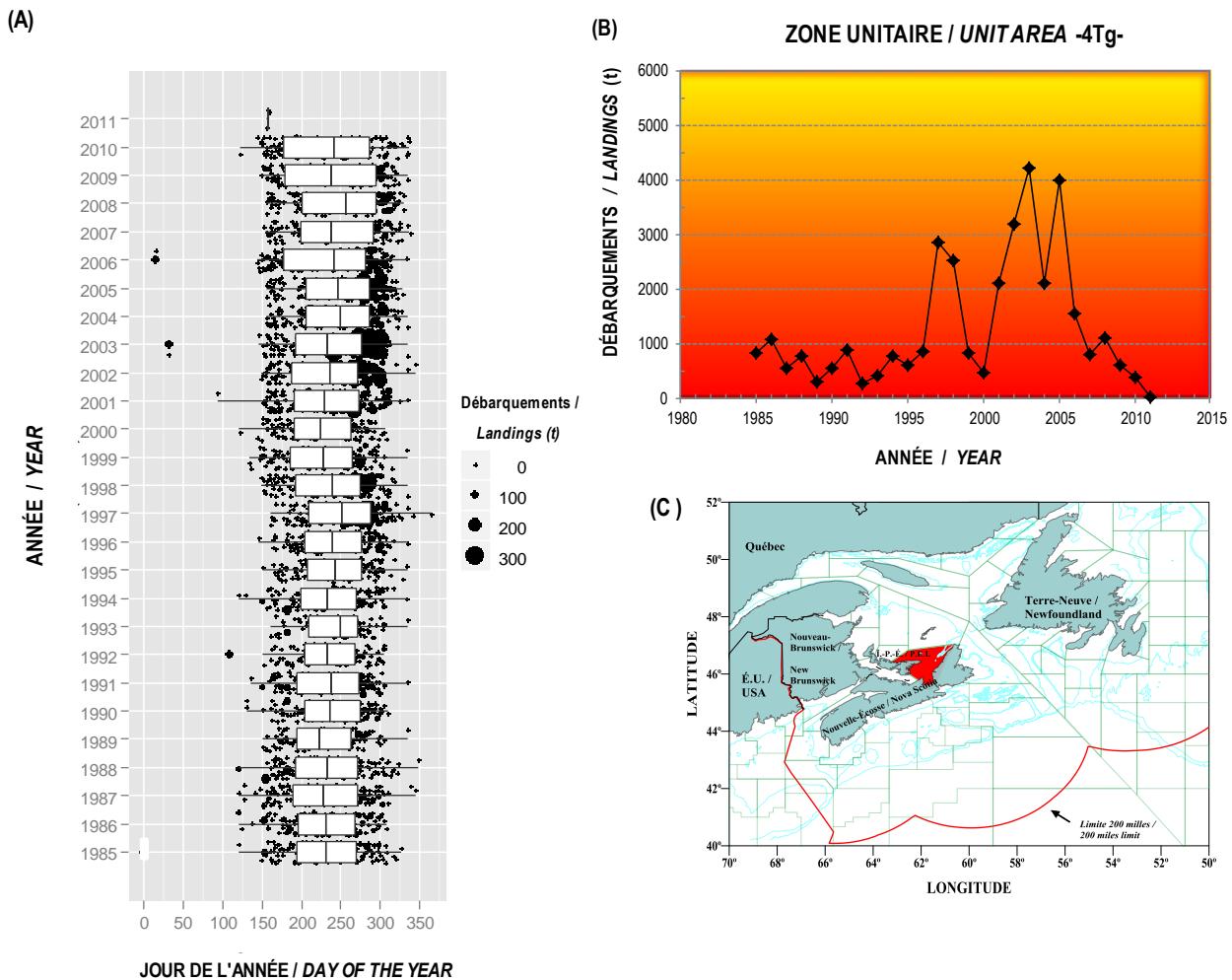


Figure 15. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in unit area 4Tg. Unit area 4Tg is indicated by the coloured area of the map (C).

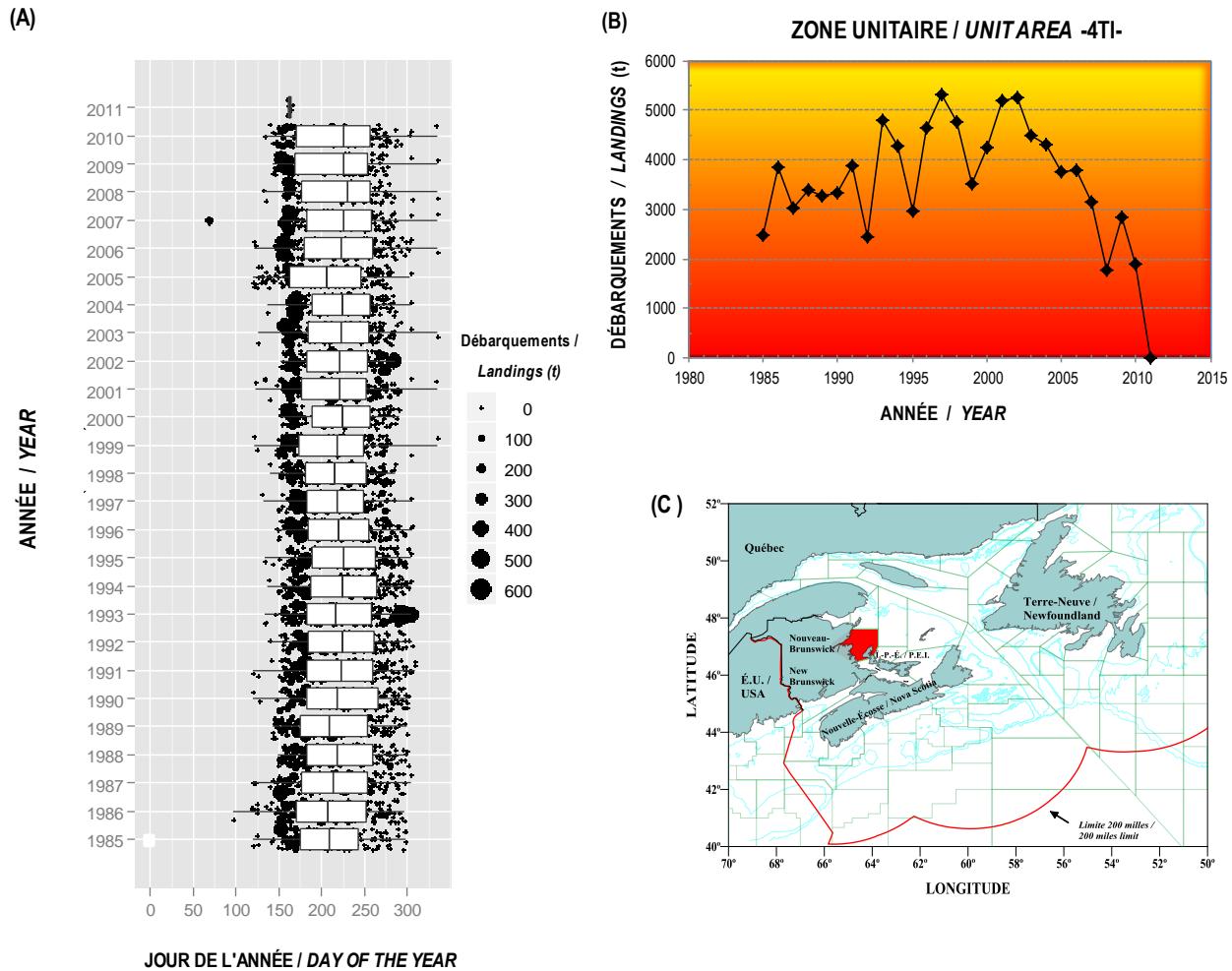


Figure 16. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in unit area 4TI. Unit area 4TI is indicated by the coloured area of the map (C).

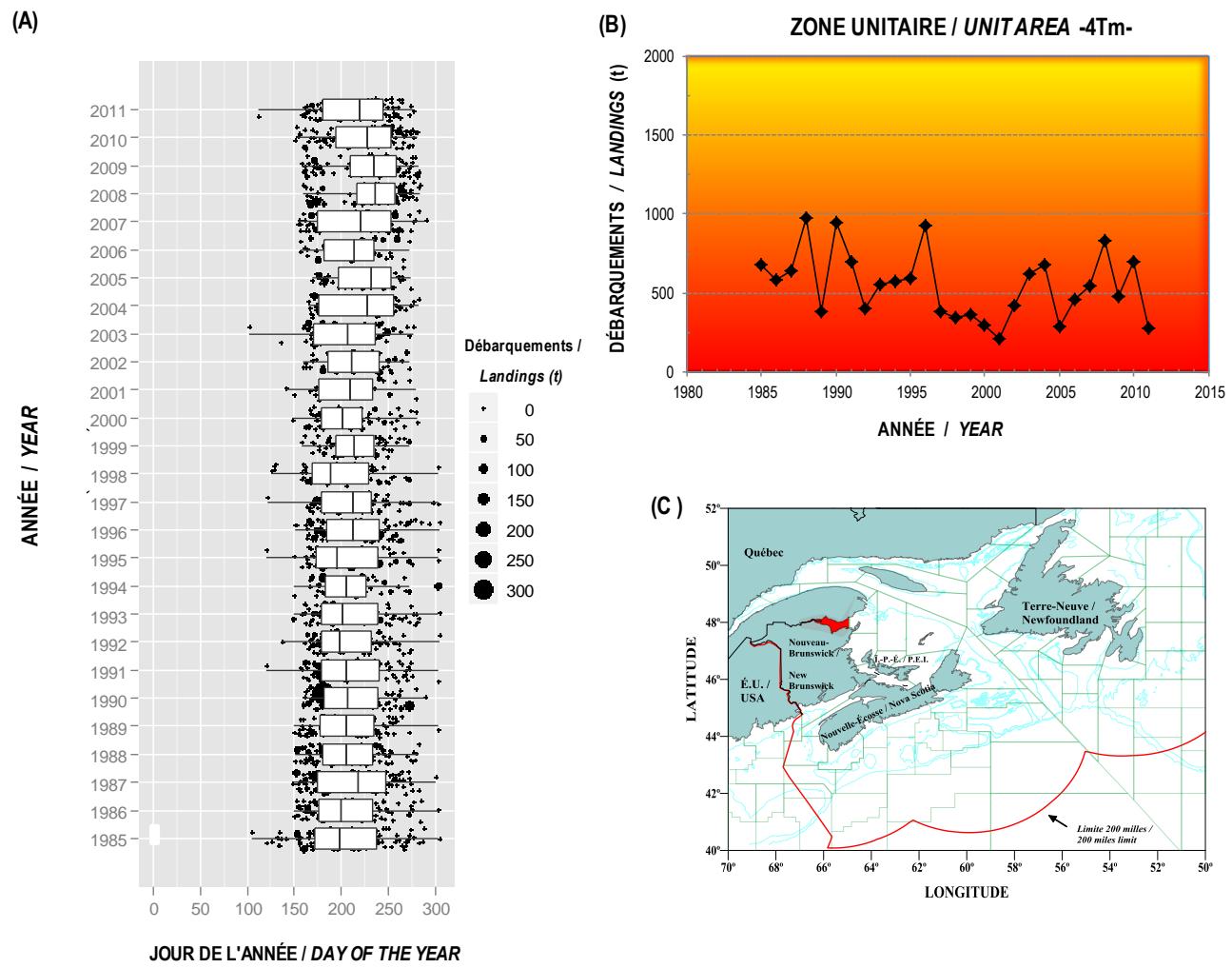
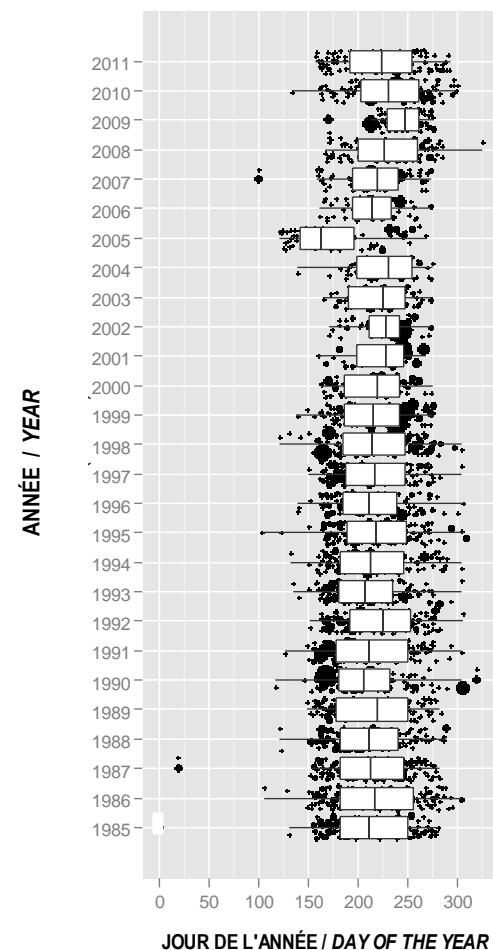
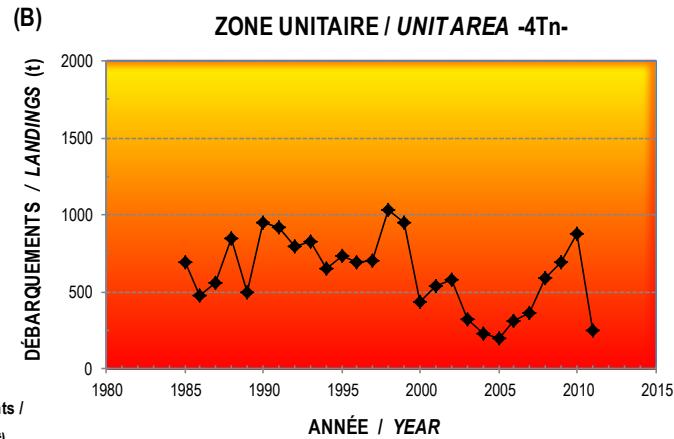


Figure 17. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in unit area 4Tm. Unit area 4Tm is indicated by the coloured area of the map (C).

(A)



(B)



(C)

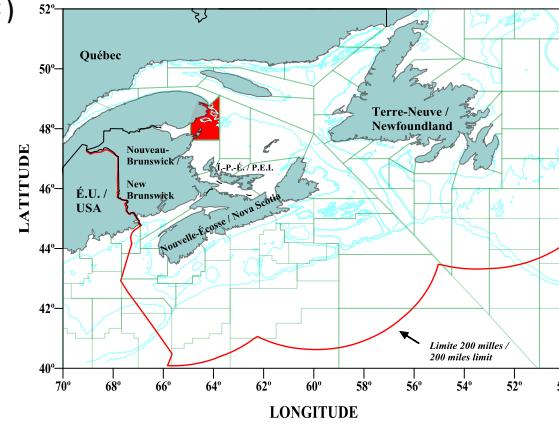
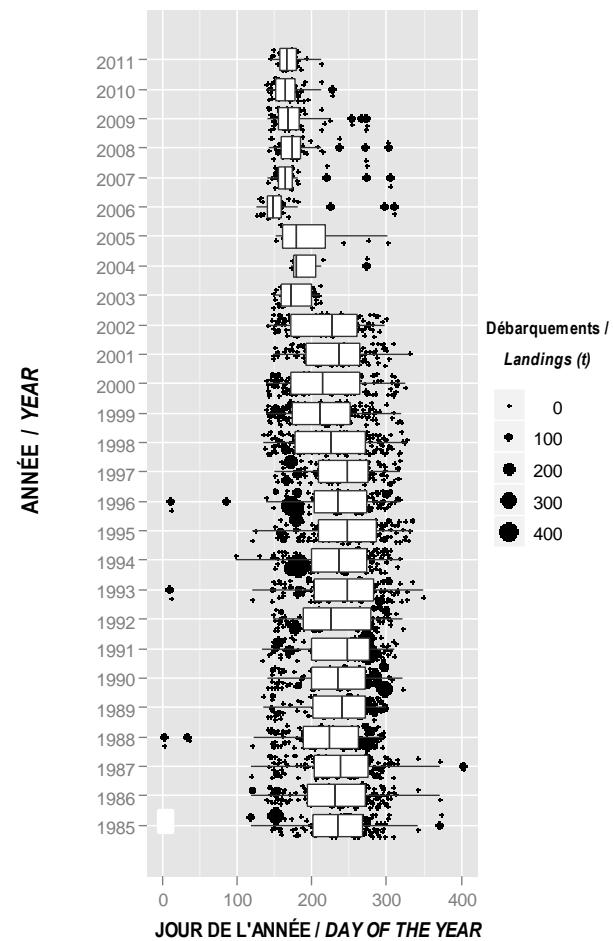
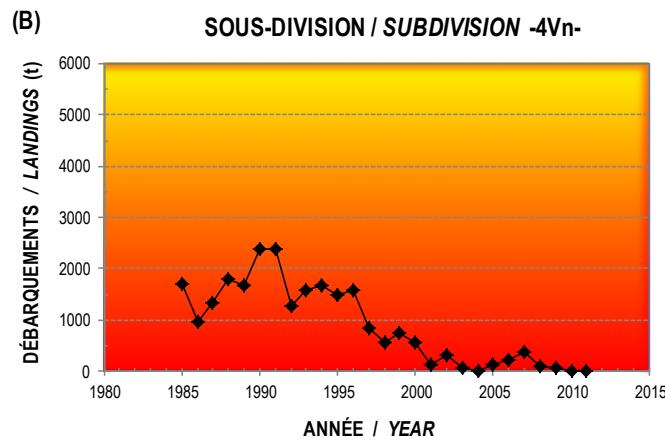


Figure 18. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in unit area 4Tn. Unit area 4Tn is indicated by the coloured area of the map (C).

(A)



(B)



(C)

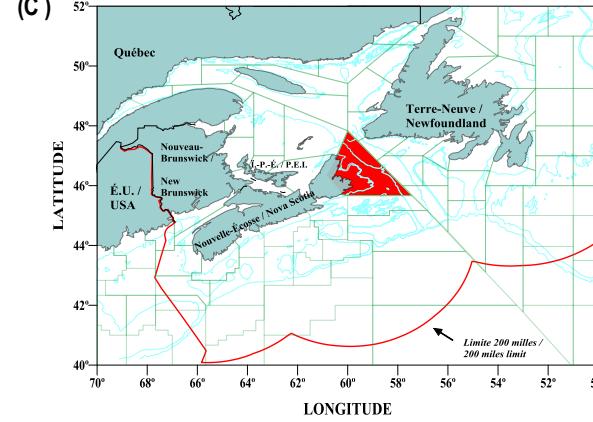


Figure 19. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in subdivision 4Vn. Subdivision 4Vn is indicated by the coloured area of the map (C).

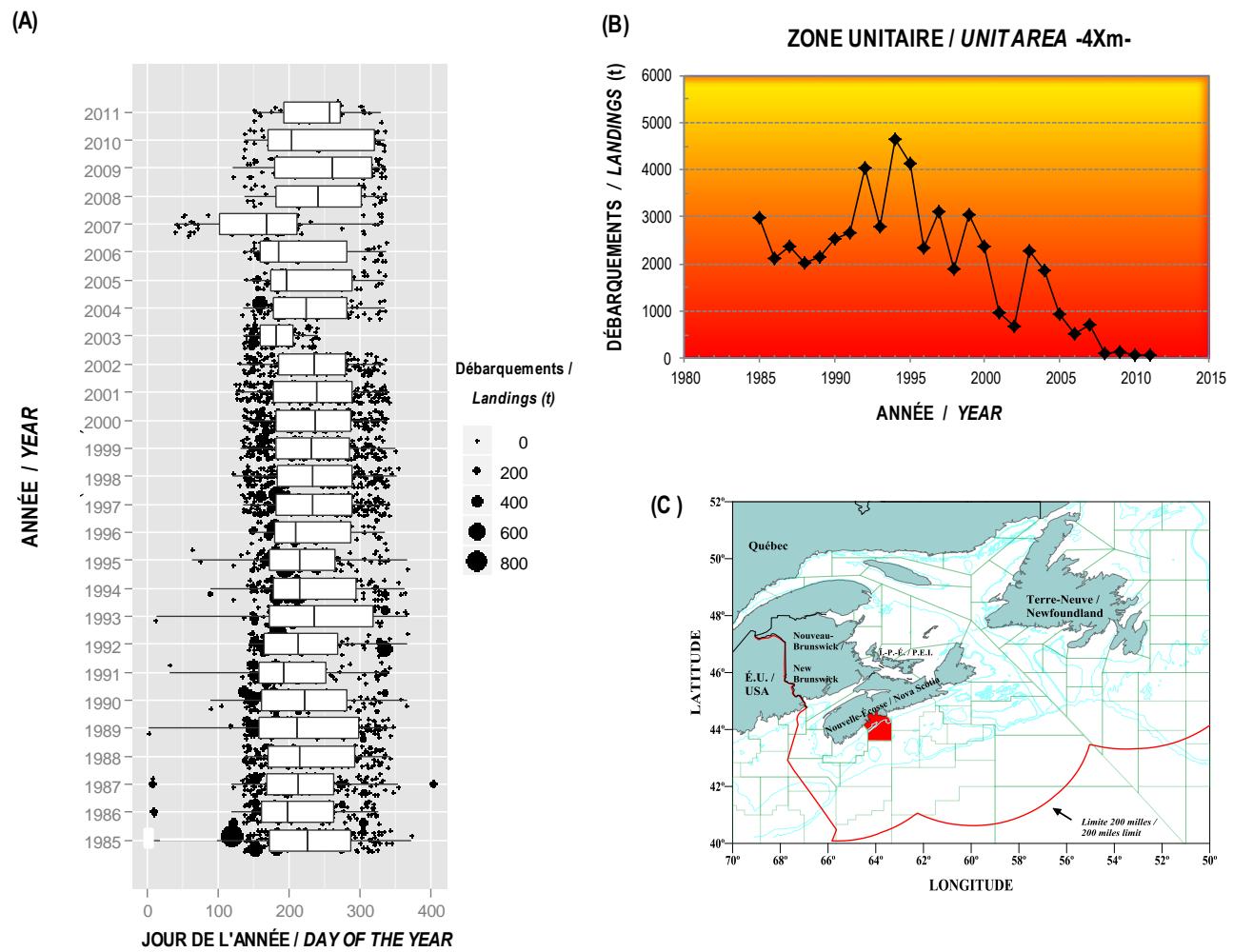


Figure 20. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in unit area 4Xm. Unit area 4Xm is indicated by the coloured area of the map (C).

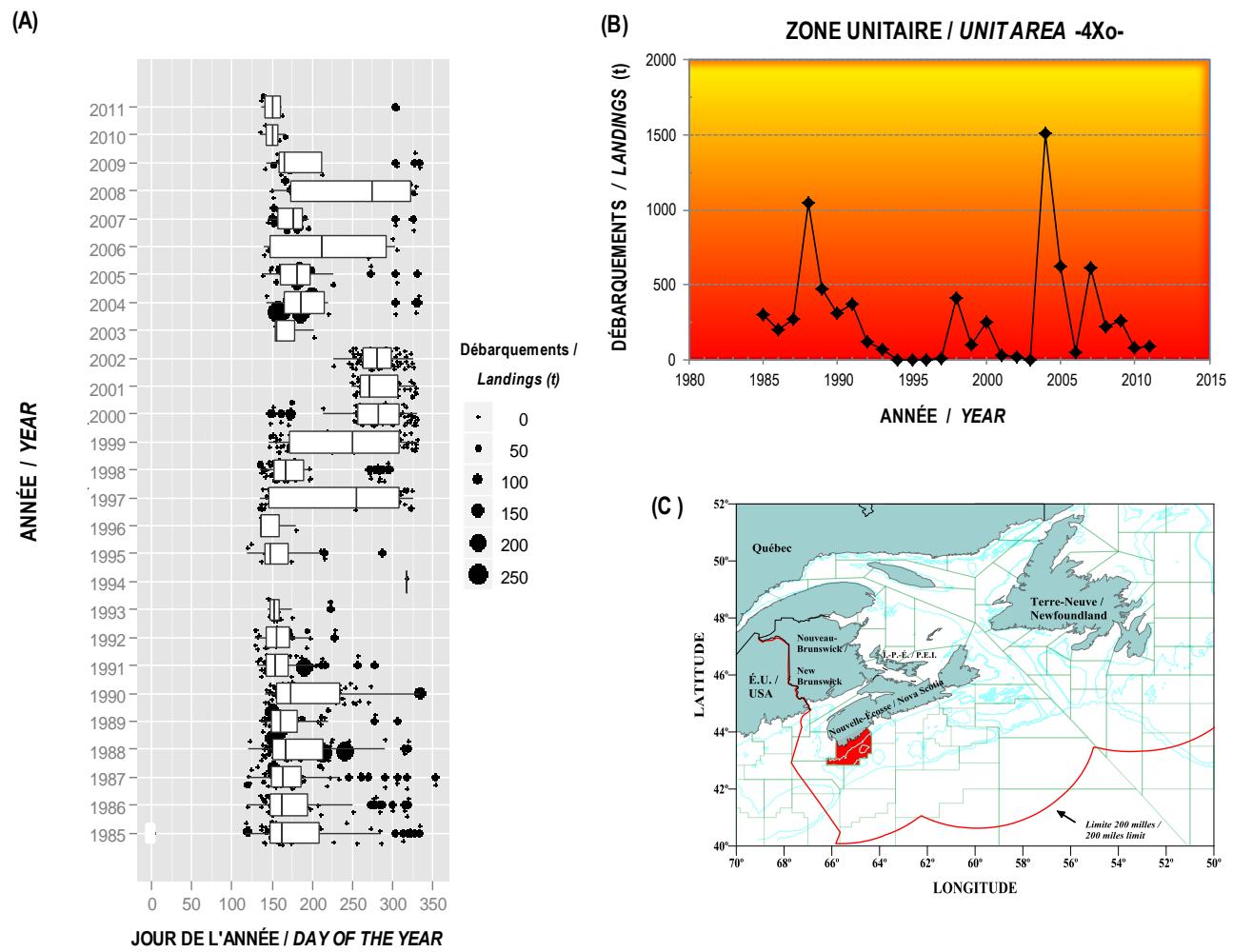


Figure 21. Box and whiskers plots of the Atlantic mackerel daily landings (t) (A) and annual landings (t) (B) in unit area 4Xo. Unit area 4Xo is indicated by the coloured area of the map (C).