

Fig. 1a. Map of the stock area, showing physiographic features and NAFO Divisions.

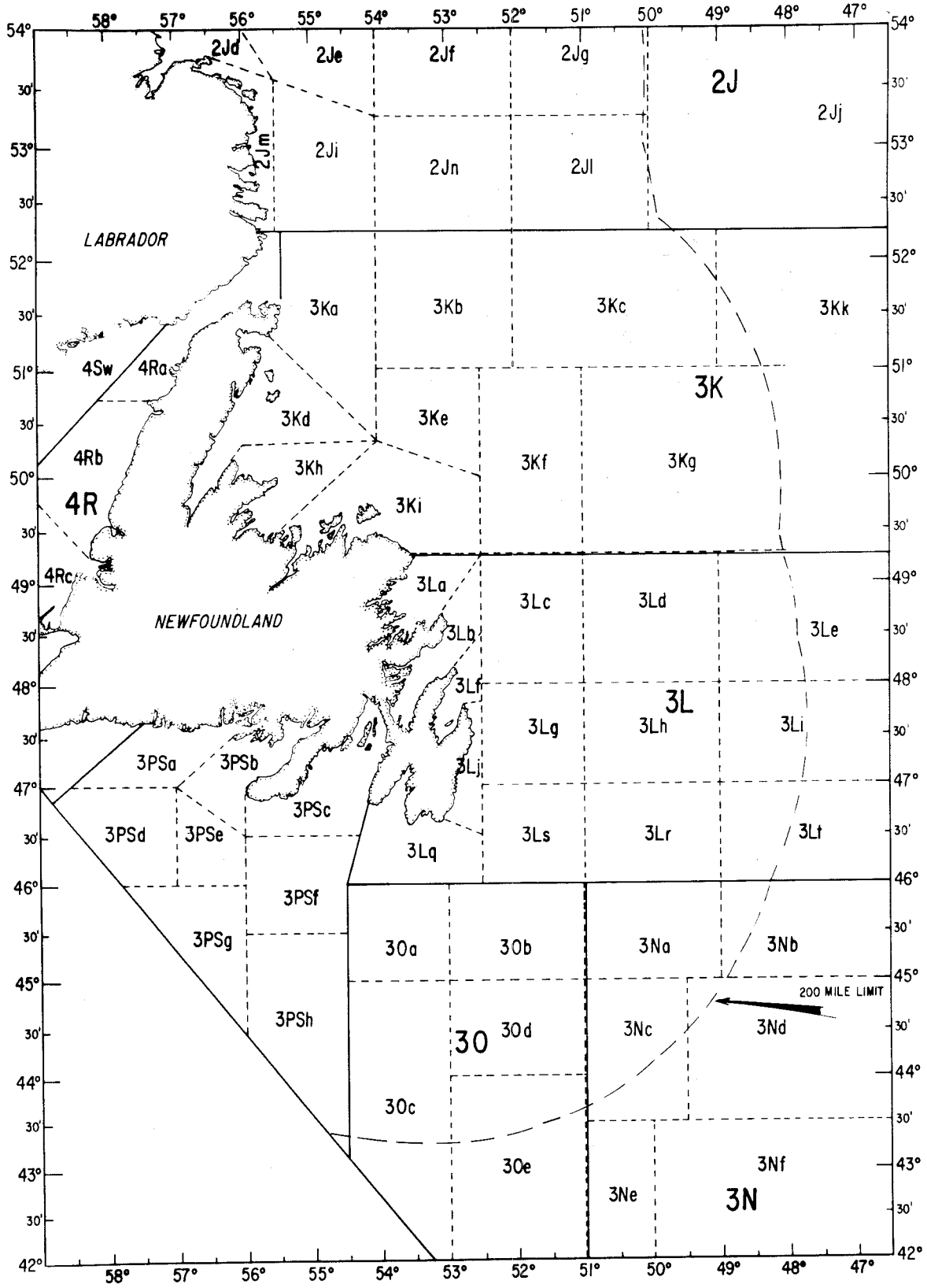


Fig. 1b. Map of the stock area, showing commercial fishery statistical unit areas.

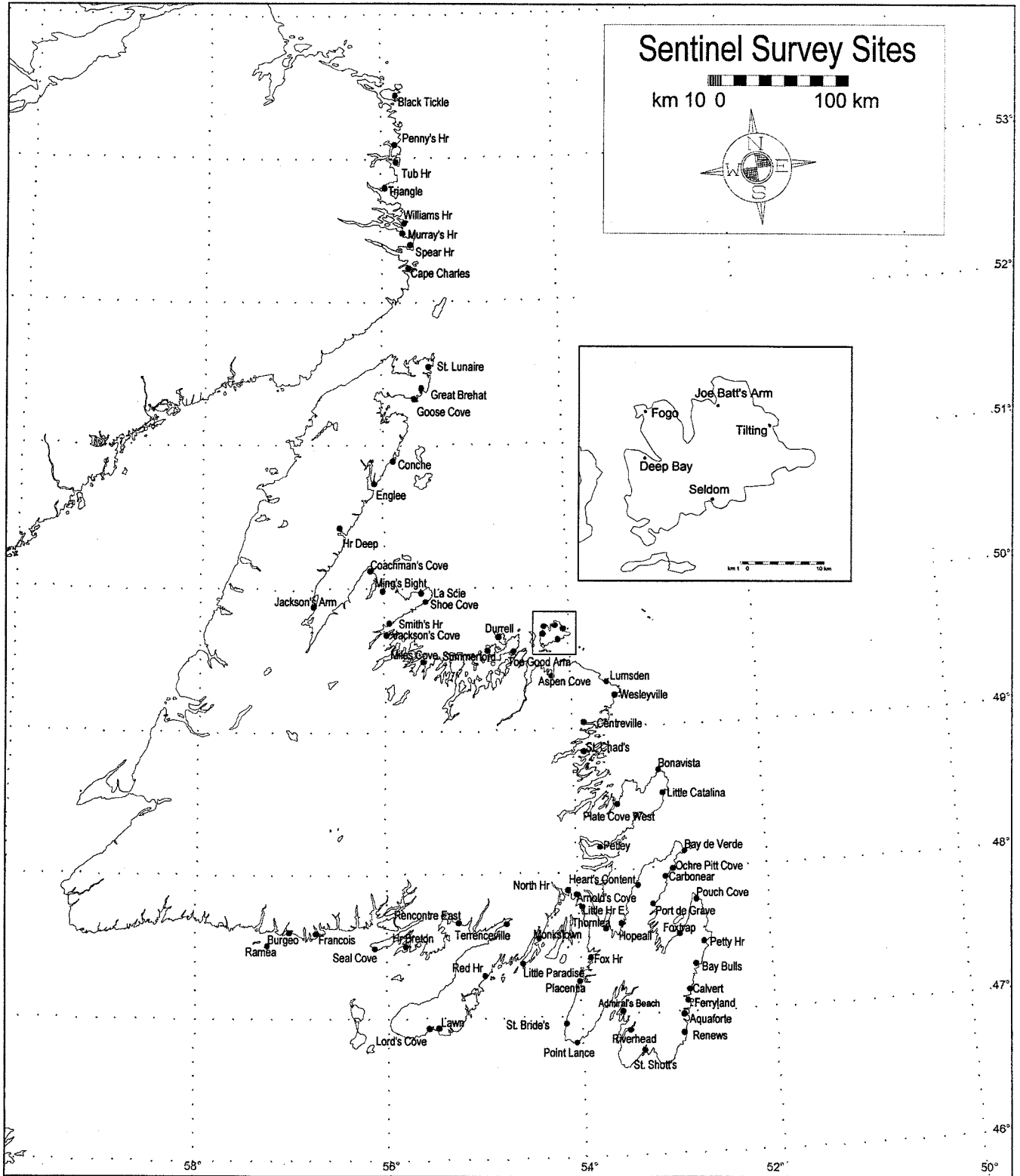


Fig. 1d. Map of the stock area, showing sentinel survey sites.

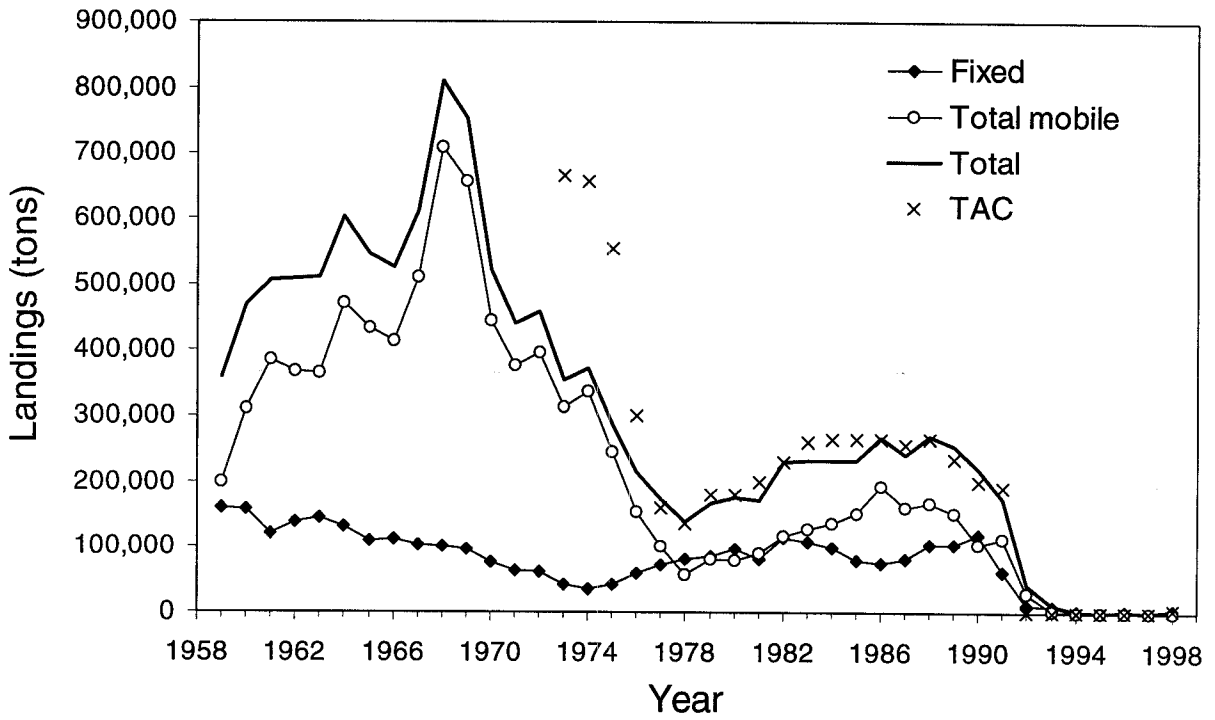


Fig. 2. Divisions 2J+3KL cod landings from fixed and mobile gear and the TAC.

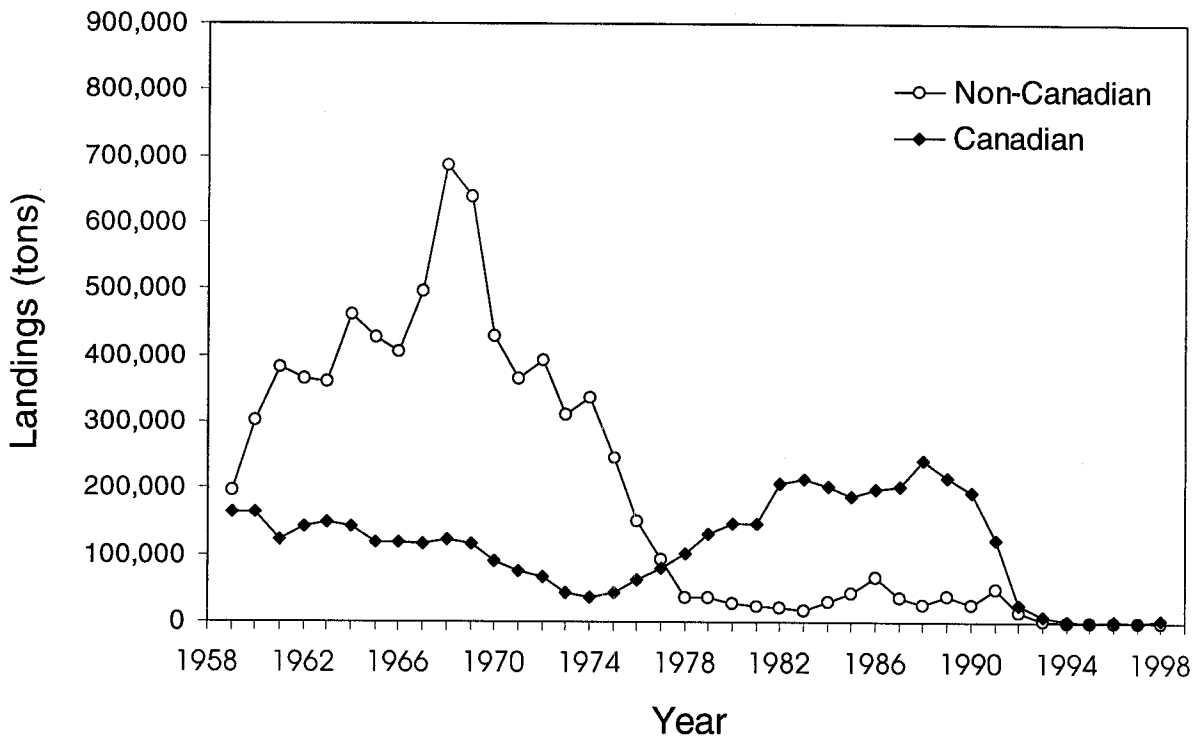


Fig. 3. Division 2J+3KL cod landings by Canadian and non-Canadian vessels.

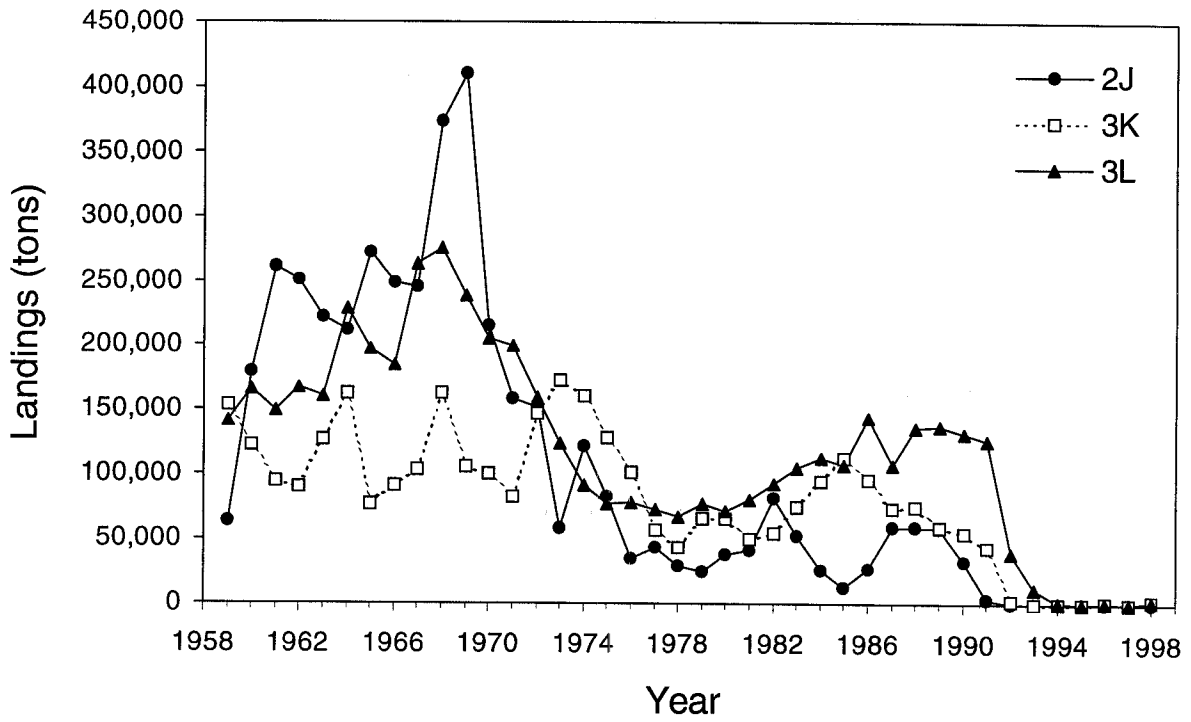


Fig. 4. Division 2J+3KL cod landings by Division.

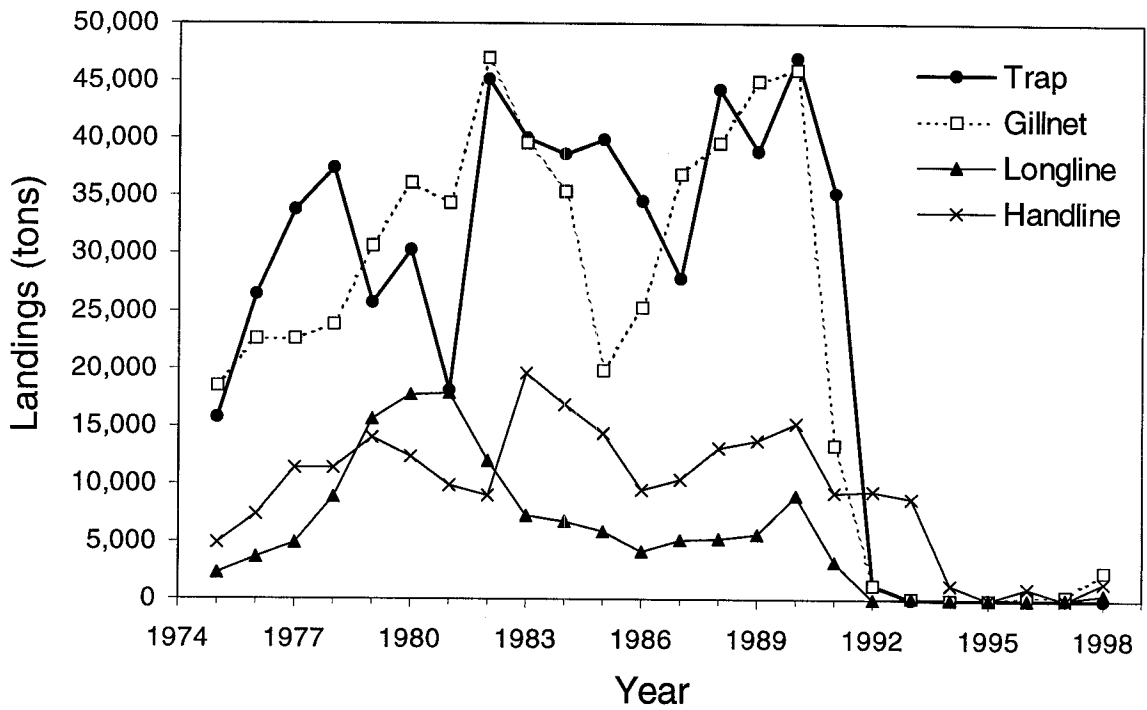


Fig. 5. Division 2J+3KL cod fixed gear landings by gear type.

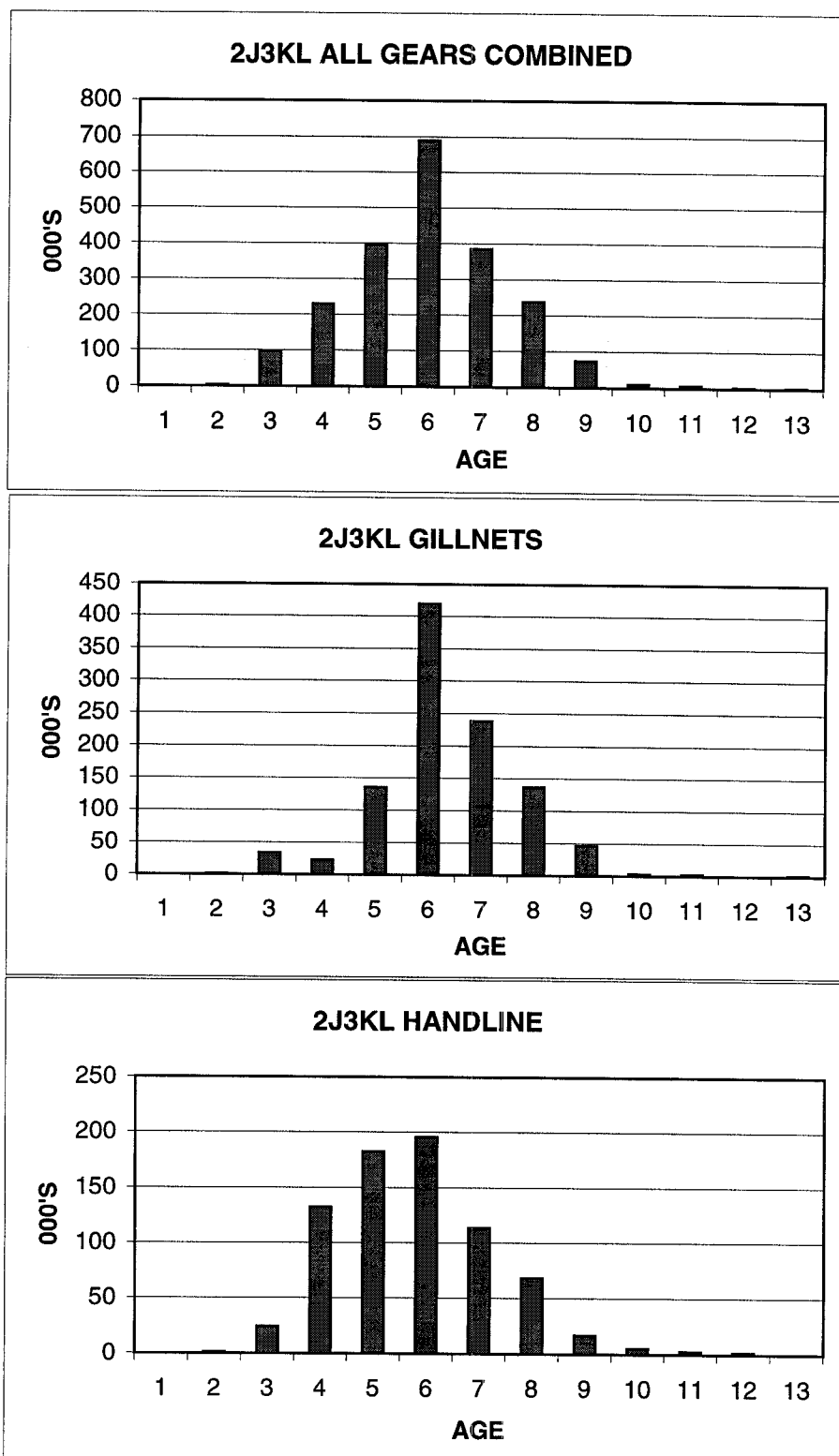


Fig. 6. The estimated catch at age by gear and by all gears combined for cod in Divisions 2J+3KL in 1998.

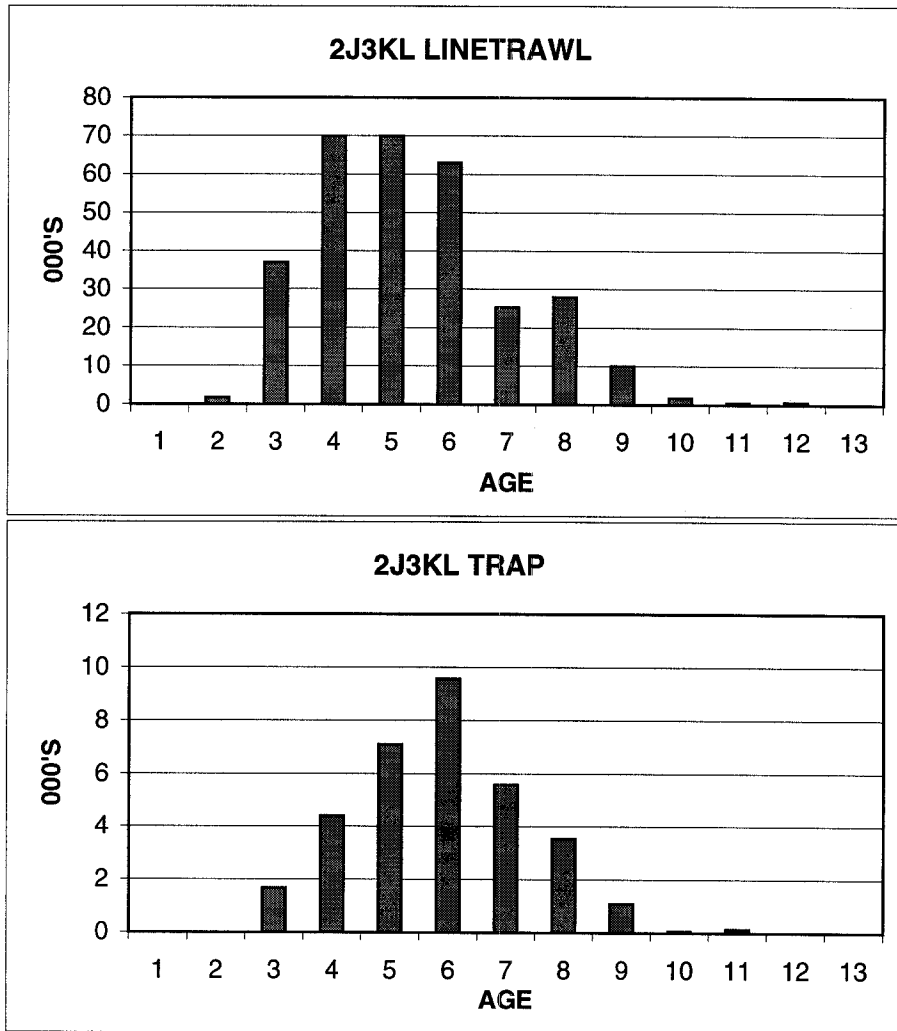


Fig. 6. The estimated catch at age by gear and by all gears combined for cod in Divisions 2J+3KL in 1998 (cont'd).

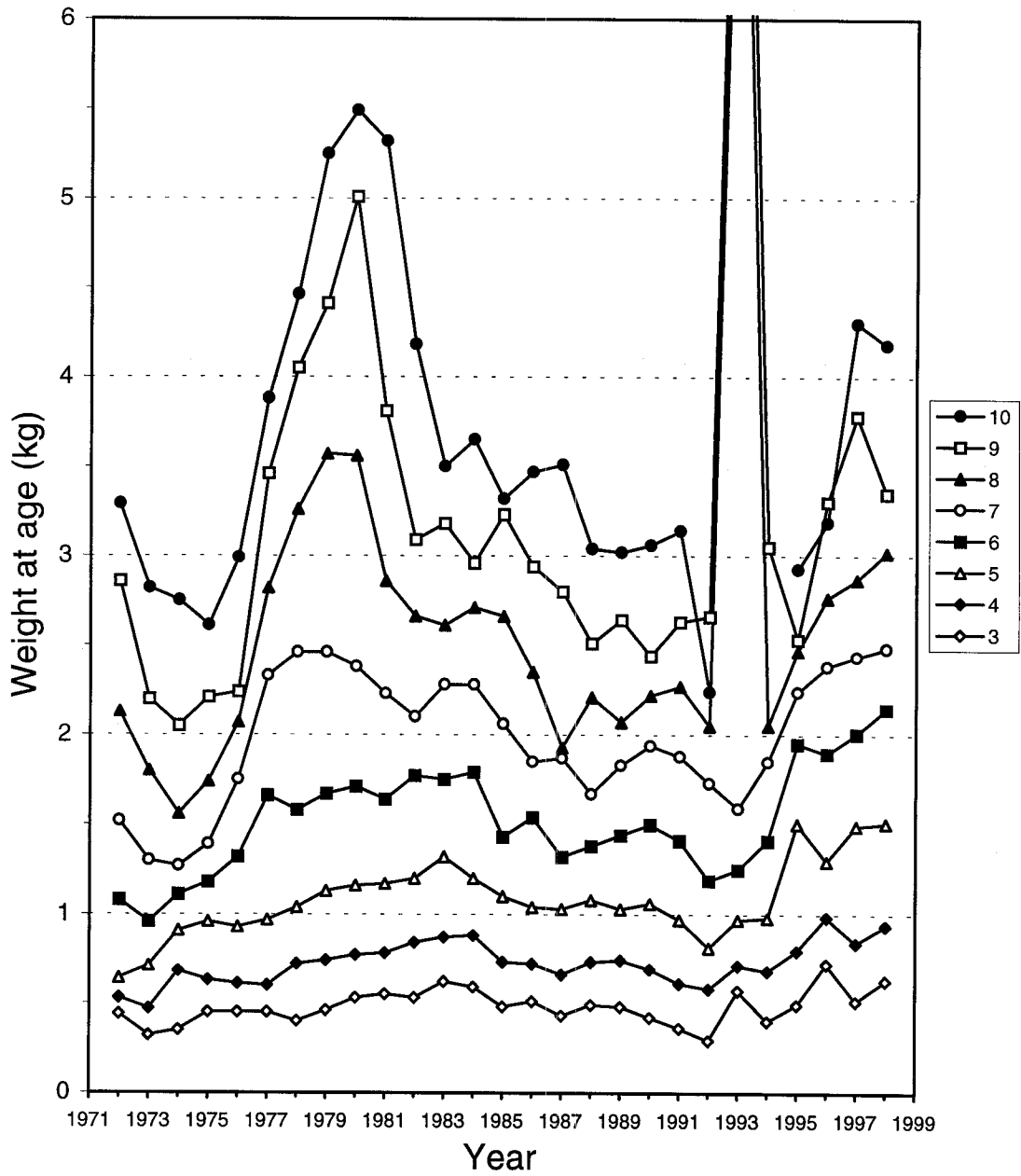


Fig. 7. Mean weights-at-age calculated from mean lengths-at-age in the commercial catch.

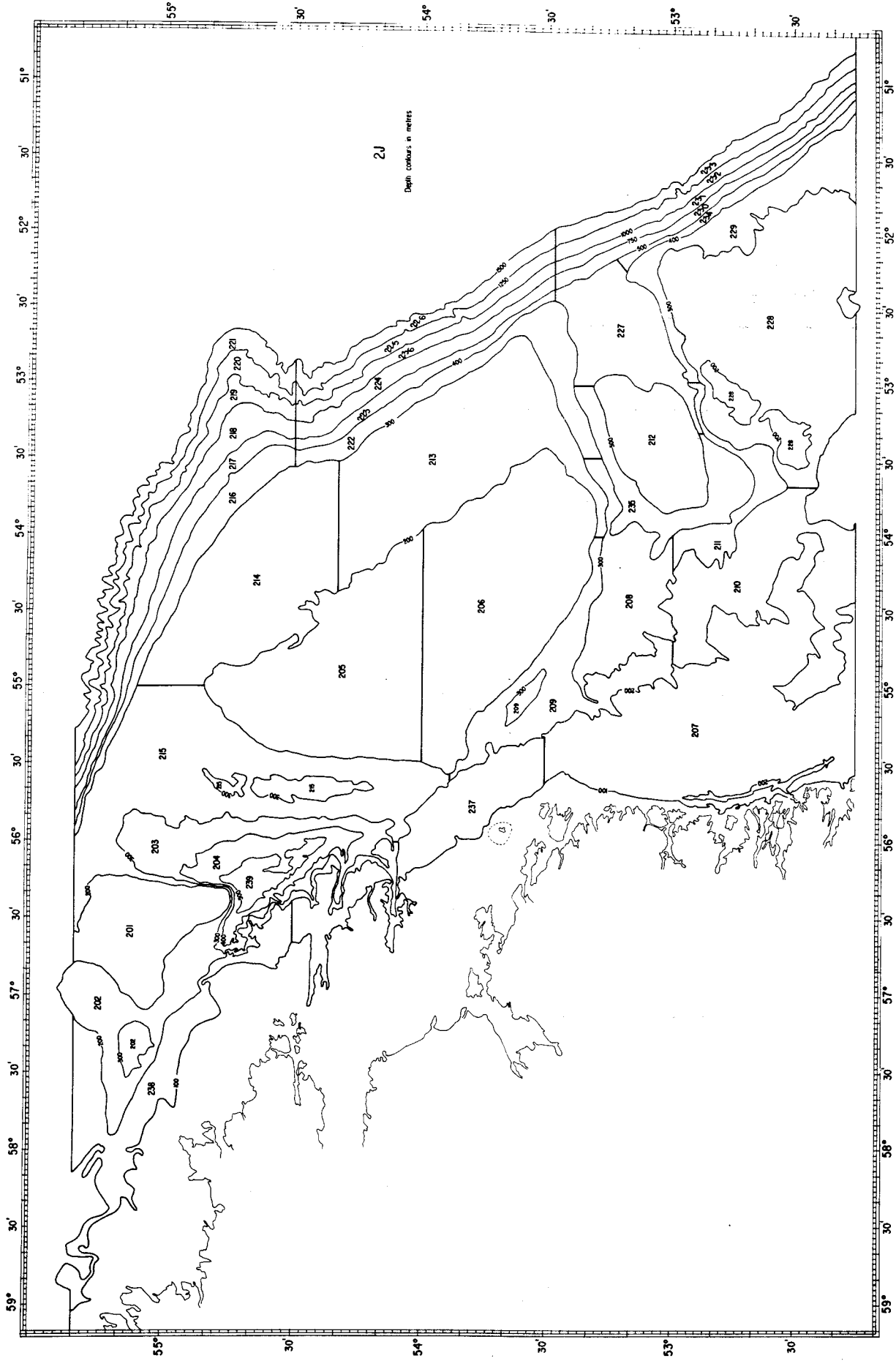


Fig. 8. Strata used for research vessel bottom trawl surveys in NAFO Division 2J.

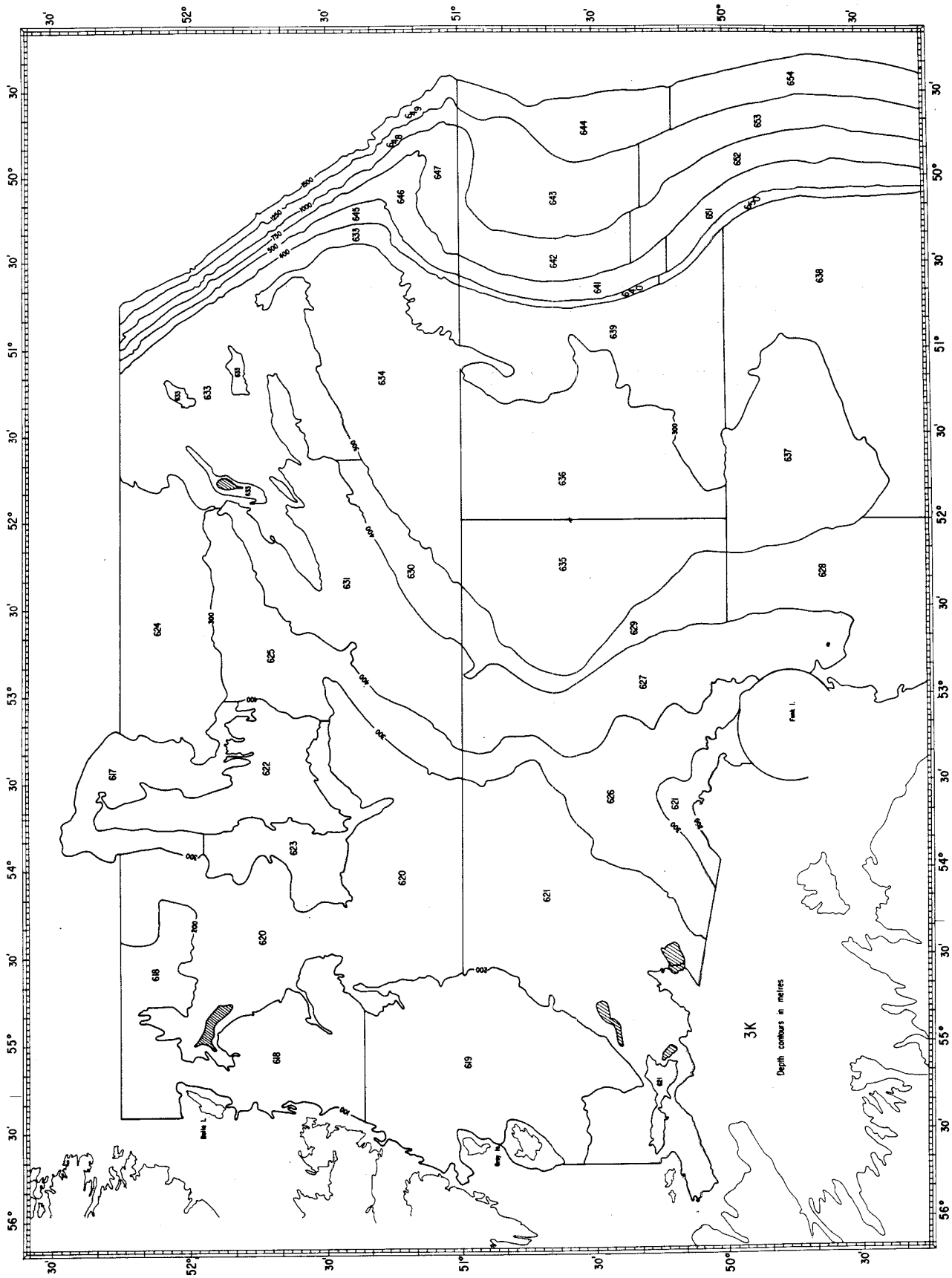


Fig. 9. Strata used for research vessel bottom trawl surveys in NAFO Division 3K.

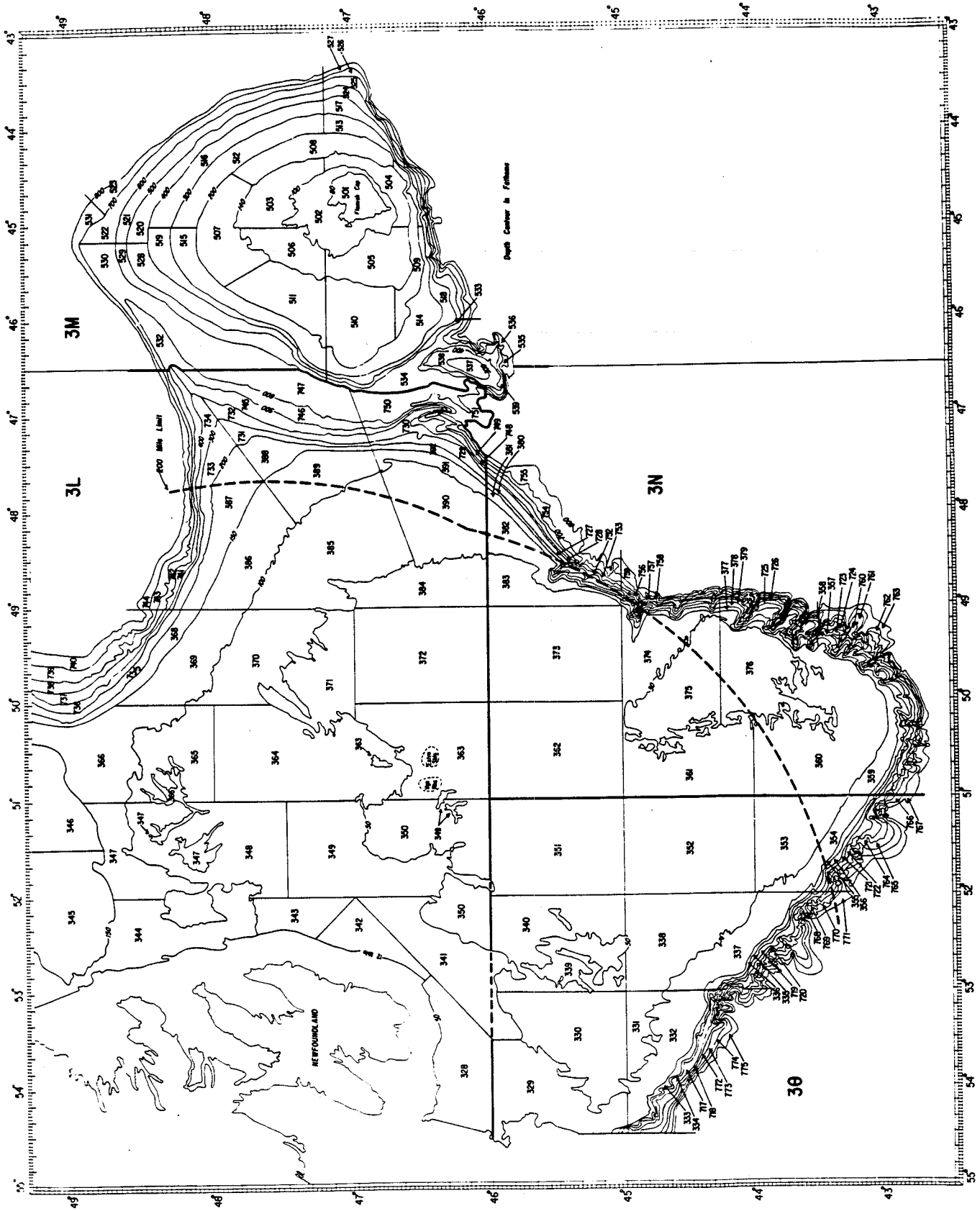


Fig. 10. Strata used for research vessel bottom trawl surveys in NAFO Division 3L.

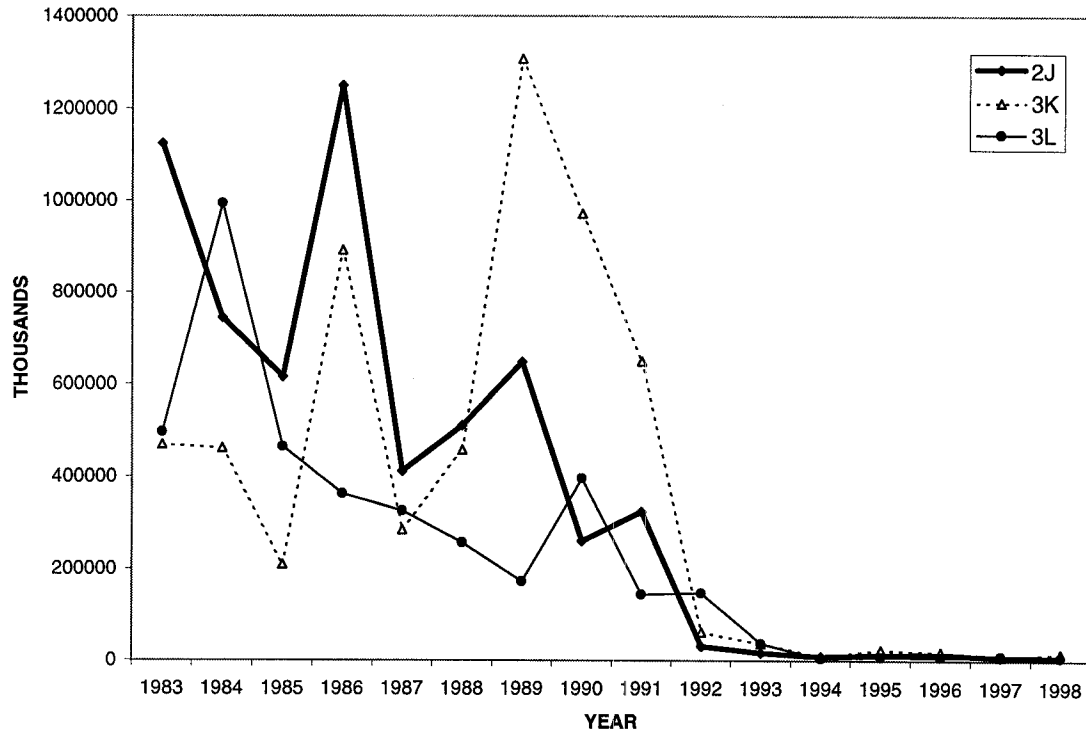


Fig 11a. Abundance by Division for index strata (<500 meters in Divisions 2J and 3K and <200 fathoms in Division 3L). Strata not fished have been filled using a multiplicative model.

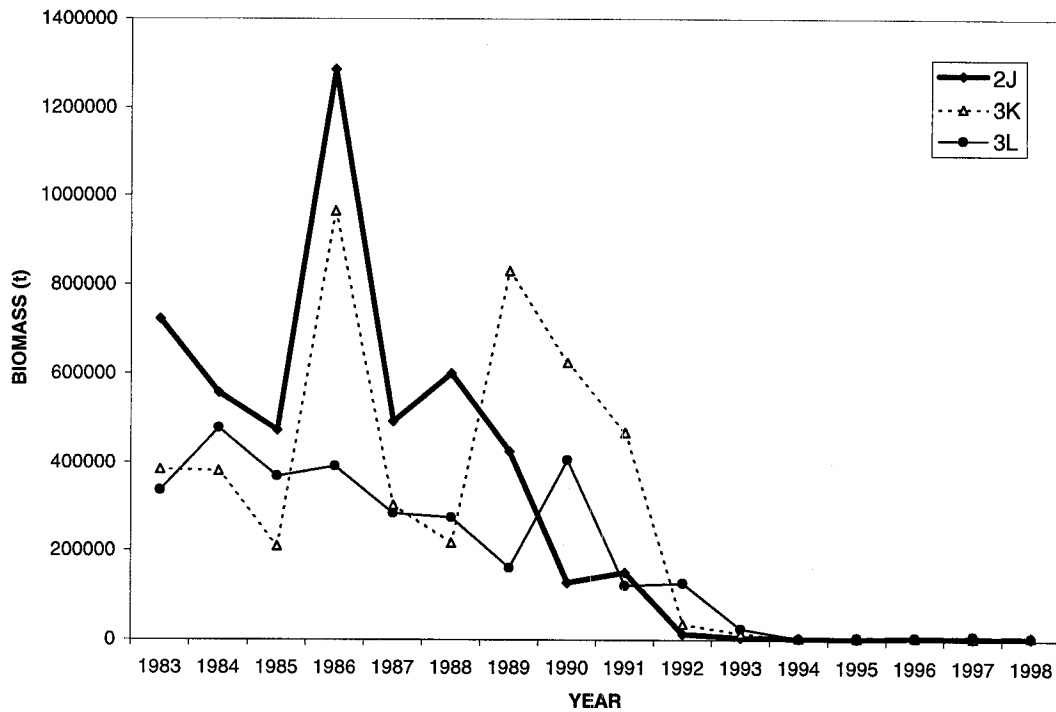


Fig 11b. Biomass by Division for index strata (<500 meters in Divisions 2J and 3K and <200 fathoms in Division 3L). Strata not fished have been filled using a multiplicative model.

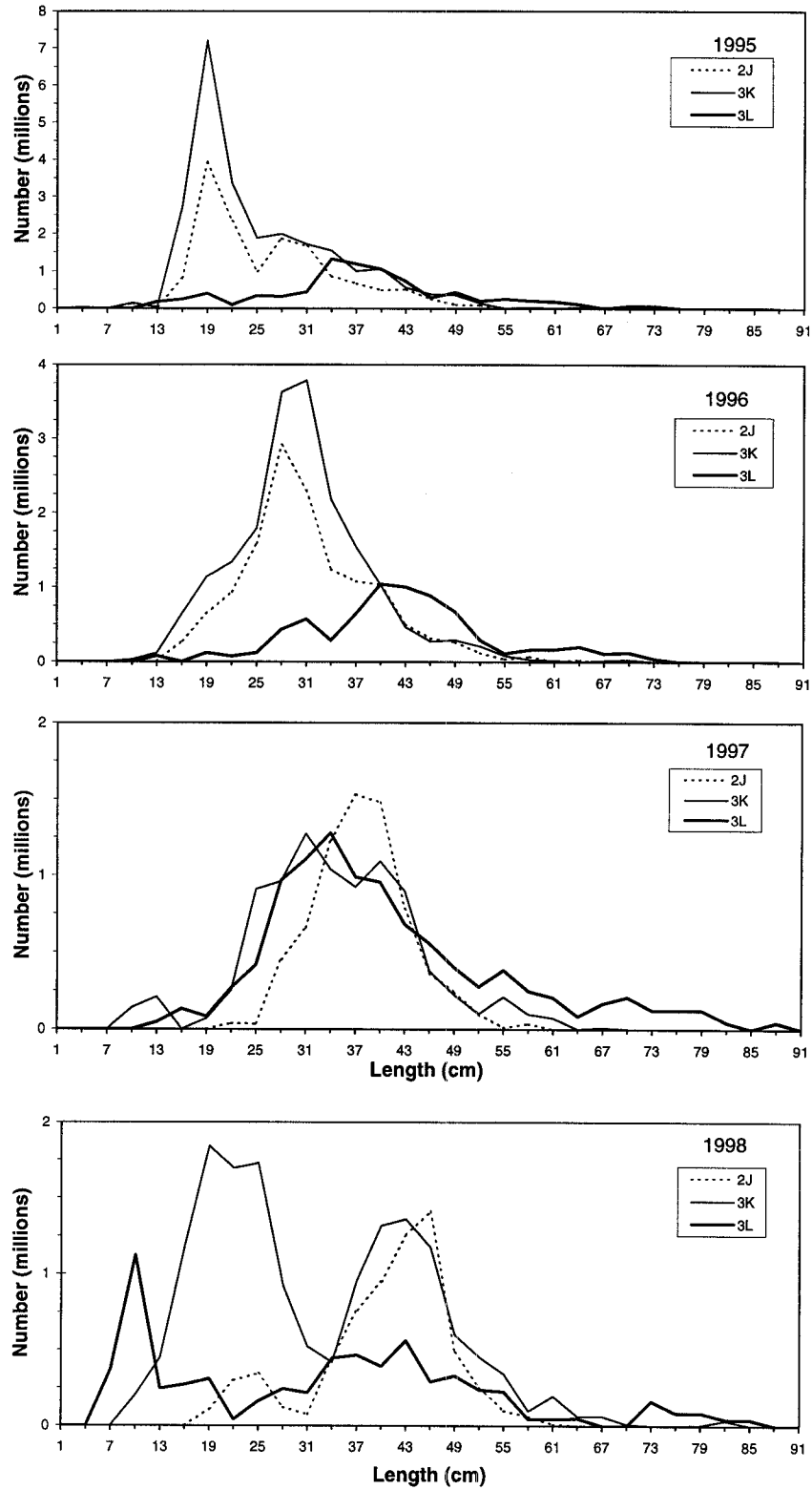


Fig. 12. Population numbers, by 3-cm length-groups, in Divisions 2J, 3K and 3L in 1995-1998, as calculated from catches during autumn bottom-trawl surveys. Only index strata are included in the calculations.

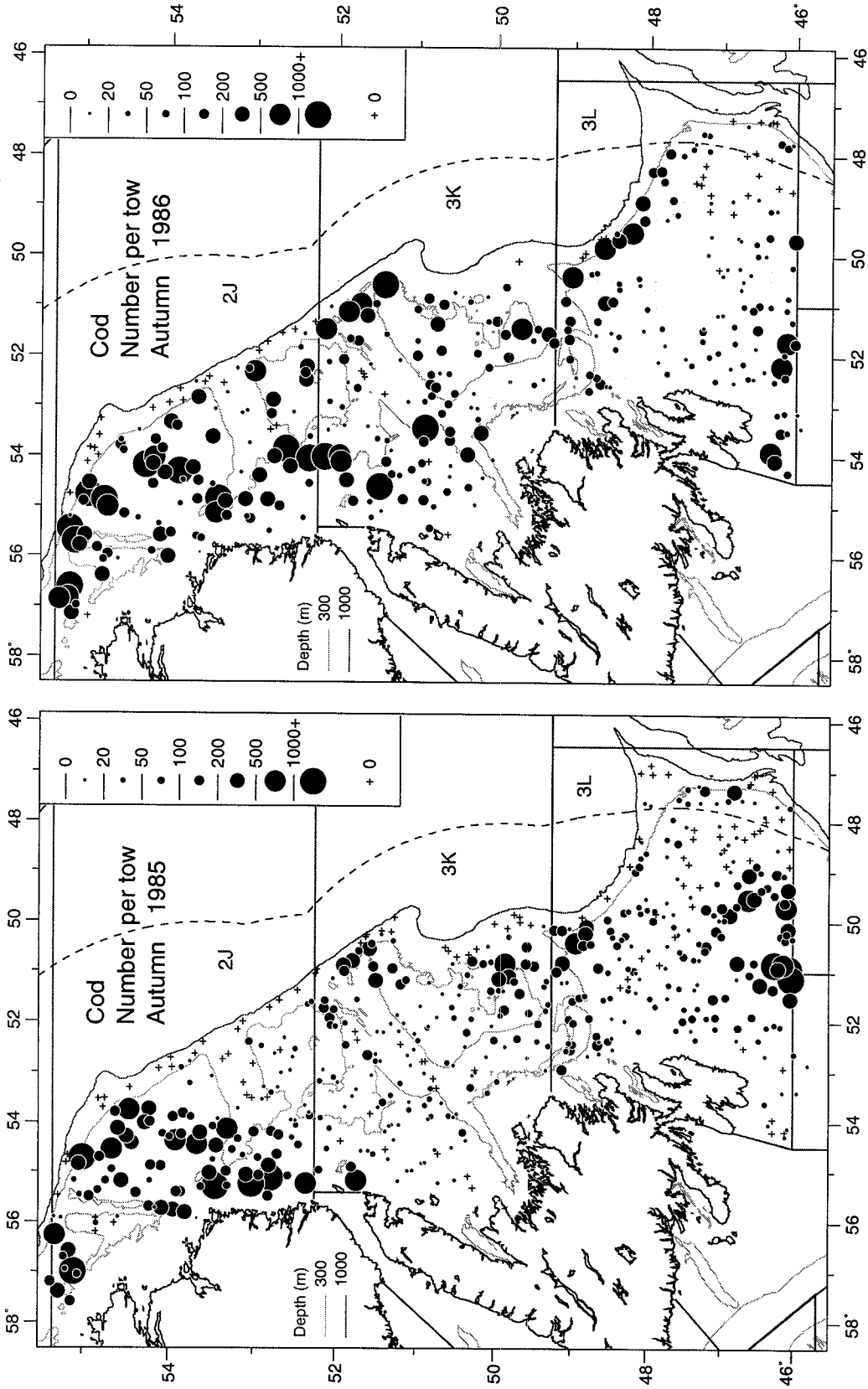


Fig. 13a. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1985-1986.

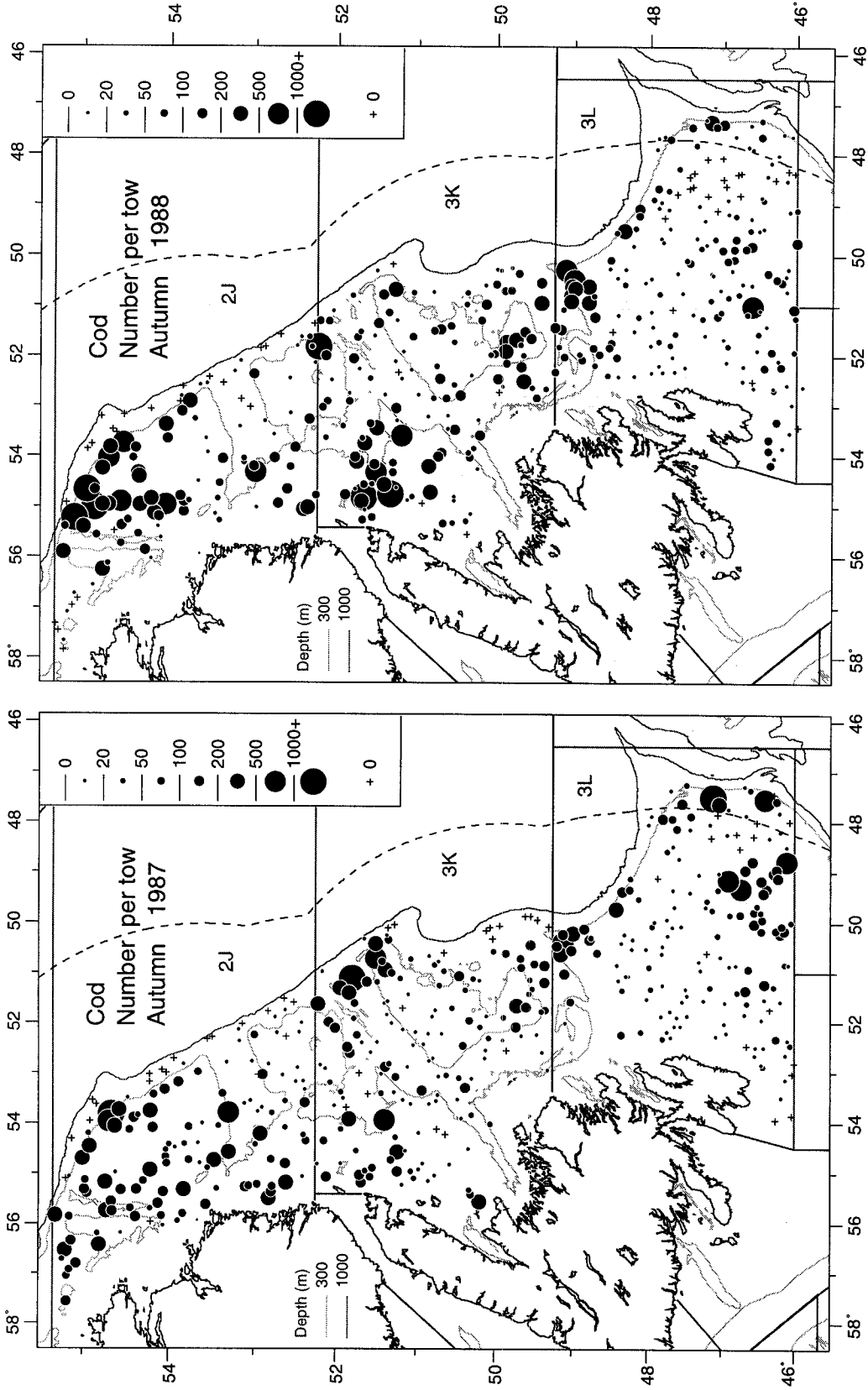


Fig. 13b. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1987-1988.

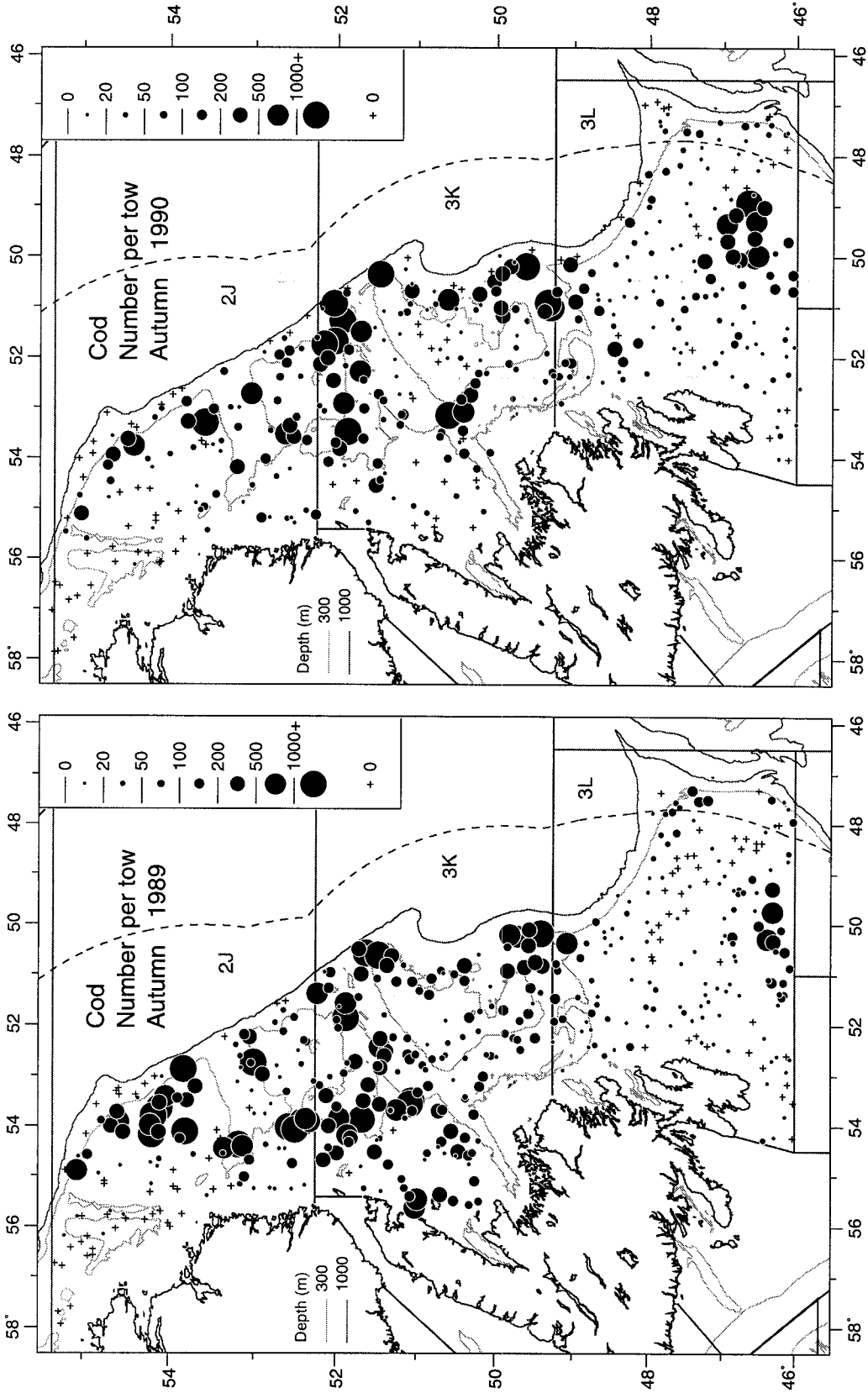


Fig. 13c. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1989-1990.

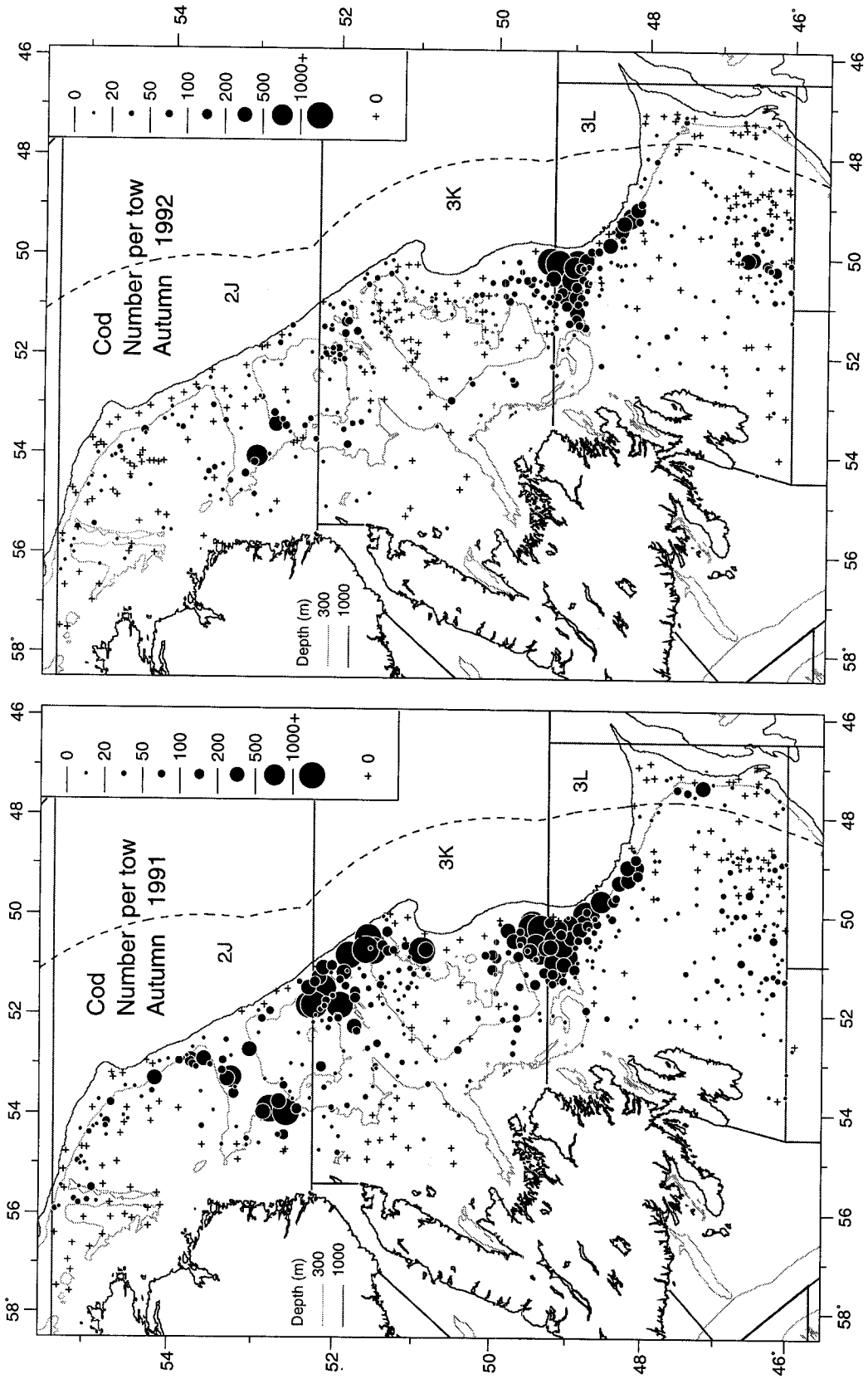


Fig. 13d. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1991-1992.

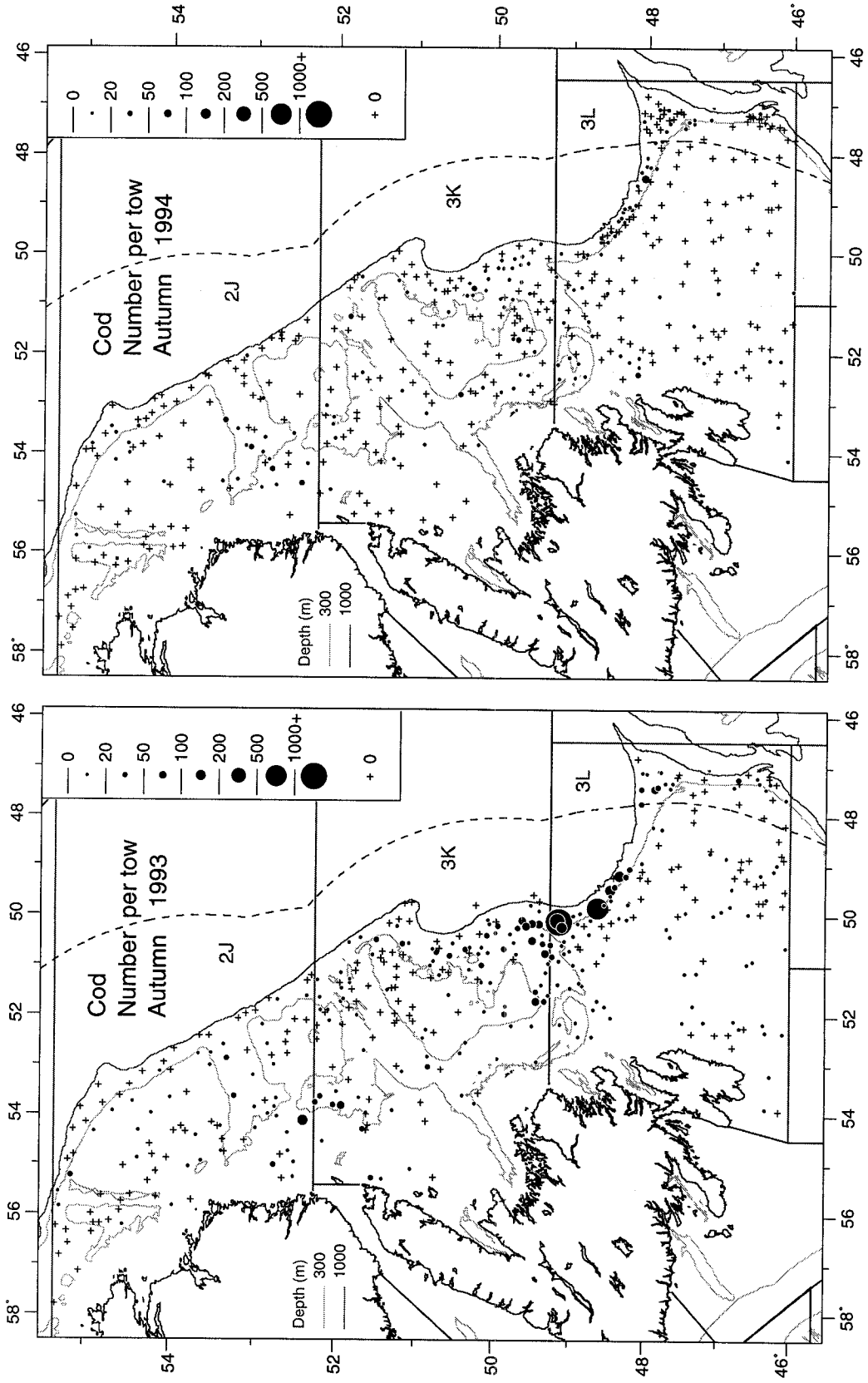


Fig. 13e. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1993-1994.

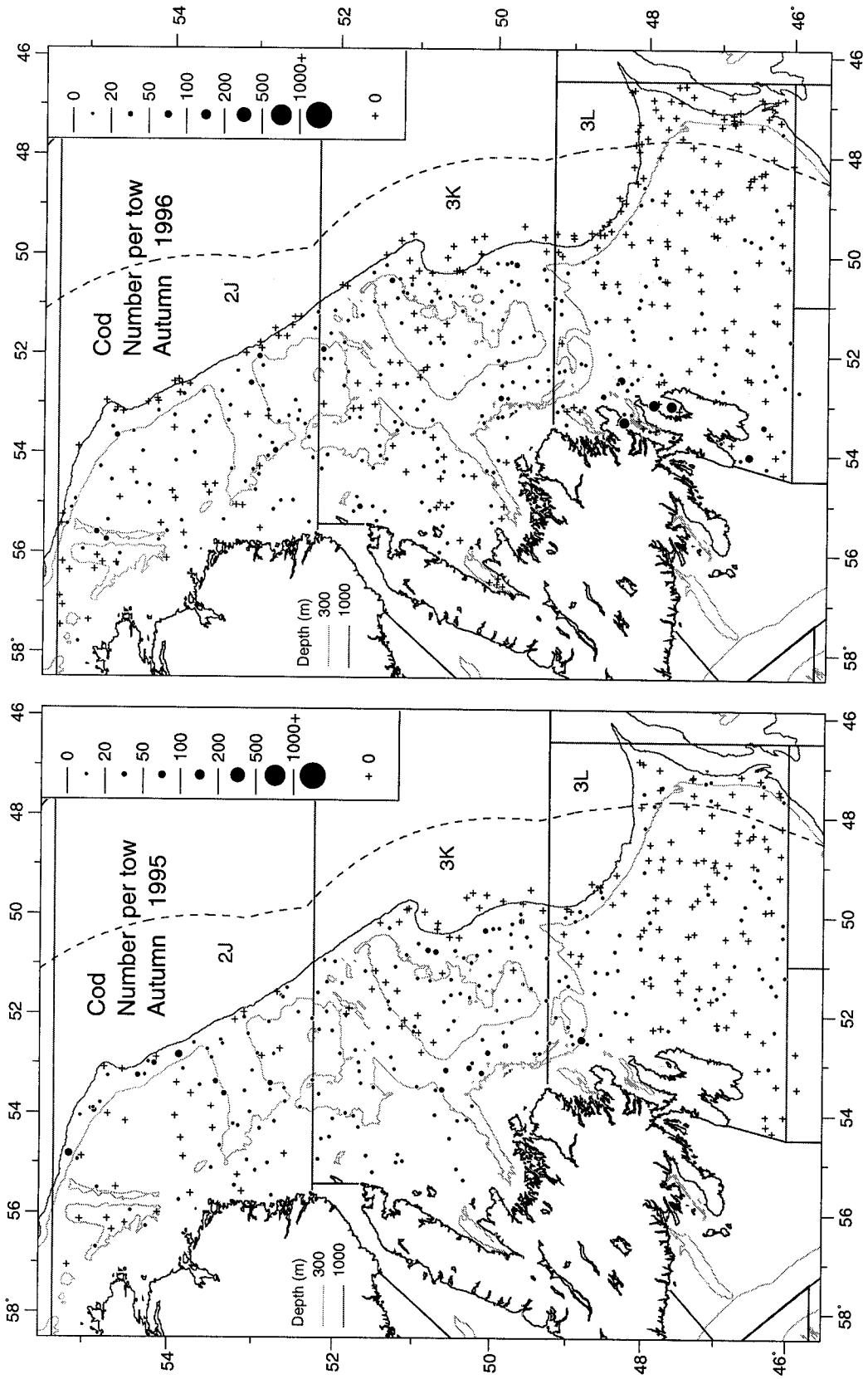


Fig. 13f. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1995-1996.

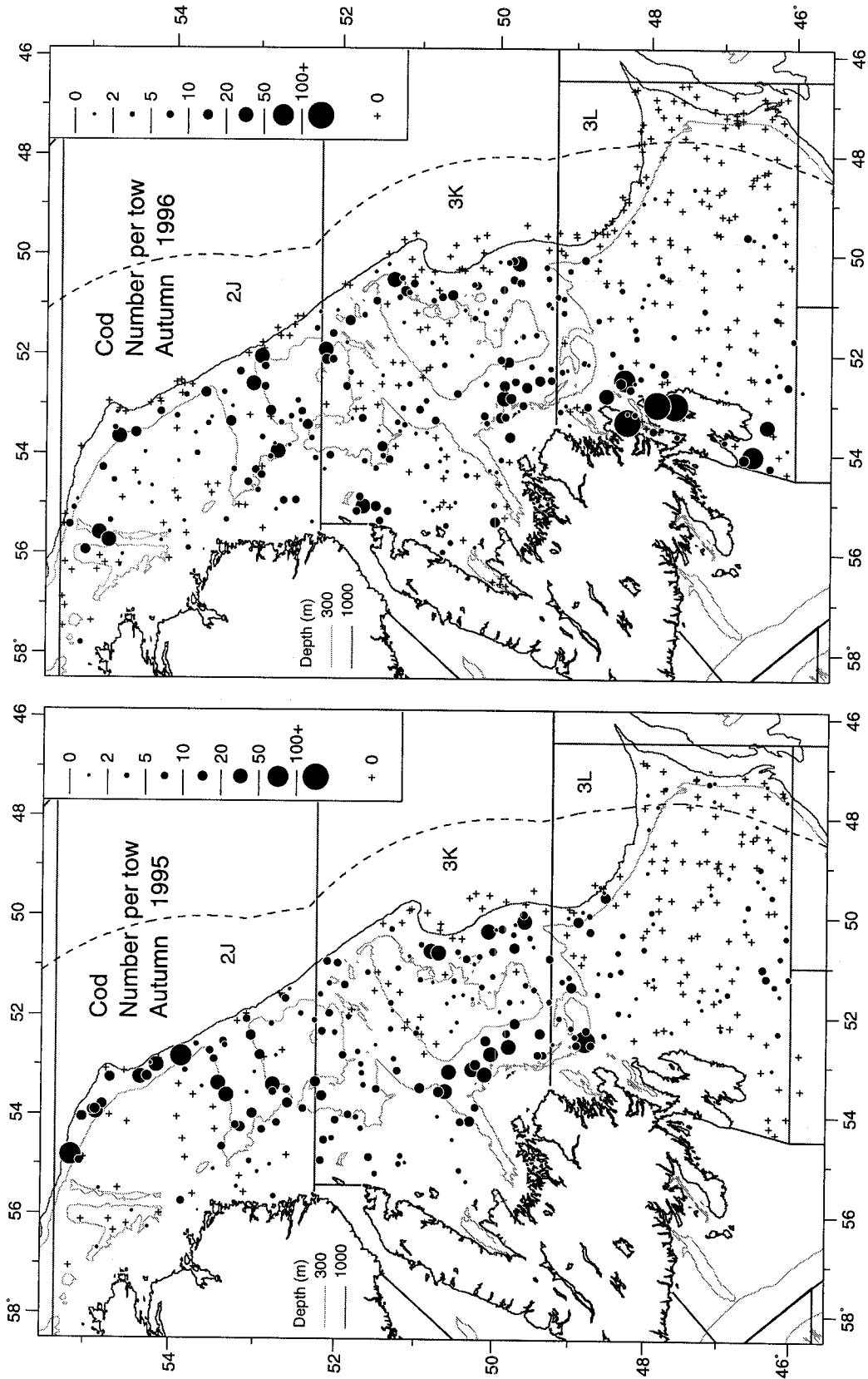


Fig. 14a. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1995-1996.

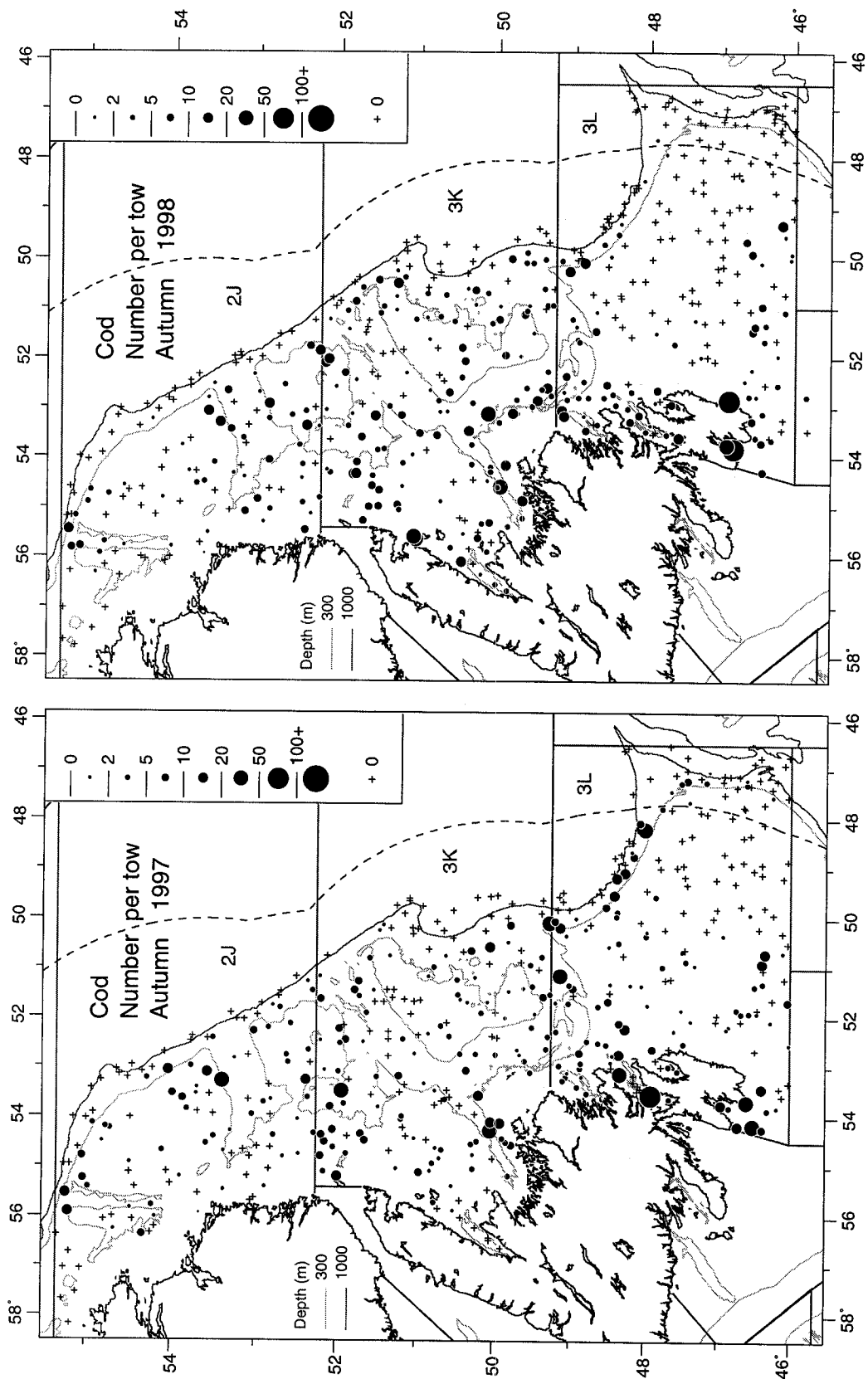


Fig. 14b. Cod distribution (numbers per standard tow) during the autumn survey in Divisions 2J, 3K and 3L in 1997-1998.

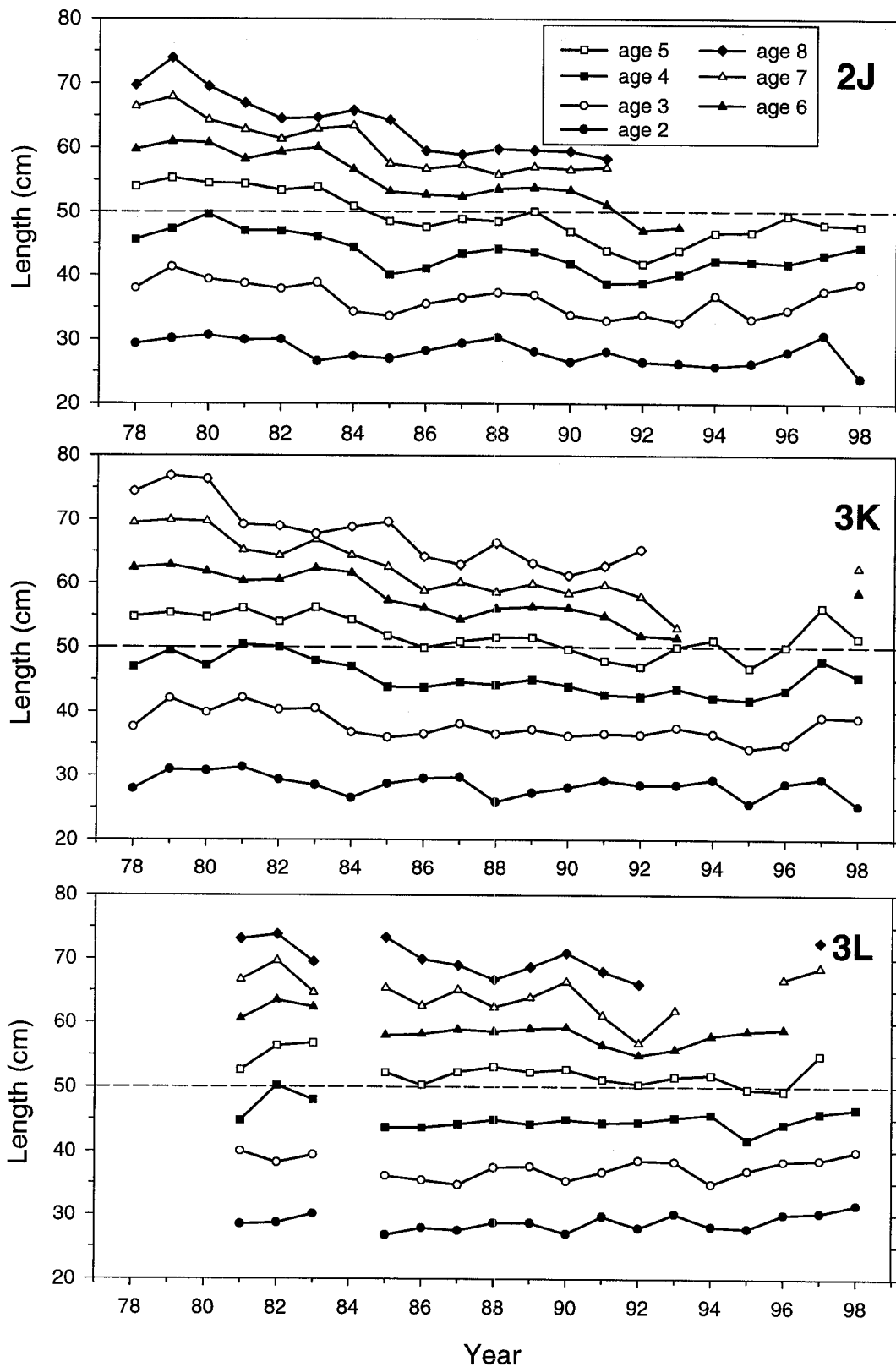


Fig. 15. Mean lengths-at-age for cod caught during the autumn bottom-trawl surveys. See Lilly (MS 1998) for details.

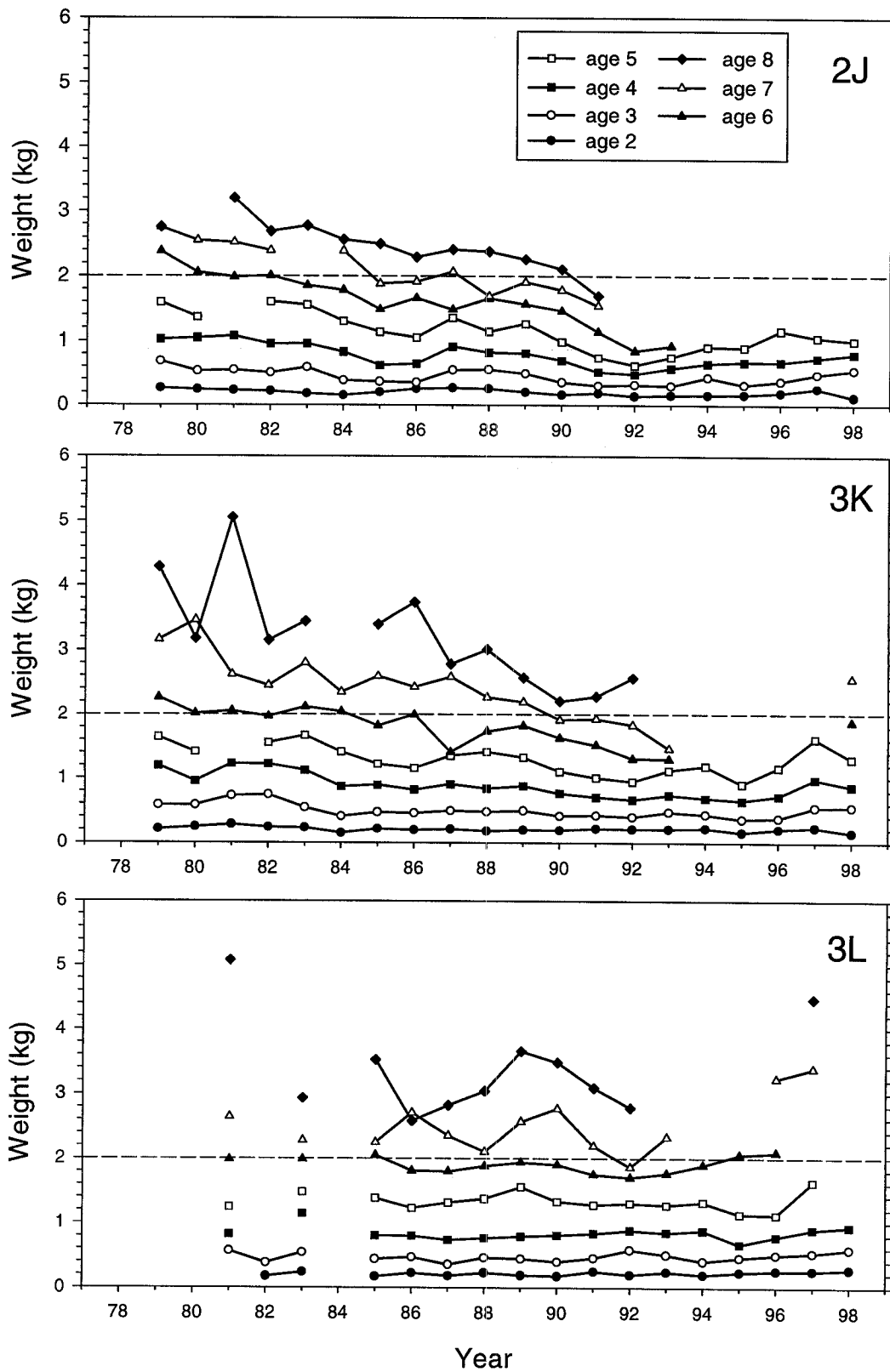


Fig. 16. Mean weights-at-age for cod caught during the autumn bottom-trawl surveys. See Lilly (MS 1998) for details.

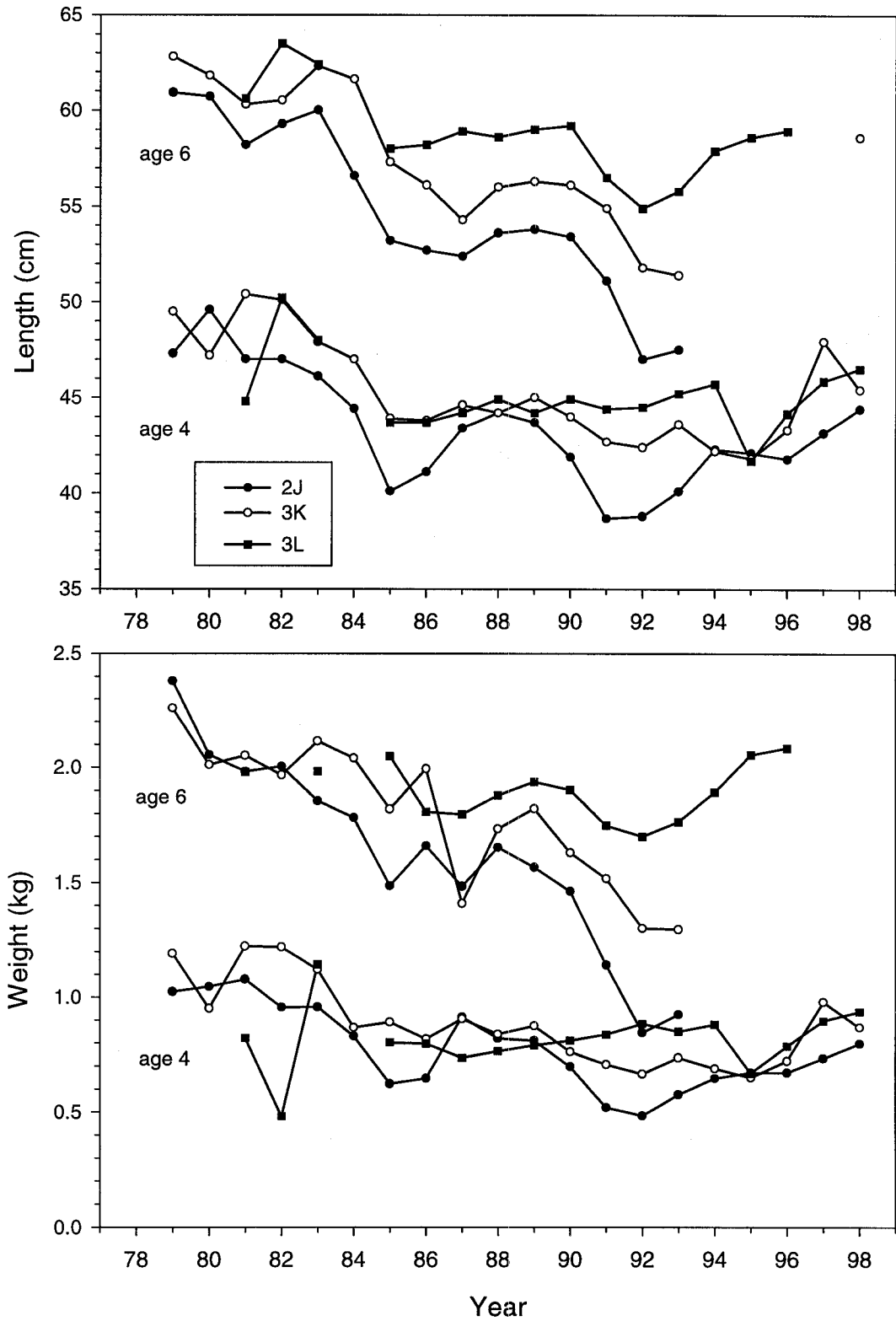


Fig. 17. Mean lengths and weights by Division for cod of ages 4 and 6 caught during the autumn bottom-trawl surveys in Divisions 2J, 3K and 3L.

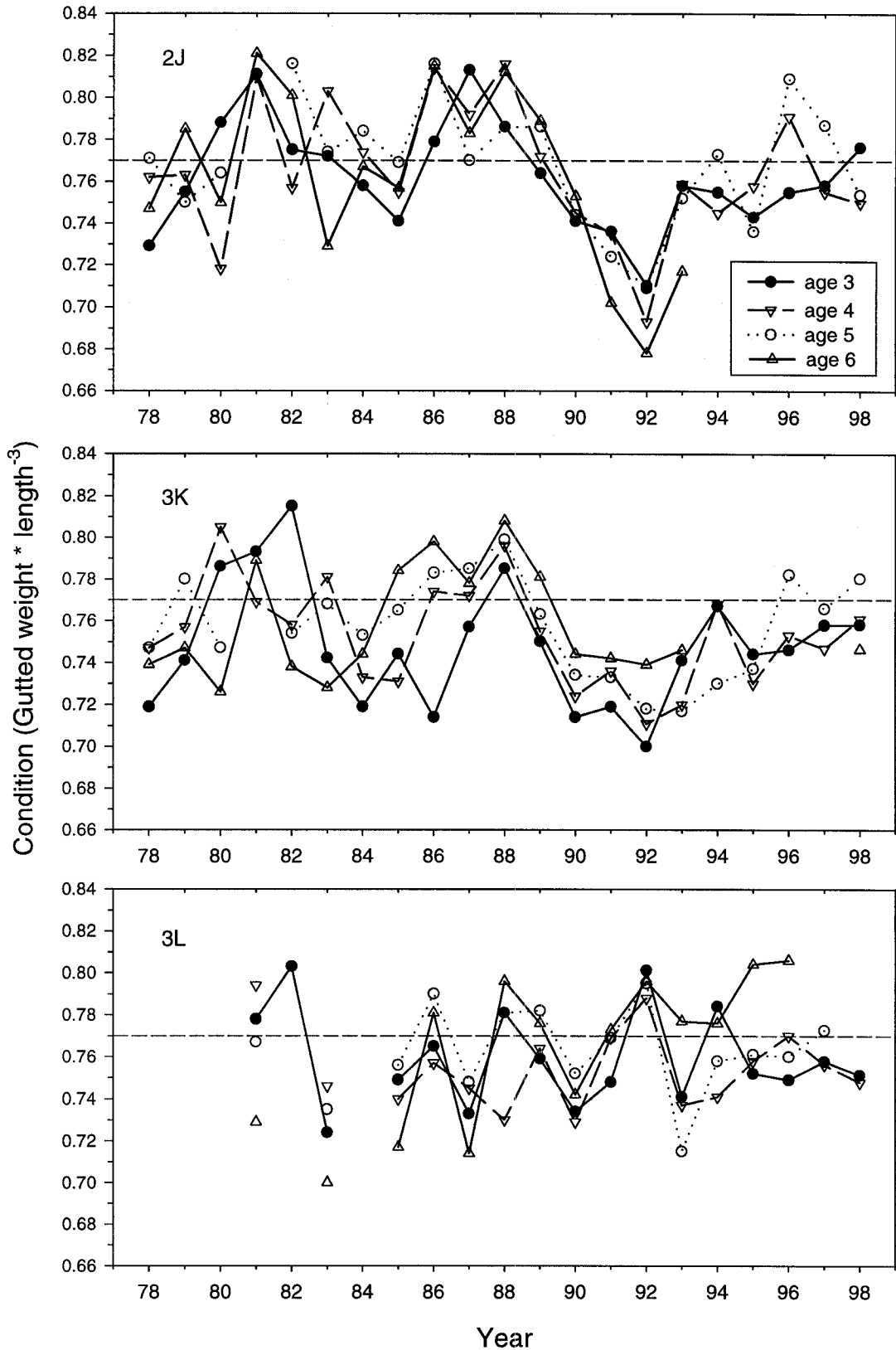


Fig. 18. Average Fulton's condition (gutted weight) at ages 3-6 for cod sampled during autumn surveys in Divisions 2J3KL. A condition factor of 0.77, which is the overall average reported by Taggart et al. (1994), is shown for reference.

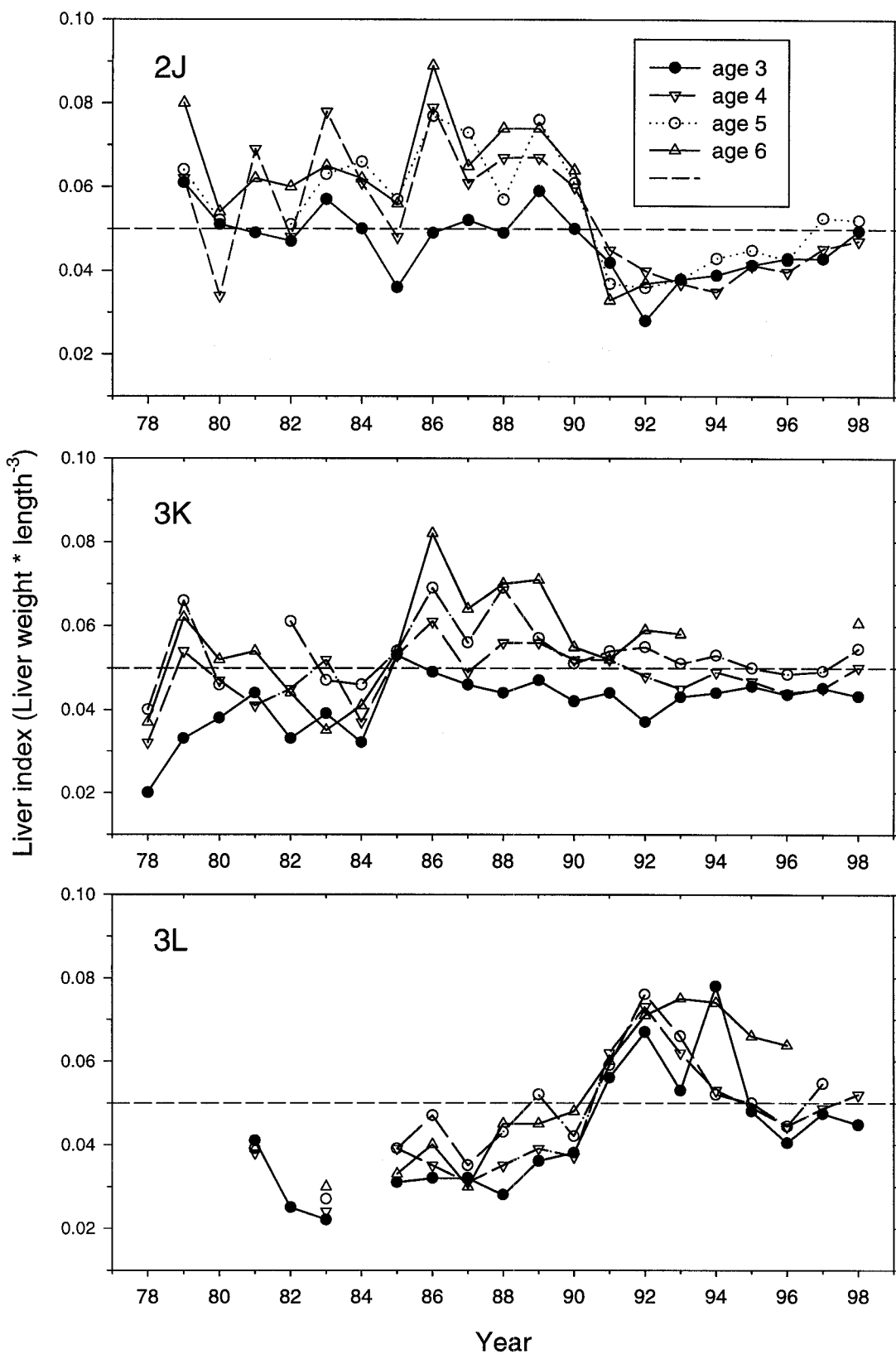


Fig. 19. Average liver index at ages 3-6 for cod sampled during autumn surveys in Divisions 2J3KL.

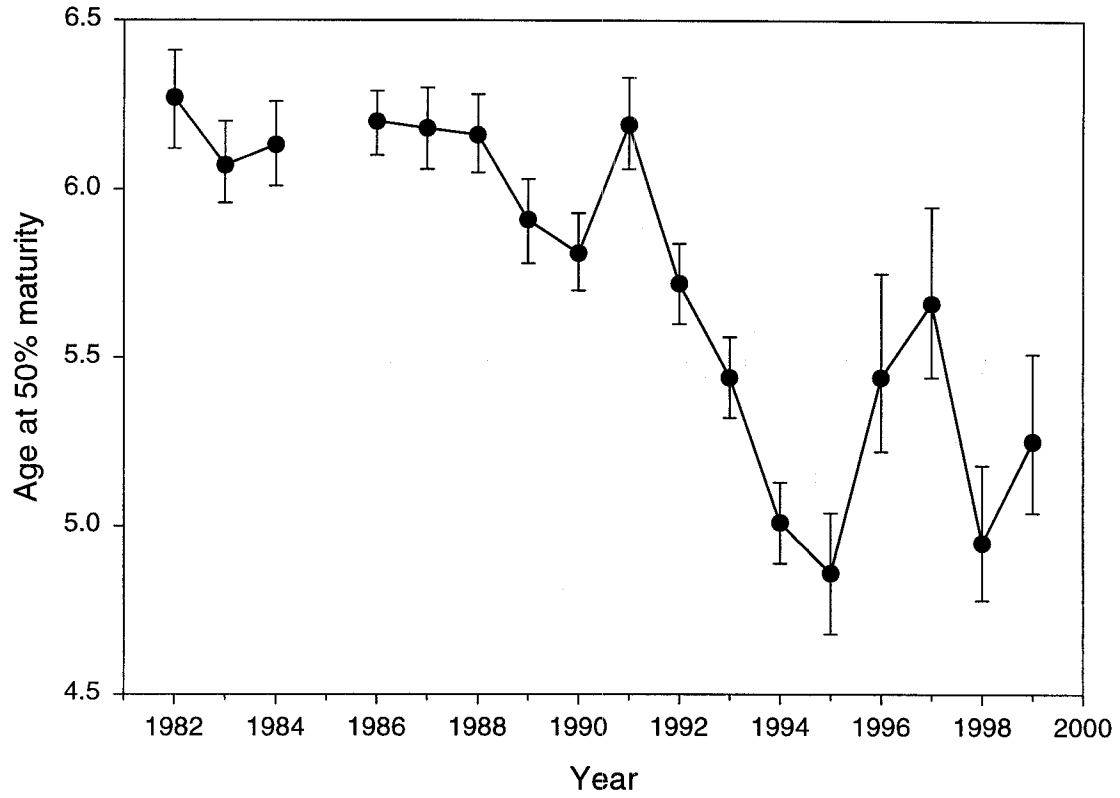


Fig. 20. Age at 50% maturity (\pm 95% CI) for female cod in NAFO Divisions 2J, 3K and 3L combined. Error bars are upper and lower 95% confidence intervals.

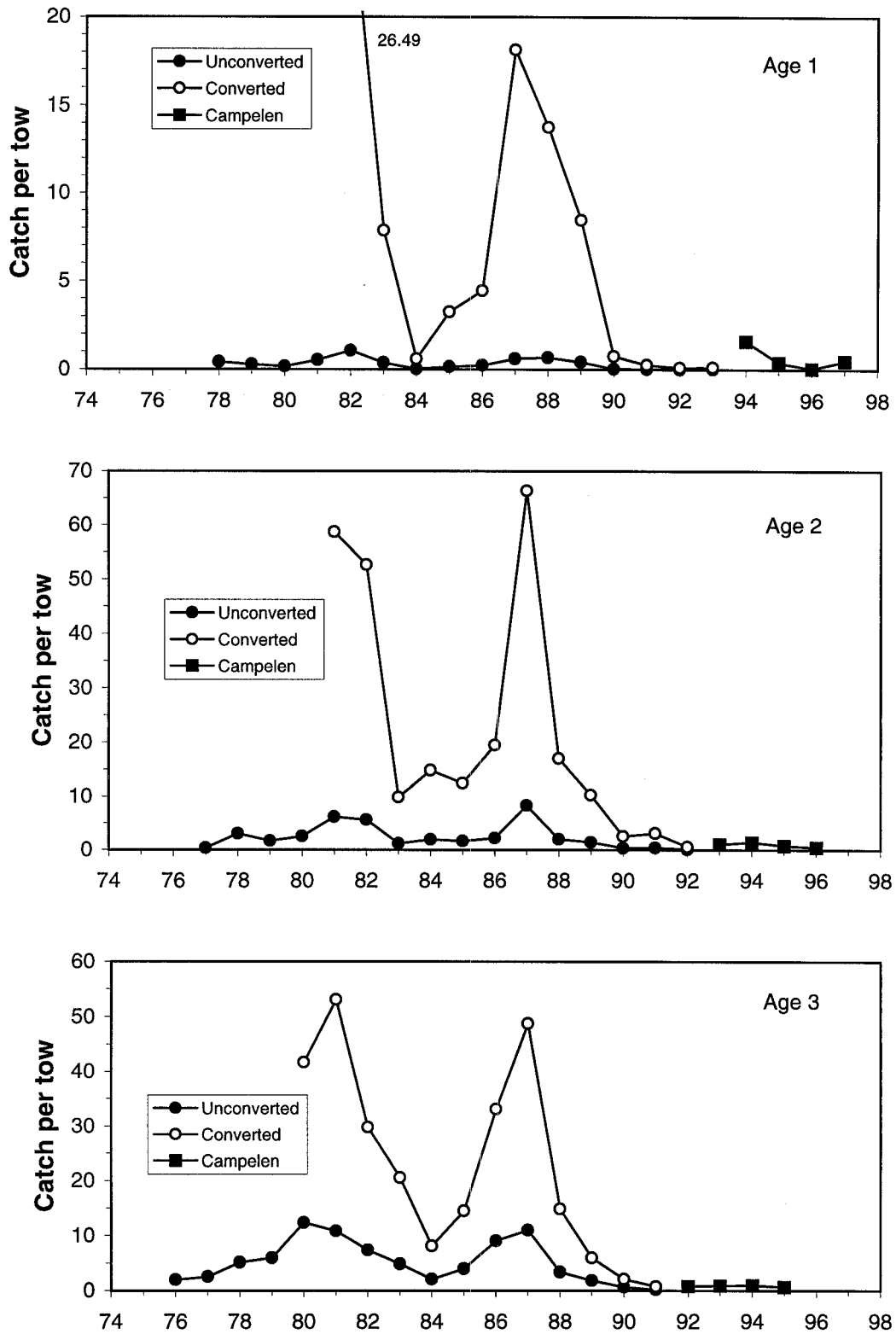


Fig. 21. Mean catch per tow of the 1976-1997 yearclasses at ages 1-3 during autumn research bottom-trawl surveys in Divisions 2J, 3K and 3L combined. Data obtained prior to the introduction of the Campelen trawl in 1995 are shown as actual (unconverted) numbers (from Shelton et al. (MS 1996) and in numbers converted to Campelen equivalents.

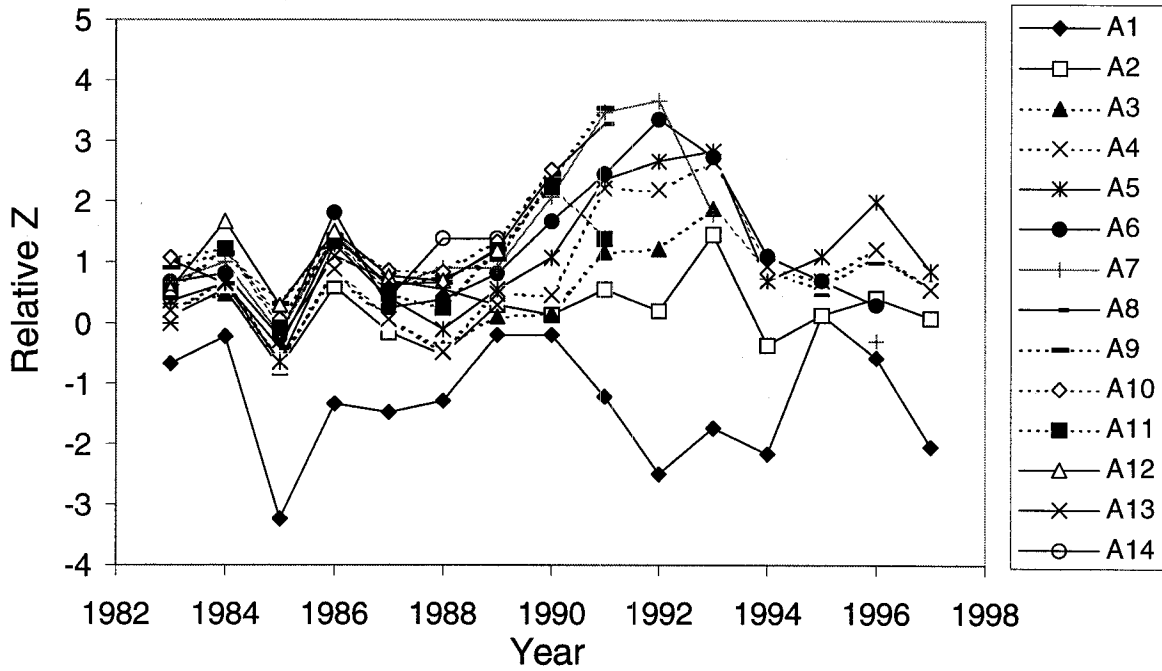


Fig. 22. Estimates of Z calculated from catches during the autumn research bott-trawl surveys.

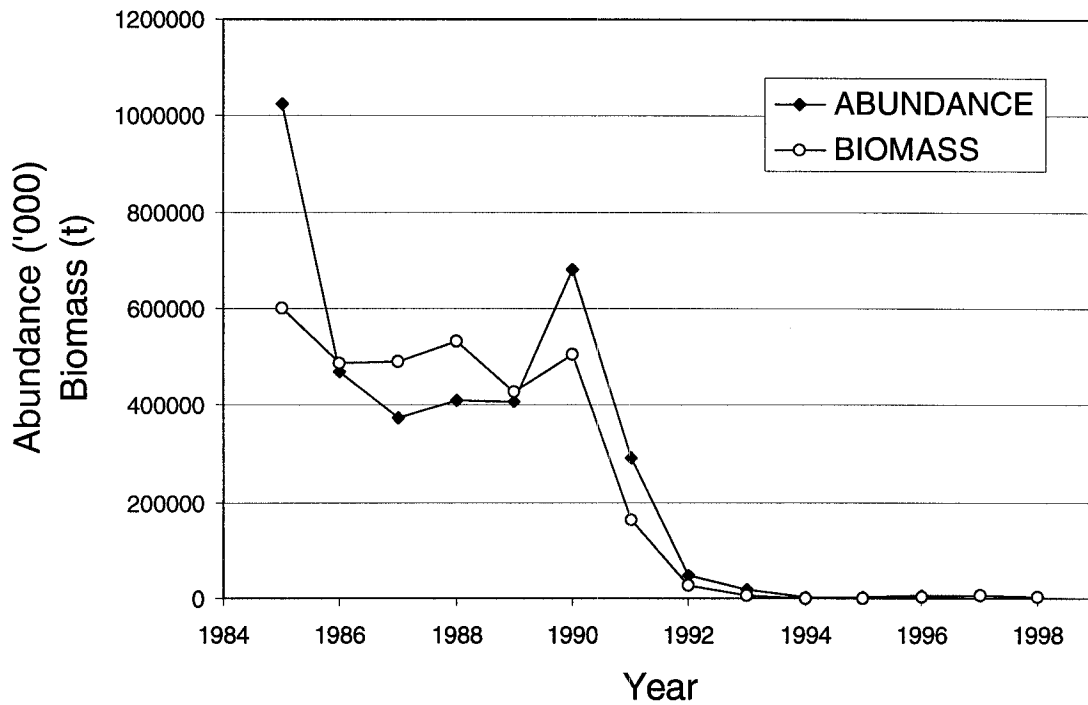


Fig. 23. Abundance and biomass of cod for index strata in Division 3L during spring research bottom-trawl surveys.