

Kolarctic CBC – Project KO4178; Conserving our Atlantic salmon as a sustainable resource for people in the North; fisheries and conservation in the context of growing threats and a changing environment.

REPORT IX. Median dates of capture and cumulative salmon catches in bag net and bend net fishery in four salmon districts in Finnmark

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<p>REPORT IX. Median dates of capture and cumulative salmon catches in bag net and bend net fishery in four salmon districts in Finnmark</p> <p>Niemelä^{1,2}, E., Hassinen^{1,2}, E., Høstmark³, M.S., Kalske³, T.H</p> <p>¹⁾ Biodiversity Unit, University of Turku; Turku, Finland ²⁾ Firm Olli van der Meer; Oulu; Finland ³⁾ County Governor of Troms and Finnmark; Vadsø, Norway</p>	
<p>Abstract</p> <p>Cumulative catch curves can be used to clarify differences in the capturing time for small, medium and large salmon in larger areas like in salmon districts. From these cumulative curves it can be used median date of capture for different sizes of salmon and then compare differences in the capture dates between areas. Median dates of capture for small, medium and large salmon are differing between the years 1993-2021 in all salmon districts in Finnmark. Differences between the years can be caused by changes in the fishing period and annual differences in the timing of salmon migration along the coastal areas. Based on the catch reporting data and median dates of capture it is apparent that medium and large salmon have been caught annually firstly in Varanger salmon district. This difference can be observed especially clearly in the median date of capture for large salmon. Median dates of capture have taken place for medium and large size salmon nowadays later than in 1990's due to the later start of fishery compared to the earlier start in 1990's. There is no clear change in the median date of capture for small salmon along the years because they usually are occurring into the catches in the middle of summer and therefore are not affected by the changes in the start of fishing season. Median dates of capture are taking place for small, medium and large salmon in Alta salmon district.</p>	
<p>Key words: Median capture date, bag net, bend net, Atlantic salmon, <i>Salmo salar</i>, Finnmark</p>	
<p>Front page photo: Eero Niemelä</p>	

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1. Long-term annual median dates of capture with higher and lower quartiles for small, medium and large salmon in four salmon districts in Finnmark, the fishing methods bag net and bend net combined

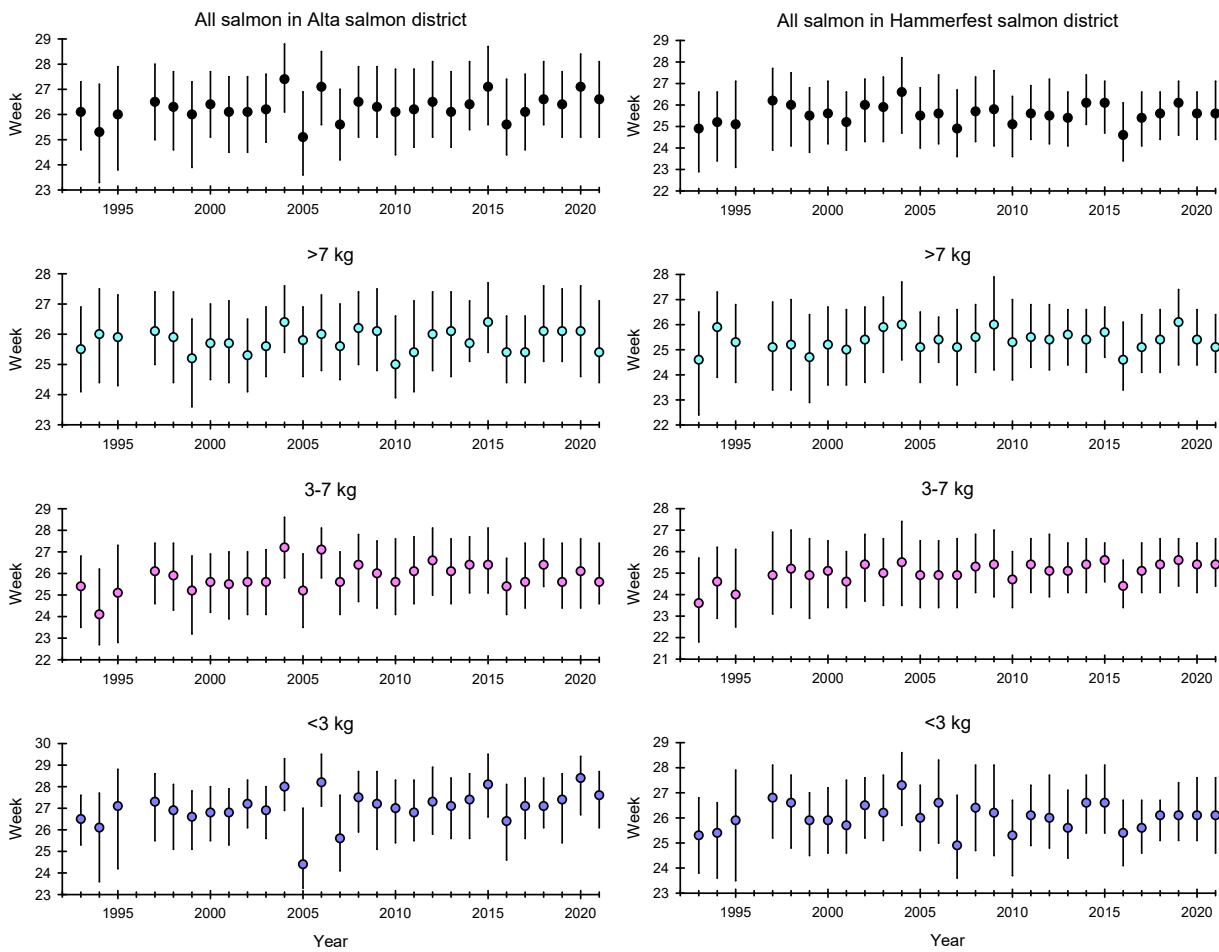


Figure 1. Annual median dates of capture with higher and lower quartiles for small, medium and large salmon in Alta and Hammerfest salmon districts, bag net and bend net fishing methods combined. Source; SSB.

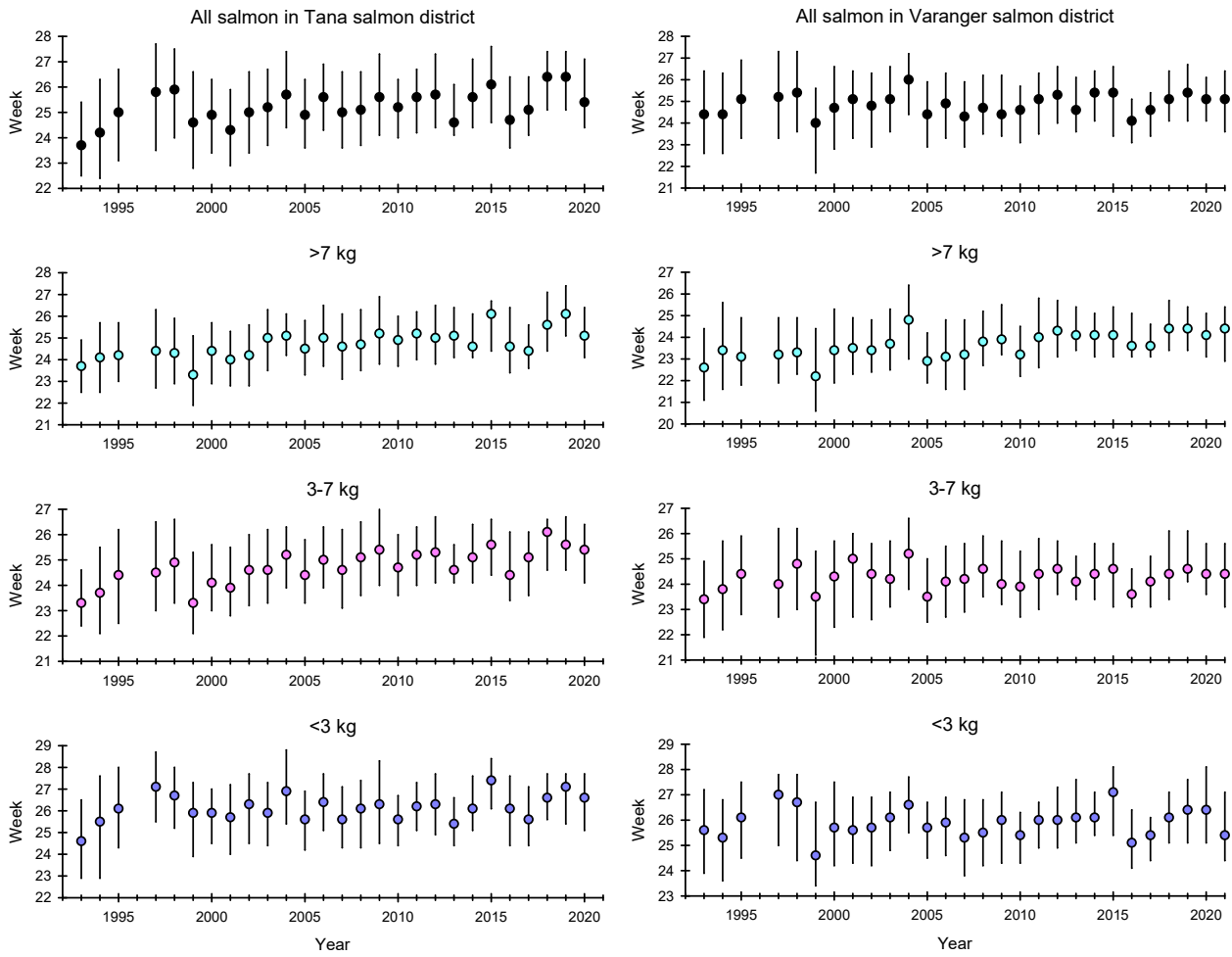


Figure 2. Annual median dates of capture with higher and lower quartiles for small, medium and large salmon in Tana and Varanger salmon districts in Finnmark, bag net and bend net fishing methods combined. Source; SSB.

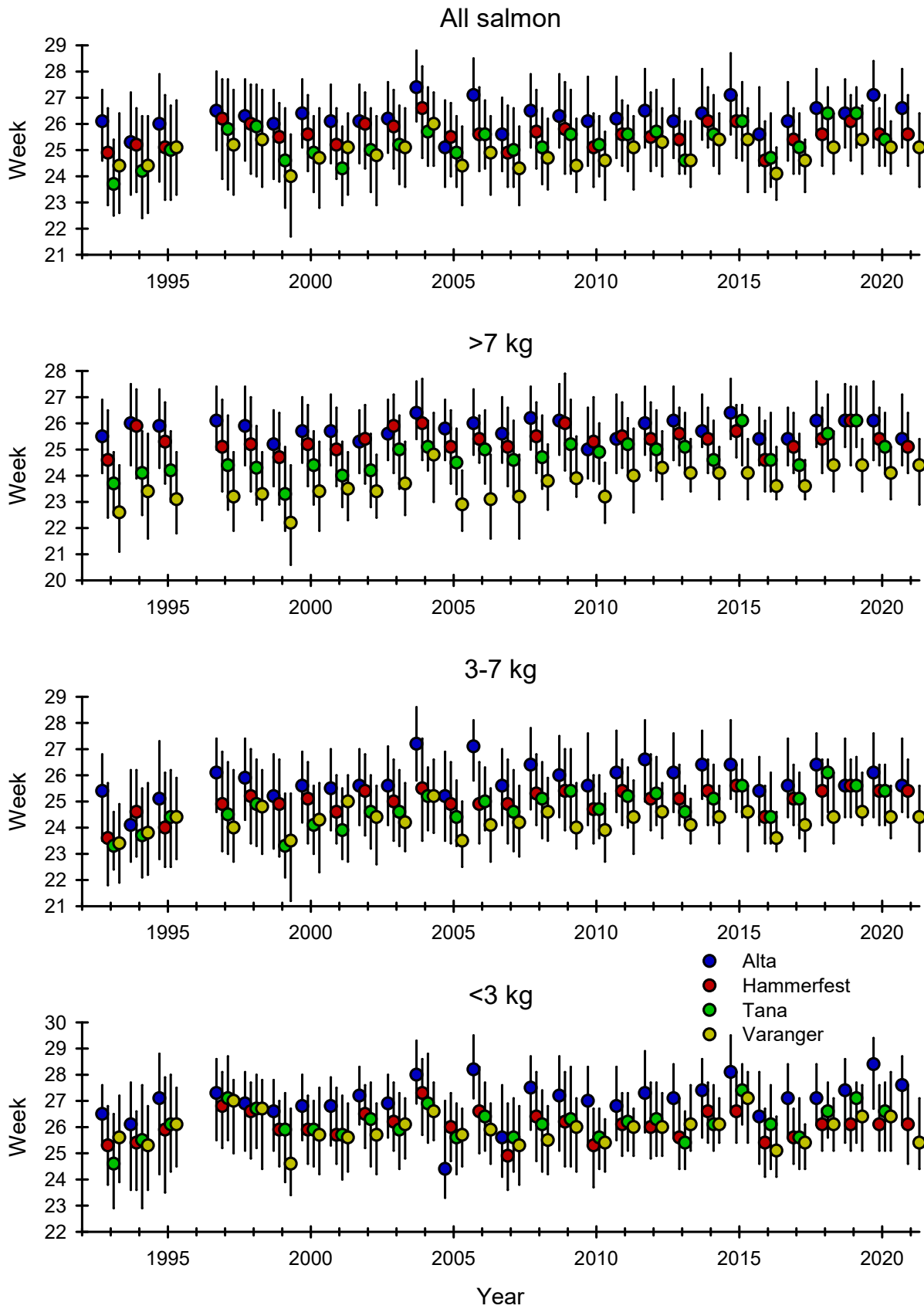


Figure 3. Differences in the annual median dates of capture with higher and lower quartiles for small, medium and large salmon between four salmon districts in Finnmark, bag net and bend net fishing methods combined. Source; SSB

2. Cumulative catches for salmon below 3 kg in bag net and bend net fishery in Finnmark salmon districts.

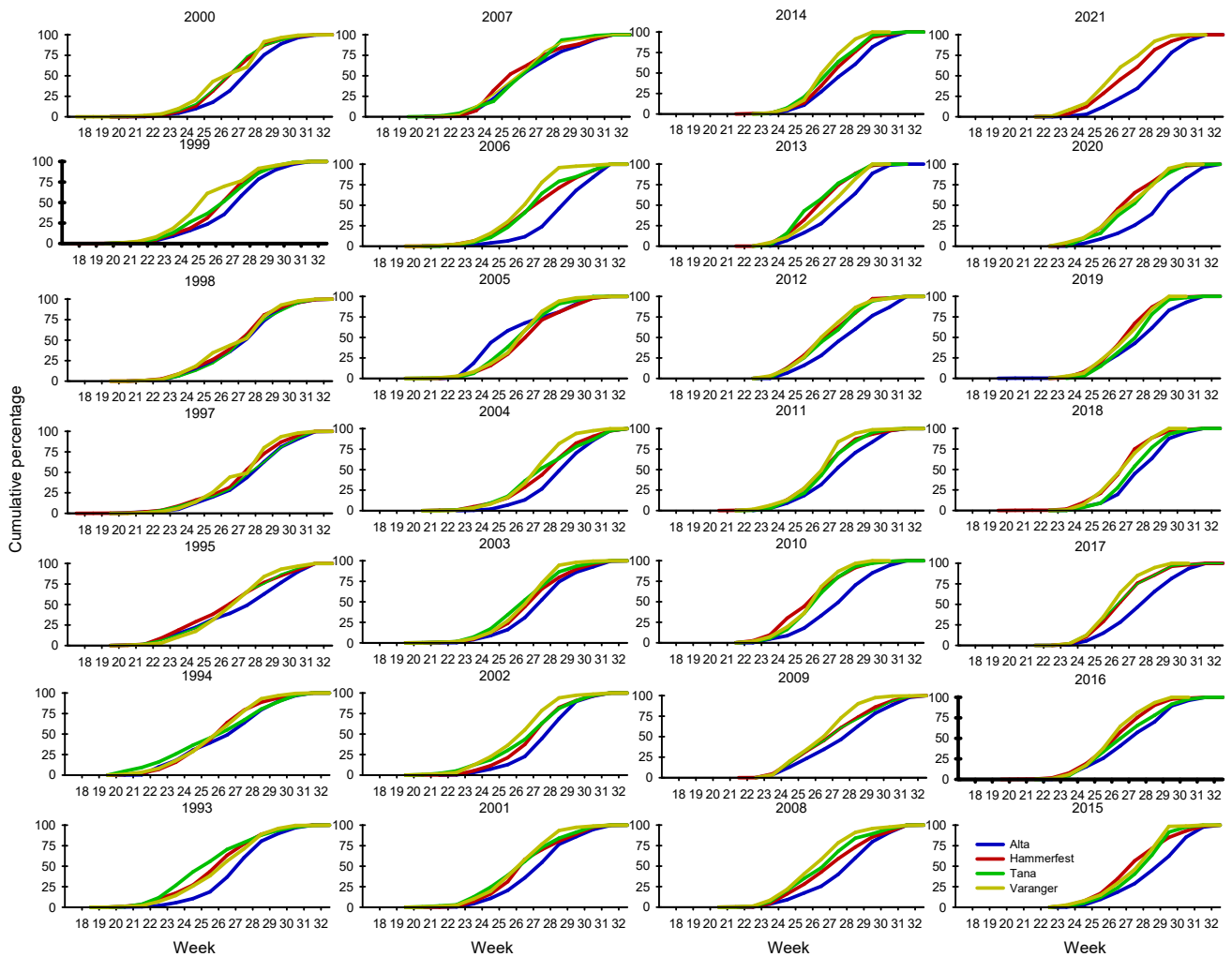


Figure 4. Cumulative catches from combined bag net and bend net fishery for salmon below 3 kg in Finnmark salmon districts. Source; SSB.

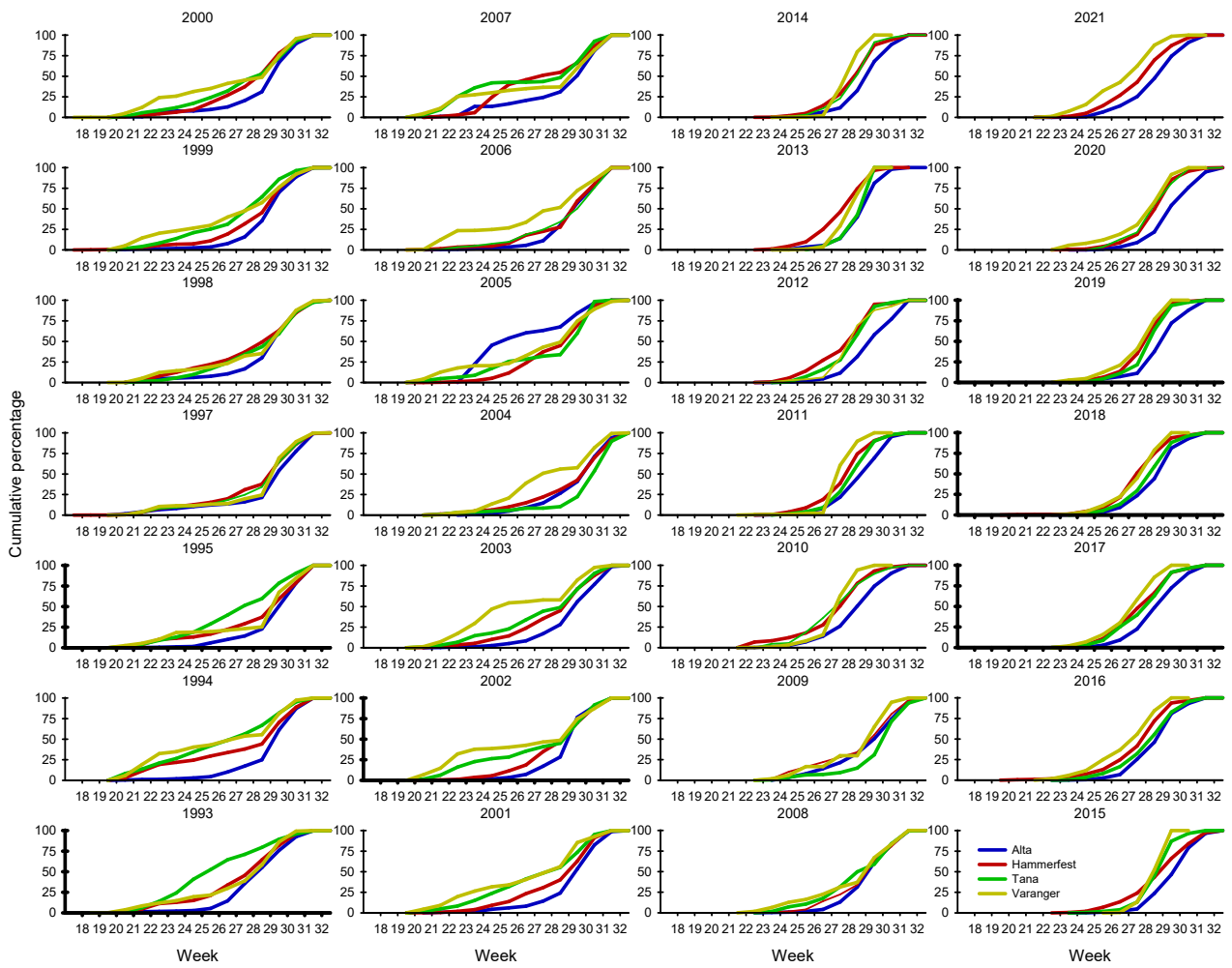


Figure 5. Cumulative bag net catches for salmon below 3 kg salmon in Finnmark salmon districts. Source; SSB.

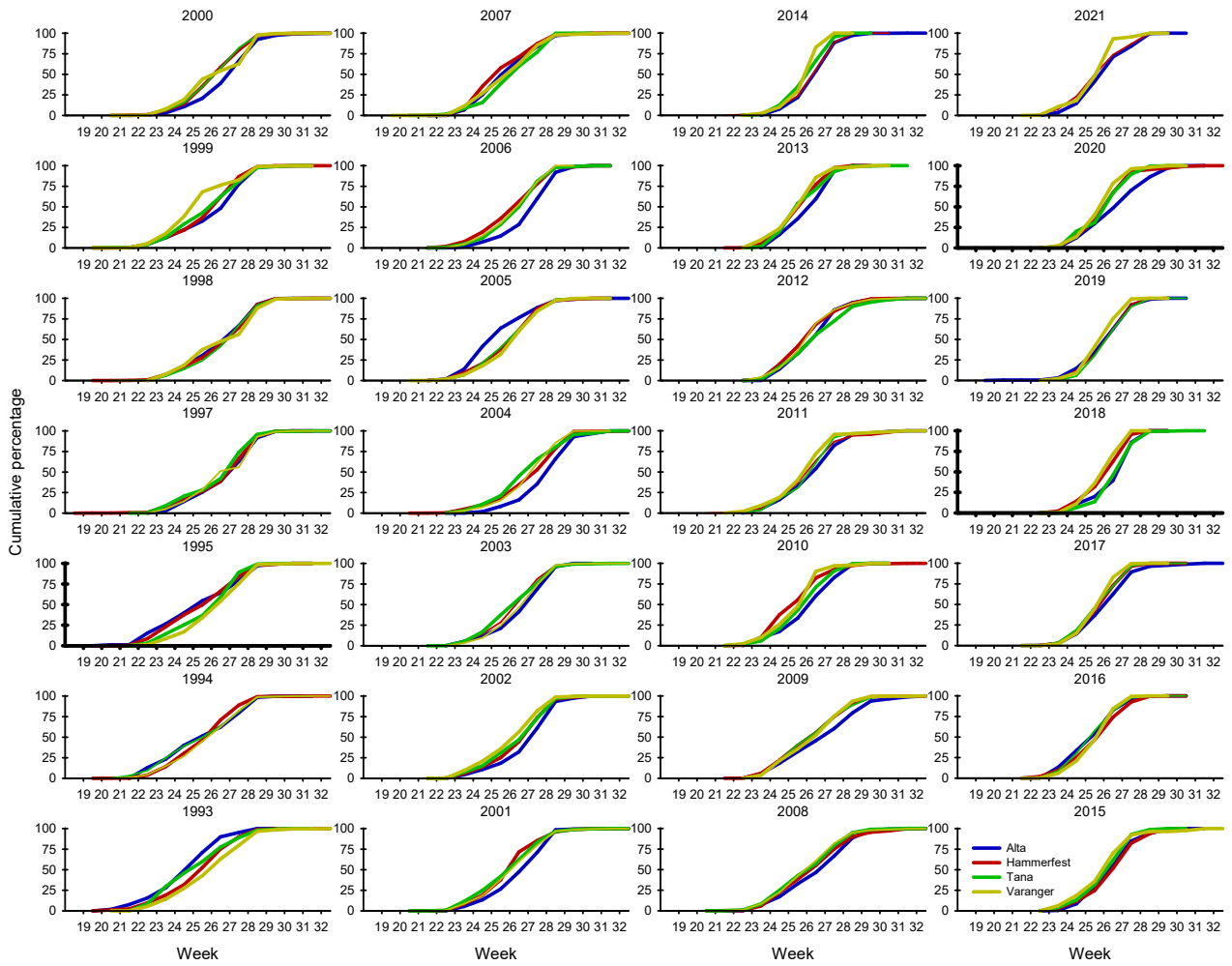


Figure 6. Cumulative bend net catches for salmon below 3 kg salmon in Finnmark salmon districts. Source; SSB.

3. Cumulative catches for salmon between 3–7 kg in bag net and bend net fishery in Finnmark salmon districts.

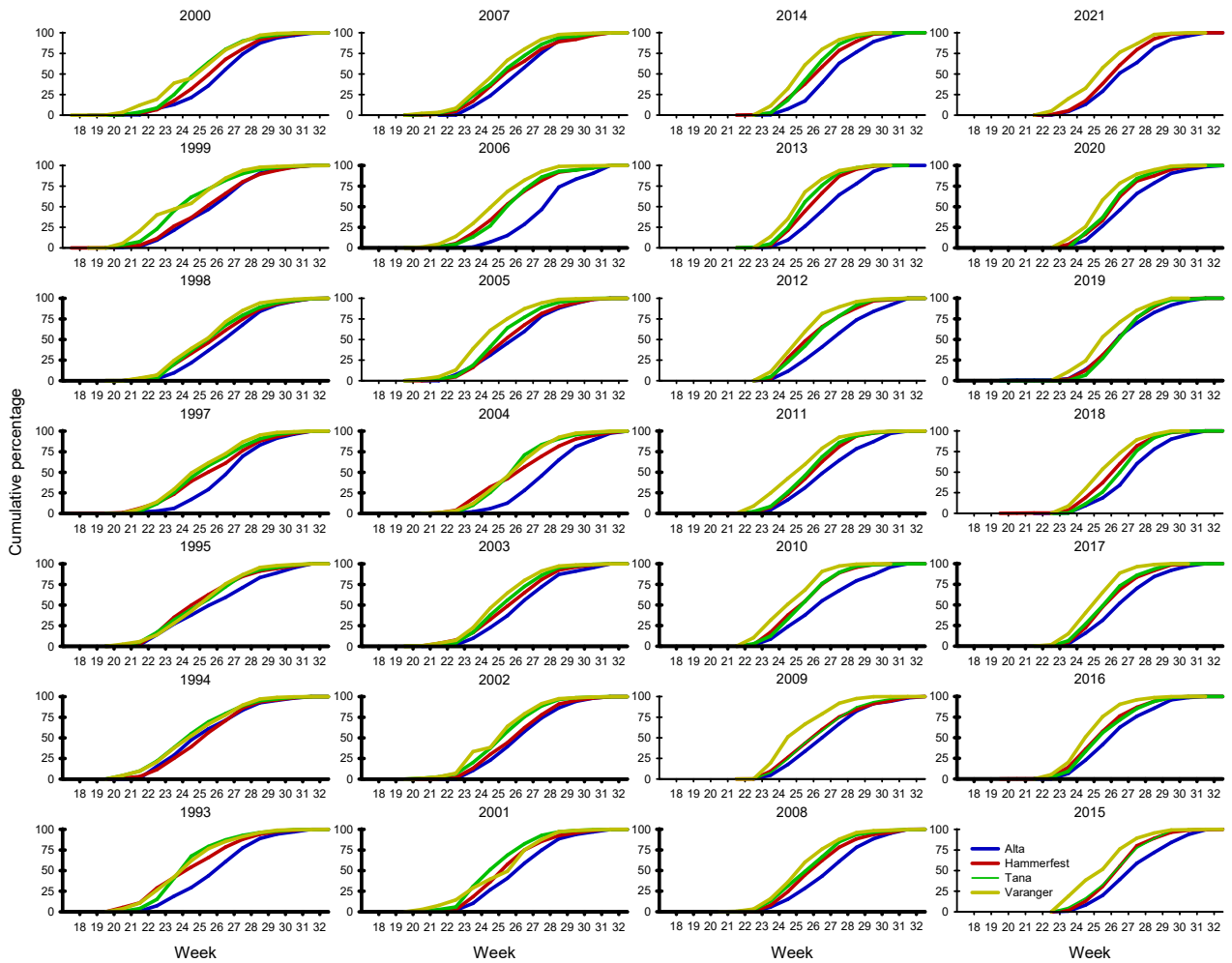


Figure 7. Cumulative catches from combined bag net and bend net fishery for salmon between 3-7 kg in Finnmark salmon districts. Source; SSB.

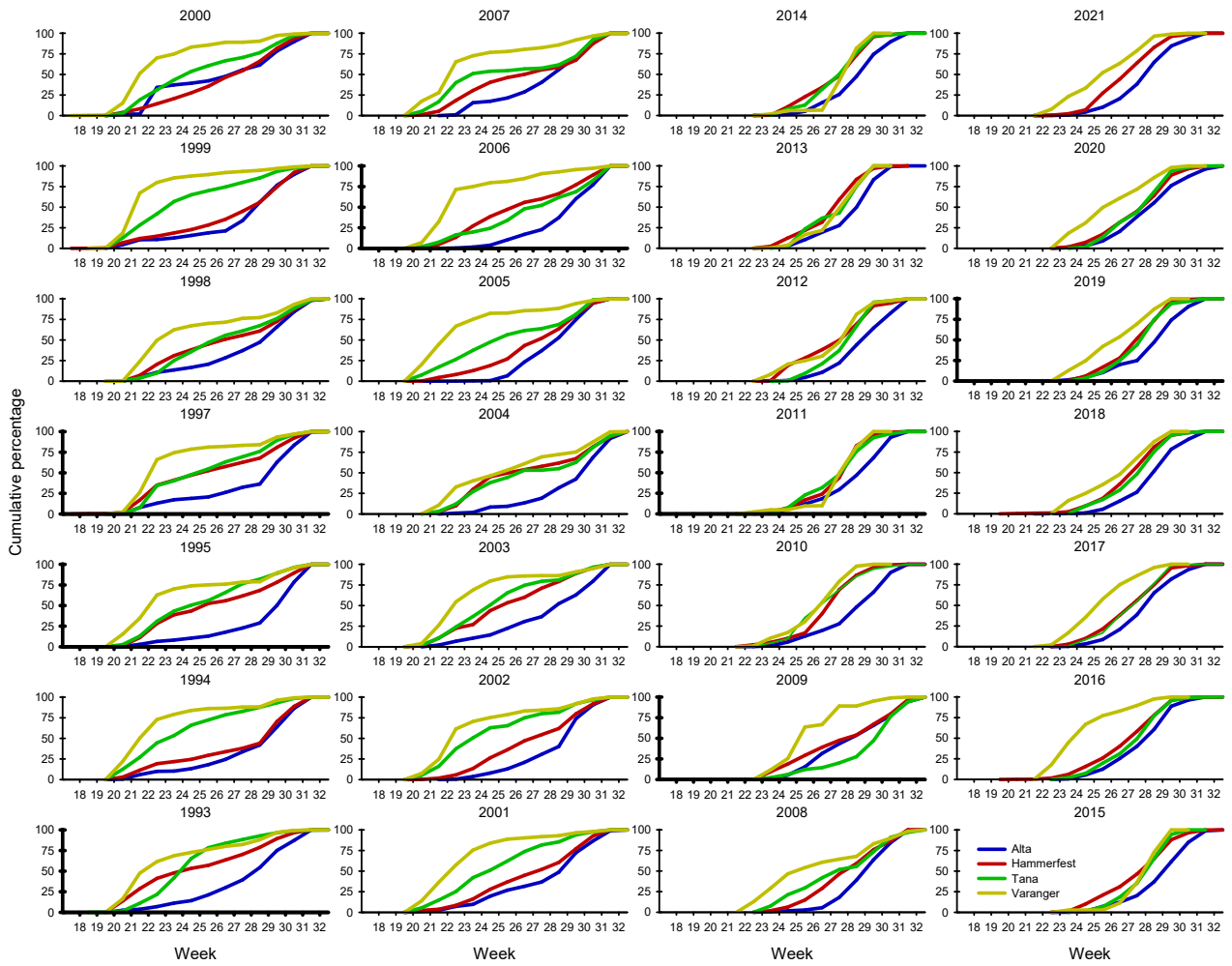


Figure 8. Cumulative bag net catches for salmon between 3-7 kg in Finnmark salmon districts. Source; SSB.

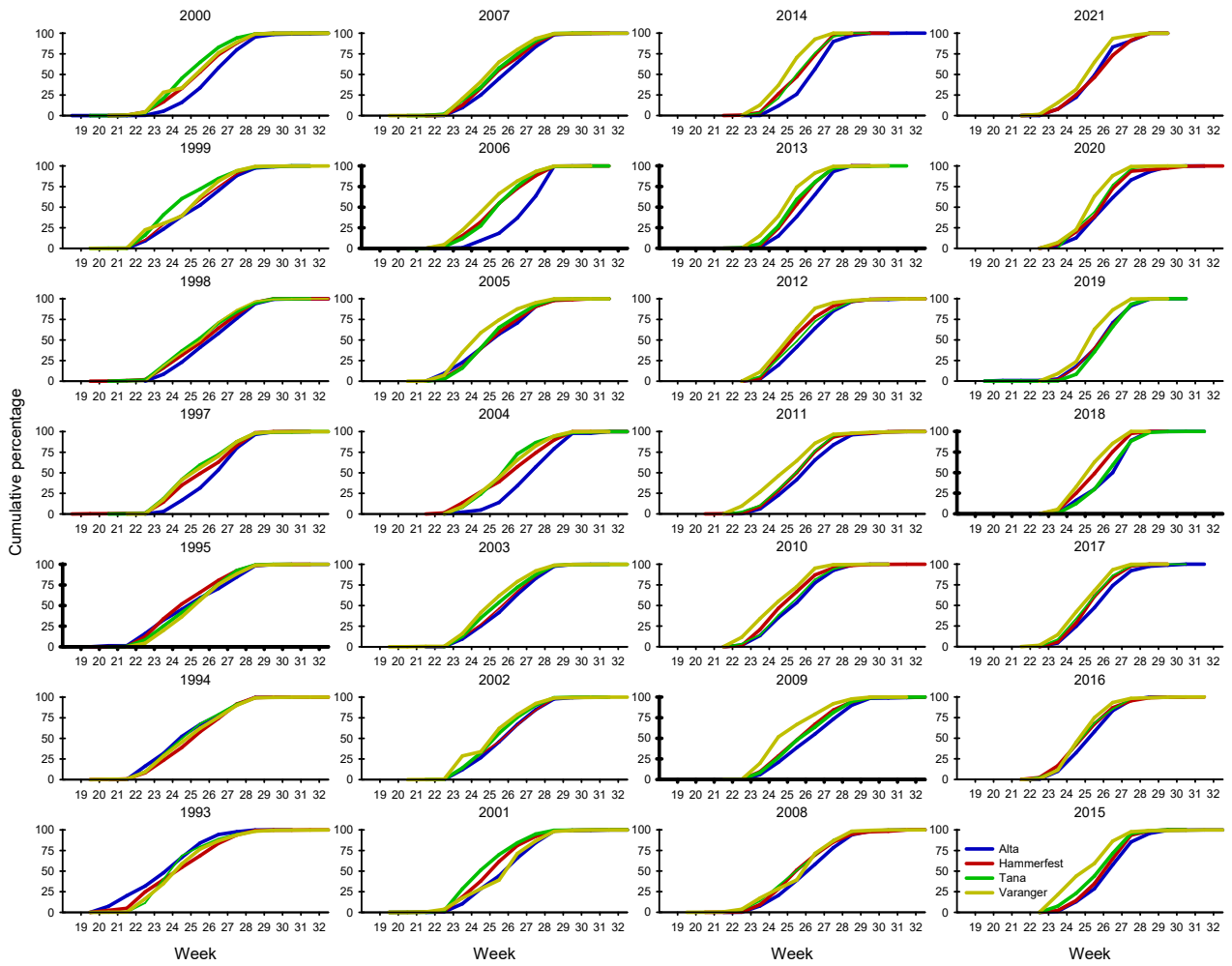


Figure 9. Cumulative bend net catches for salmon between 3-7 kg in Finnmark salmon districts. Source; SSB.

4. Cumulative catches for salmon above 7 kg in bag net and bend net fishery in Finnmark salmon districts.

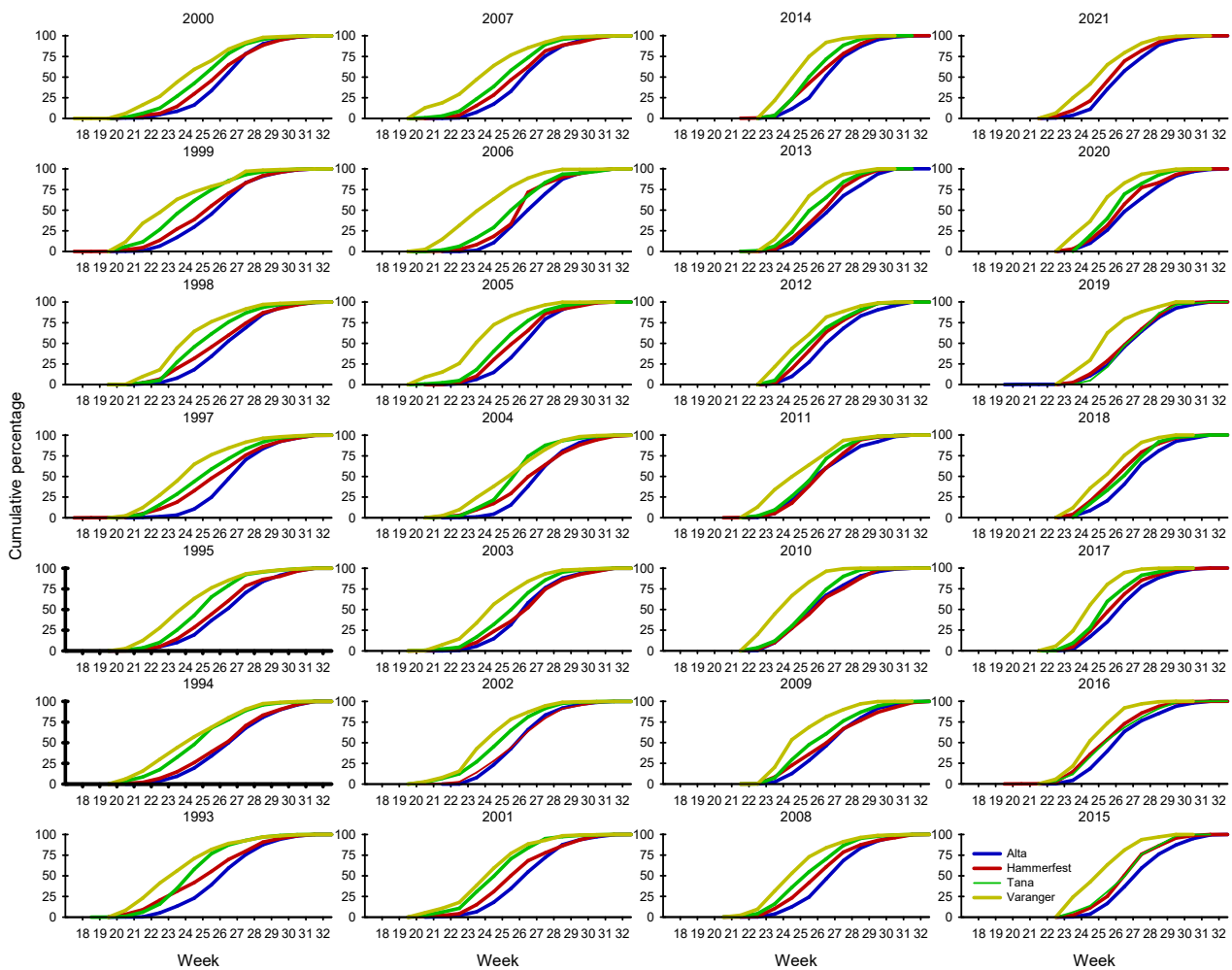


Figure 10. Cumulative catches from combined bag net and bend net fishery for salmon above 7 kg in Finnmark salmon districts. Source; SSB.

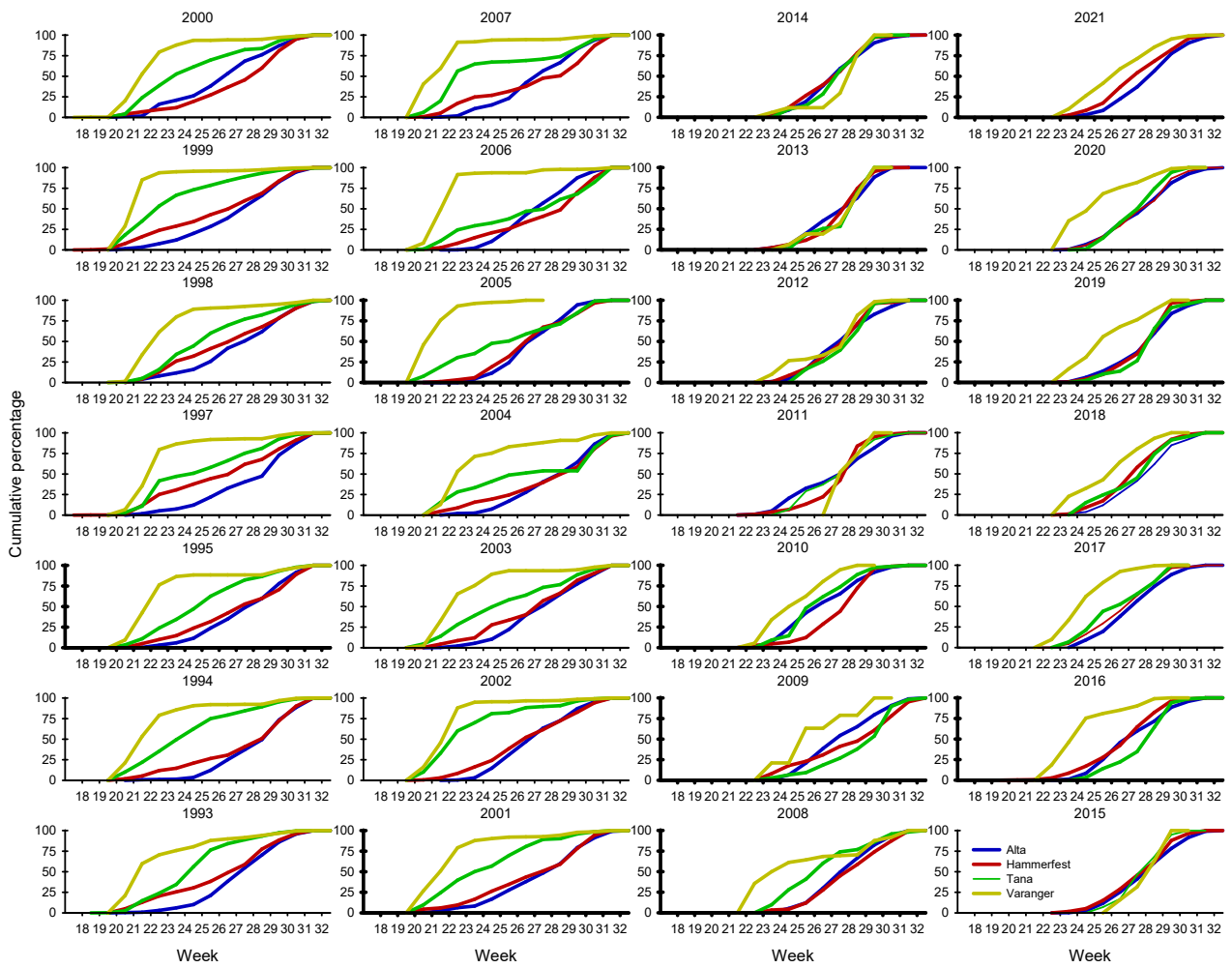


Figure 11. Cumulative bag net catches for salmon above 7 kg in Finnmark salmon districts. Source; SSB.

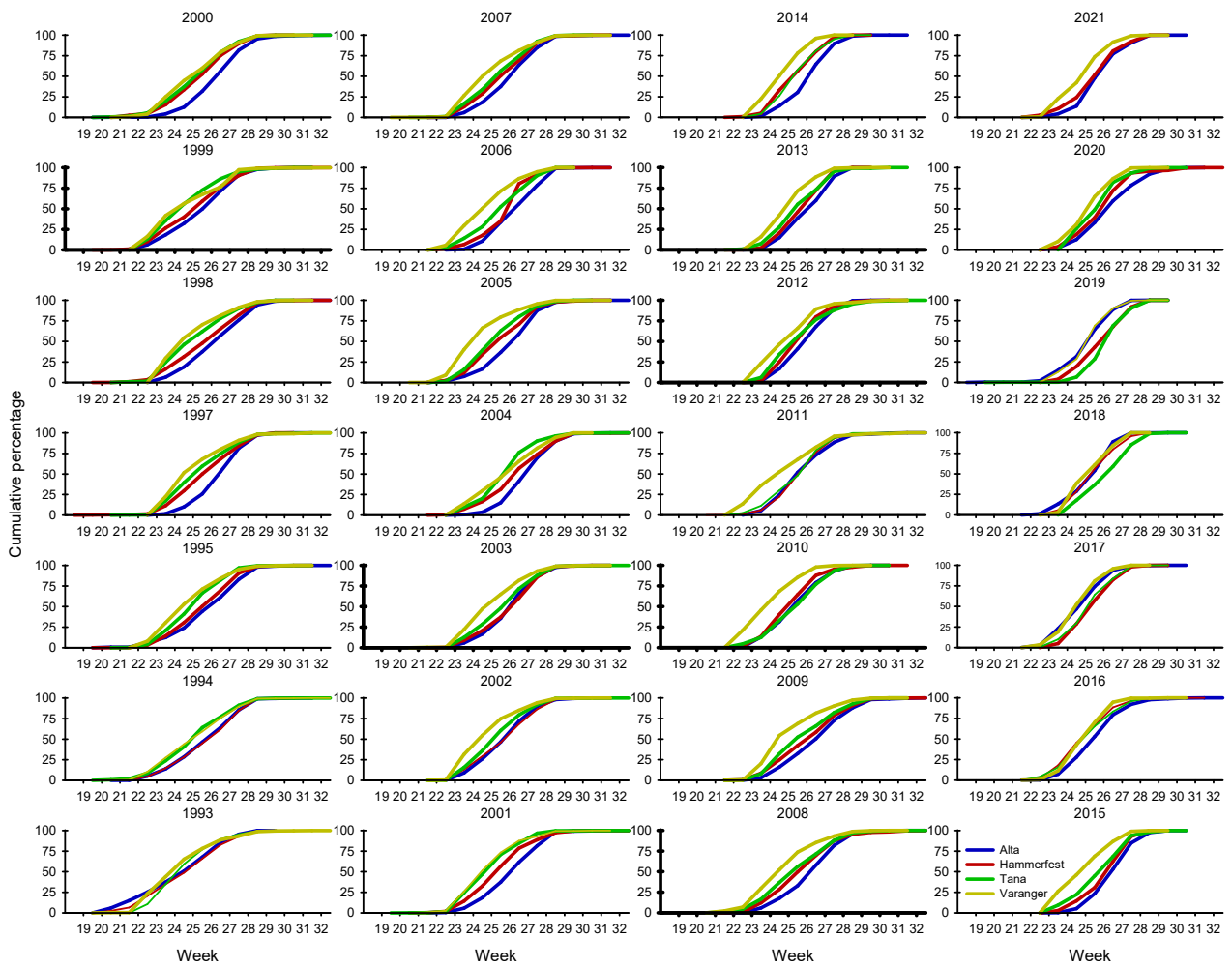


Figure 12. Cumulative bend net catches for salmon above 7 kg in Finnmark salmon districts. Source; SSB.

5. Annual cumulative catches between three size groups of salmon in bag net and bend net fishery in four salmon districts in Finnmark

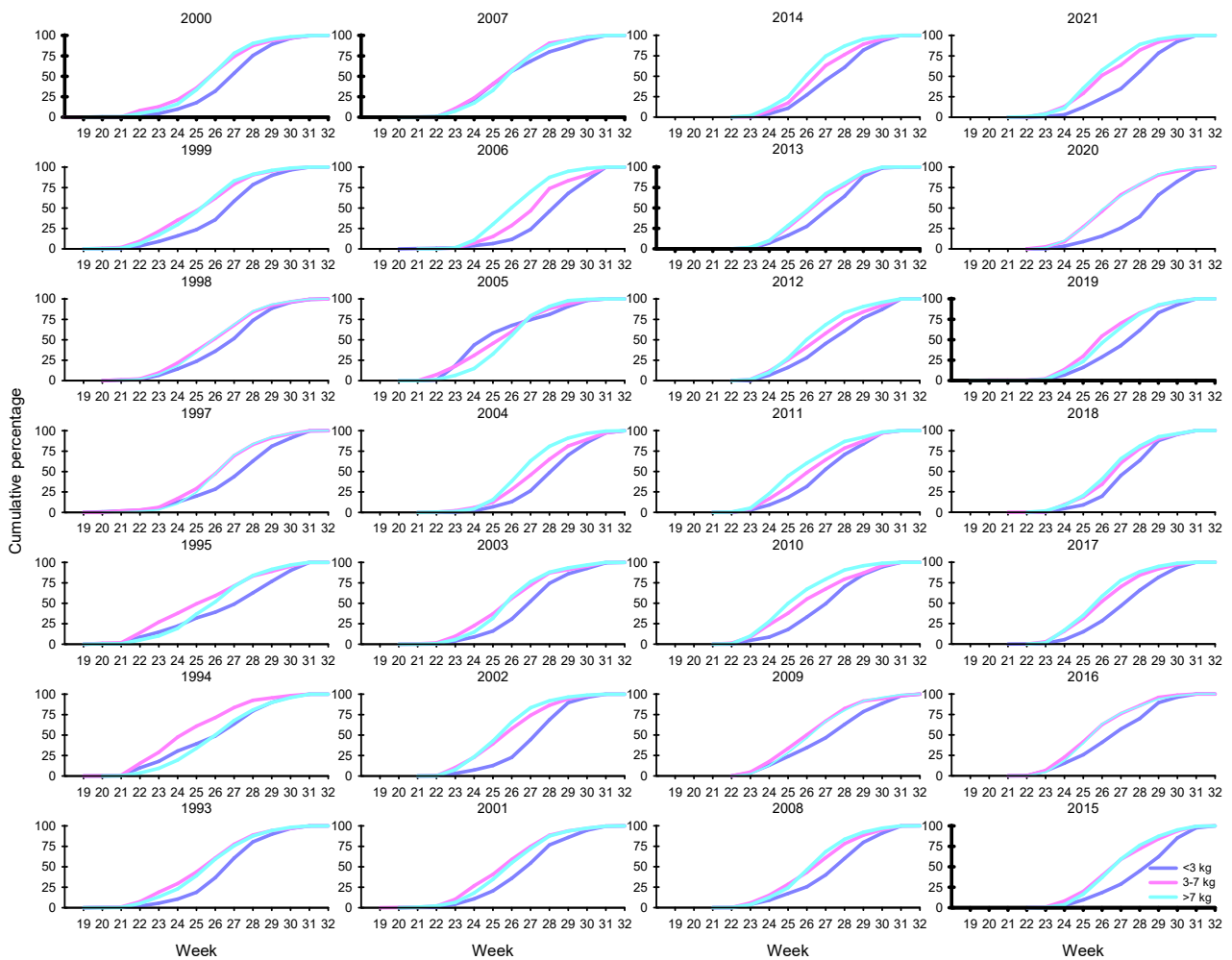


Figure 13. Annual cumulative catches from combined bag net and bend net fishery for three size groups of salmon in Alta salmon district. Source; SSB.

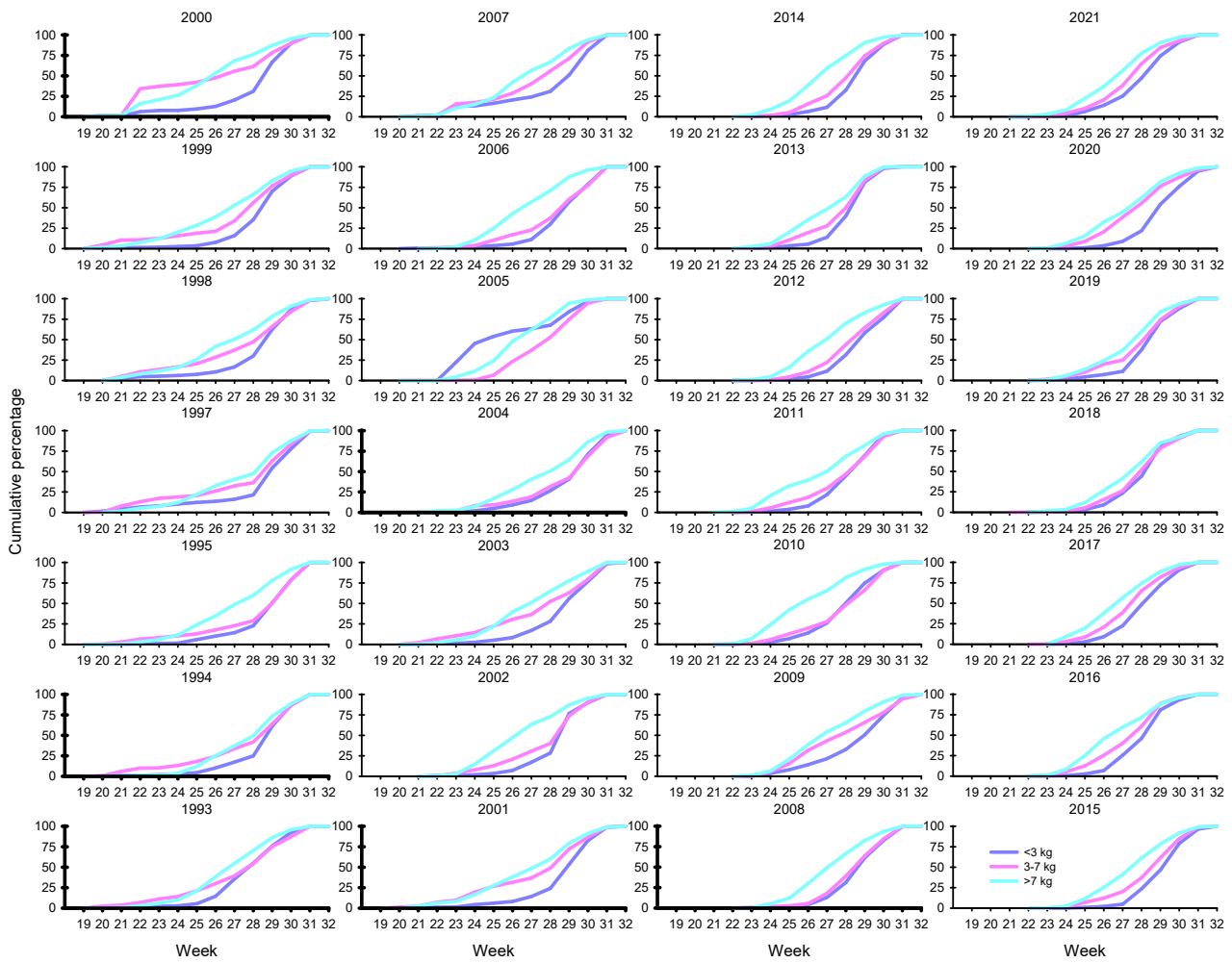


Figure 14. Annual cumulative bag net catches for three size groups of salmon in Alta salmon district. Source; SSB.

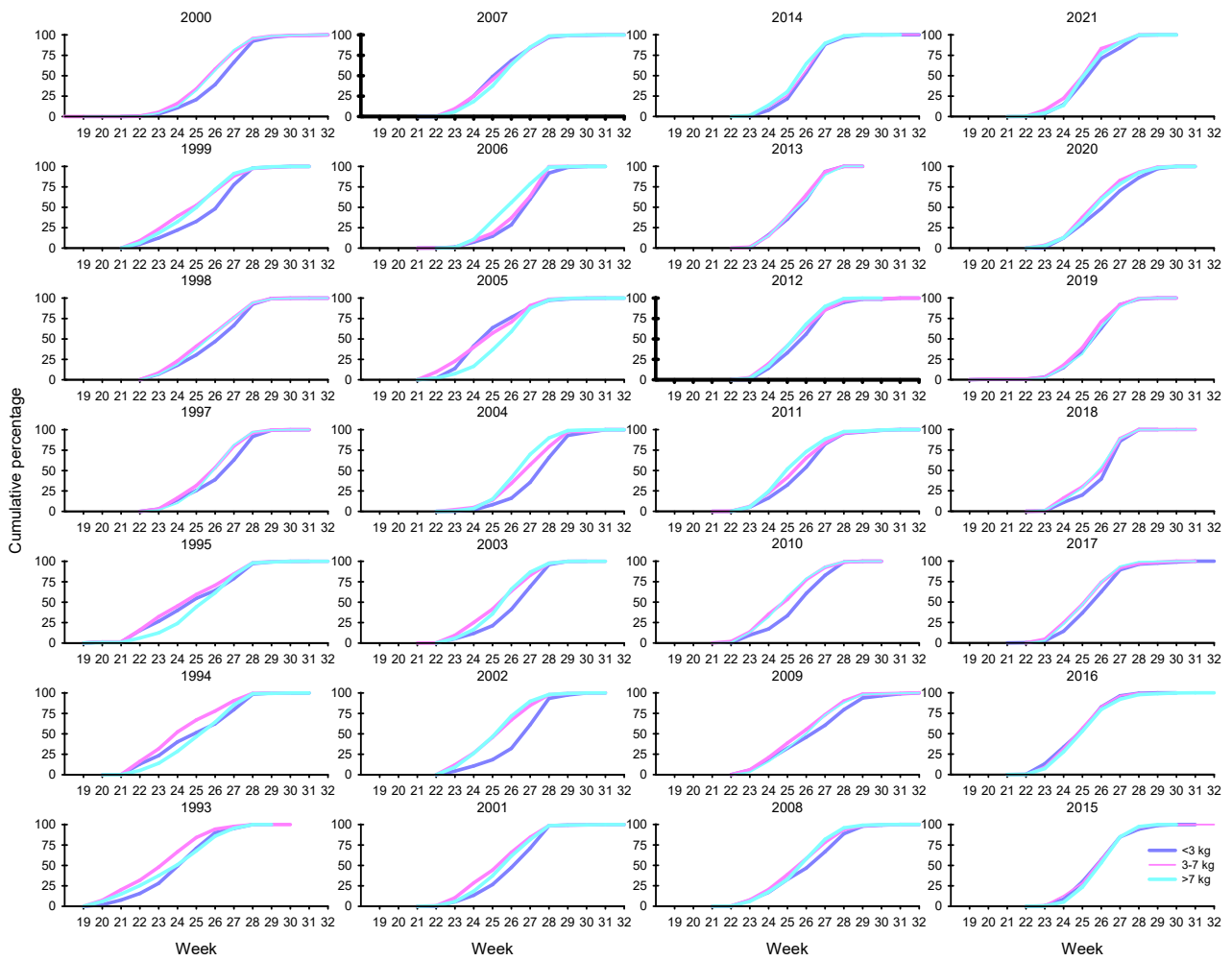


Figure 15. Annual cumulative bend net catches for three size groups of salmon in Alta salmon district. Source; SSB.

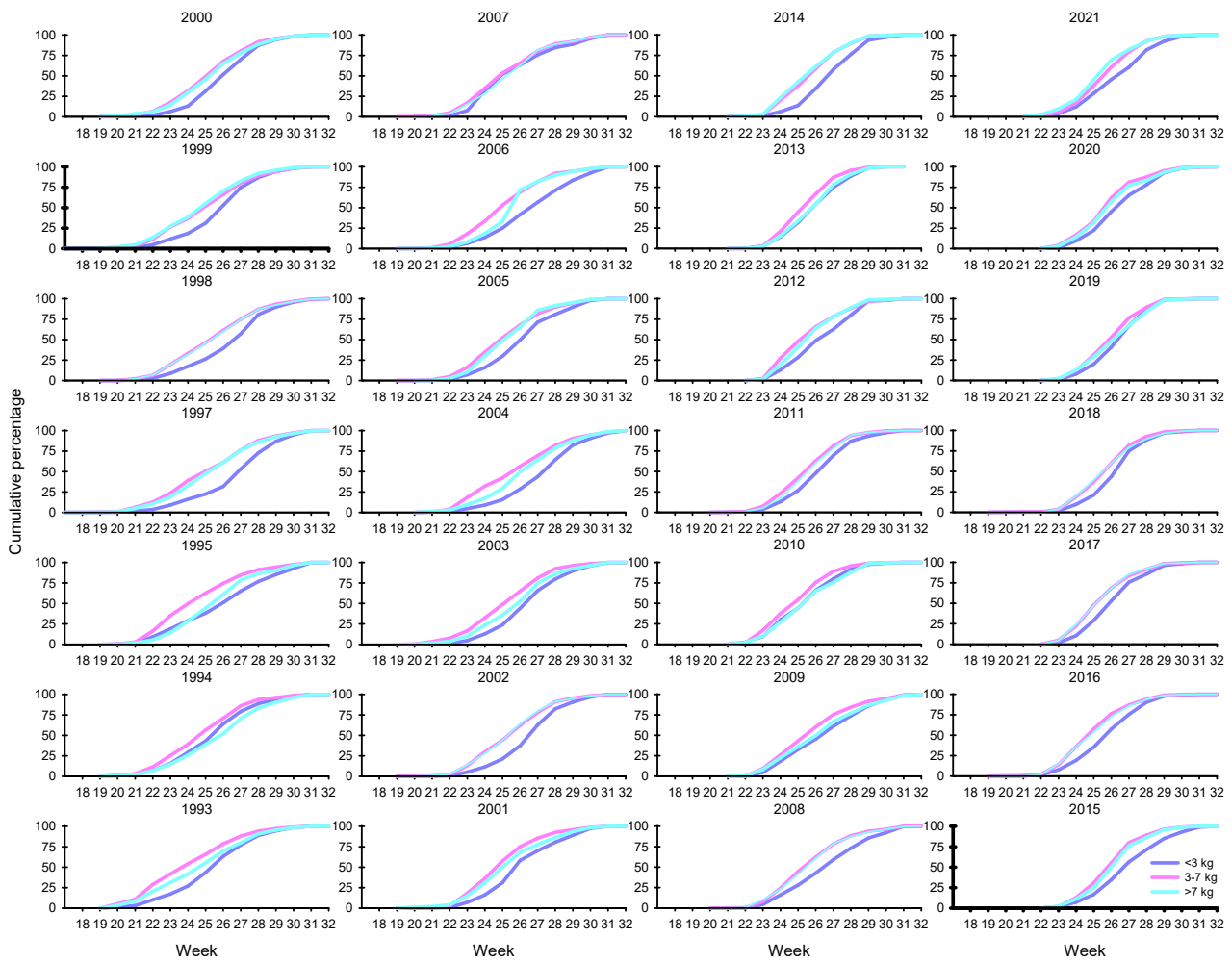


Figure 16. Annual cumulative catches from combined bag net and bend net fishery for three size groups of salmon in Hammerfest salmon district. Source; SSB.

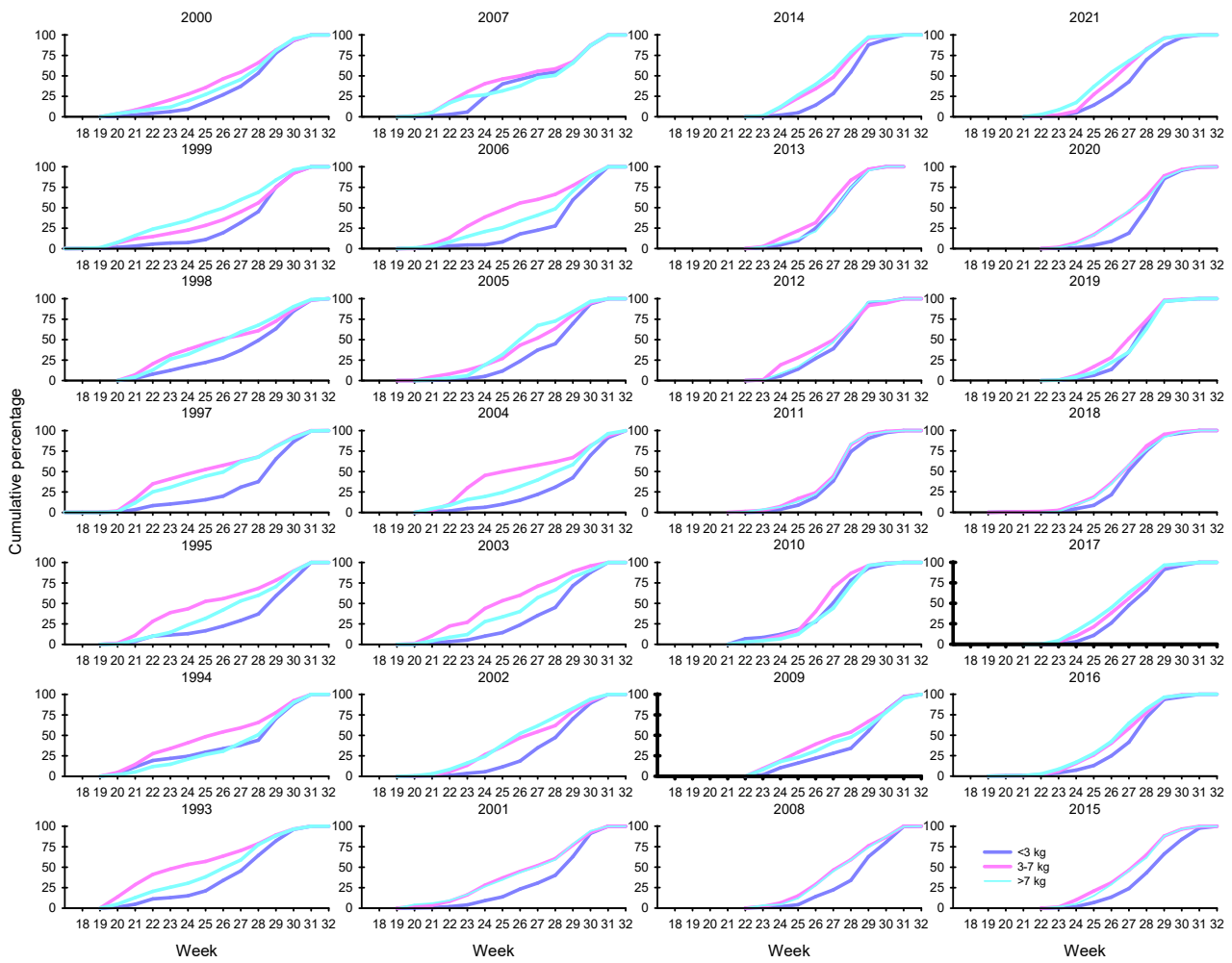


Figure 17. Annual cumulative bag net catches for three size groups of salmon in Hammerfest salmon district. Source; SSB.

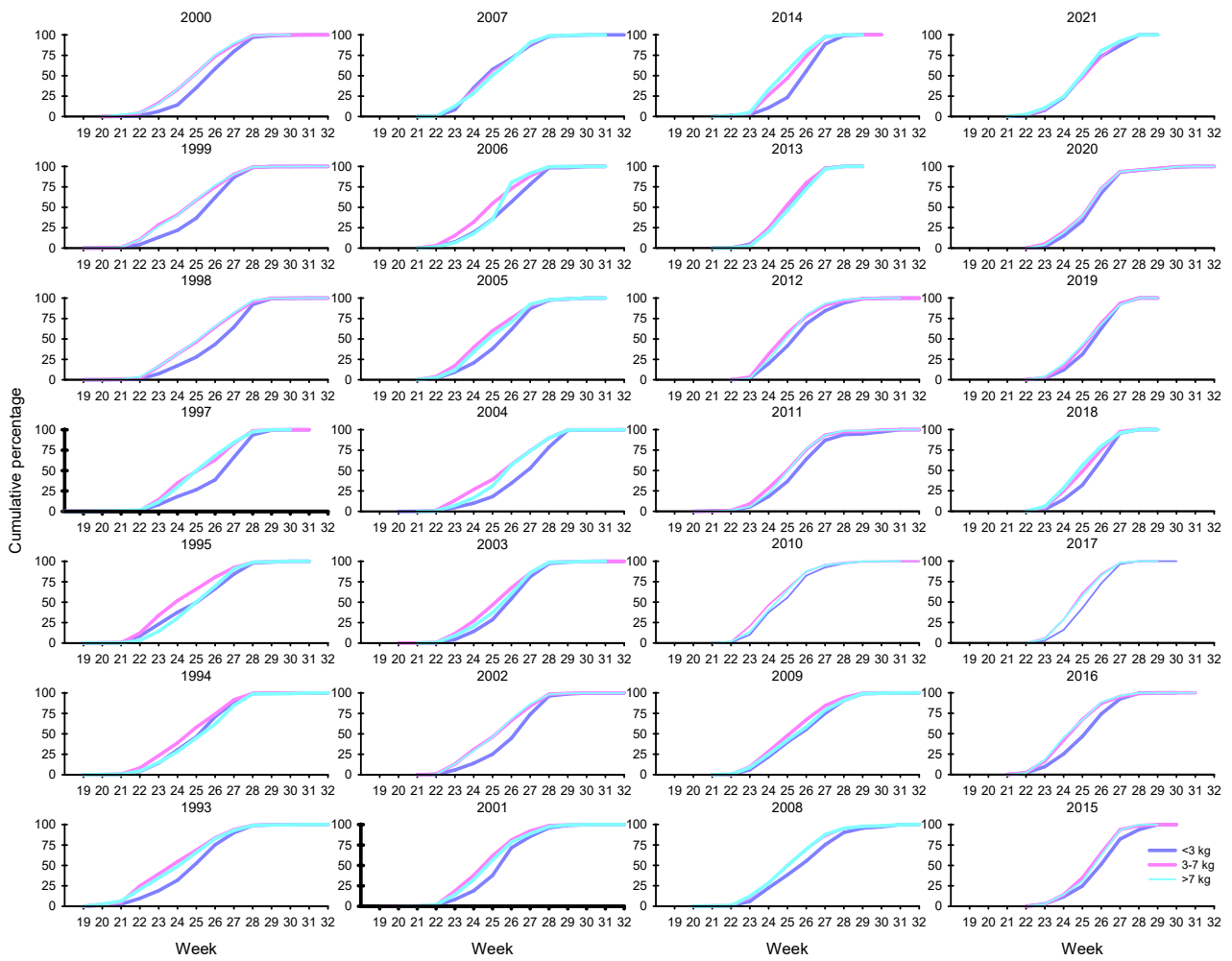


Figure 18. Annual cumulative bend net catches for three size groups of salmon in Hammerfest salmon district. Source; SSB.

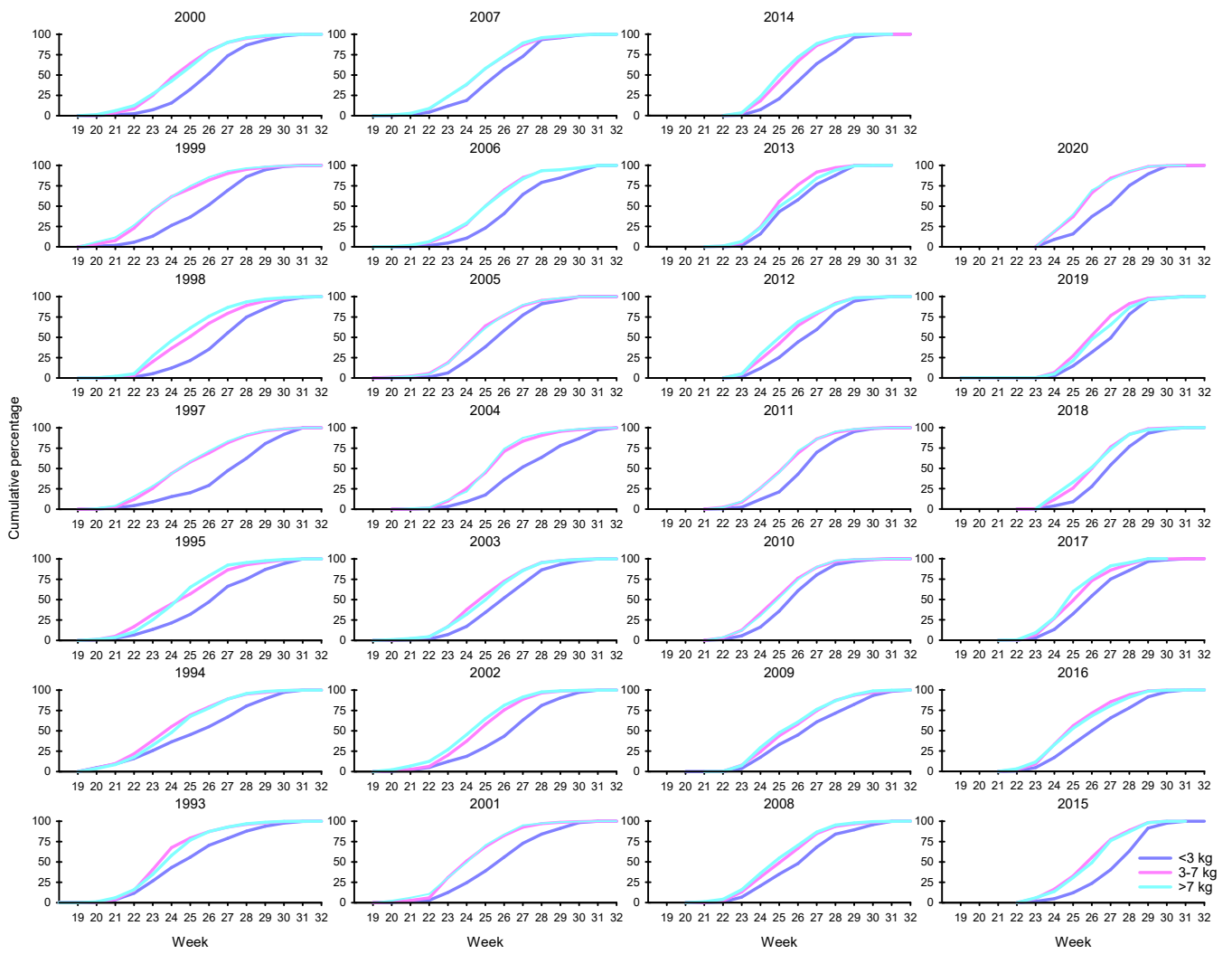


Figure 19. Annual cumulative catches from combined bag net and bend net fishery for three size groups of salmon in Tana salmon district. Source; SSB.

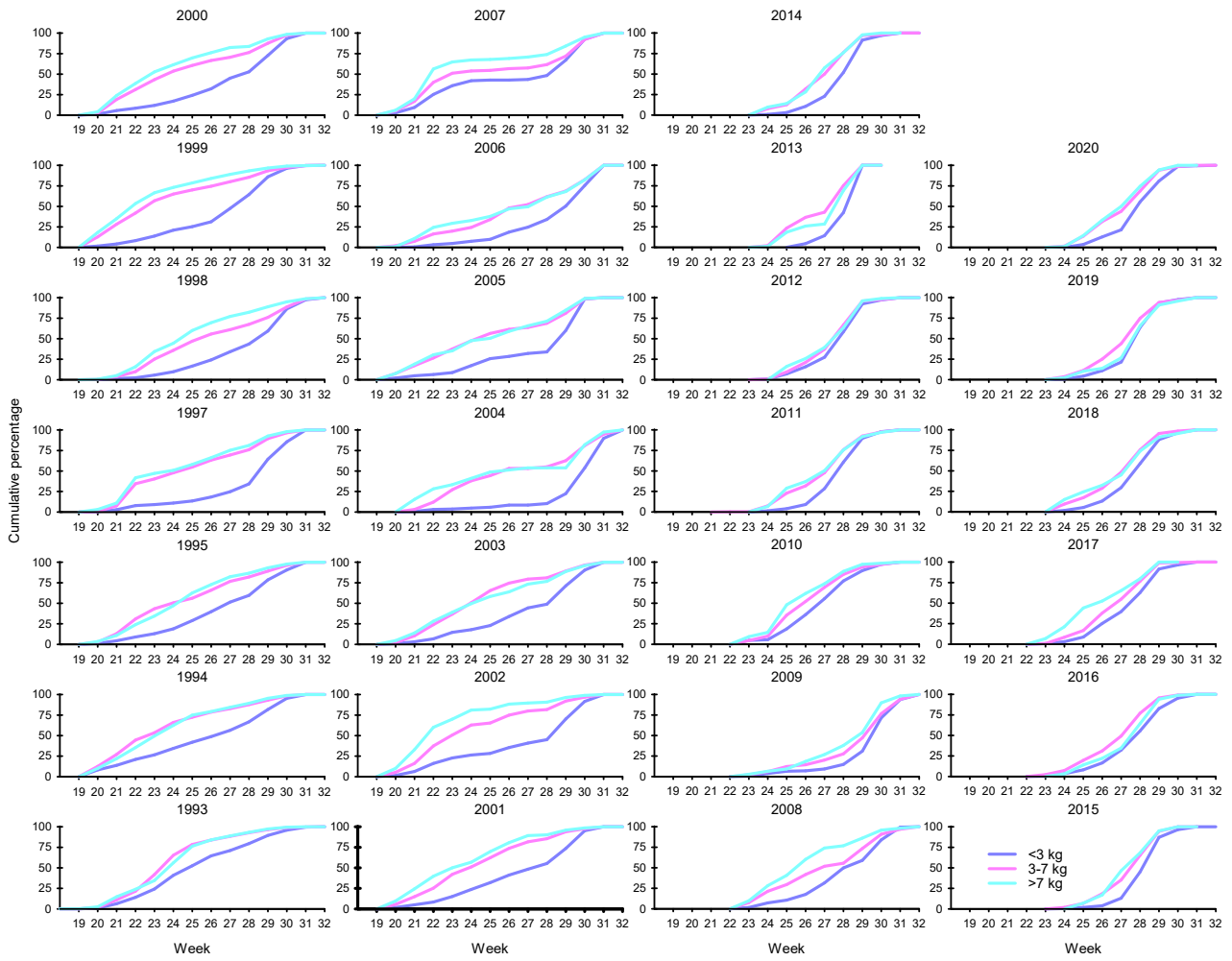


Figure 20. Annual cumulative bag net catches for three size groups of salmon in Tana salmon district. Source; SSB.

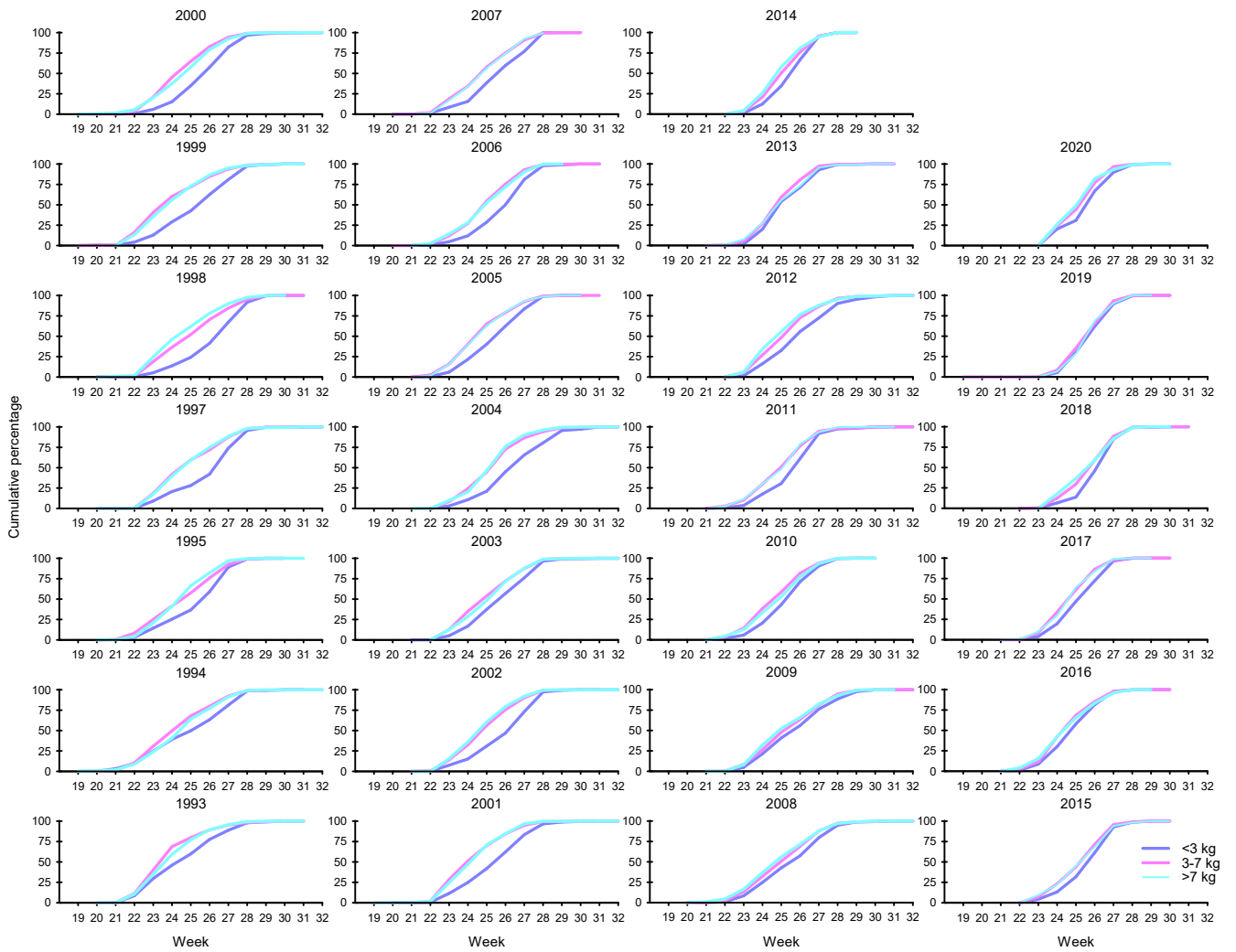


Figure 21. Annual cumulative bend net catches for three size groups of salmon in Tana salmon district. Source; SSB.

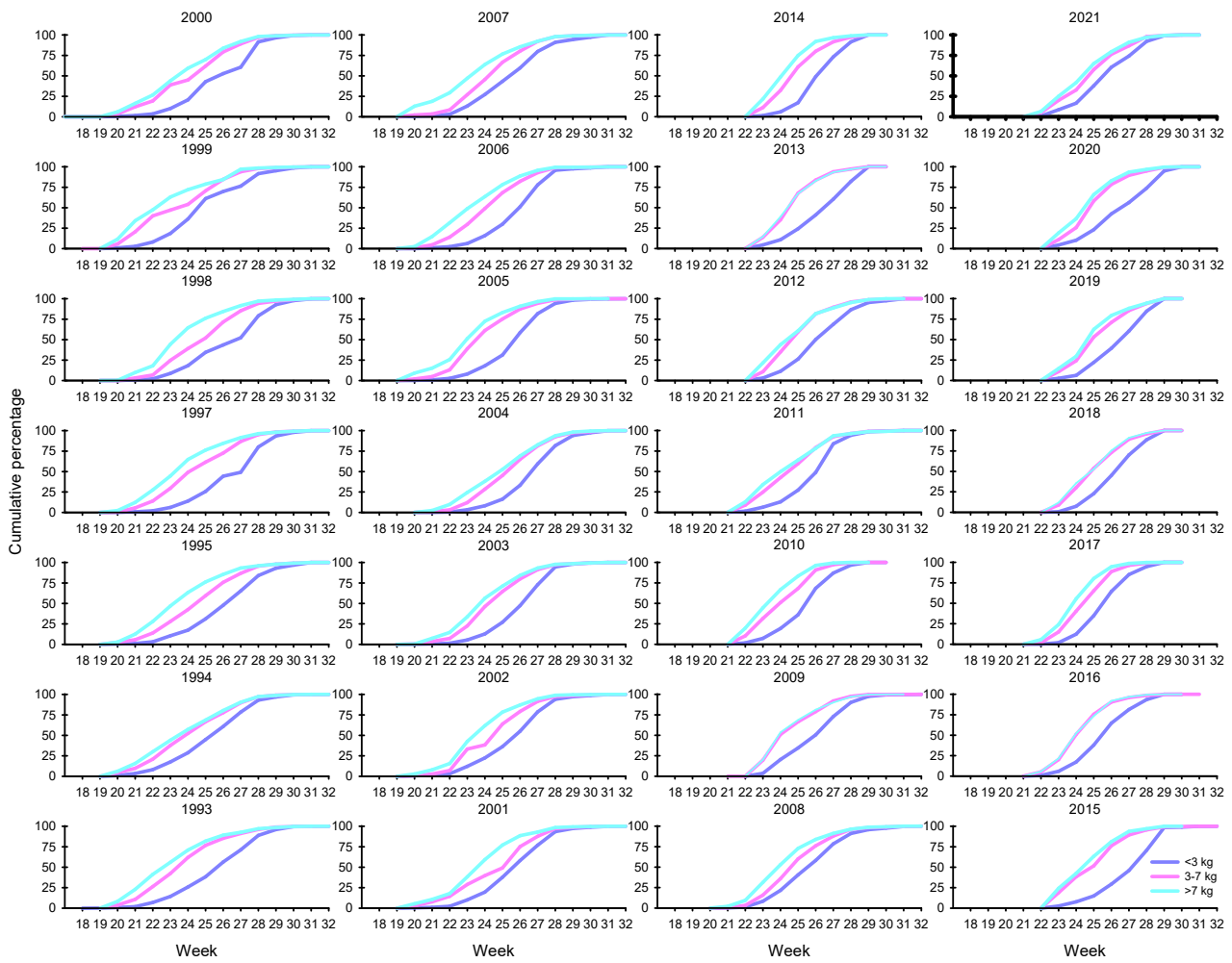


Figure 22. Annual cumulative catches from combined bag net and bend net fishery for three size groups of salmon in Varanger salmon district. Source; SSB.

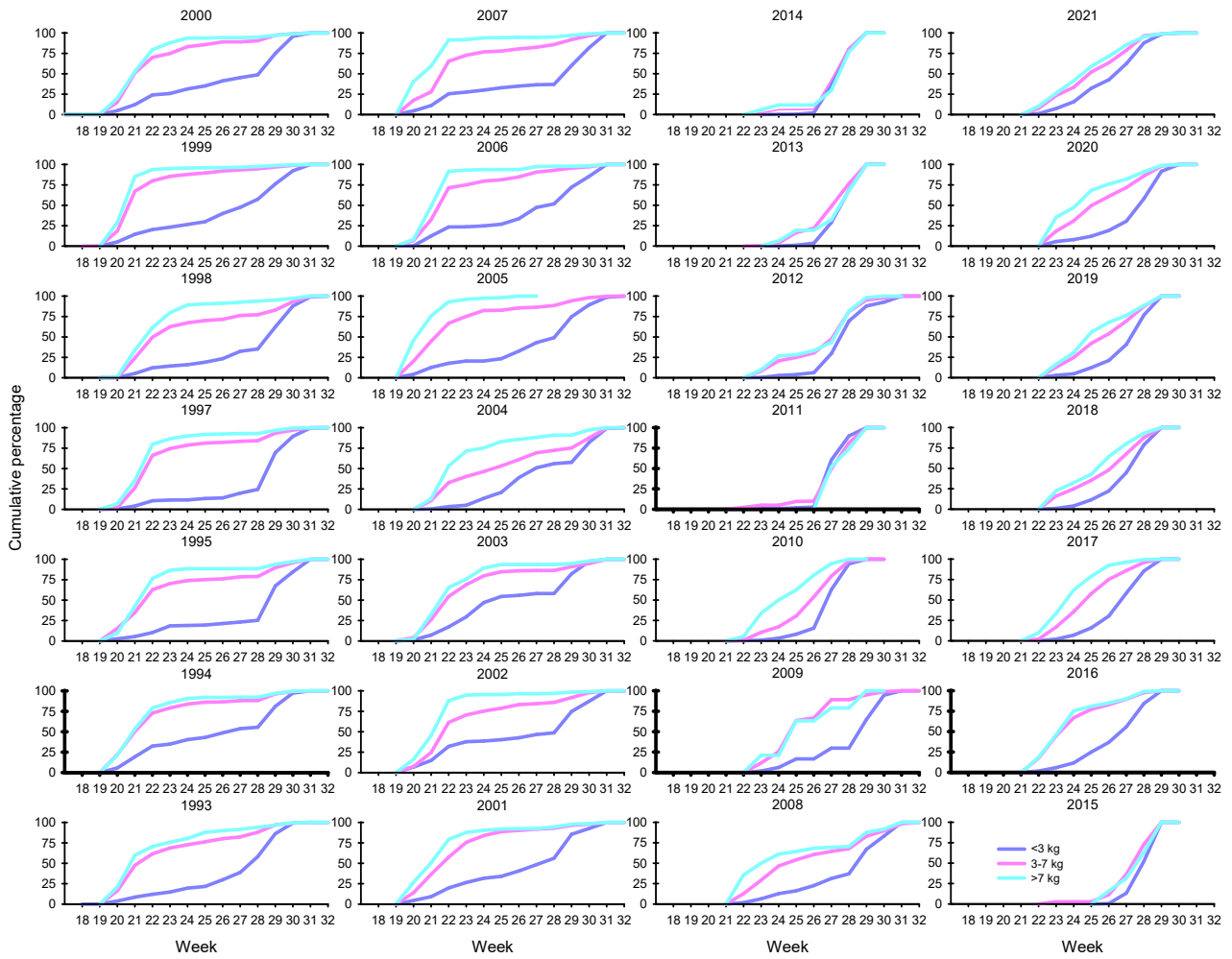


Figure 23. Annual cumulative bag net catches for three size groups of salmon in Varanger salmon district. Source; SSB.

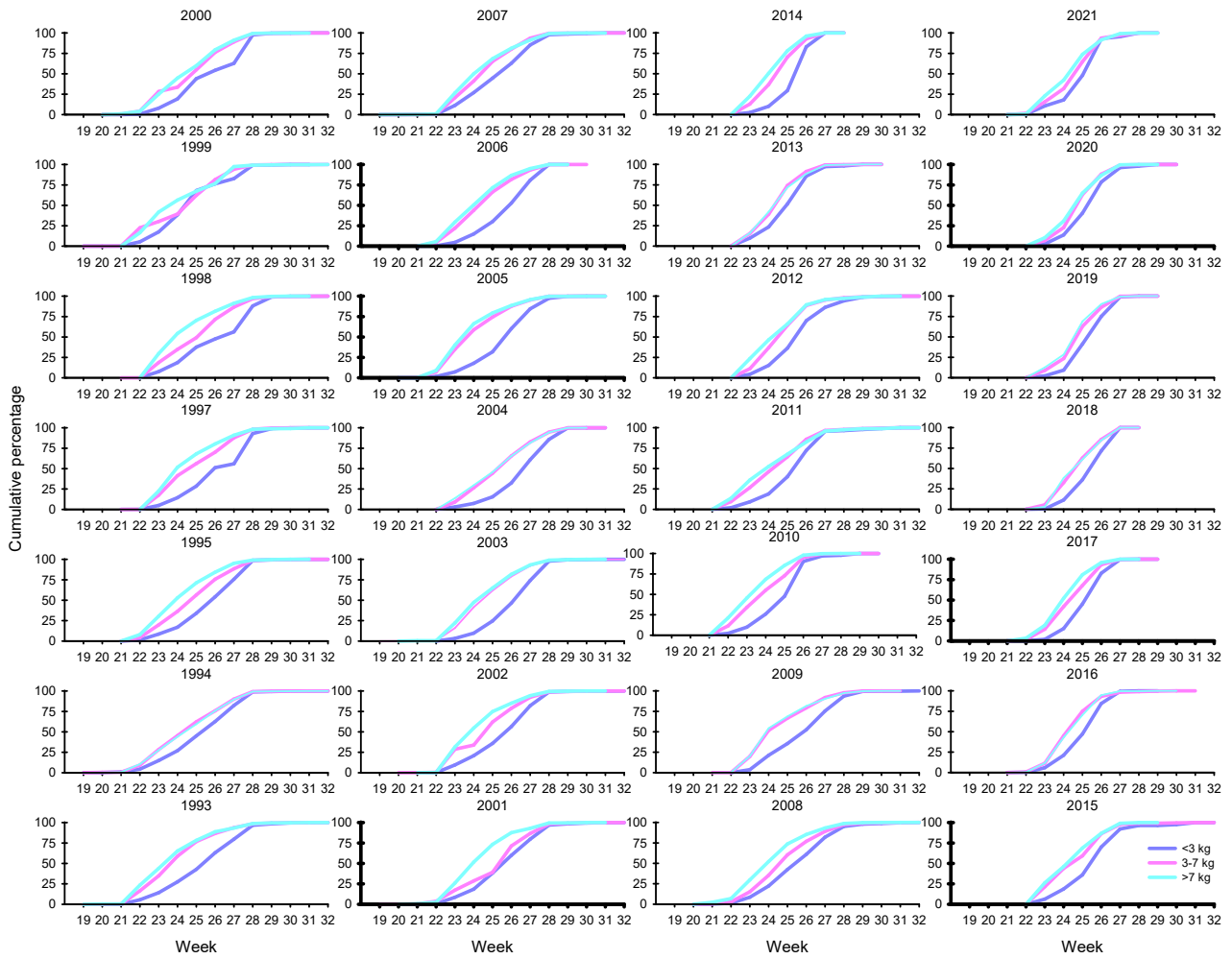


Figure 24. Annual cumulative bend net catches for three size groups of salmon in Varanger salmon district. Source; SSB.