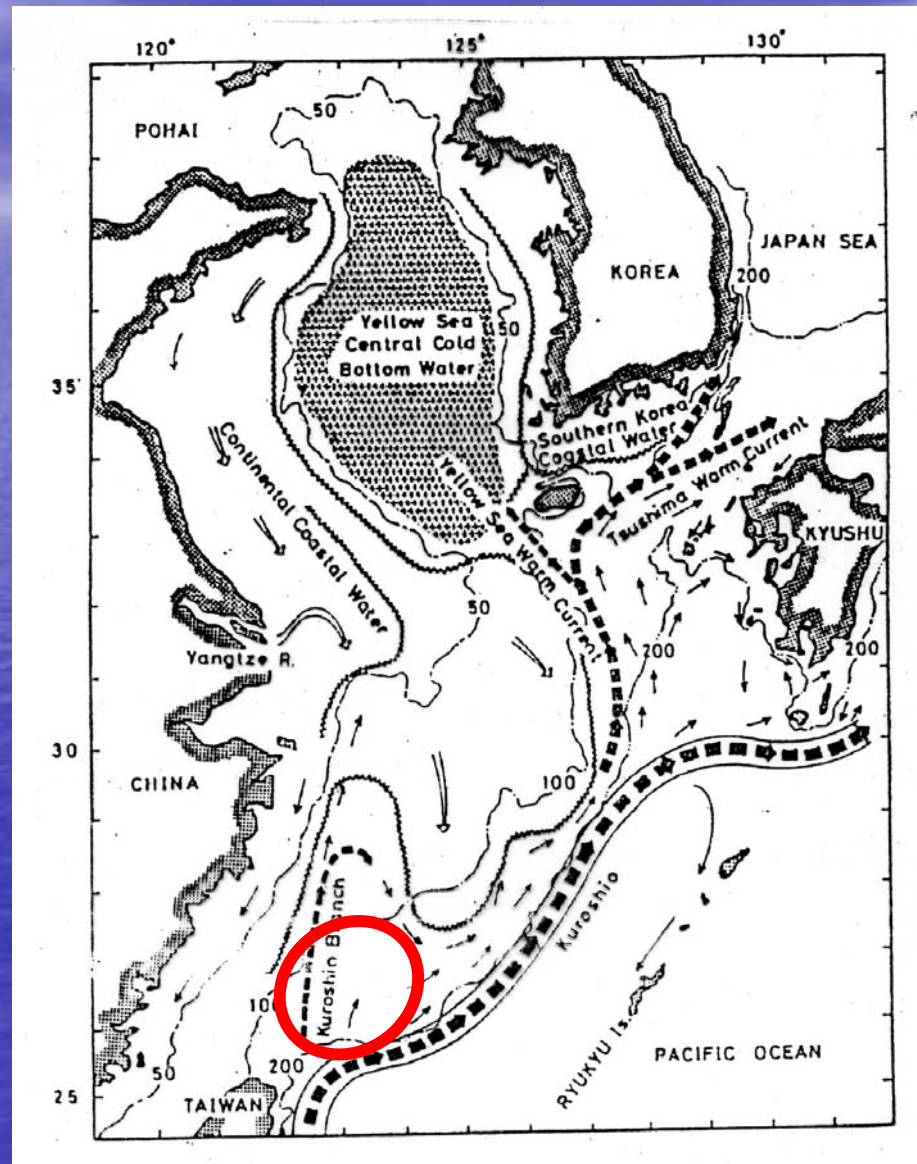


Stepwise increase of Water Temp. and Zp. biomass after mid-1980s in ECS and their possible effect on jack mackerel's recovery

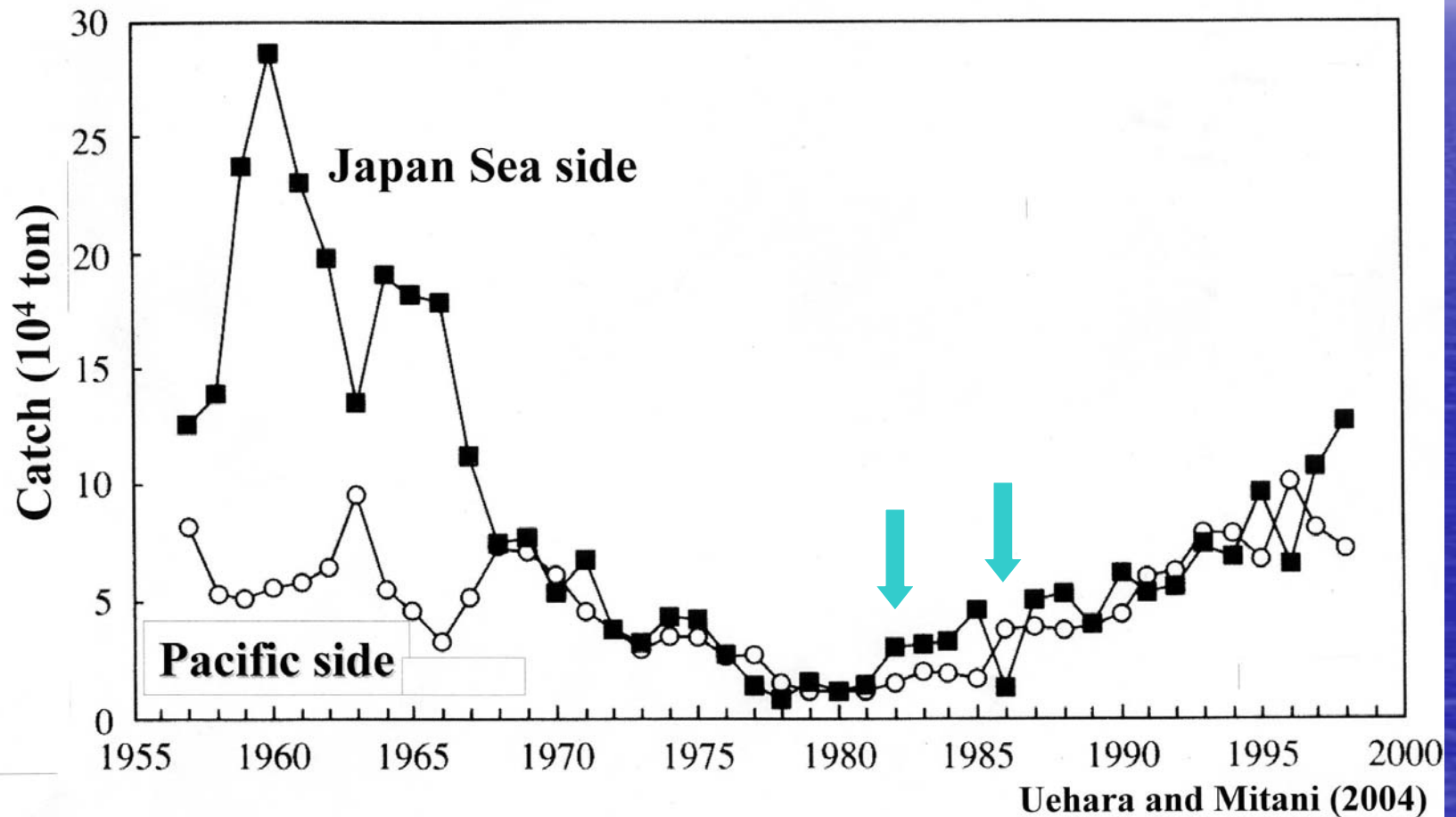
- T. Sugimoto (Tokai Univ.)
- H-Y. Kim, K. Tadokoro,
- K. Kuroda, N. Nagai

Main spawning grounds in the ECS are formed to the NE of Taiwan near the Kuroshio front along the shelf break

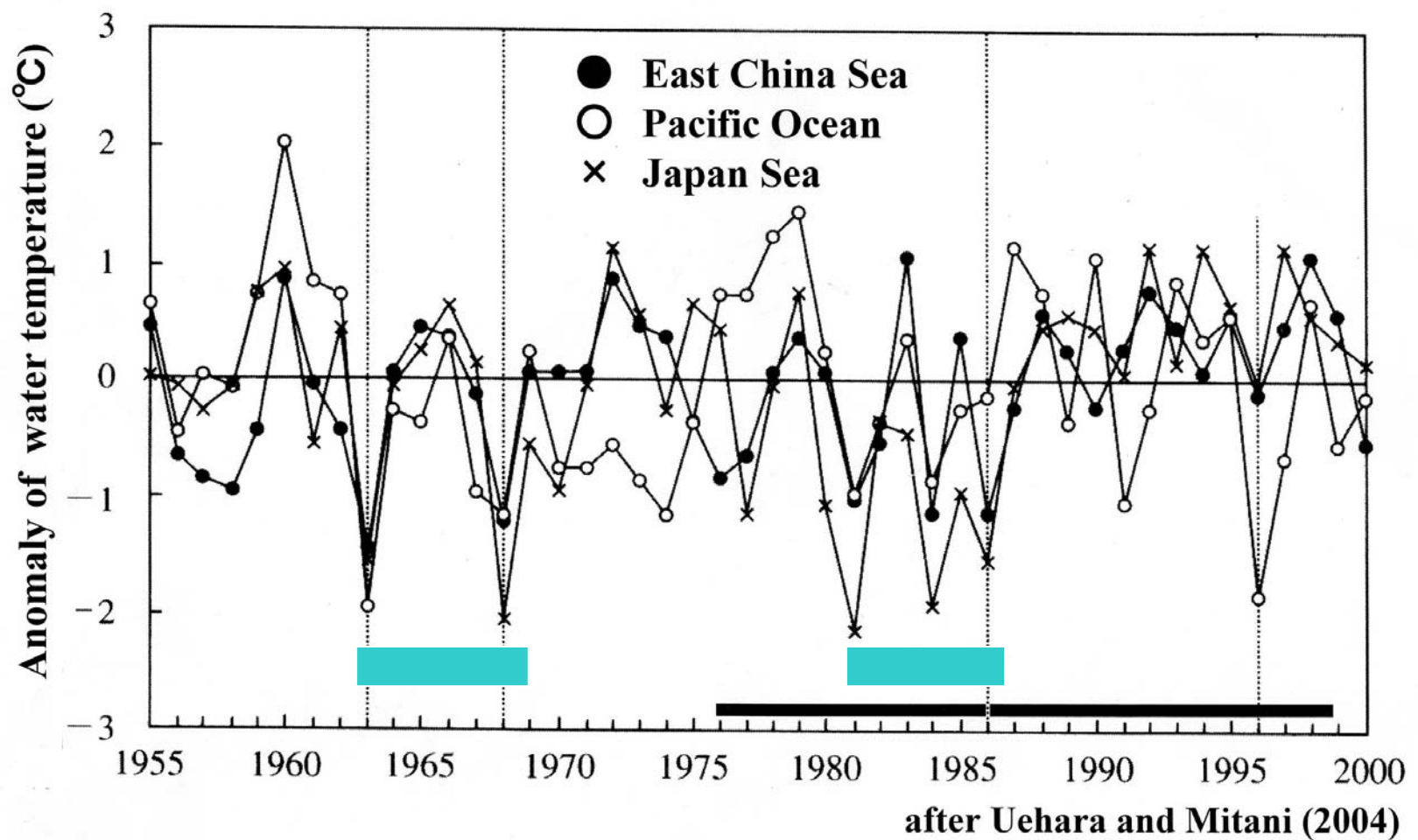


Recovery started in 1982 and increased until mid-1990s.

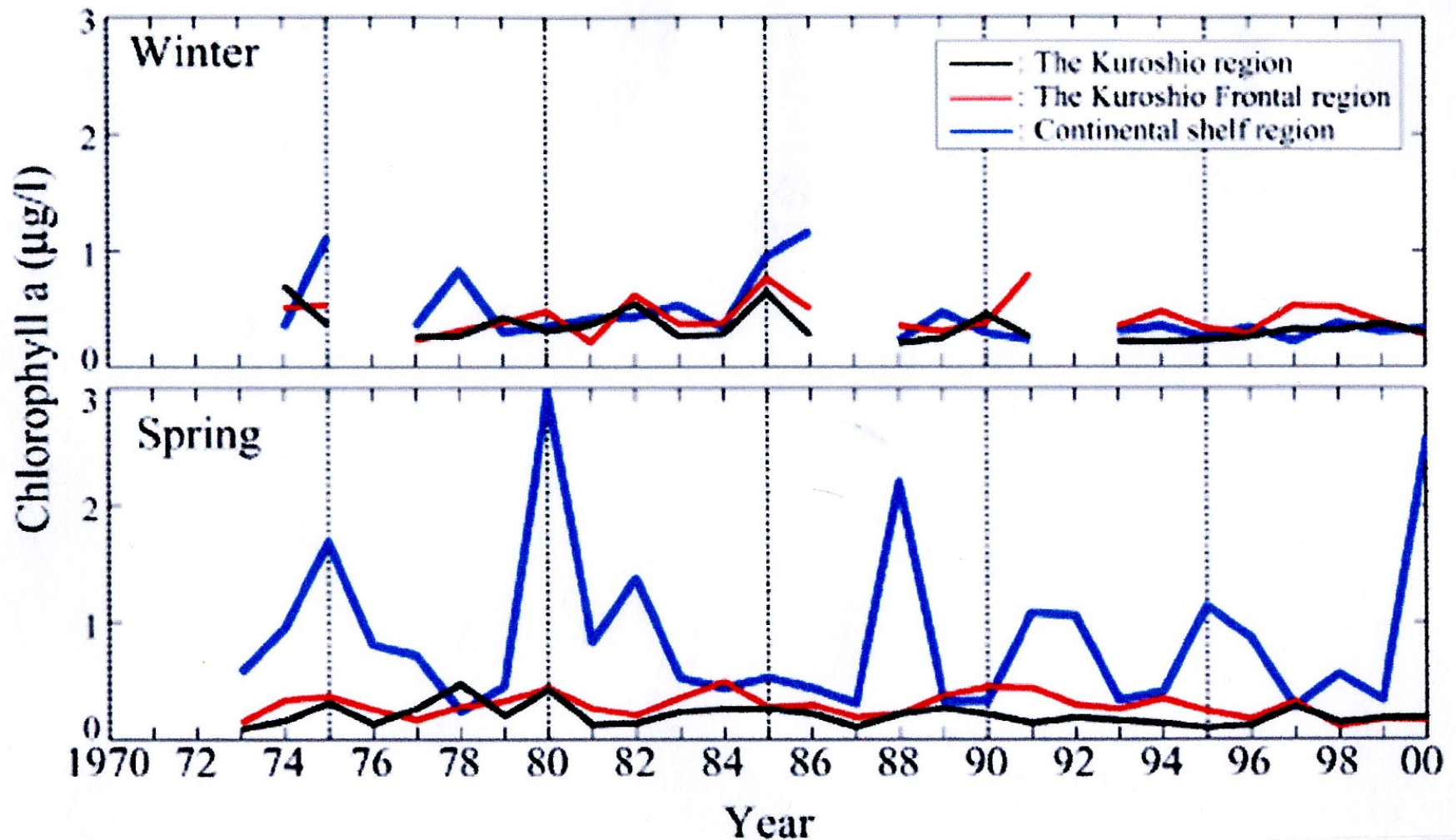
Interannual variation in the catch of Jack mackerel



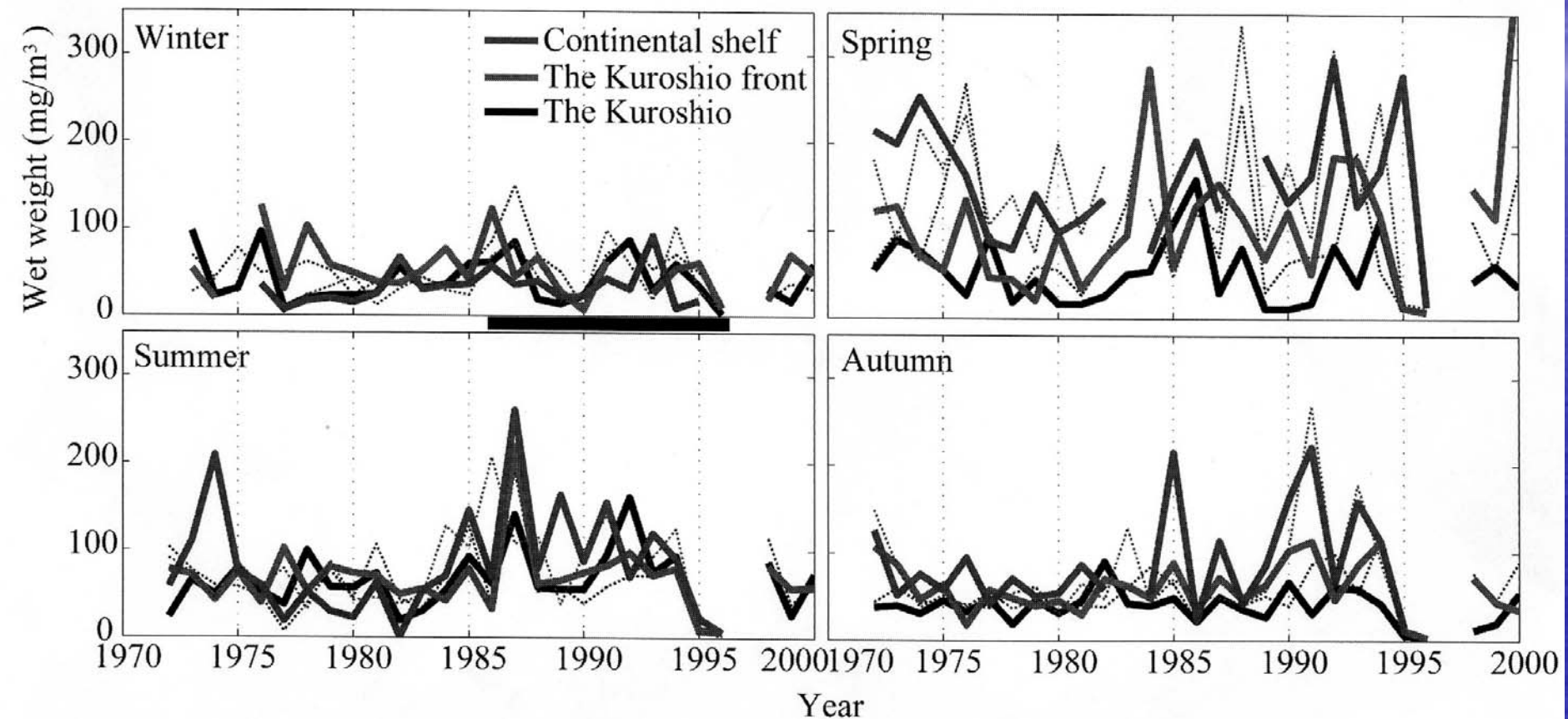
Water temperature was low during earlier 1980s and mid 1960s but high during 1970s and after mid 1980s.



Spring blooms of Chl-a concentration appear on the continental shelf with several years periodicity, whose peaks decreased gradually.



Zp. wet weight on PN line was low during 1975-85 but warm water species increased during 1986-95.



Conclusion

Stock of mackerel seems to be triggered to recover from its lowest level during a cold regime of several years (with high chl-a concentration in the continental shelf region), and then continues to increase further in the next decadal warm regime, (which is accompanied by a higher level of food zooplankton).