

# Seasonal means of temperature and salinity in the shelf area in Háfadjúp and across Selvogsbanki in 1971—1975

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During the years 1971—1975 relatively comprehensive hydrobiological investigations were carried out in the shelf area southwest of Iceland — “The Háfadjúp-Snæfellsnes project” (Malmberg, 1978 a, b).

The investigations included i.a. temperature ( $\pm 0.02^{\circ}\text{C}$ ) and salinity ( $\pm 0.003\text{‰ S}$ ) observations, carried out at standard stations and depths in various seasons during the years 1971—1975.

At this stage the data have been worked up as

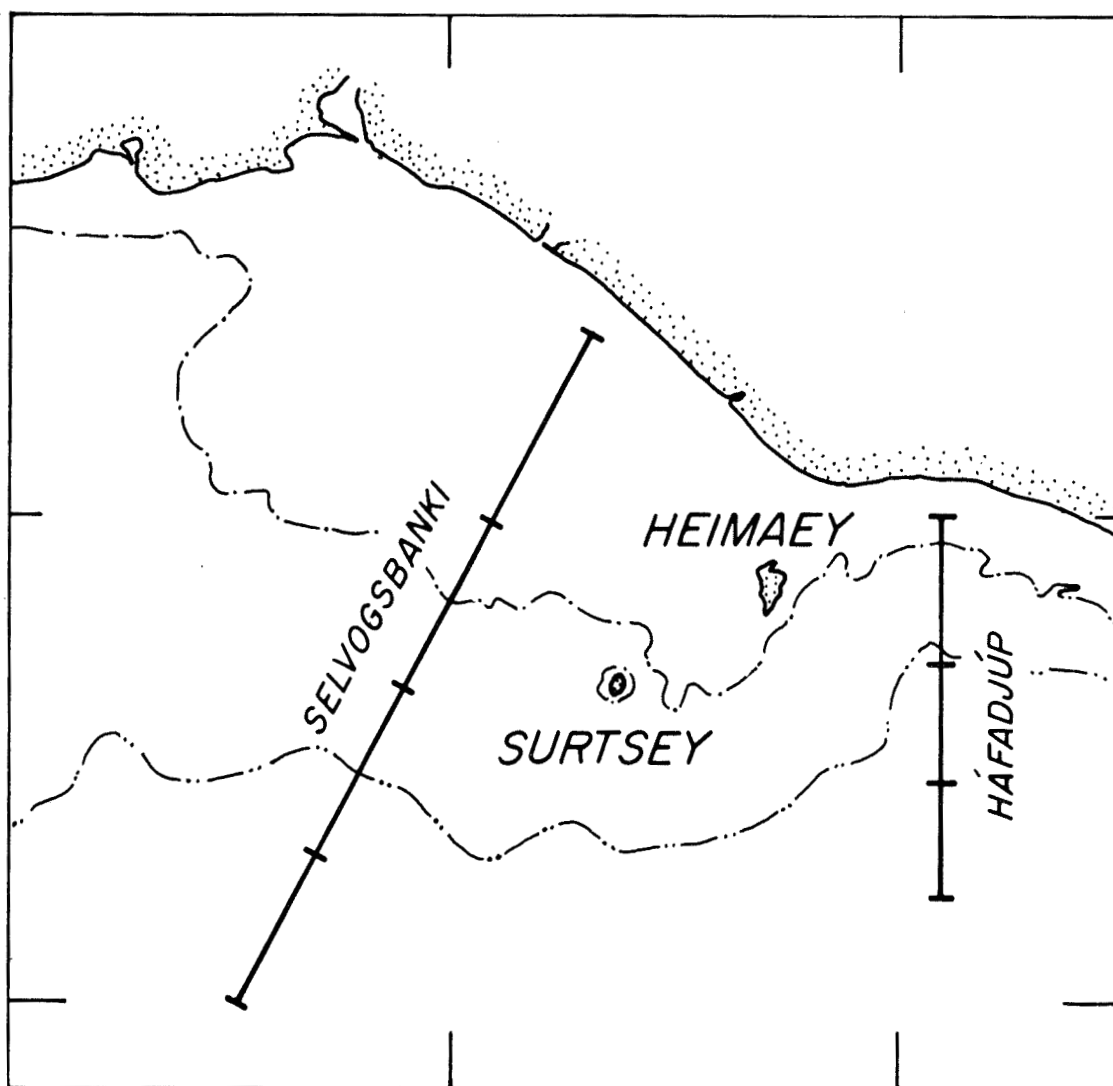


Figure 1. Location of standard hydrographic stations in Háfadjúp and across Selvogsbanki.

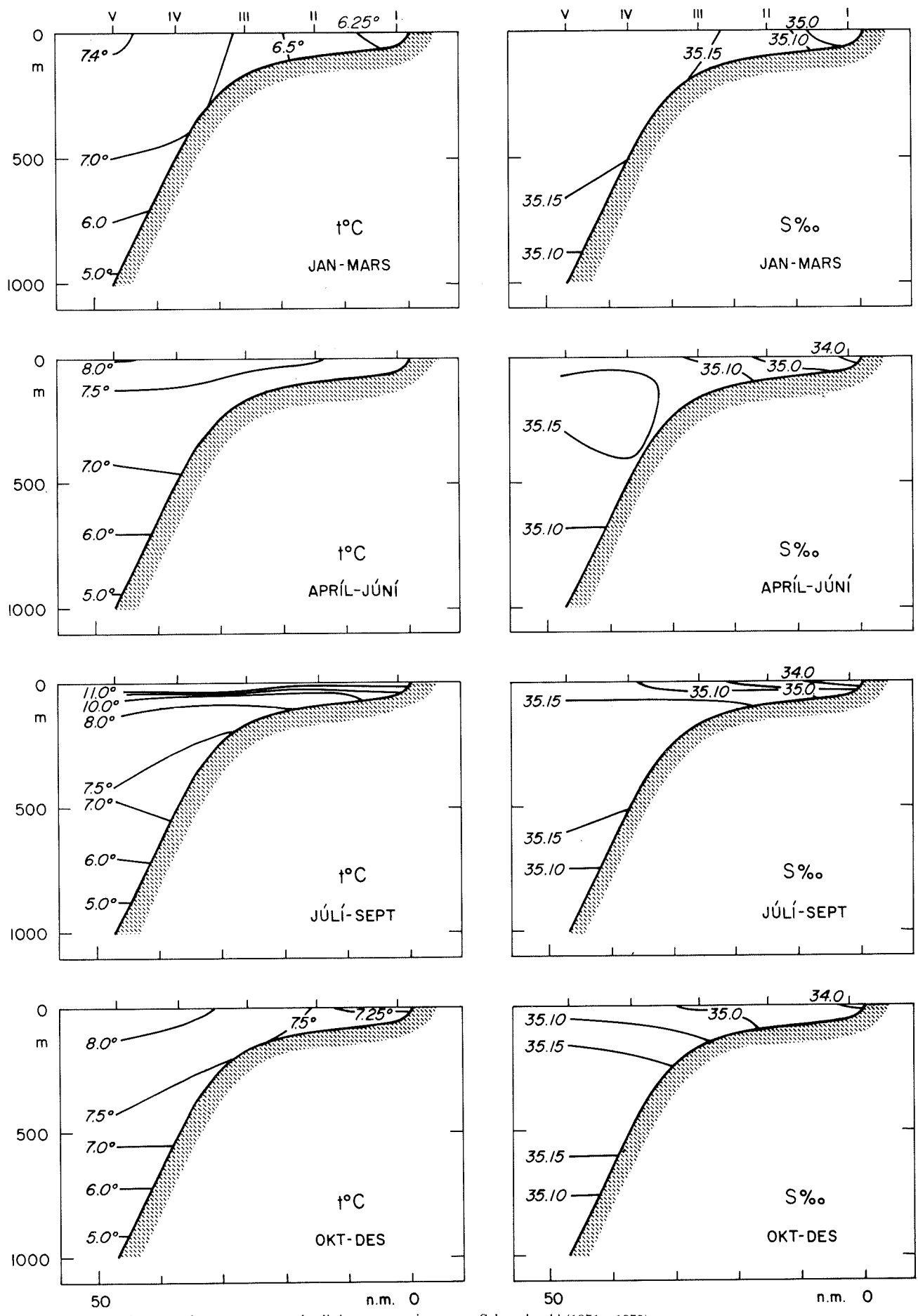


Figure 2. Seasonal means of temperature and salinity on a section across Selvogsbanki (1971—1975).

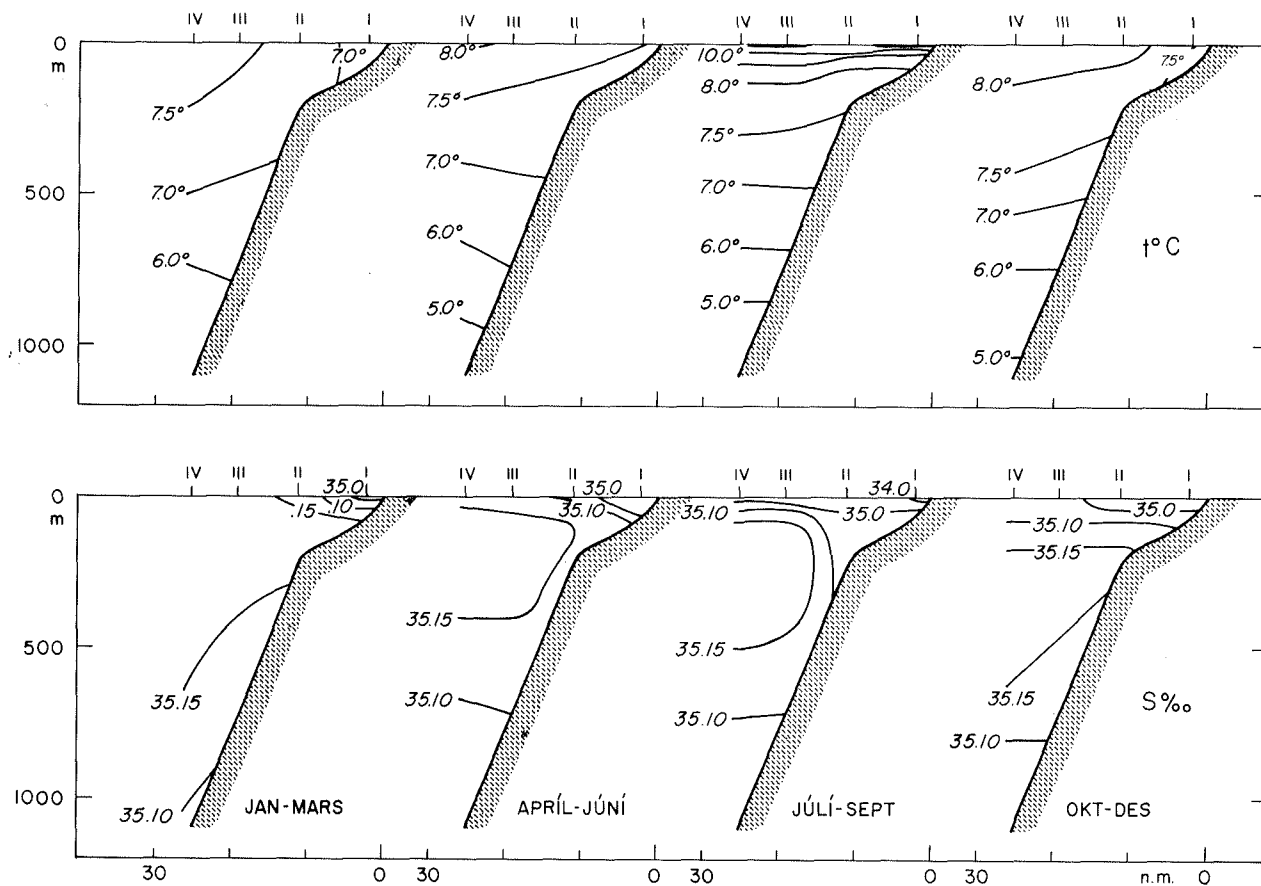


Figure 3. Seasonal means of temperature and salinity on a section in Háfadjúp (1971—1975).

time series and means for different stations and depths per months, seasons and years. The results are available in tables and diagrams at the Marine Research Institute in Reykjavík.

This report presents a few results of two sections, more specifically seasonal means of temperature and salinity for the *Háfadjúp* section consisting of 4 hydrographic stations and a section across *Selvogsbanki* consisting of 5 hydrographic stations (Fig. 1). The stations were worked 28 and 30 times, respectively, in 1971—1975. The mean sections shown in Figures 2 and 3 can be taken as representative for the hydrographic conditions in the waters around Vestmannaeyjar as well as around *Surtsey*. For orientation it should be noted that the volcanic island *Surtsey* is situated about 20 n.m.

off the mainland with a surrounding depth of about 120 m.

Two different water masses, Atlantic water ( $S‰ > 35.0‰$ ) and Icelandic coastal water ( $S‰ < 35.0‰$ ), are present in the waters in question. The seasonal variations, both in properties and distribution, are relatively small in the Atlantic water but much greater in the coastal water. In short, seasonal variations of the hydrographic conditions in the study area decrease seawards and with depth down to 200 m.

#### References:

- Svend Aage Malmberg 1978 a: Háfadjúp — Snæfellsnes 1971—1975. I. Háfadjúp. Hafrannsóknir 13.
- Svend Aage Malmberg 1978 b: Háfadjúp — Snæfellsnes 1971—1975. II Selvogsvanki. Hafrannsóknir 15.