

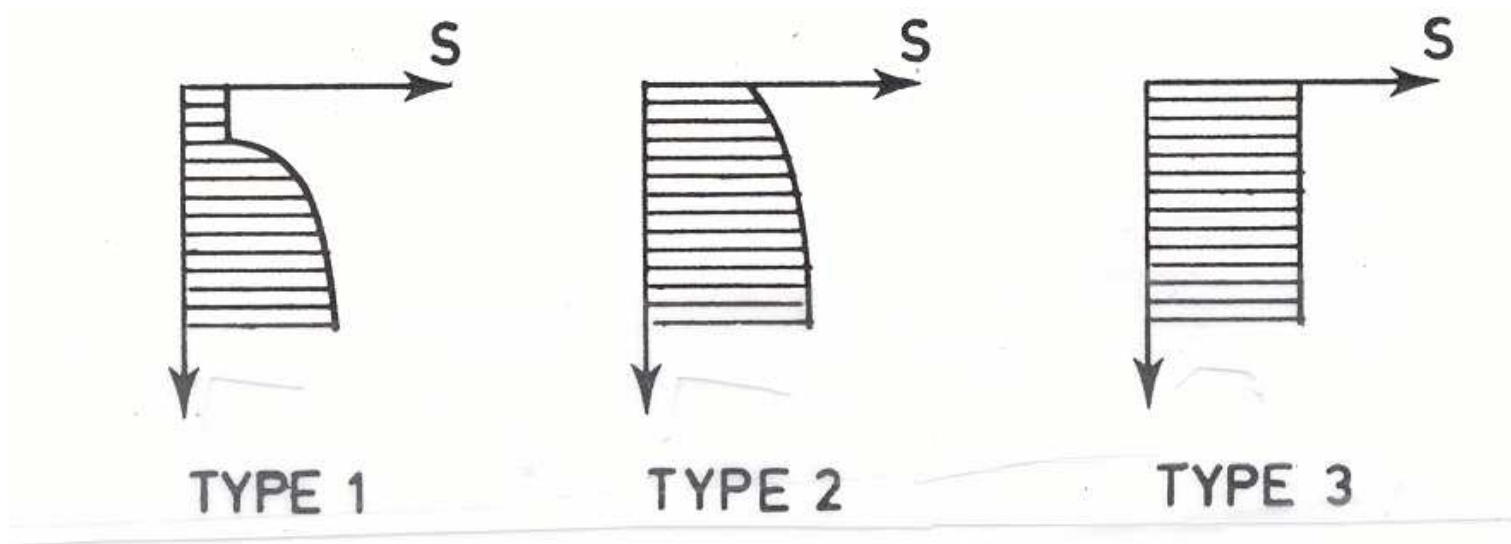
Overflatestrøm i dype fjorden

Magne Haakstad
Høgskolen i Bodø

Organisering av foredraget

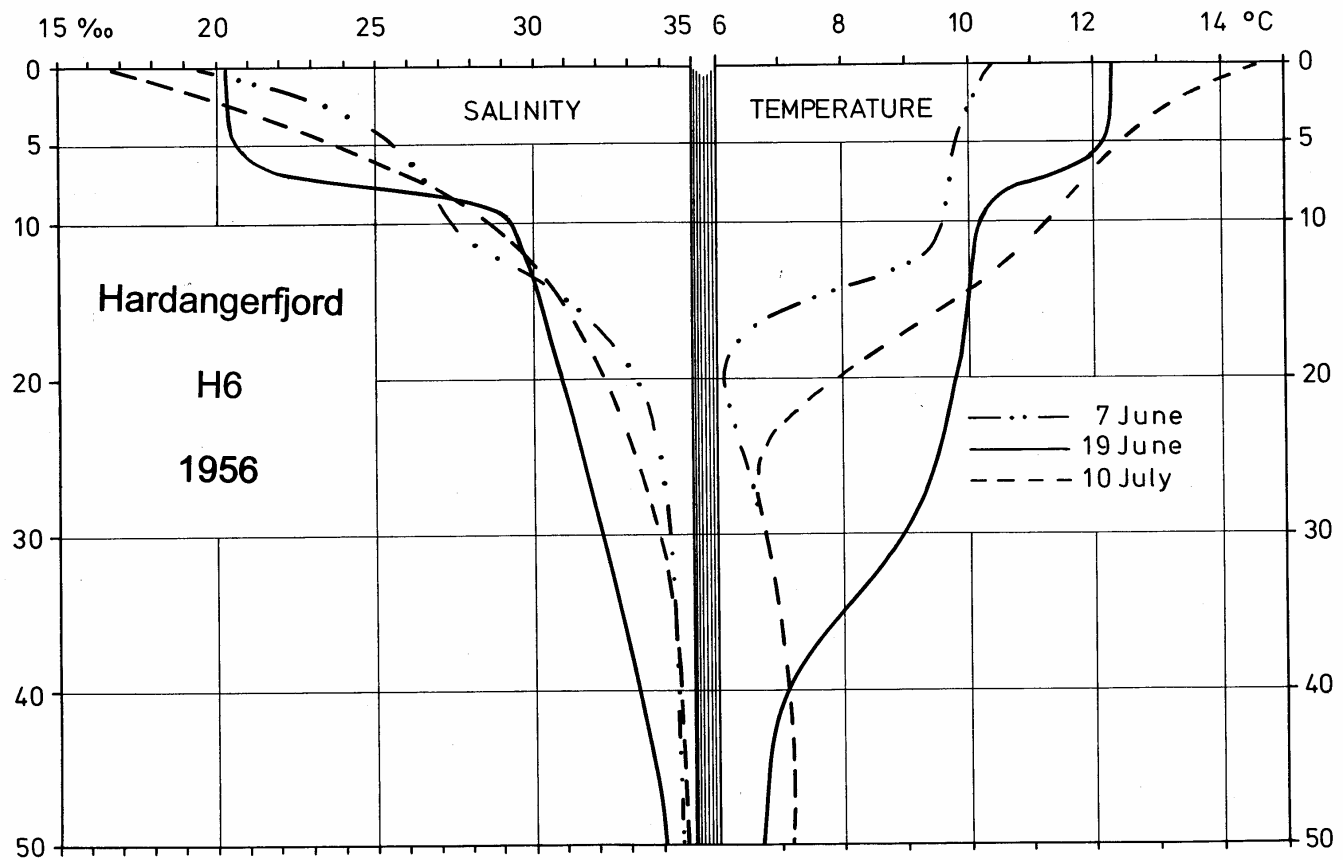
- Klassifisering av fjord sirkulasjon
- Data fra Hardangerfjorden
- Påvirkning fra kystvann
- Vindpåvirkning
- Estuarin sirkulasjon

Picards inndeling av fjorder

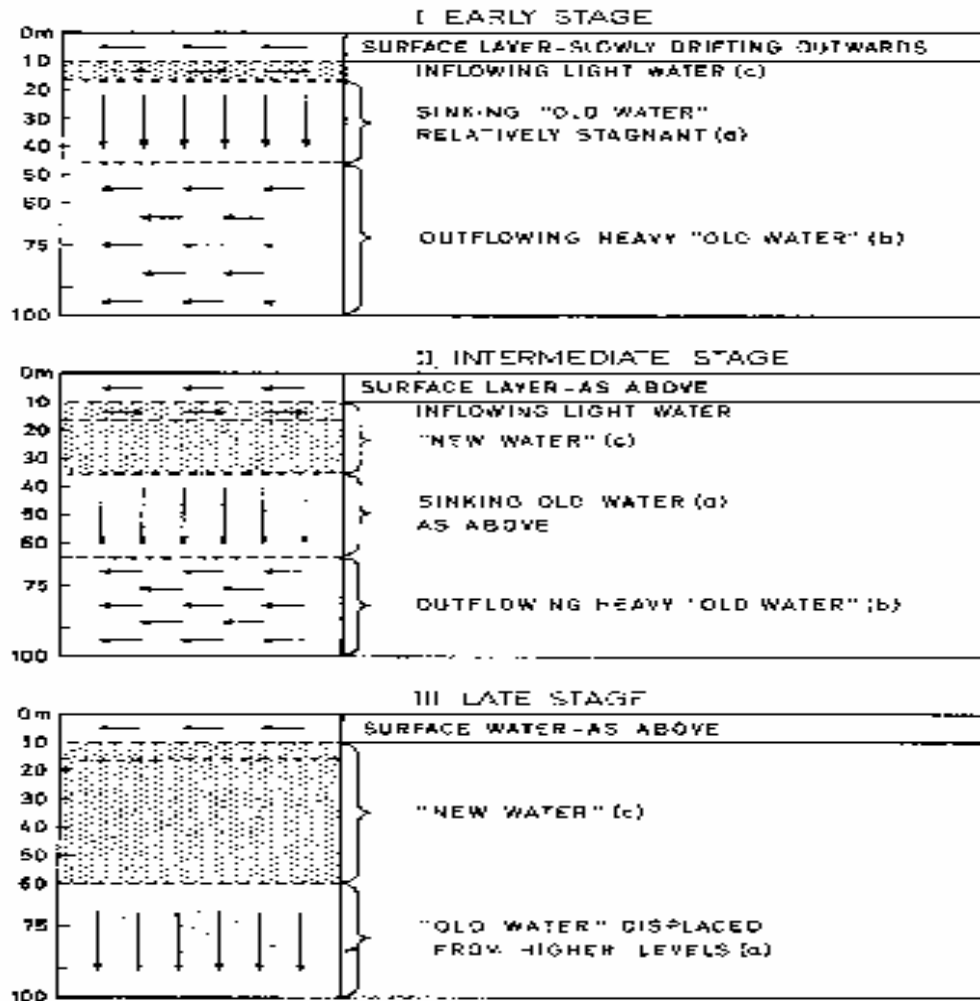


Hardangerfjorden type 1 eller type 2?

Hardangerfjorden juni 1956



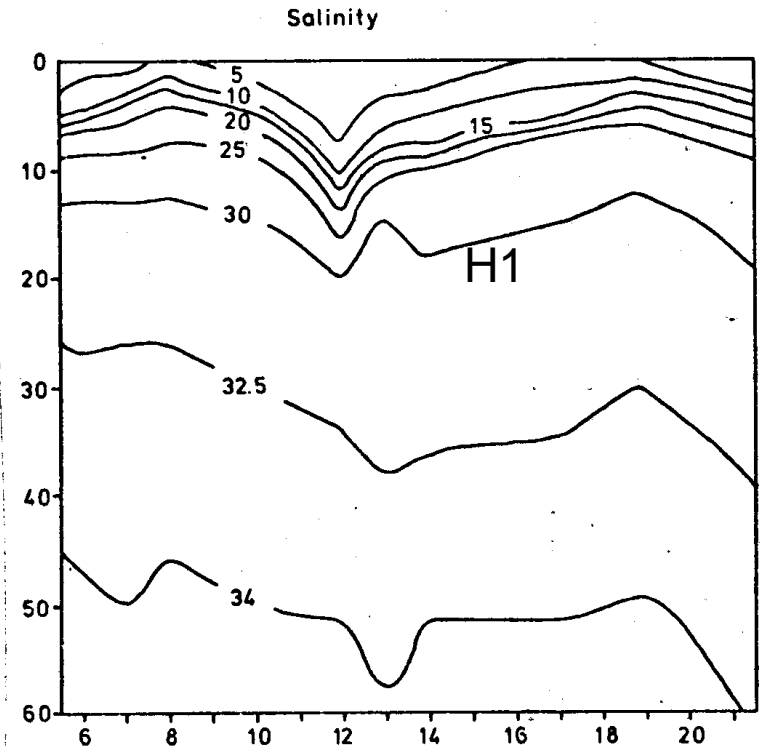
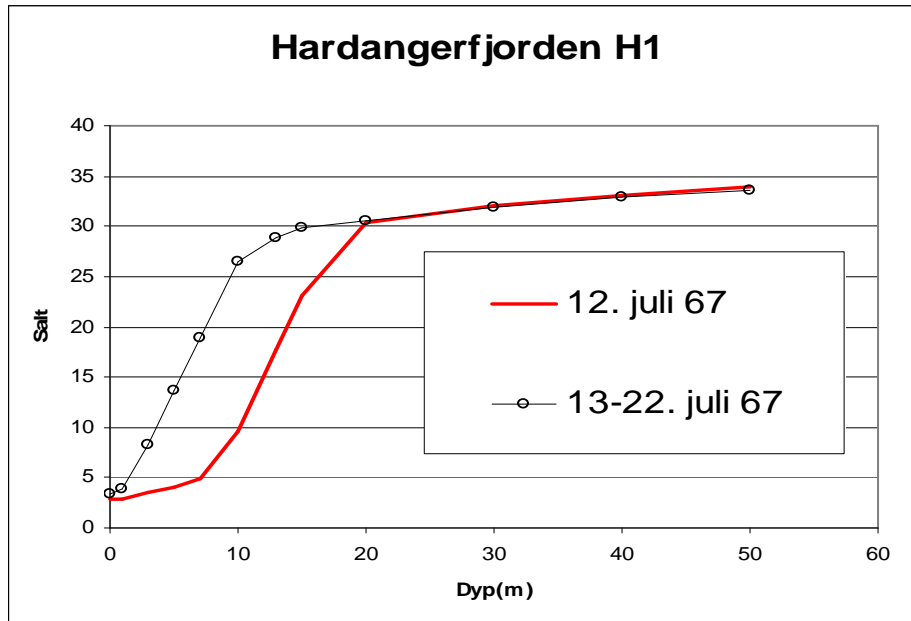
Braaruds modell for påvirkning fra kystvann



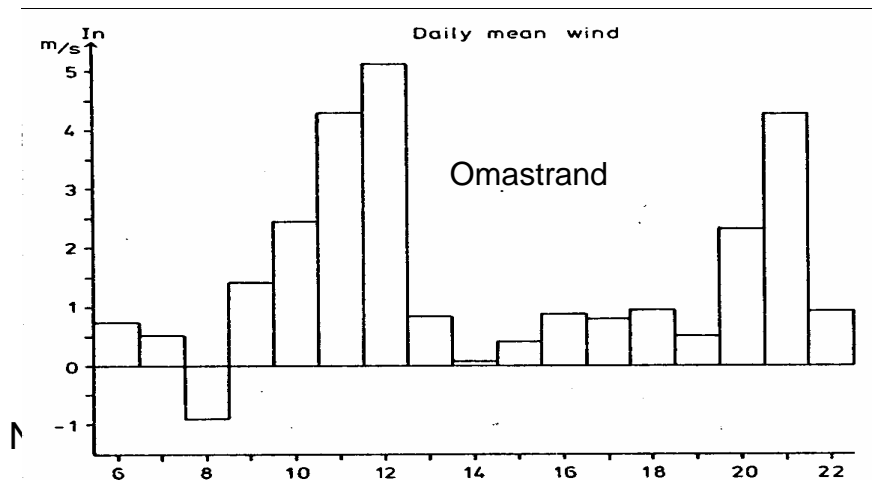
Braarud (1975)

Fig. 2. A schematic illustration of the suggested hydrographic changes in the fjord waters during the late summer water exchange. See the text.

Hardagerfjorden juli 1967

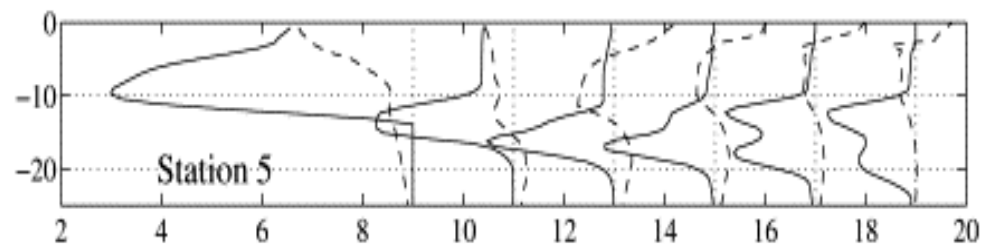
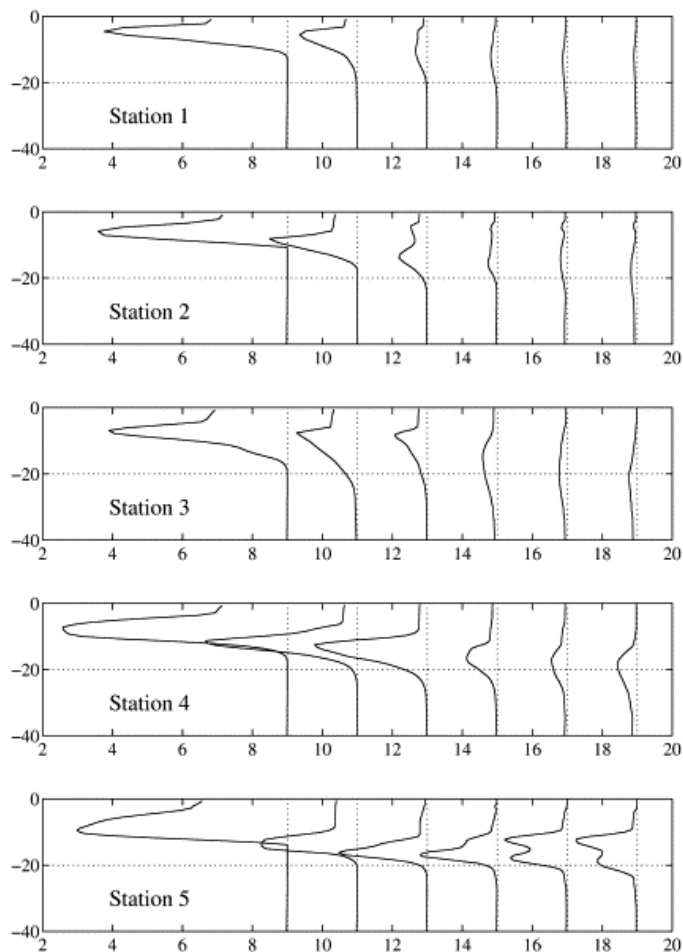


B



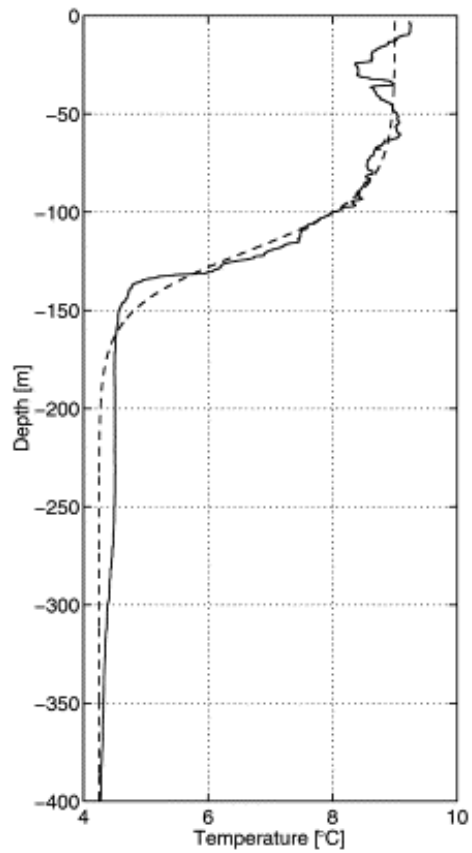
Aas (1971)

Modellert vind påvirkning i Skjerstadvjorden

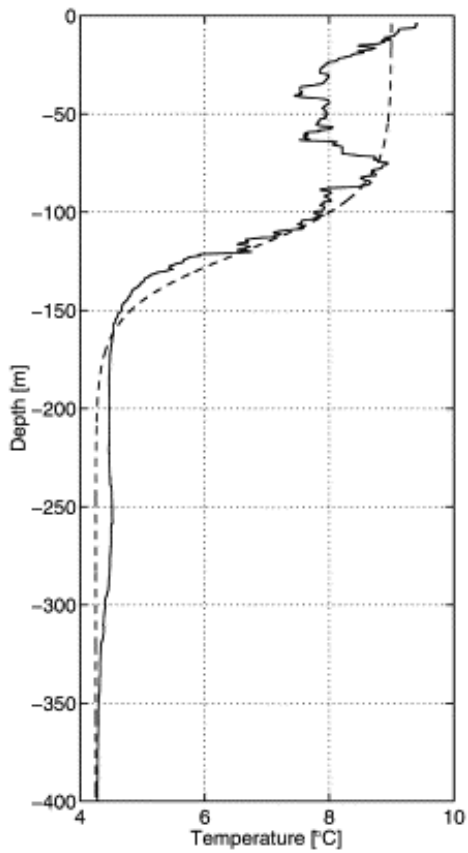


Eliassen et al (2001)

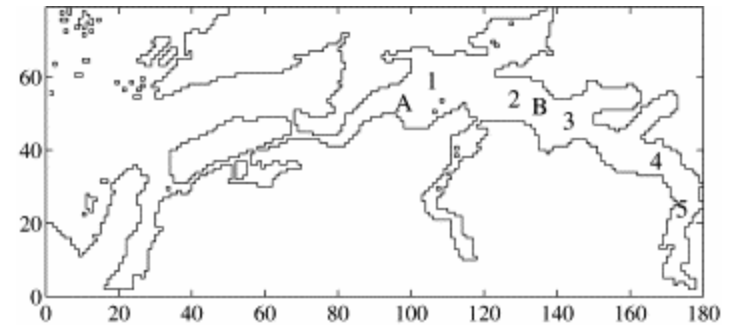
Observasjonene i Skjerstadvfjorden



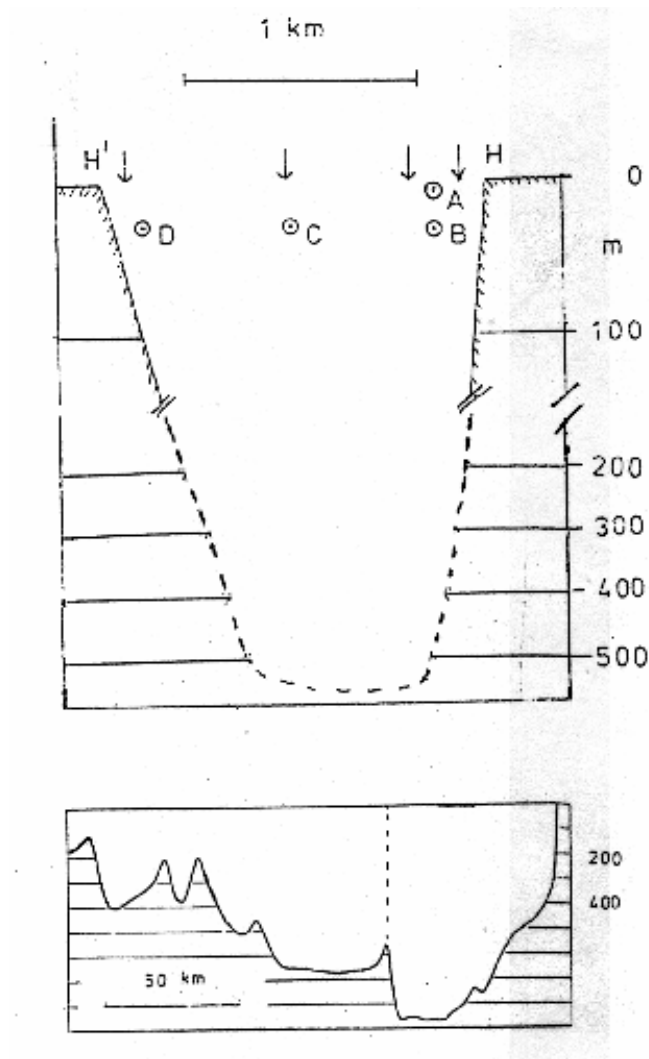
(a) Position A



(b) Position B

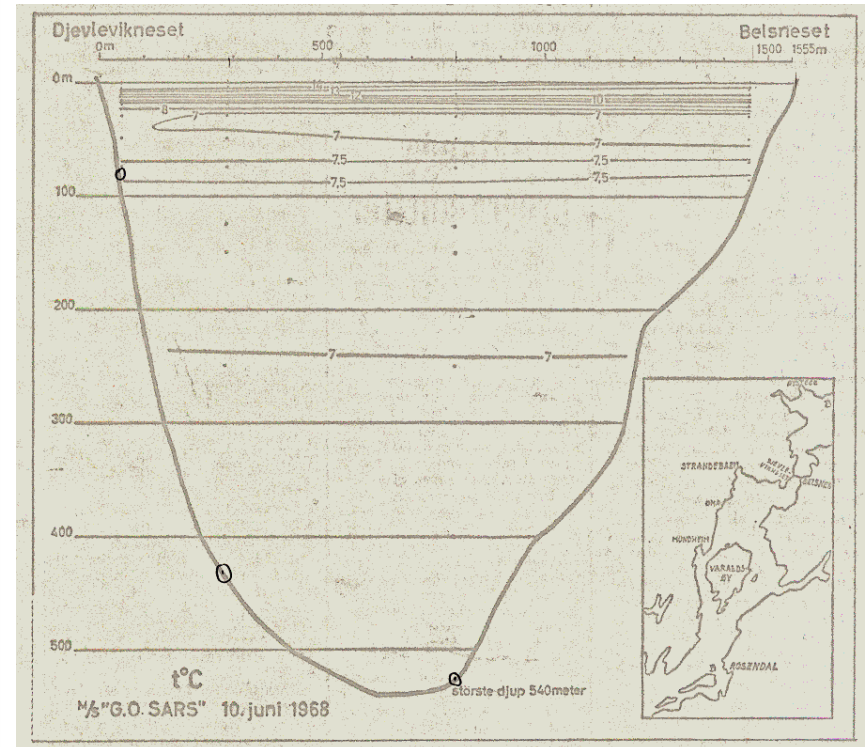
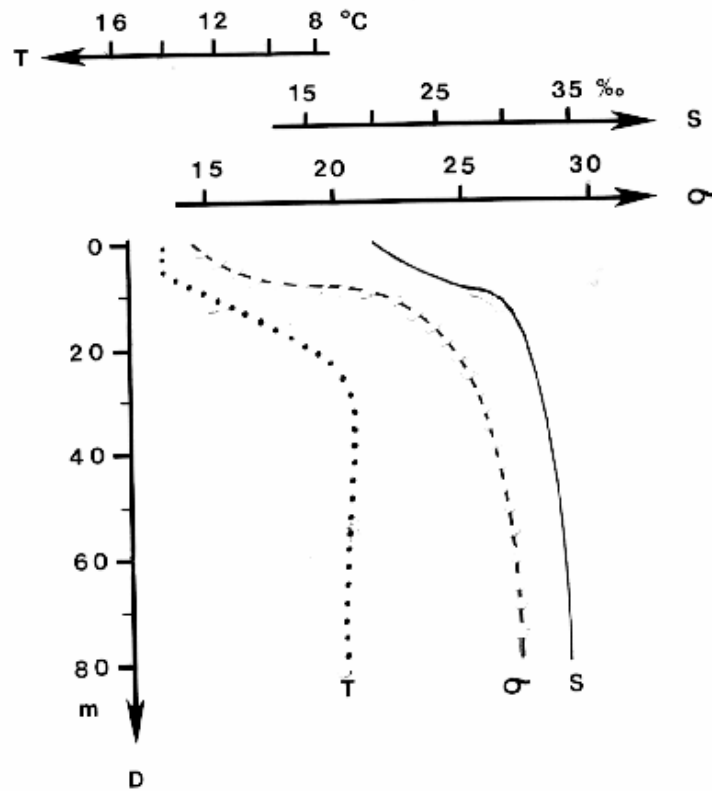


Estuarin sirkulasjon i Hardangerfjorden juni 1968

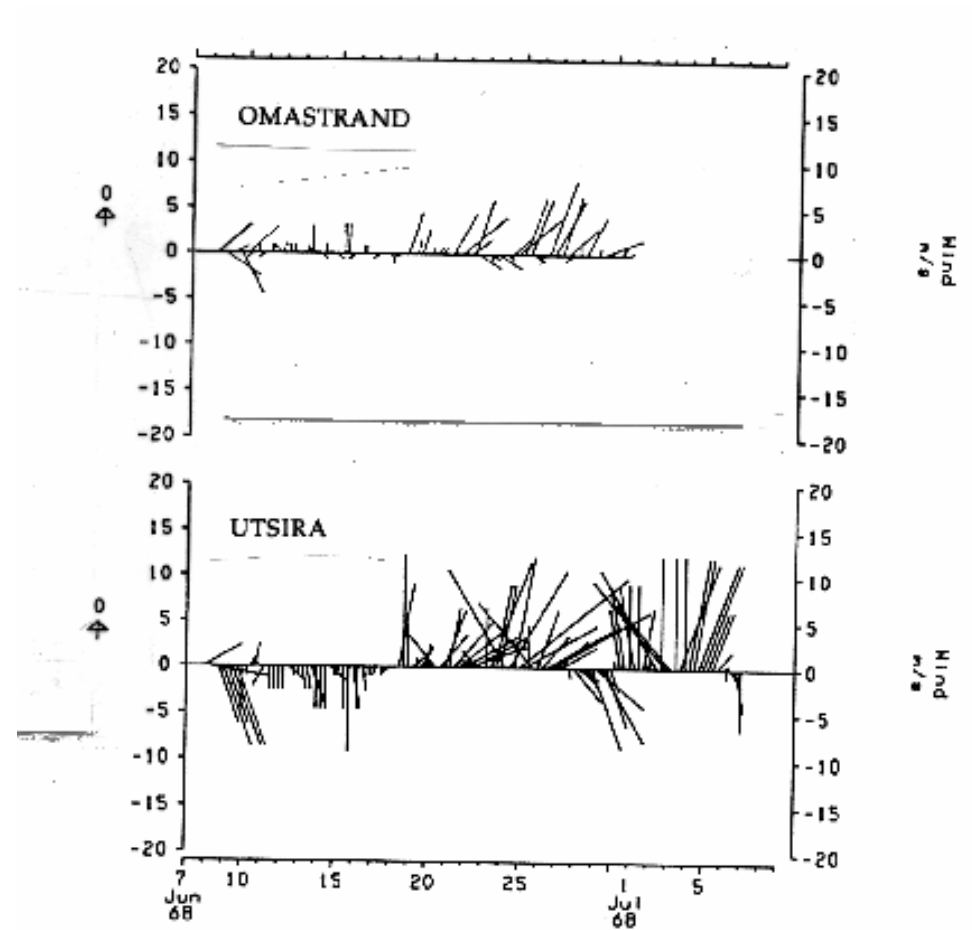


NGF møte, Geilo 2006

Hardangerfjorden juni-juli 1968

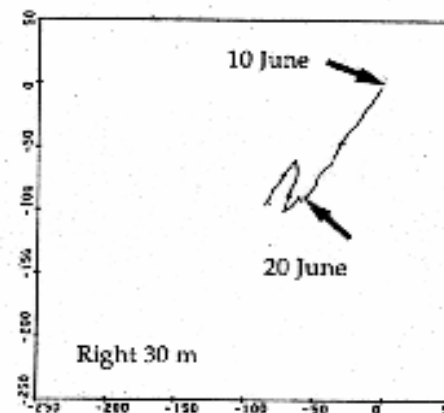
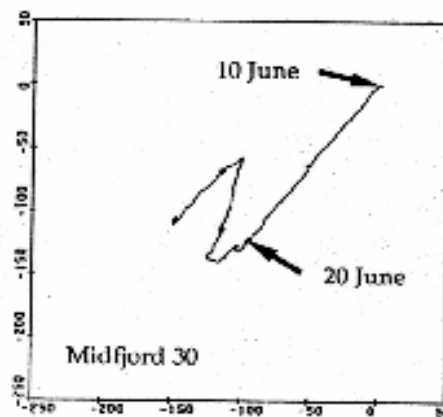
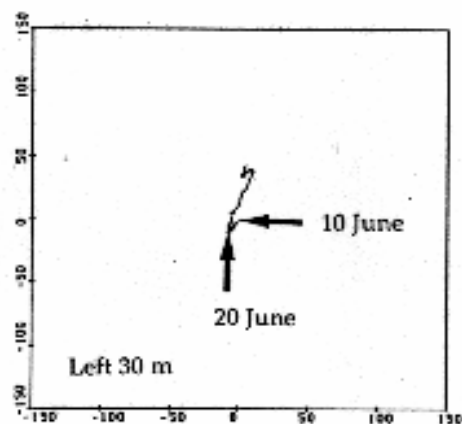
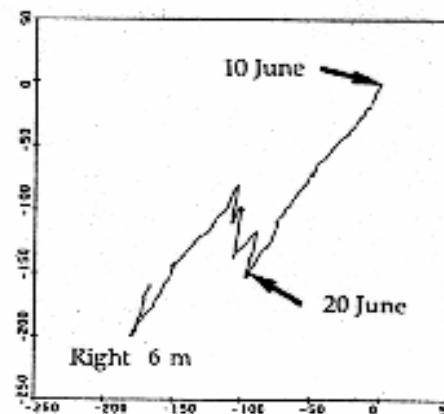


Vind



NGF møte, Geilo 2006

Progressivt vektor diagram for perioden 10. juni til 5. juli



Kilometers

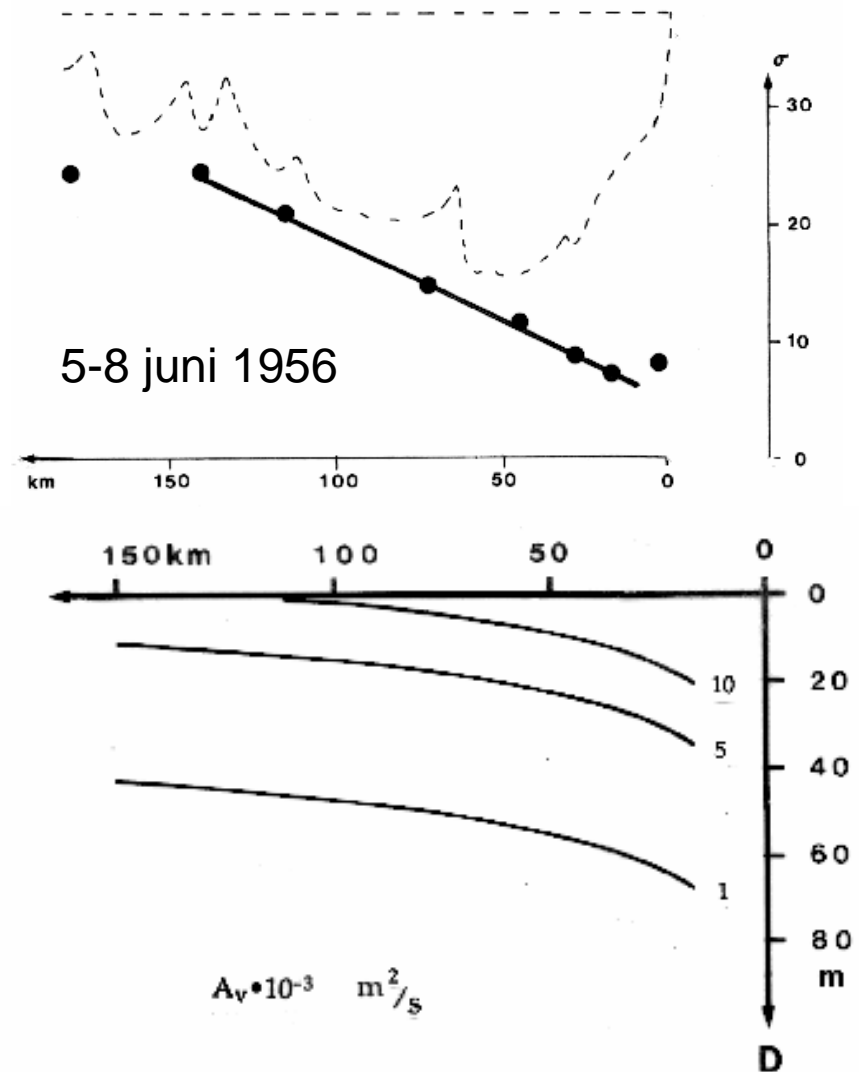
Kilometers

Løsning av bevegelseslikningen

Forutsetninger:

Overflatetetthet øker lineært ut fjorden.

Vertikal indre friksjon forutsettes å avta eksponentialt med dypet



Observert og beregnet vertikalprofil

