Ice Draft Calculations

$$\eta = \frac{(P_{btm} - P_{atm})}{\rho\, g} \quad \text{(water level)}$$

$$d = \eta - \beta \cdot r \cdot \cos\theta \quad \text{(ice draft)}$$

$\beta =$ function of C (speed of sound)

Determined from:
- bottom temperature
- CTD
- Open water events

P_{atm}

Mean water level

Sail

Keel

d

$r \cdot \cos\theta$

r

η

θ

SWIP

tilt sensor

P_{btm}

r

SWIP

(Temperature & Pressure sensors)