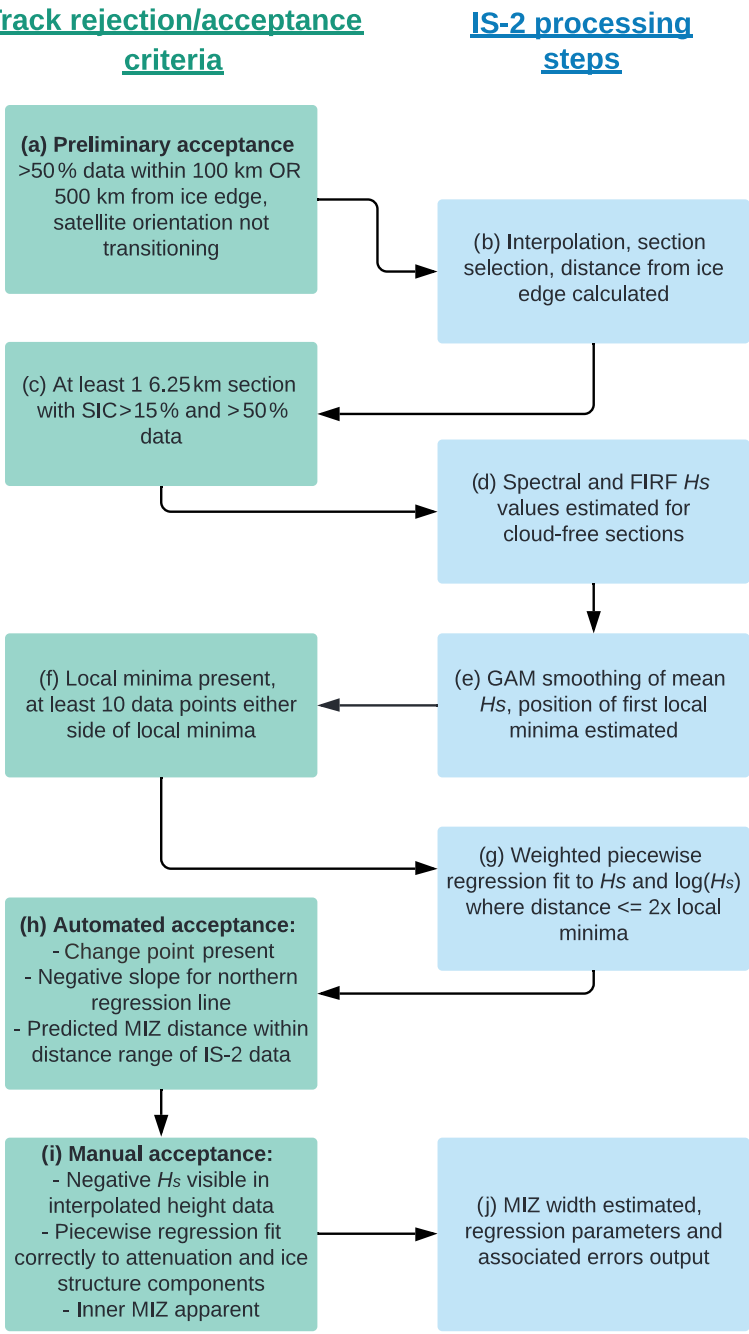
Track rejection/acceptance criteria
IS-2 processing steps
(a) Preliminary acceptance
>50 % data within 100 km OR 500 km from ice edge, satellite orientation not transitioning
(b) Interpolation, section selection, distance from ice edge calculated
(c) At least 1 6.25 km section with SIC>15 % and >50 % data
(d) Spectral and FIRF Hs values estimated for cloud-free sections
(e) GAM smoothing of mean Hs, position of first local minima estimated
(f) Local minima present, at least 10 data points either side of local minima
(g) Weighted piecewise regression fit to Hs and log(Hs) where distance <= 2x local minima
(h) Automated acceptance:
- Change point present
- Negative slope for northern regression line
- Predicted MIZ distance within distance range of IS-2 data
(i) Manual acceptance:
- Negative Hs visible in interpolated height data
- Piecewise regression fit correctly to attenuation and ice structure components
- Inner MIZ apparent
(j) MIZ width estimated, regression parameters and associated errors output