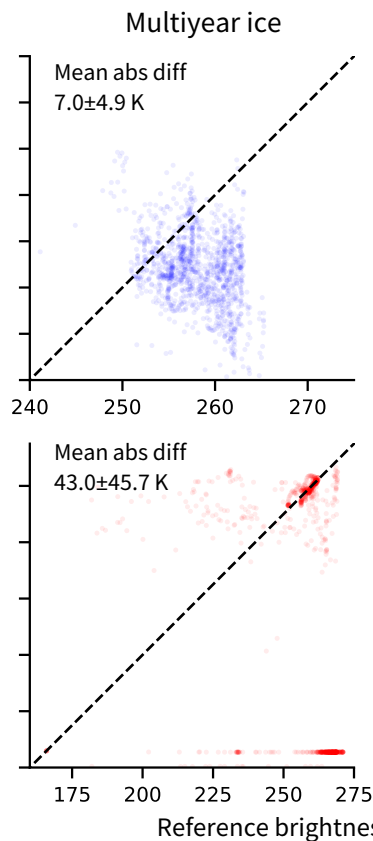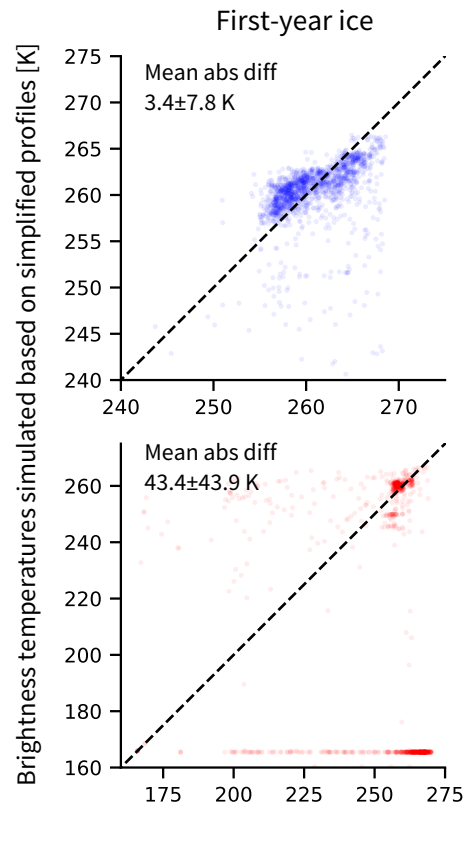(a) EXPERIMENT **SIMPLEALLCONST**
- linear temperature profile
- constant salinity profile

(b) EXPERIMENT **SIMPLEALLFUNC**
- linear temperature profile
- salinity profile as a function of depth

First-year ice

Mean abs diff
3.4±7.8 K

Multiyear ice

Mean abs diff
7.0±4.9 K

First-year ice

Mean abs diff
3.1±6.8 K

Multiyear ice

Mean abs diff
2.5±2.7 K

Mean abs diff
43.4±43.9 K

Mean abs diff
43.0±45.7 K

Mean abs diff
43.2±44.1 K

Mean abs diff
10.5±21.7 K

Cold conditions

Warm conditions

Brightness temperatures simulated based on simplified profiles [K]

Reference brightness temperatures [K]