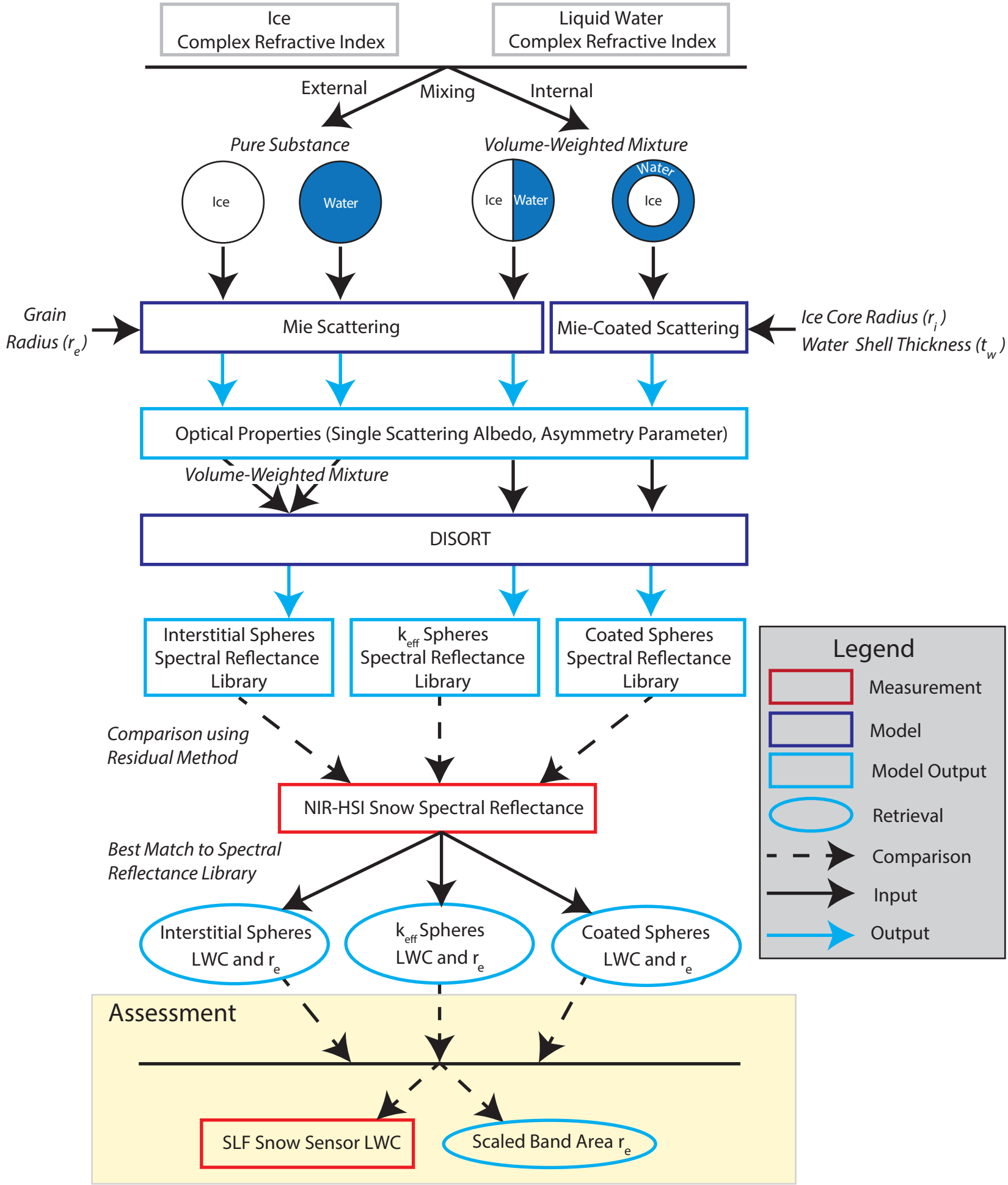
Ice
Complex Refractive Index
Liquid Water
Complex Refractive Index
External
Mixing
Internal
Pure Substance
Volume-Weighted Mixture
Ice
Water
Ice
Water
Water
Ice
Grain
Radius (r_e)
Mie Scattering
Mie-Coated Scattering
Ice Core Radius (r_i)
Water Shell Thickness (t_w)
Optical Properties (Single Scattering Albedo, Asymmetry Parameter)
Volume-Weighted Mixture
DISORT
Interstitial Spheres
Spectral Reflectance
Library
k_{eff} Spheres
Spectral Reflectance
Library
Coated Spheres
Spectral Reflectance
Library
Comparison using
Residual Method
NIR-HSI Snow Spectral Reflectance
Best Match to Spectral
Reflectance Library
Interstitial Spheres
LWC and r_e
k_{eff} Spheres
LWC and r_e
Coated Spheres
LWC and r_e
Assessment
SLF Snow Sensor LWC
Scaled Band Area r_e
Legend
Measurement
Model
Model Output
Retrieval
Comparison
Input
Output