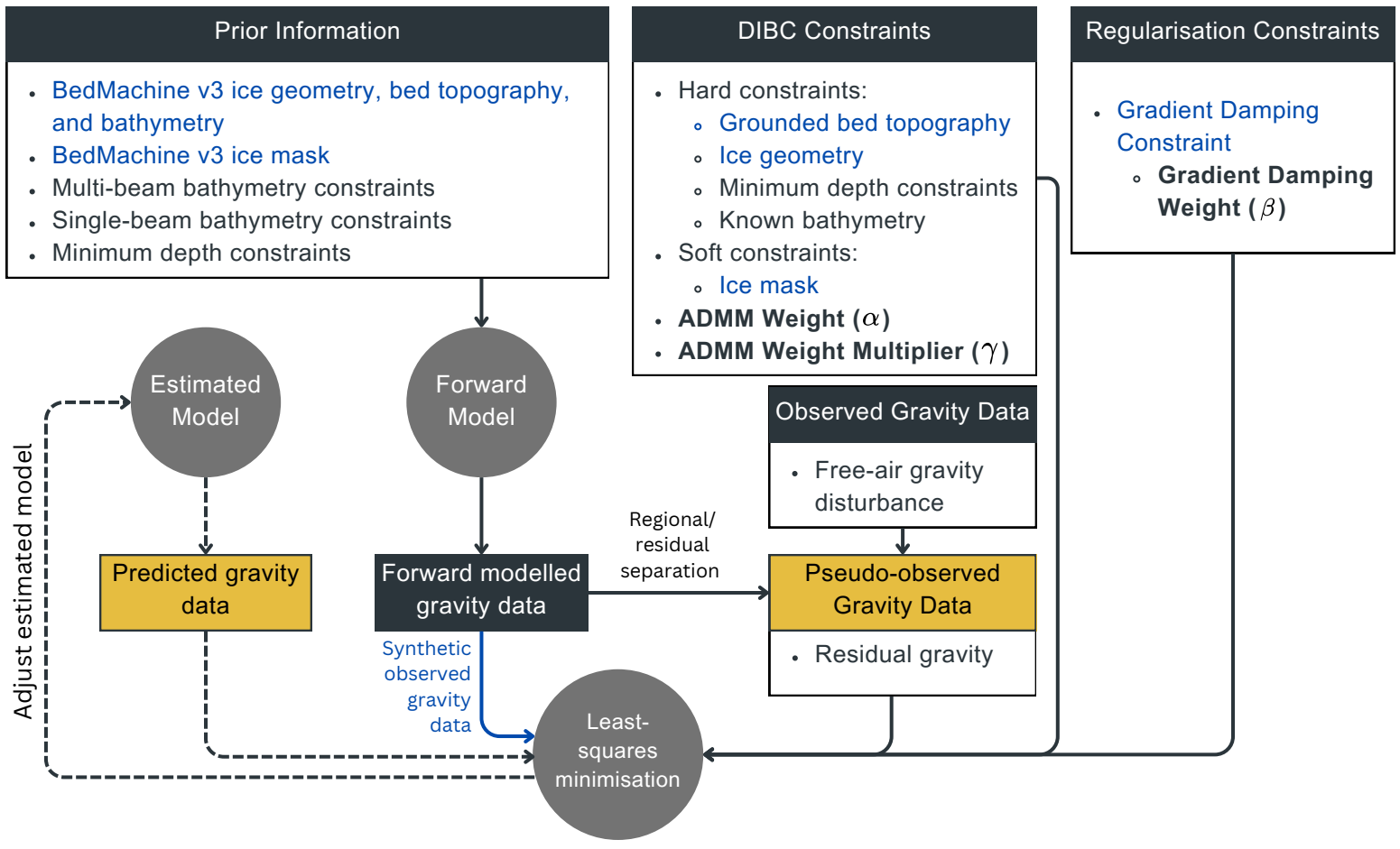
Prior Information
BedMachine v3 ice geometry, bed topography, and bathymetry
BedMachine v3 ice mask
Multi-beam bathymetry constraints
Single-beam bathymetry constraints
Minimum depth constraints
DIBC Constraints
Hard constraints:
Grounded bed topography
Ice geometry
Minimum depth constraints
Known bathymetry
Soft constraints:
Ice mask
ADMM Weight (α)
ADMM Weight Multiplier (γ)
Regularisation Constraints
Gradient Damping Constraint
Gradient Damping Weight (β)
Estimated Model
Forward Model
Observed Gravity Data
Free-air gravity disturbance
Adjust estimated model
Predicted gravity data
Forward modelled gravity data
Regional/ residual separation
Pseudo-observed Gravity Data
Residual gravity
Synthetic observed gravity data
Least-squares minimisation