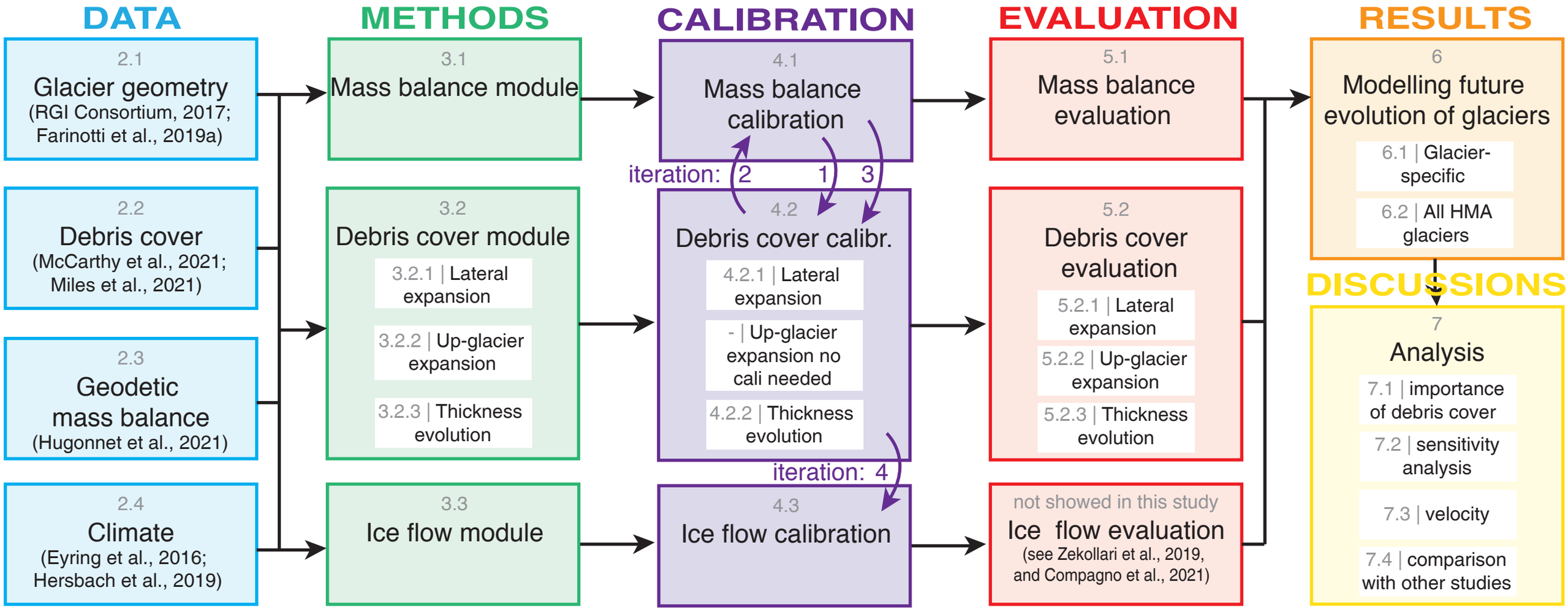
DATA
METHODS
CALIBRATION
EVALUATION
RESULTS
2.1
Glacier geometry
(RGI Consortium, 2017; Farinotti et al., 2019a)
2.2
Debris cover
(McCarthy et al., 2021; Miles et al., 2021)
2.3
Geodetic mass balance
(Hugonnet et al., 2021)
2.4
Climate
(Eyring et al., 2016; Hersbach et al., 2019)
3.1
Mass balance module
3.2
Debris cover module
3.2.1 | Lateral expansion
3.2.2 | Up-glacier expansion
3.2.3 | Thickness evolution
3.3
Ice flow module
4.1
Mass balance calibration
iteration: 2
1
3
4.2
Debris cover calibr.
4.2.1 | Lateral expansion
- | Up-glacier expansion no cali needed
4.2.2 | Thickness evolution
iteration: 4
4.3
Ice flow calibration
5.1
Mass balance evaluation
5.2
Debris cover evaluation
5.2.1 | Lateral expansion
5.2.2 | Up-glacier expansion
5.2.3 | Thickness evolution
not showed in this study
Ice flow evaluation
(see Zekollari et al., 2019, and Compagno et al., 2021)
6
Modelling future evolution of glaciers
6.1 | Glacier-specific
6.2 | All HMA glaciers
DISCUSSIONS
7
Analysis
7.1 | importance of debris cover
7.2 | sensitivity analysis
7.3 | velocity
7.4 | comparison with other studies