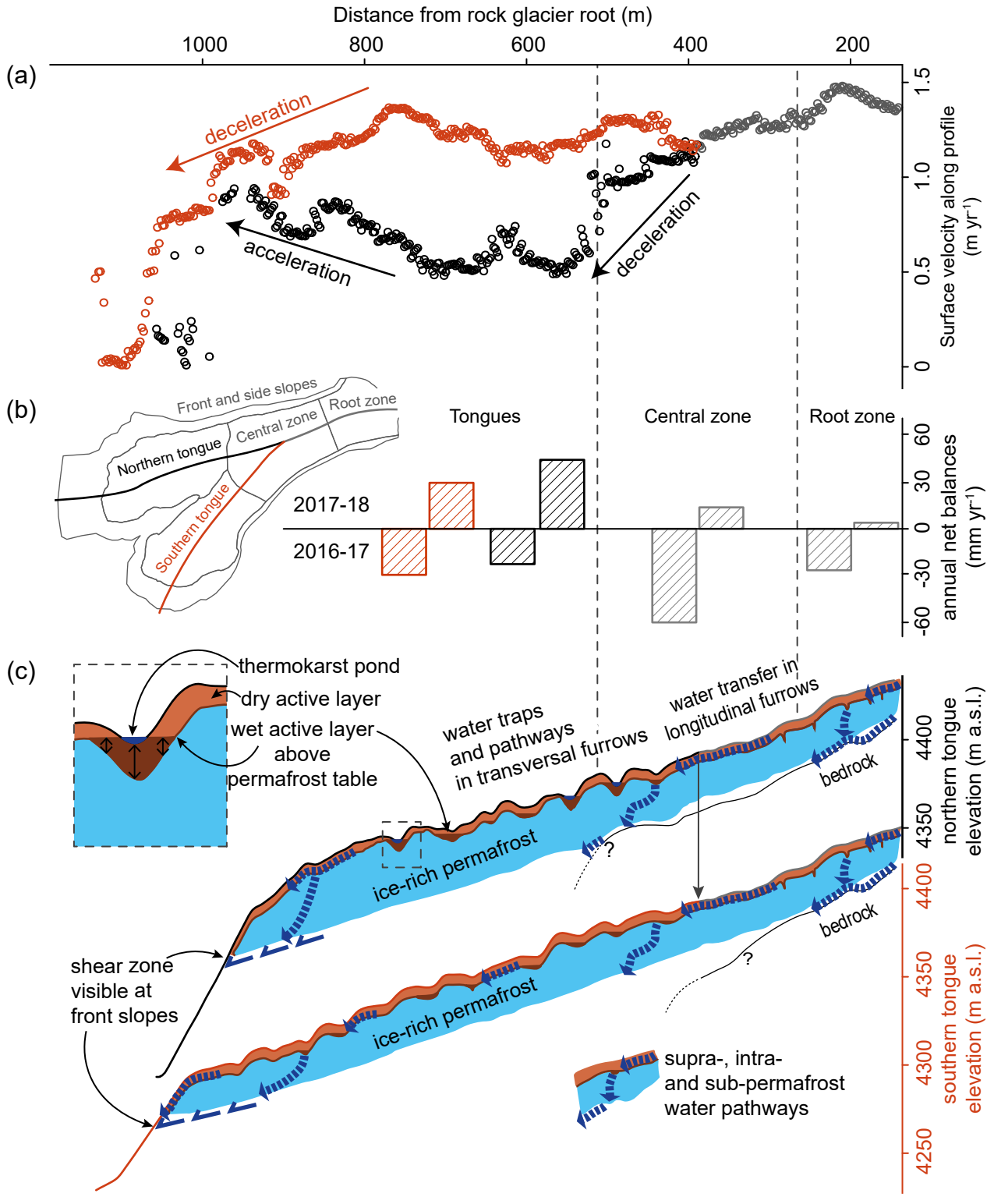
Distance from rock glacier root (m)
1000
800
600
400
200
(a)
deceleration
acceleration
deceleration
Surface velocity along profile (m yr⁻¹)
0
0.5
1.0
1.5
(b)
Front and side slopes
Root zone
Central zone
Northern tongue
Southern tongue
Tongues
Central zone
Root zone
2017-18
2016-17
annual net balances (mm yr⁻¹)
60
30
0
-30
-60
(c)
thermokarst pond
dry active layer
wet active layer above permafrost table
water traps and pathways in transversal furrows
water transfer in longitudinal furrows
bedrock
ice-rich permafrost
shear zone visible at front slopes
supra-, intra- and sub-permafrost water pathways
northern tongue elevation (m a.s.l.)
4400
4350
southern tongue elevation (m a.s.l.)
4400
4350
4300
4250