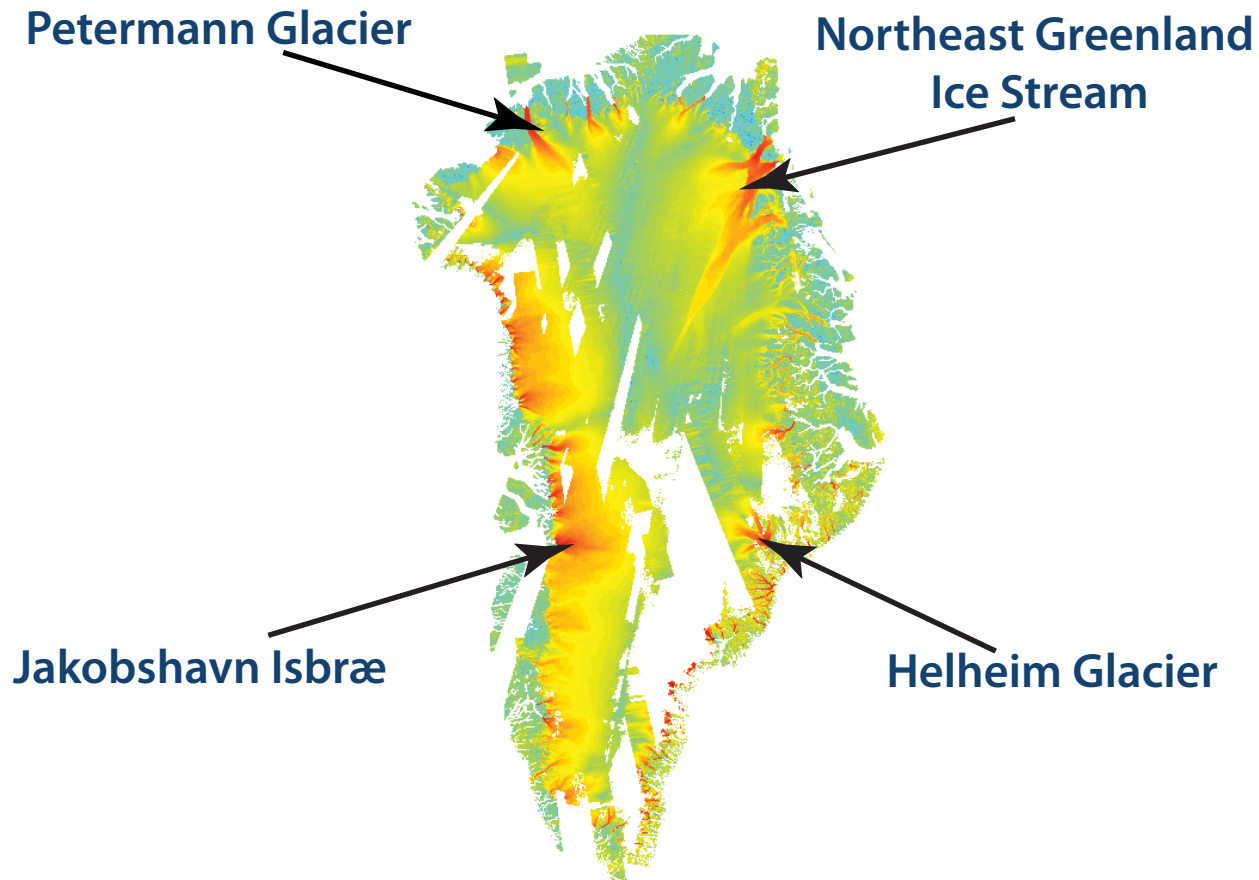


Basal conditions of fast-flowing outlet glaciers and ice streams from 3D inversions

Olga Sergienko (osergien@princeton.edu)

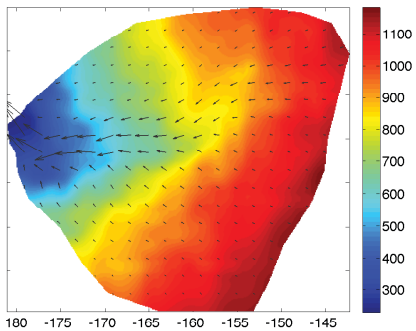
GFDL/Princeton University



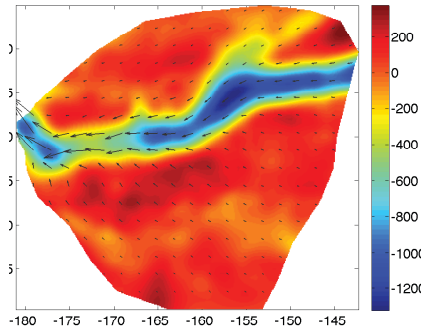
Surface observations → Inverse model → Basal conditions

Jakobshavn Isbræ

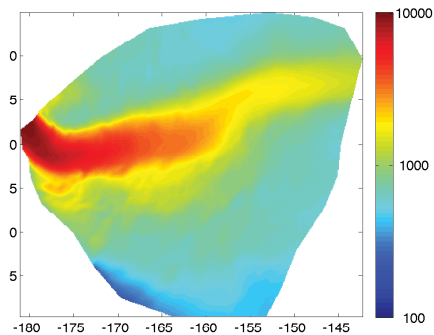
Surface elevation (m)



Bed elevation (m)

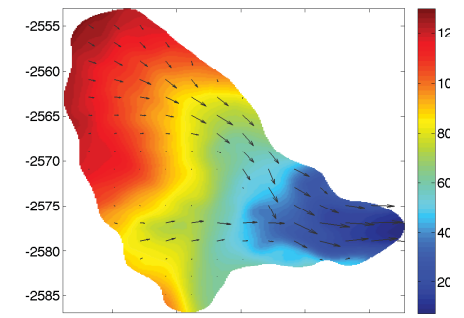


Ice speed (m/yr)

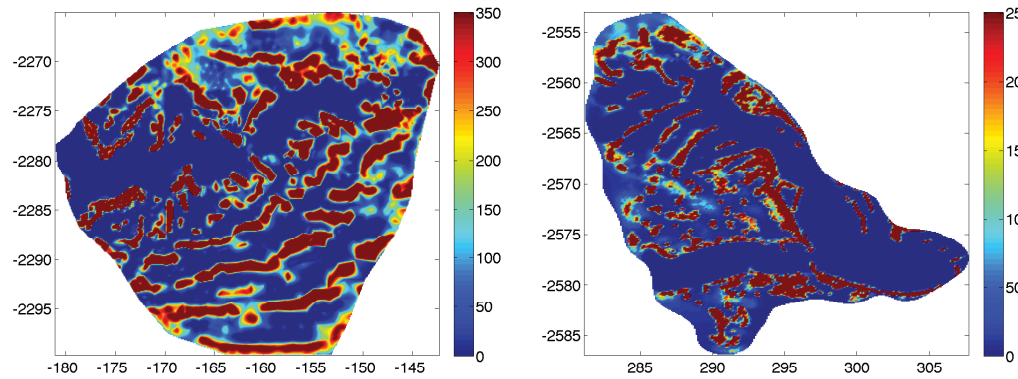


Helheim Glacier

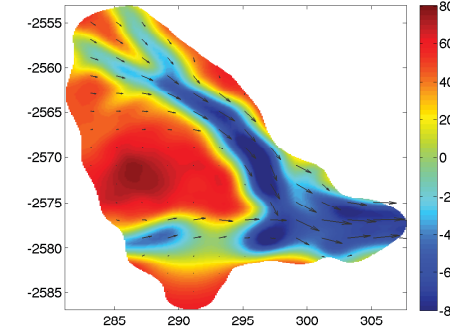
Surface elevation (m)



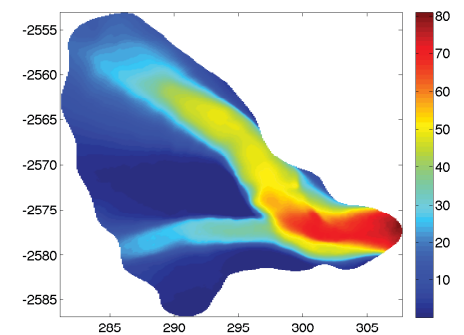
Basal shear stress (kPa)



Bed elevation (m)



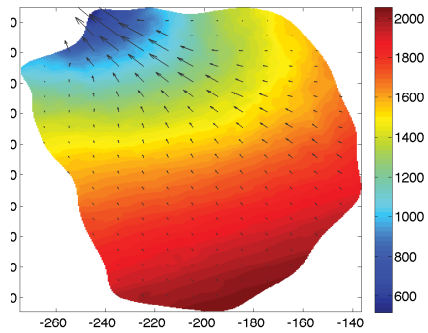
Ice speed (m/yr)



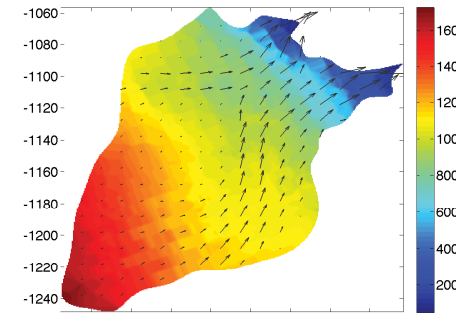
Petermann Glacier

Northeast Greenland Ice Stream

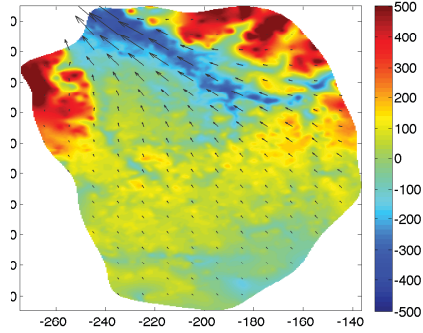
Surface elevation (m)



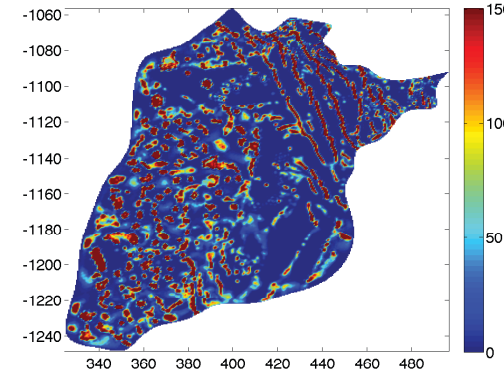
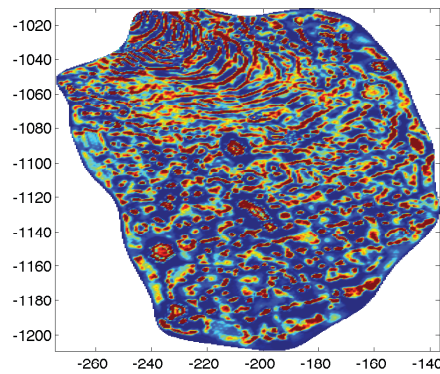
Surface elevation (m)



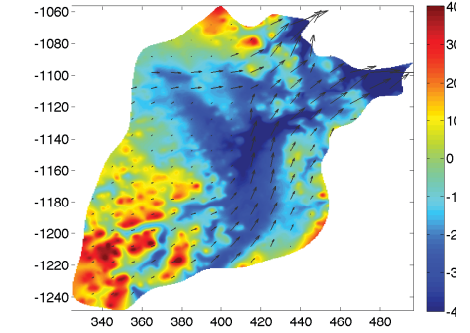
Bed elevation (m)



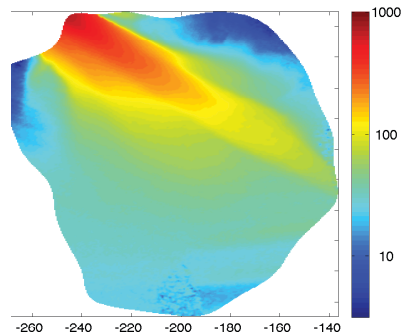
Basal shear stress (kPa)



Bed elevation (m)



Ice speed (m/yr)



Ice speed (m/yr)

