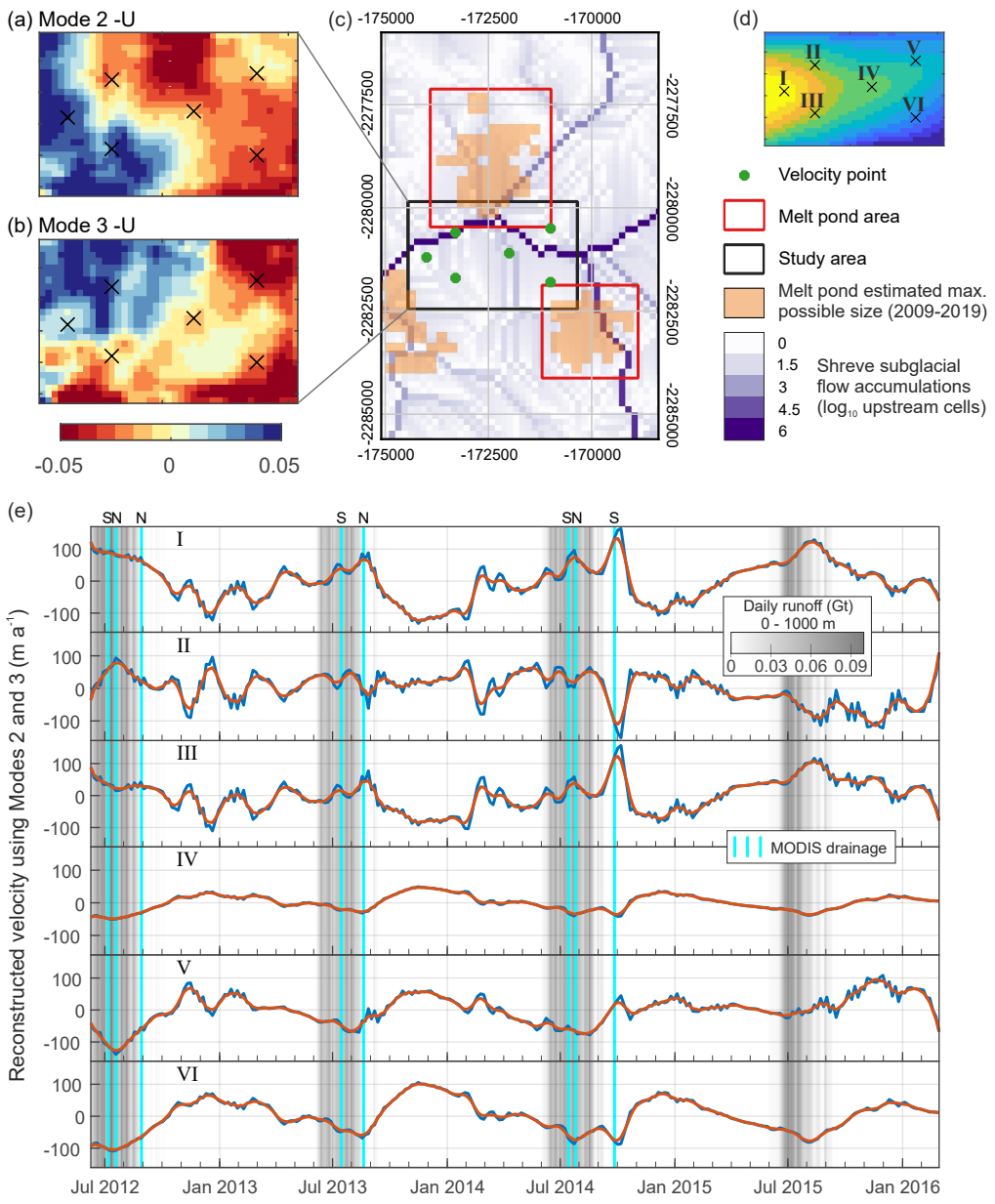
(a) Mode 2 -U
(b) Mode 3 -U
-0.05
0
0.05
(c)
-175000
-172500
-170000
-2277500
-2280000
-2282500
-2285000
(d)
I
II
III
IV
V
VI
Velocity point
Melt pond area
Study area
Melt pond estimated max. possible size (2009-2019)
0
1.5
3
4.5
6
Shreve subglacial flow accumulations (log10 upstream cells)
(e)
SN
N
S
N
SN
S
Daily runoff (Gt) 0 - 1000 m
0
0.03
0.06
0.09
MODIS drainage
Reconstructed velocity using Modes 2 and 3 (m a-1)
100
0
-100
Jul 2012
Jan 2013
Jul 2013
Jan 2014
Jul 2014
Jan 2015
Jul 2015
Jan 2016