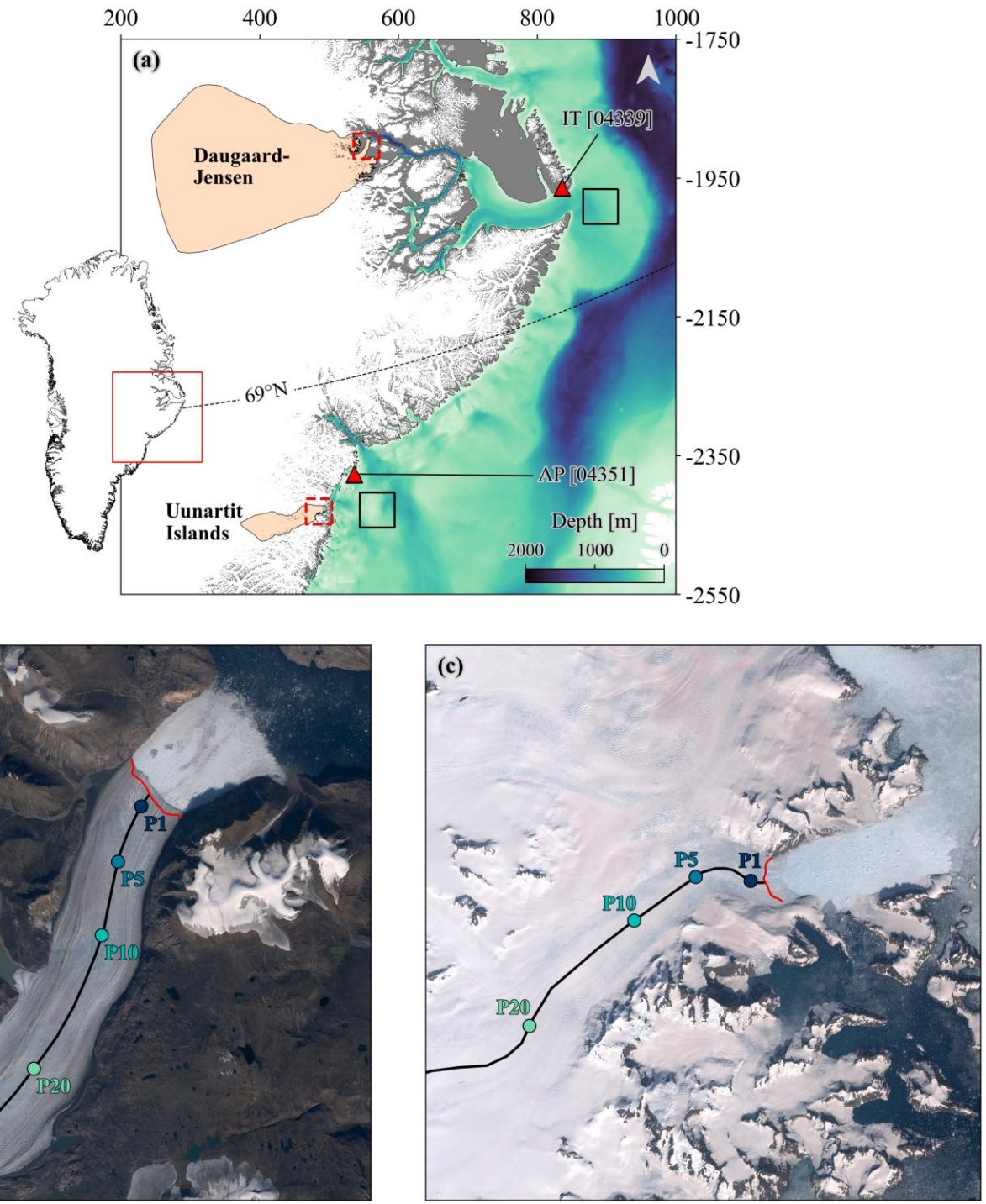
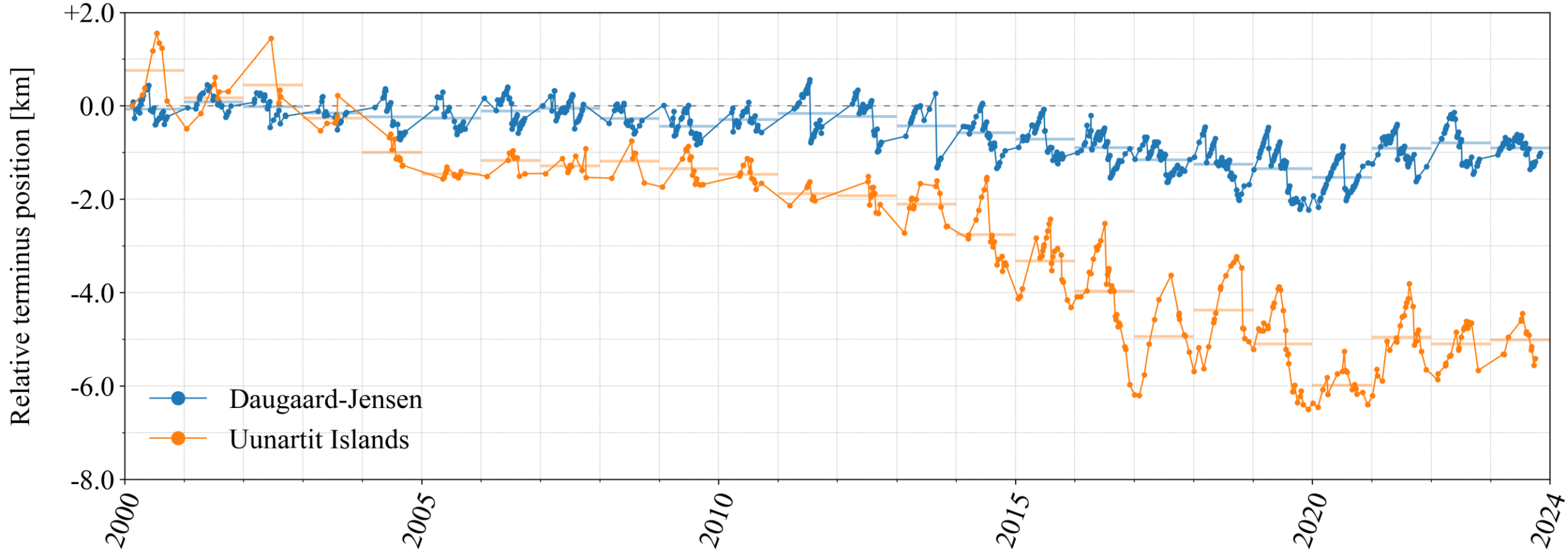
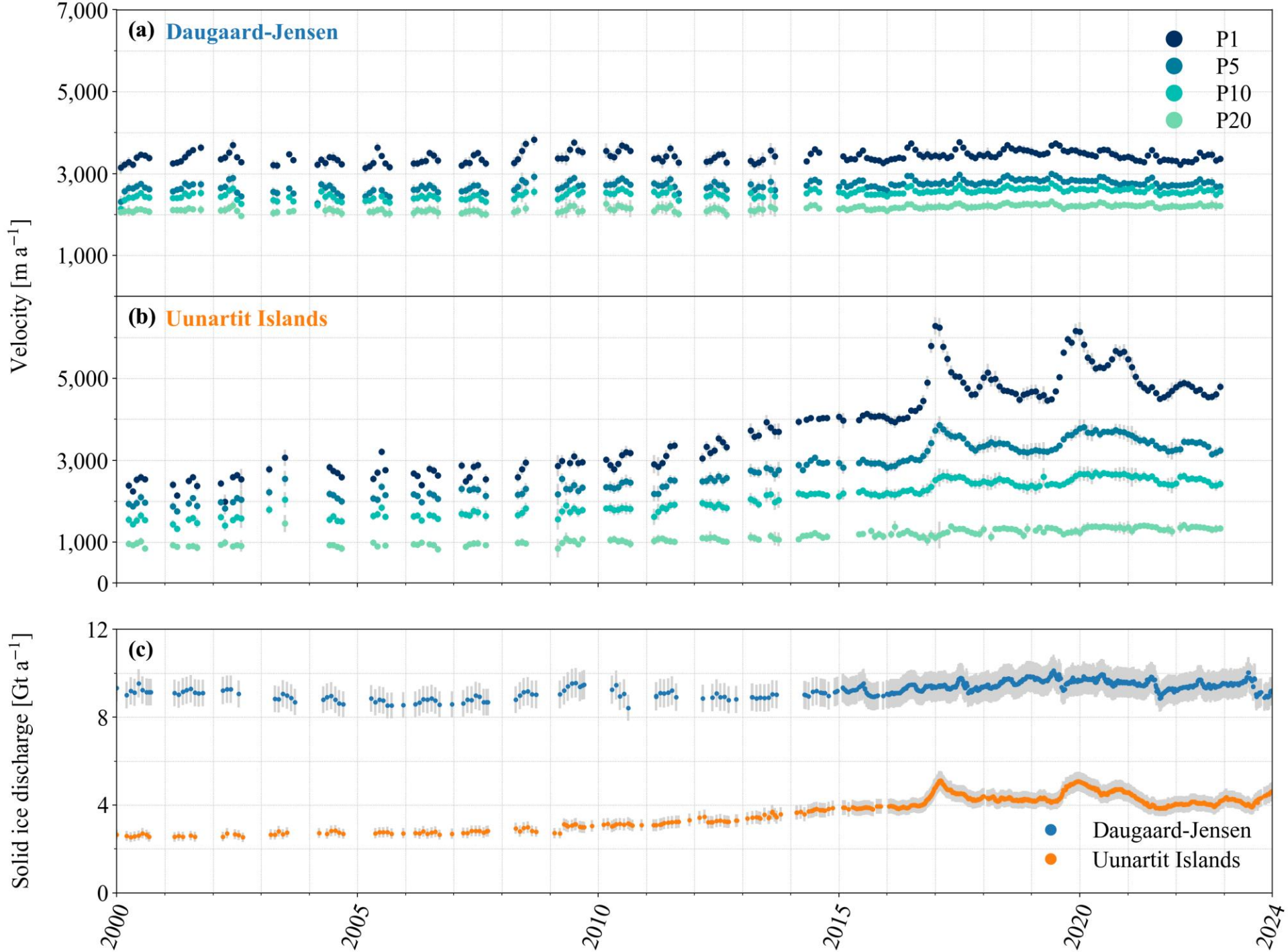
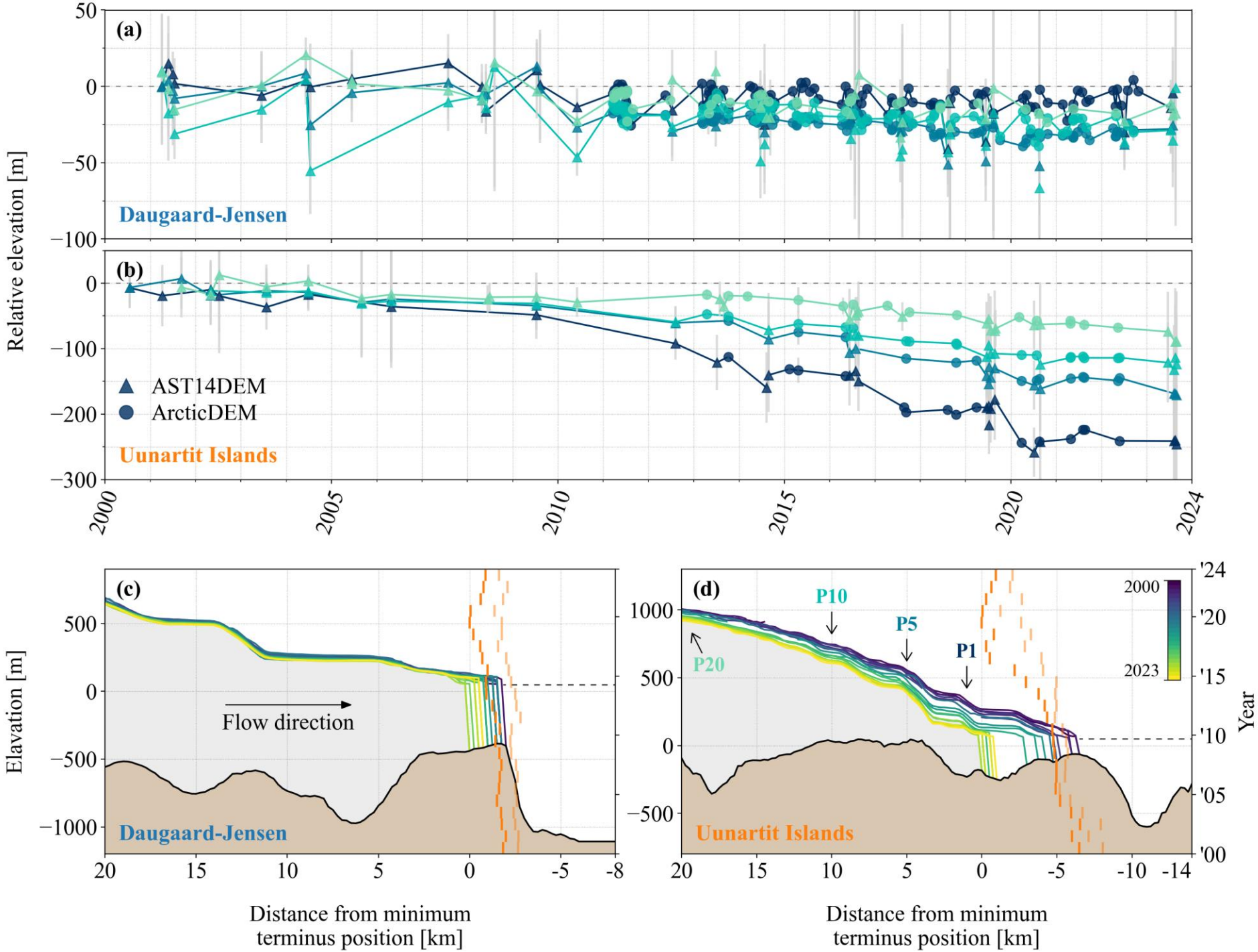
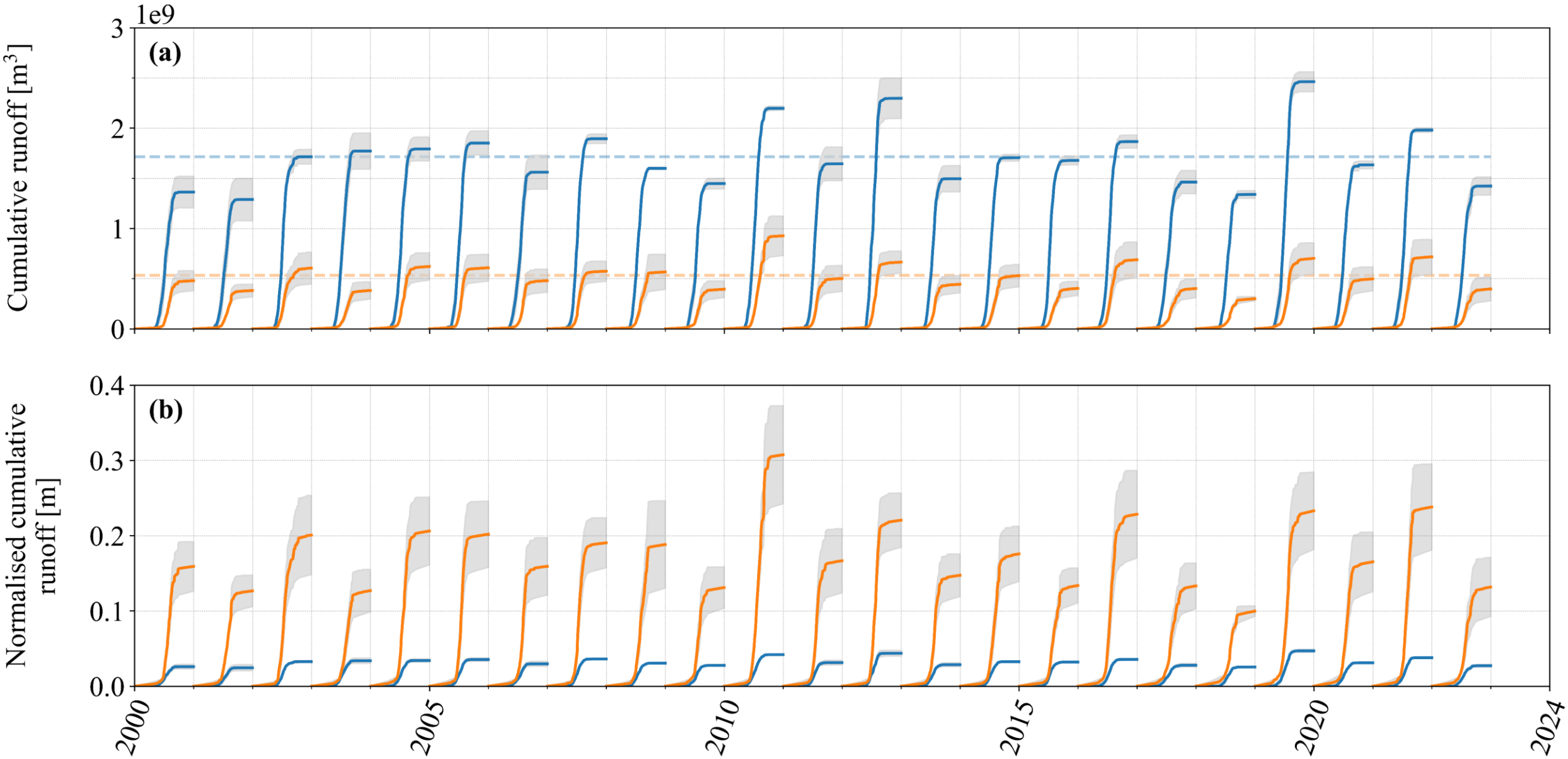
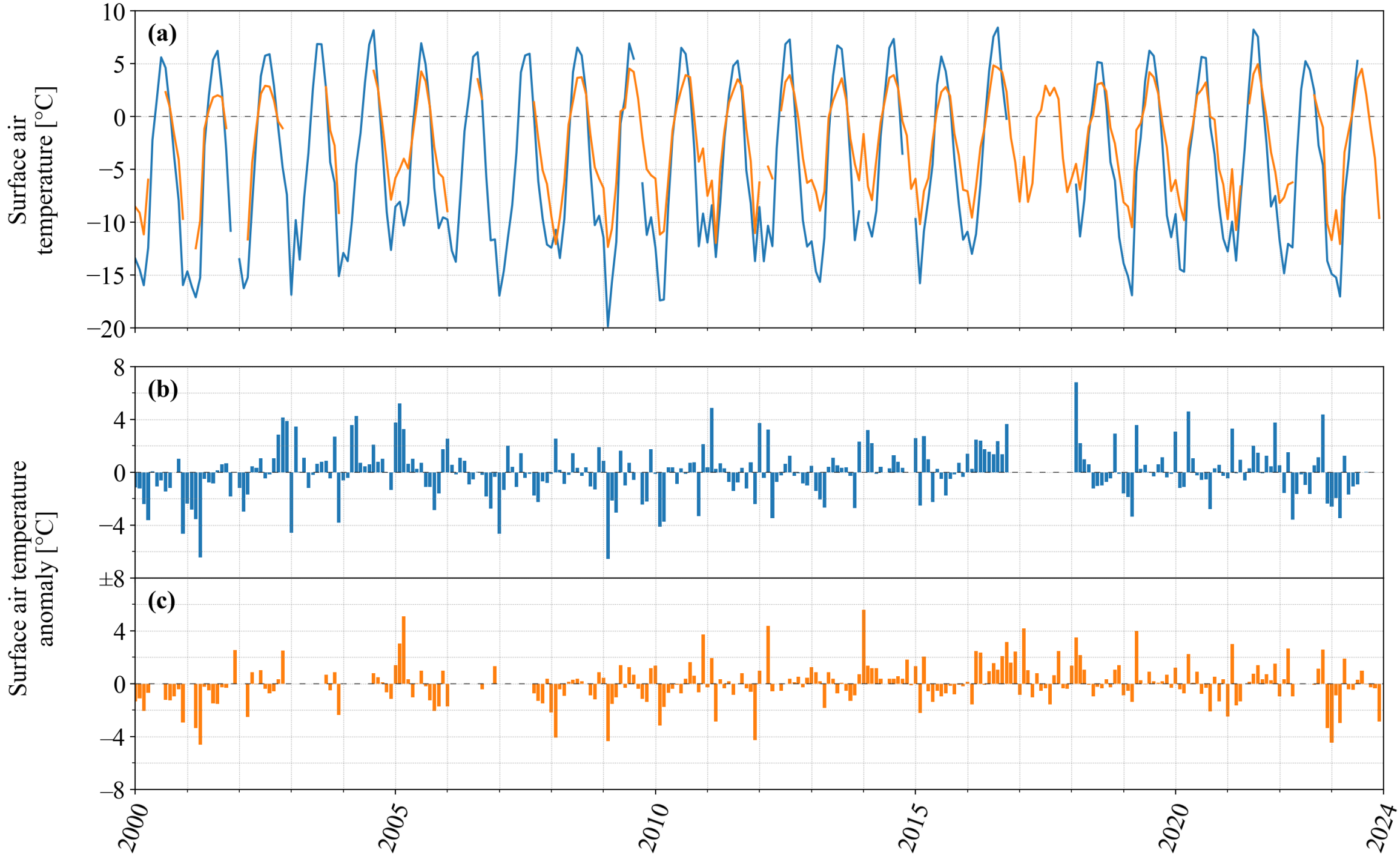

(a)
200
400
600
800
1000
-1750
-1950
-2150
-2350
-2550
Daugaard-
Jensen
IT [04339]
69°N
AP [04351]
Uunartit
Islands
Depth [m]
2000
1000
0
(b)
P1
P5
P10
P20
5 km
(c)
P1
P5
P10
P20

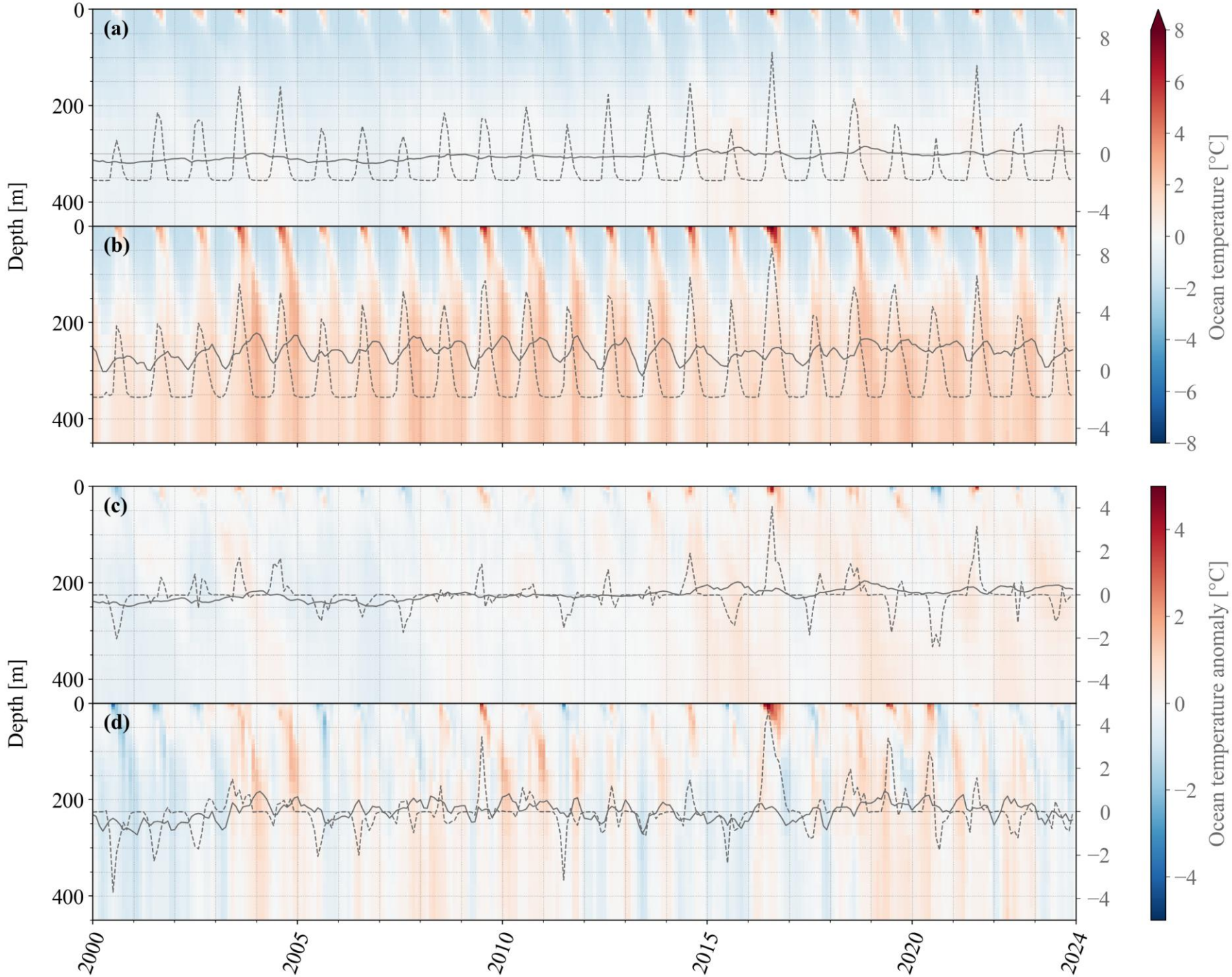

+2.0
0.0
-2.0
-4.0
-6.0
-8.0
Relative terminus position [km]
Daugaard-Jensen
Uunartit Islands
2000
2005
2010
2015
2020
2024

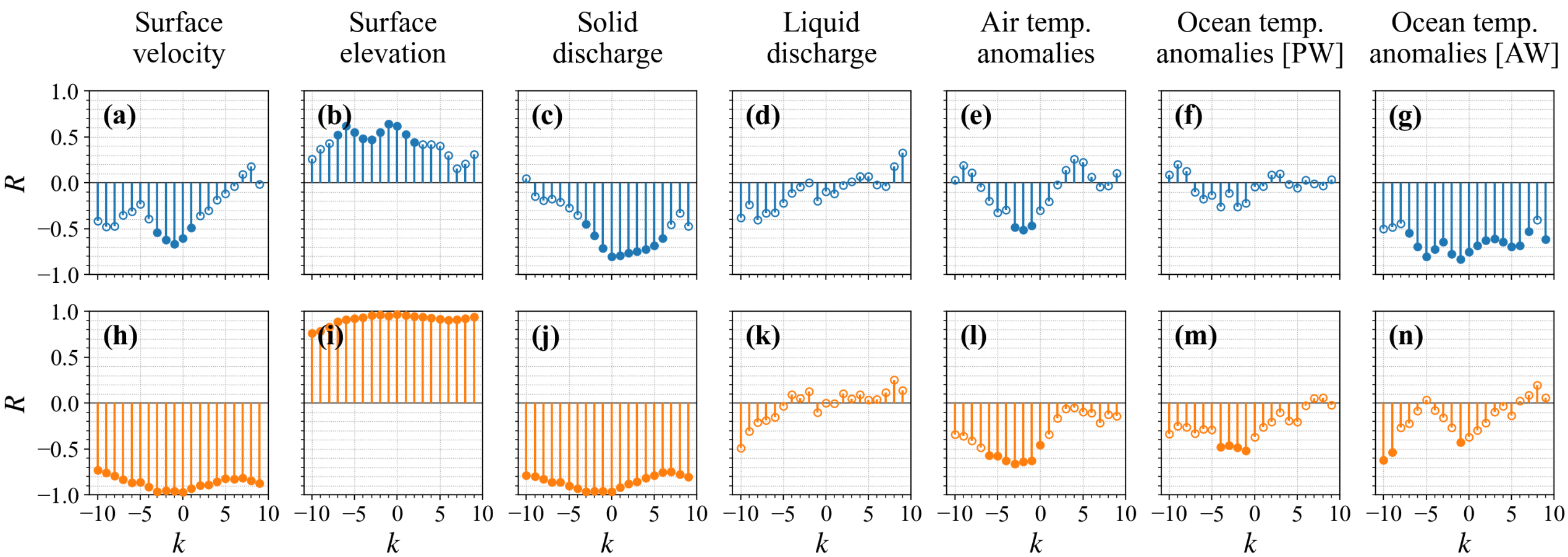

(a) Daugaard-Jensen
P1
P5
P10
P20
7,000
5,000
3,000
1,000
(b) Uunartit Islands
5,000
3,000
1,000
0
Velocity [m a^{-1}]
(c)
12
8
4
0
Solid ice discharge [Gt a^{-1}]
Daugaard-Jensen
Uunartit Islands
2000
2005
2010
2015
2020
2024

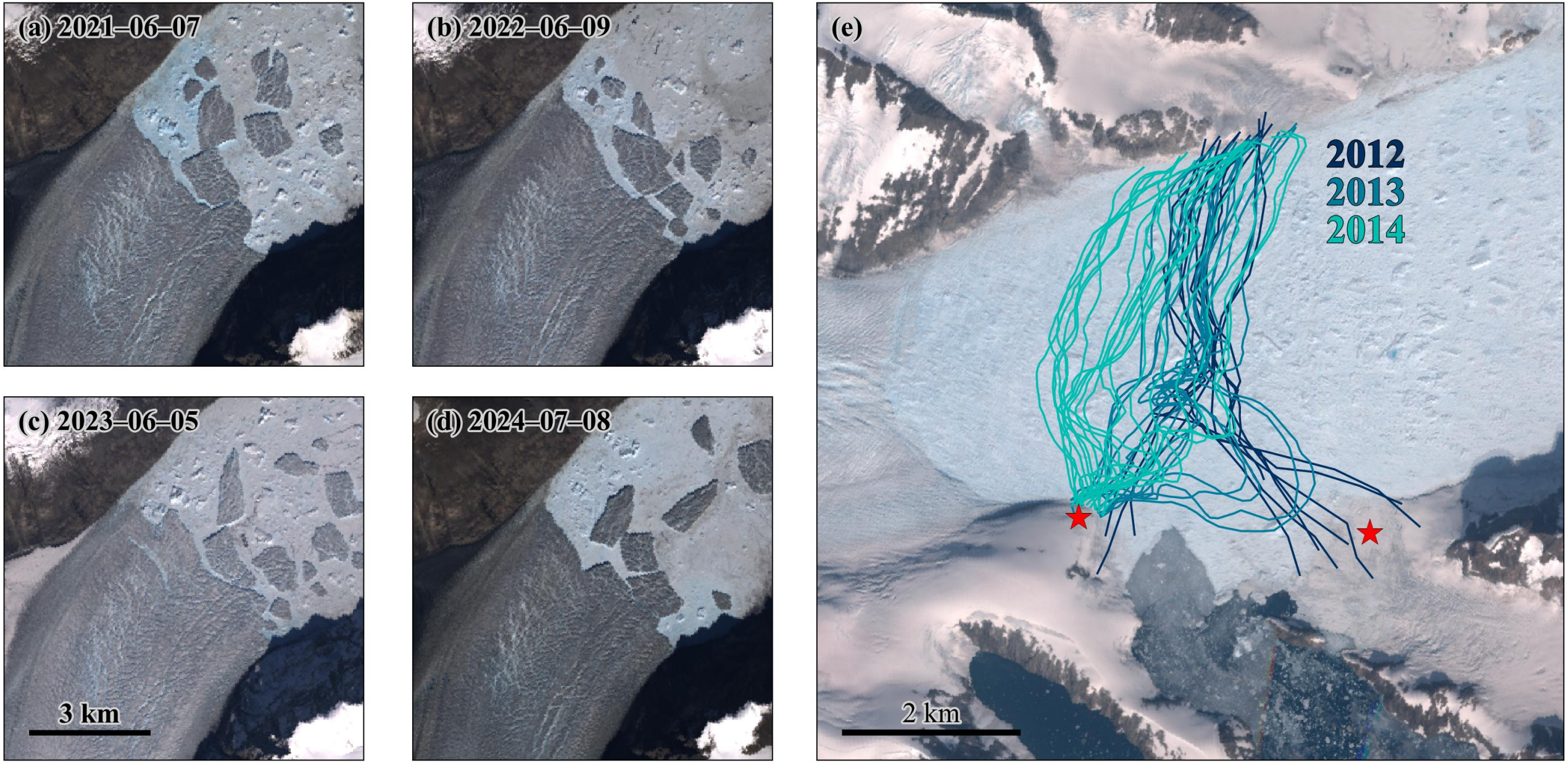

(a)
Daugaard-Jensen
(b)
AST14DEM
ArcticDEM
Uunartit Islands
Relative elevation [m]
50
0
−50
−100
0
−100
−200
−300
2000
2005
2010
2015
2020
2024
(c)
Flow direction
Daugaard-Jensen
Elavation [m]
500
0
−500
−1000
20
15
10
5
0
-5
-8
Distance from minimum terminus position [km]
(d)
P10
P5
P1
P20
2000
2023
Uunartit Islands
1000
500
0
−500
20
15
10
5
0
-5
-10
-14
Distance from minimum terminus position [km]
'24
'20
'15
'10
'05
'00
Year

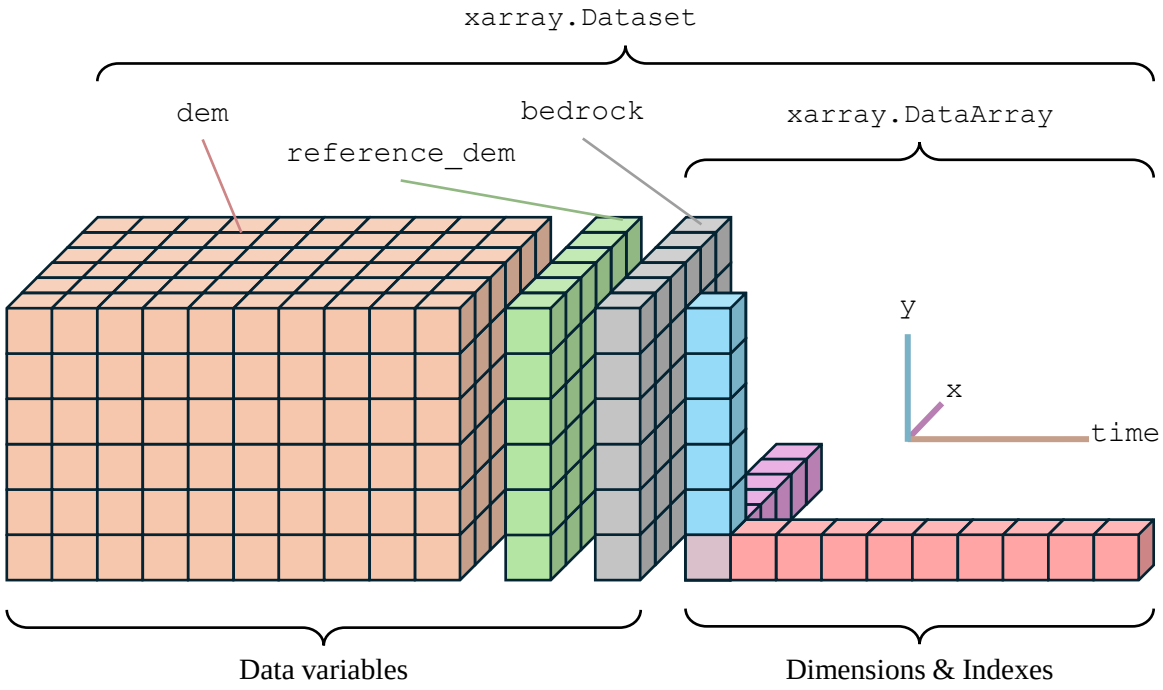

1e9
3
2
1
0
(a)
Cumulative runoff [m^3]
0.4
0.3
0.2
0.1
0.0
(b)
Normalised cumulative runoff [m]
2000
2005
2010
2015
2020
2024

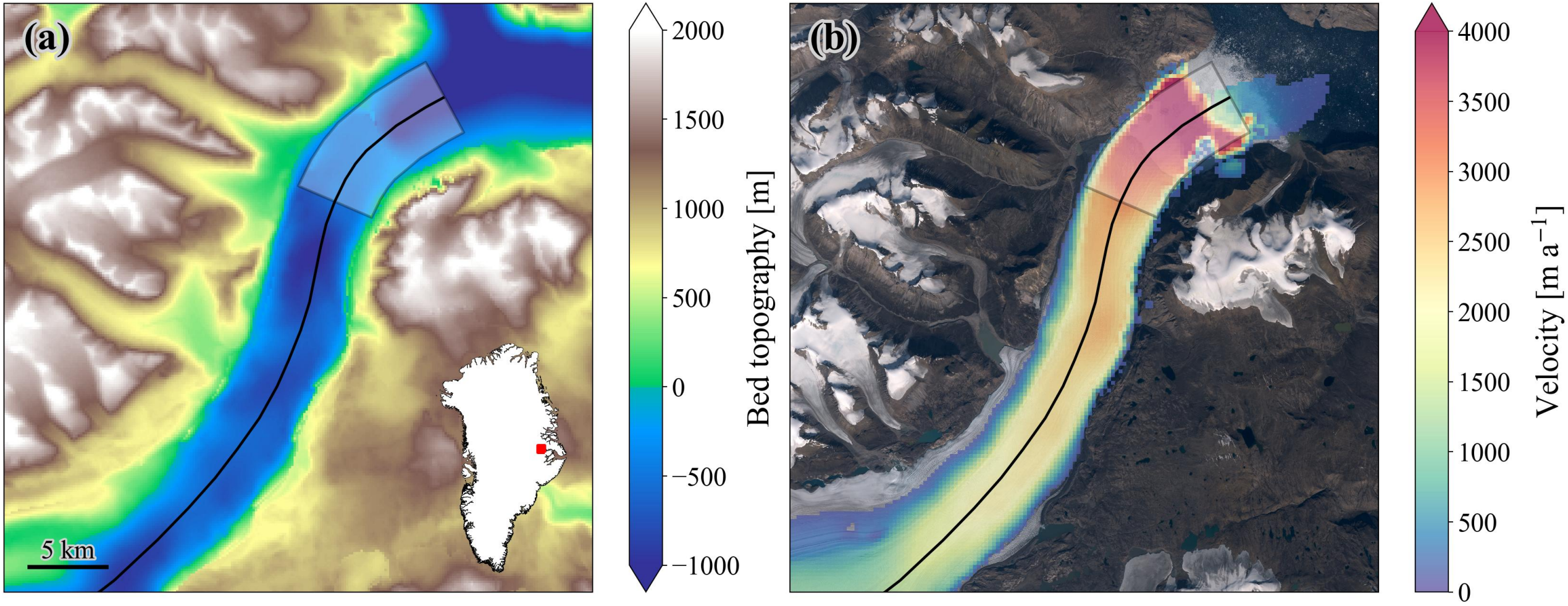

(a)
(b)
(c)
Surface air temperature [°C]
Surface air temperature anomaly [°C]
10
5
0
−5
−10
−15
−20
8
4
0
−4
±8
4
0
−4
−8
2000
2005
2010
2015
2020
2024

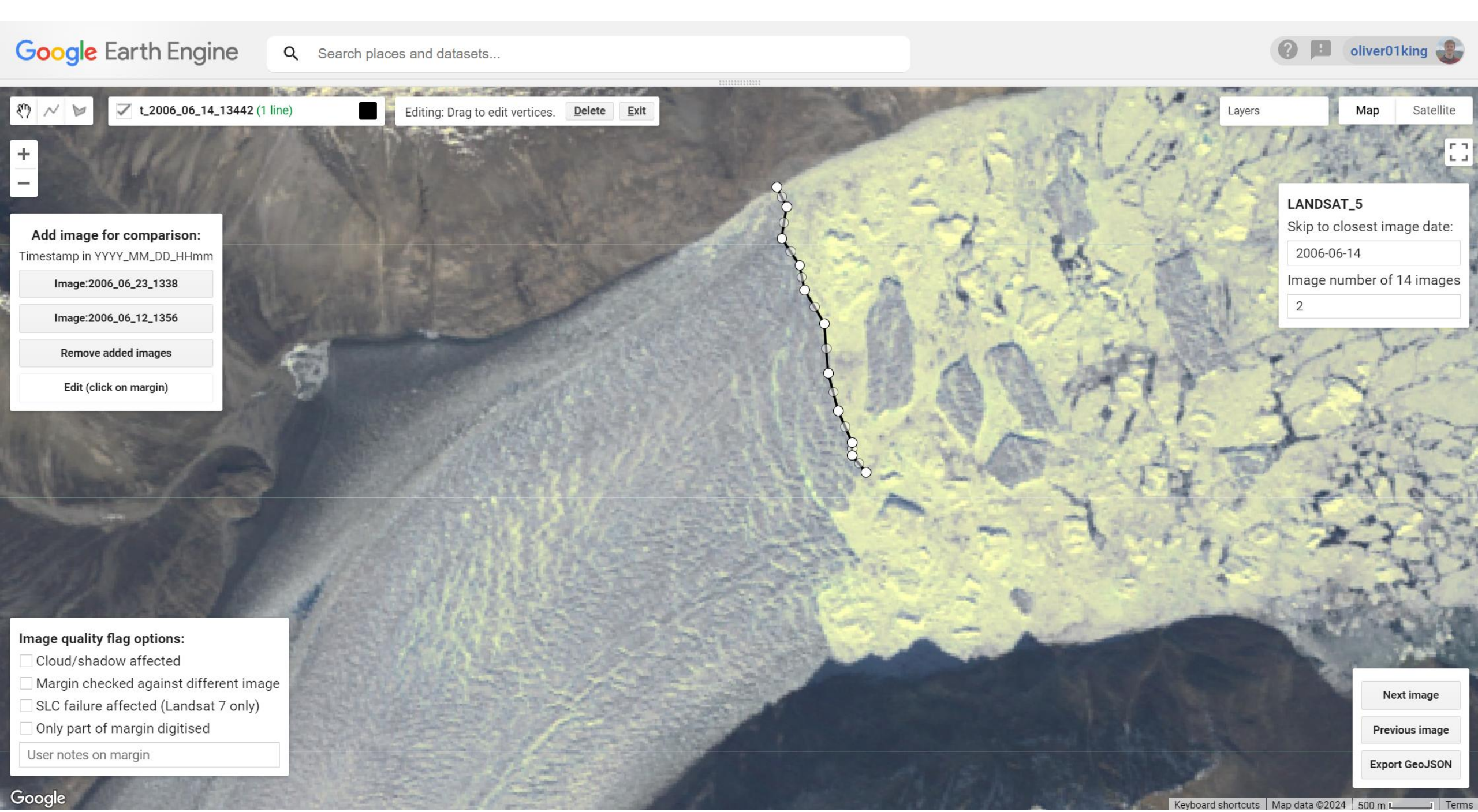

(a)
(b)
(c)
(d)
Depth [m]
0
200
400
8
4
0
−4
2
−2
−6
Ocean temperature [°C]
Ocean temperature anomaly [°C]
2000
2005
2010
2015
2020
2024

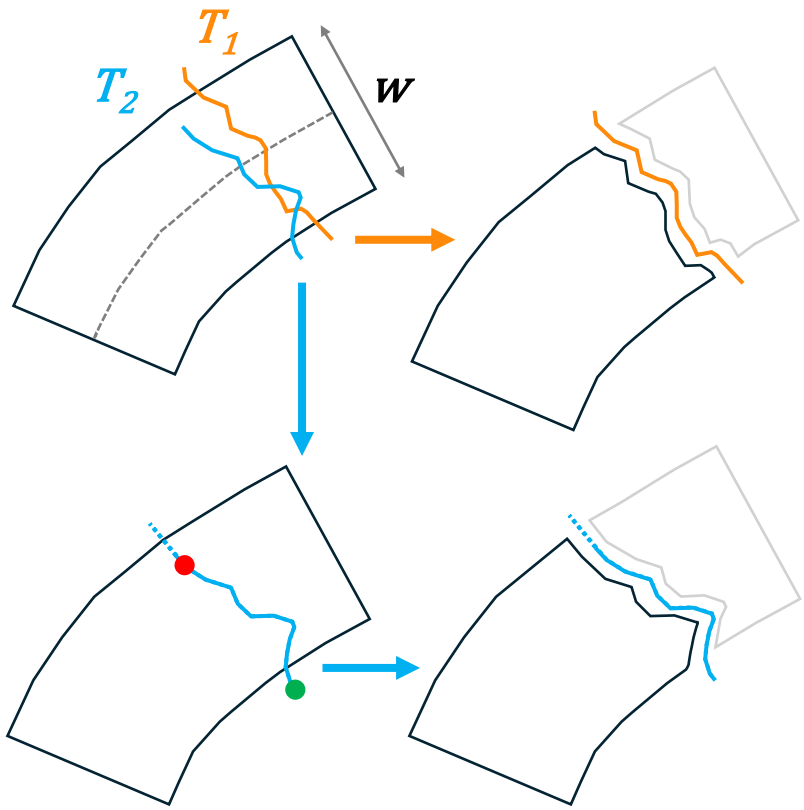

Surface velocity
Surface elevation
Solid discharge
Liquid discharge
Air temp. anomalies
Ocean temp. anomalies [PW]
Ocean temp. anomalies [AW]
(a)
(b)
(c)
(d)
(e)
(f)
(g)
(h)
(i)
(j)
(k)
(l)
(m)
(n)
R
k
1.0
0.5
0.0
−0.5
−1.0
−10
−5
0
5
10


(a) 2021–06–07
(b) 2022–06–09
(c) 2023–06–05
3 km
(d) 2024–07–08
(e)
2012
2013
2014
2 km

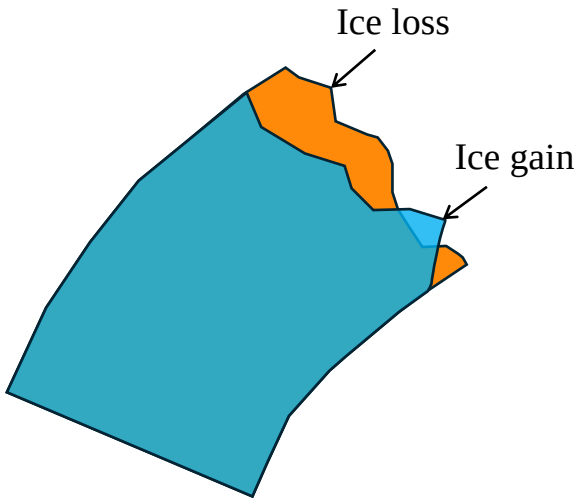

xarray.Dataset
dem
bedrock
xarray.DataArray
reference_dem
y
x
time
Data variables
Dimensions & Indexes

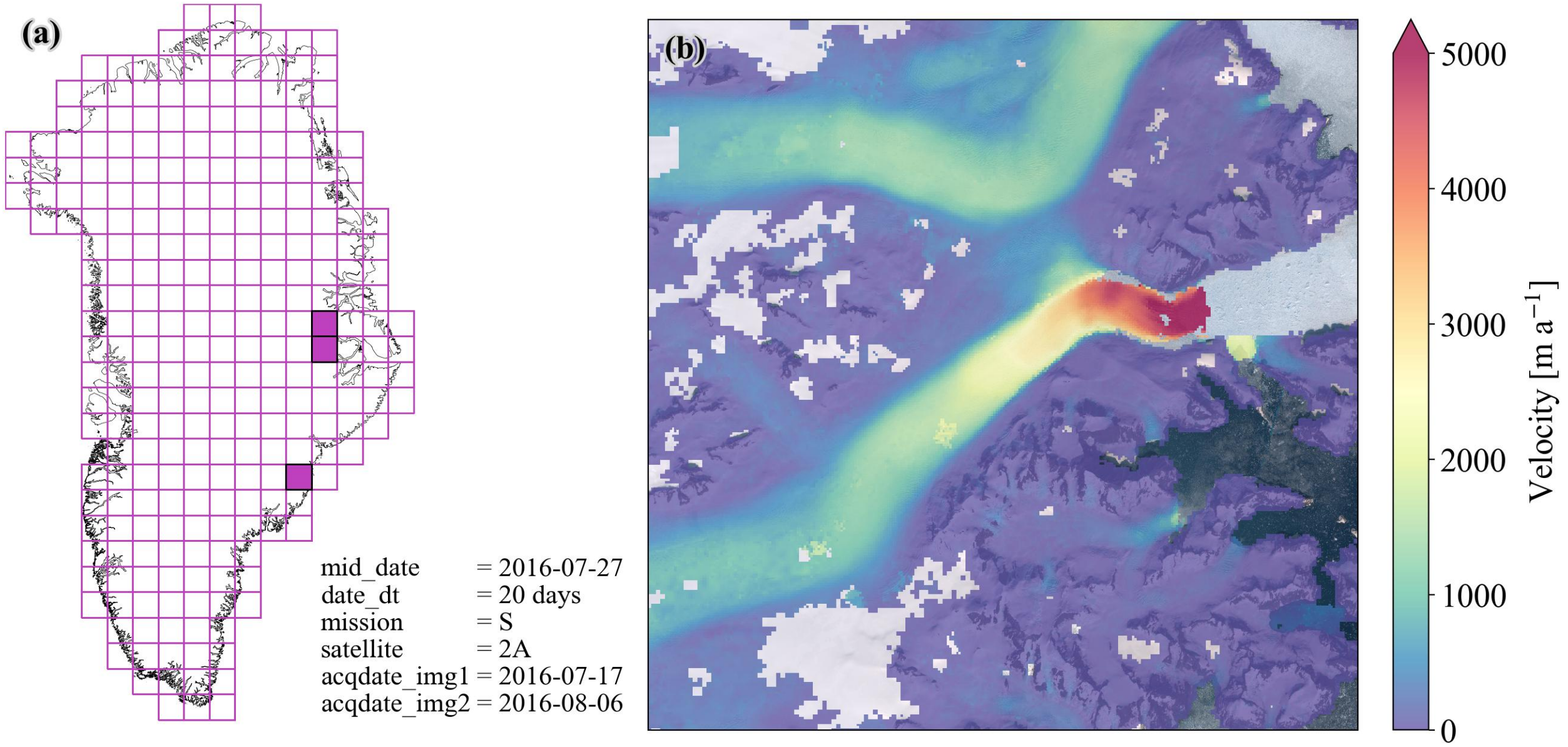

(a)
5 km
2000
1500
1000
500
0
−500
−1000
Bed topography [m]
(b)
4000
3500
3000
2500
2000
1500
1000
500
0
Velocity [m a^{-1}]

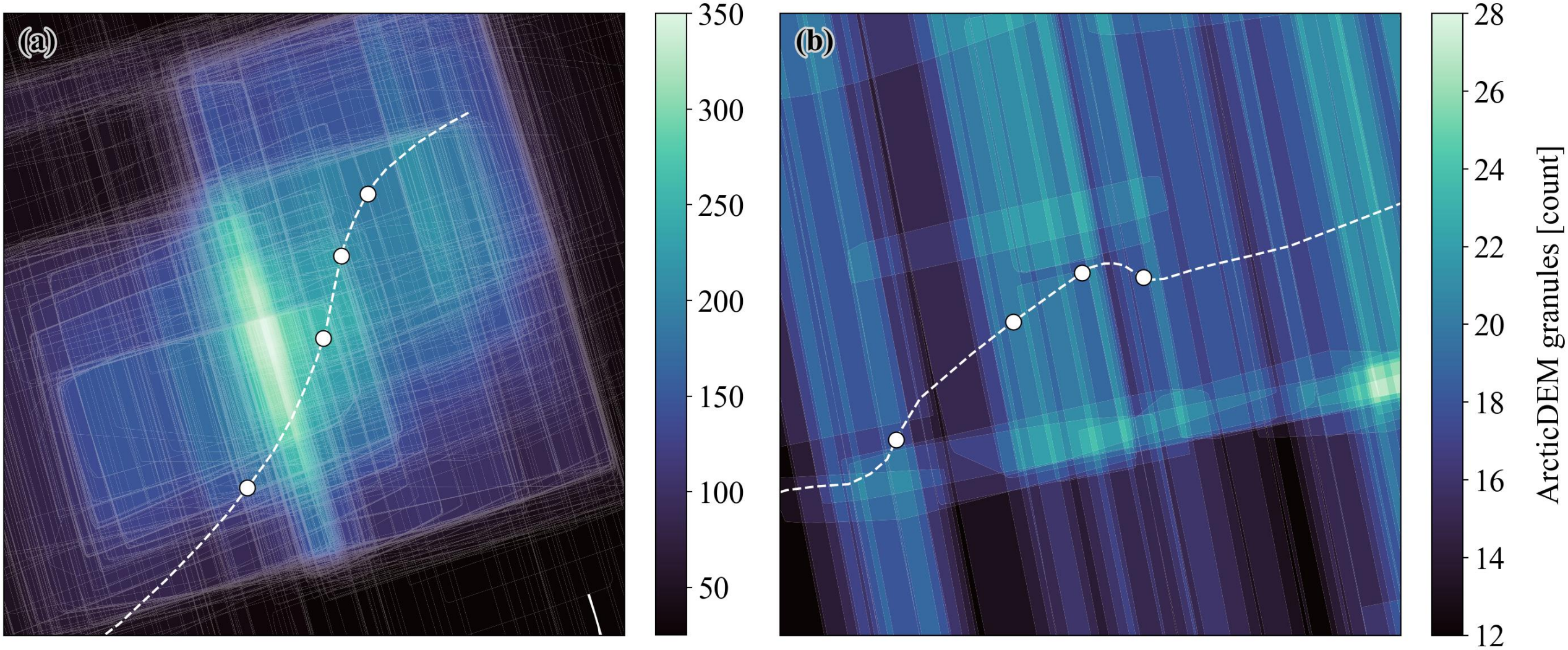

Google Earth Engine
Search places and datasets...
oliver01king
t_2006_06_14_13442 (1 line)
Editing: Drag to edit vertices.
Delete
Exit
Layers
Map
Satellite
Add image for comparison:
Timestamp in YYYY_MM_DD_HHmm
Image:2006_06_23_1338
Image:2006_06_12_1356
Remove added images
Edit (click on margin)
LANDSAT_5
Skip to closest image date:
2006-06-14
Image number of 14 images
2
Image quality flag options:
Cloud/shadow affected
Margin checked against different image
SLC failure affected (Landsat 7 only)
Only part of margin digitised
User notes on margin
Next image
Previous image
Export GeoJSON
Google
Keyboard shortcuts
Map data ©2024
500 m
Terms

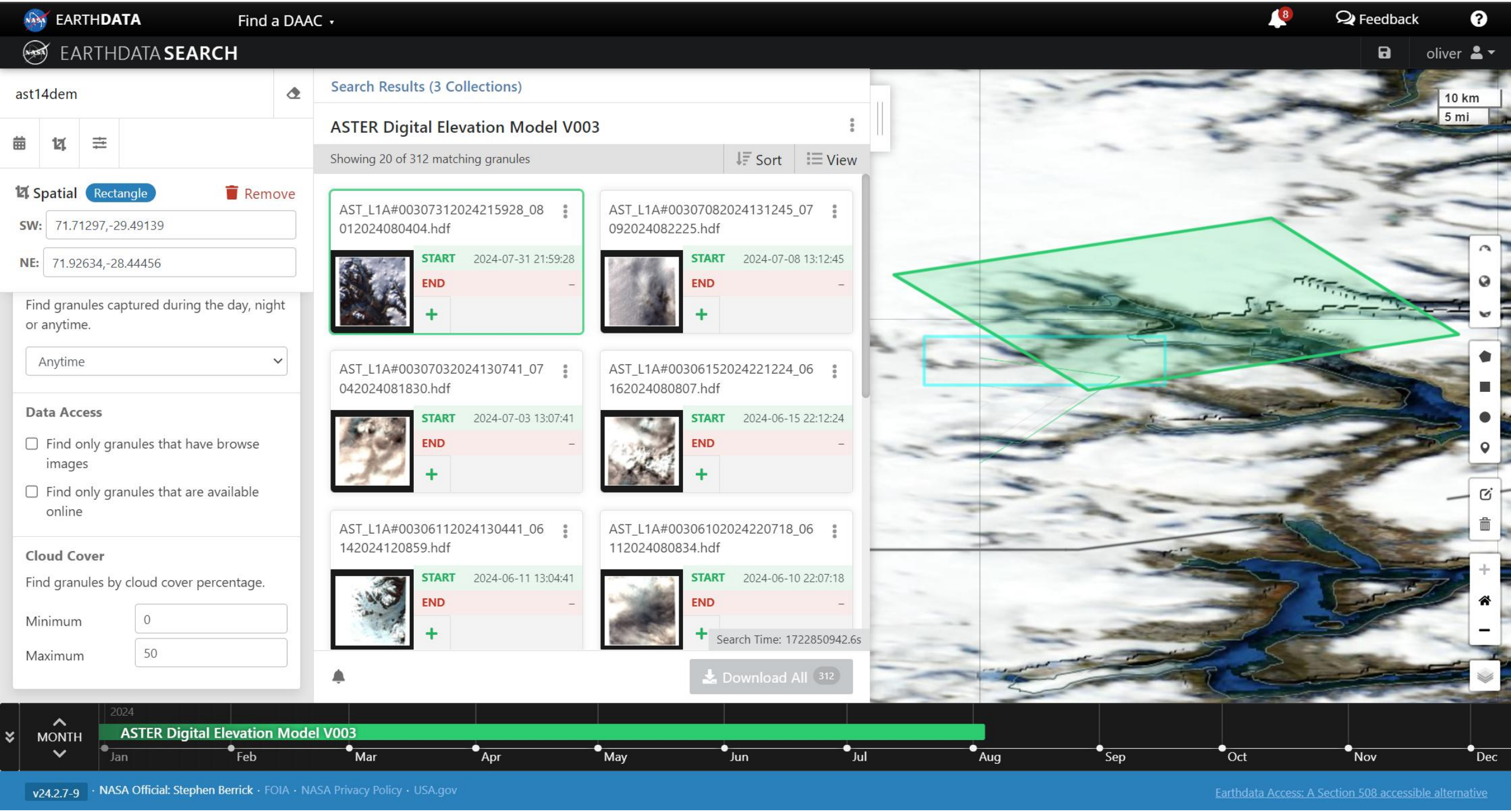


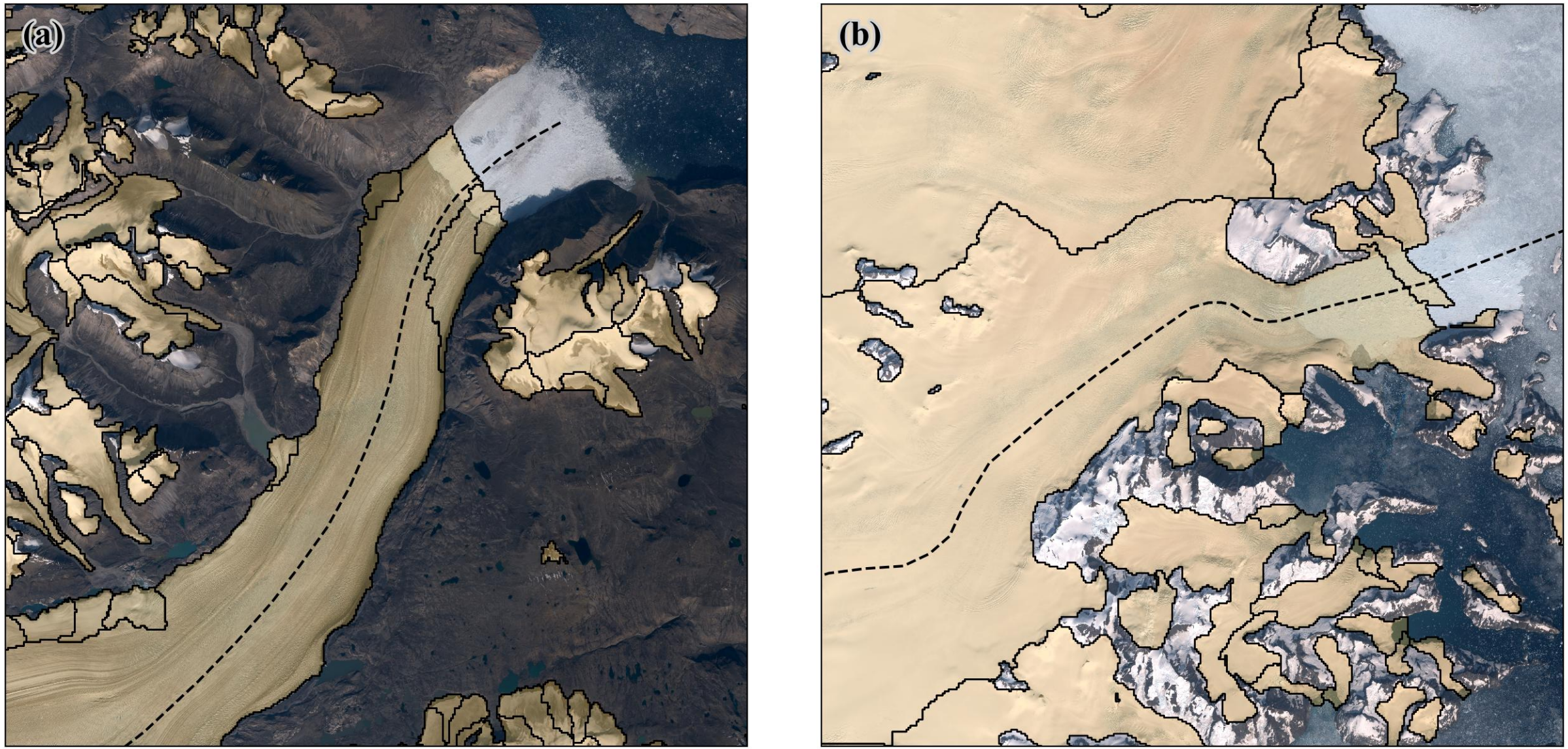
$$\Delta T = \frac{T_2 - T_1}{w}$$

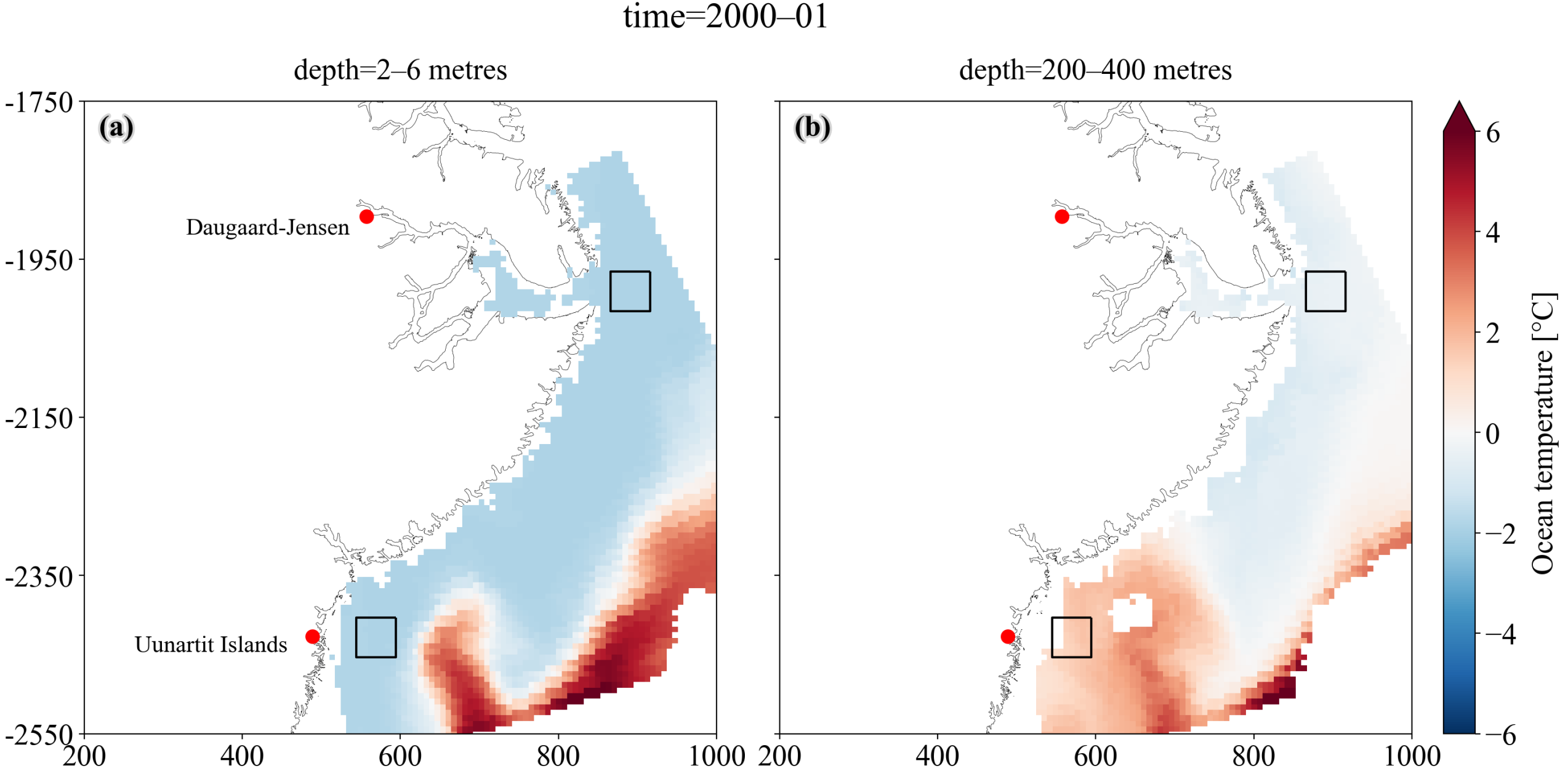



(a)
(b)
mid_date = 2016-07-27
date_dt = 20 days
mission = S
satellite = 2A
acqdate_img1 = 2016-07-17
acqdate_img2 = 2016-08-06
5000
4000
3000
2000
1000
0
Velocity [m a^{-1}]


(a)
(b)
350
300
250
200
150
100
50
28
26
24
22
20
18
16
14
12
ArcticDEM granules [count]


EARTHDATA
Find a DAAC
8
Feedback
EARTHDATA SEARCH
oliver
ast14dem
Search Results (3 Collections)
ASTER Digital Elevation Model V003
Showing 20 of 312 matching granules
Sort
View
Spatial
Rectangle
Remove
SW: 71.71297,-29.49139
NE: 71.92634,-28.44456
Find granules captured during the day, night or anytime.
Anytime
Data Access
Find only granules that have browse images
Find only granules that are available online
Cloud Cover
Find granules by cloud cover percentage.
Minimum 0
Maximum 50
AST_L1A#00307312024215928_08012024080404.hdf
START 2024-07-31 21:59:28
END –
AST_L1A#00307082024131245_07092024082225.hdf
START 2024-07-08 13:12:45
END –
AST_L1A#00307032024130741_07042024081830.hdf
START 2024-07-03 13:07:41
END –
AST_L1A#00306152024221224_06162024080807.hdf
START 2024-06-15 22:12:24
END –
AST_L1A#00306112024130441_06142024120859.hdf
START 2024-06-11 13:04:41
END –
AST_L1A#00306102024220718_06112024080834.hdf
START 2024-06-10 22:07:18
END –
Search Time: 1722850942.6s
Download All 312
10 km
5 mi
2024
MONTH
ASTER Digital Elevation Model V003
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
v24.2.7-9
NASA Official: Stephen Berrick · FOIA · NASA Privacy Policy · USA.gov
Earthdata Access: A Section 508 accessible alternative


(a)
(b)


time=2000–01
depth=2–6 metres
depth=200–400 metres
(a)
(b)
Daugaard-Jensen
Uunartit Islands
-1750
-1950
-2150
-2350
-2550
200
400
600
800
1000
6
4
2
0
−2
−4
−6
Ocean temperature [°C]