SW SASKATCHEWAN / REGIONAL MAP ATLAS

Formation geometry and gross thickness

55 map plates, with explicit source support and interval definitions

Mapped tops and gross vertical intervals are regional interpretations. They do not establish net sand, net reservoir or net pay. Geological zero edges and source support limits are kept conceptually separate. No ancient shoreline is inferred solely from a present-day formation edge.

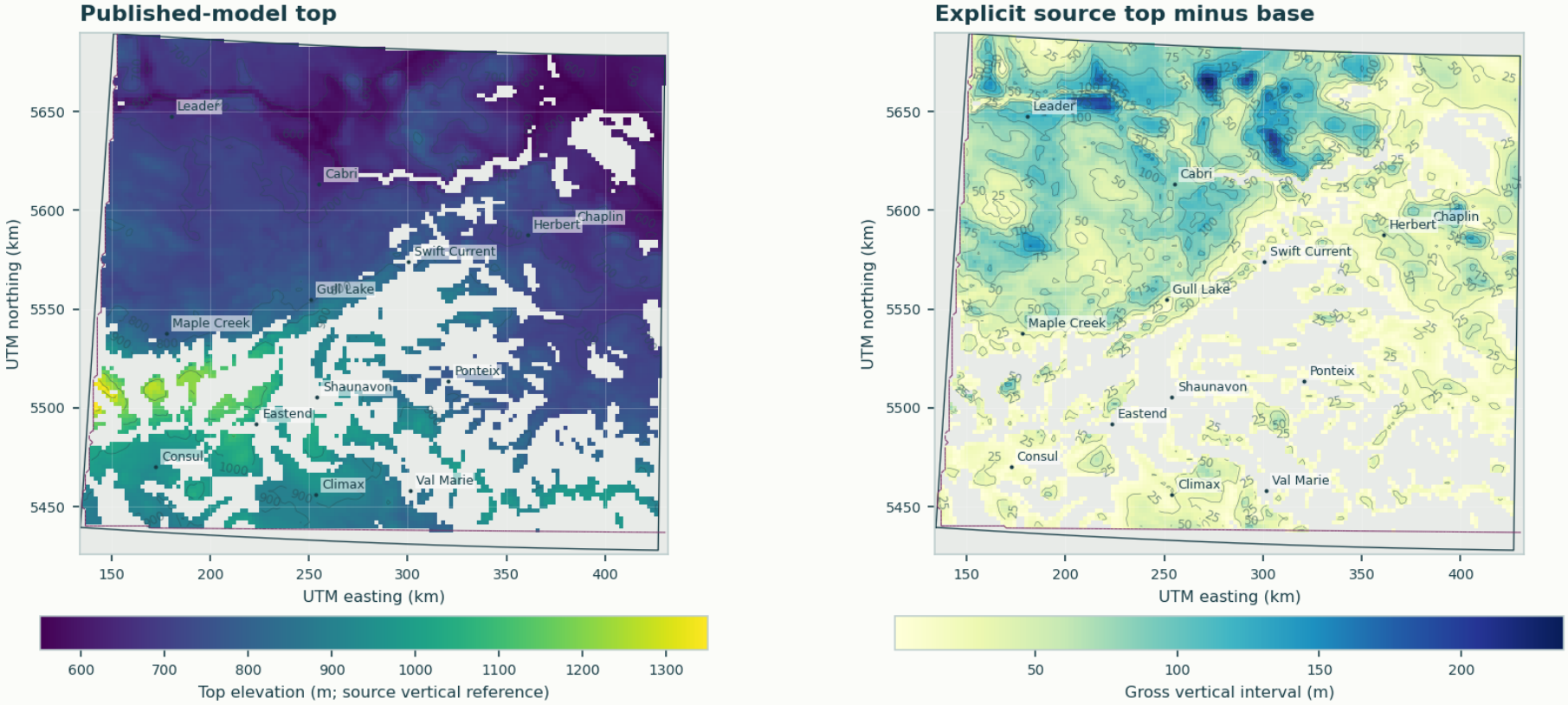
Reference system	Display spacing	Study rectangle
NAD83 / UTM zone 13N (EPSG:26913)	2 km	110W to 106W; 49N to 51.25N

Source geometry: Bédard, Marsh, Hillier and Music (2023), GSC Open File 8969, with its original stratigraphic top/base definitions. Contours and colors are display choices. Blank cells retain unsupported values. Dashed cut-mesh boundaries may encode geological truncation or model limits; they are not independently classified zero-isopach lines or reservoir seals.

Each plate identifies the exact gross interval used. The Second White Specks to Fish Scales interval includes Belle Fourche; Upper Colorado is composite. Basement and unconformities have no inferred formation thickness. Preliminary Quaternary geometry must not be used for shallow engineering or detailed surficial interpretation. See the main report and source/data package for provenance and limitations.

Quaternary | structure and gross interval

DEM top to Unconformity Sub Quaternary

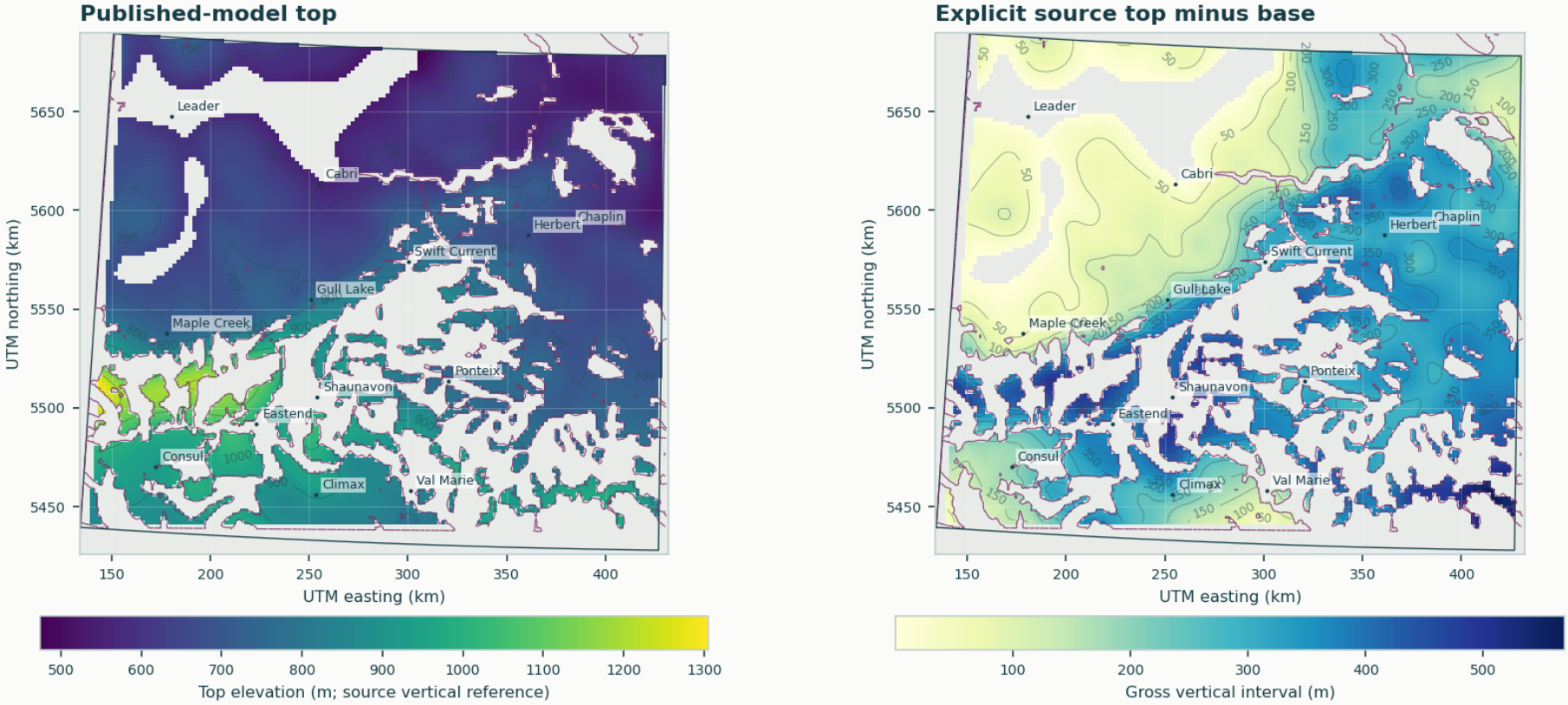


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Above Belly River | structure and gross interval

Unconformity Sub Quaternary top to Belly River

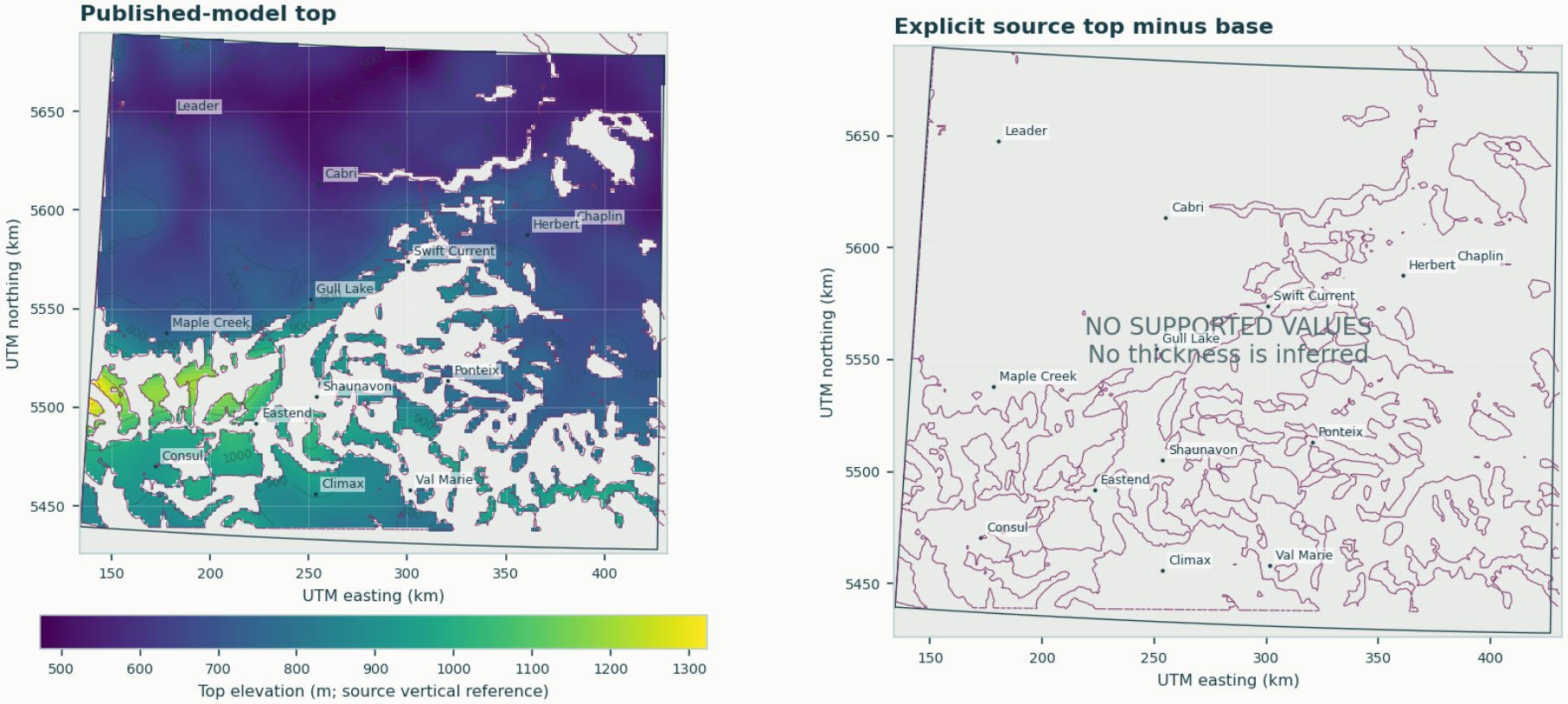


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Sub-Quaternary unconformity | structure and gross interval

Erosional surface only; no thickness.

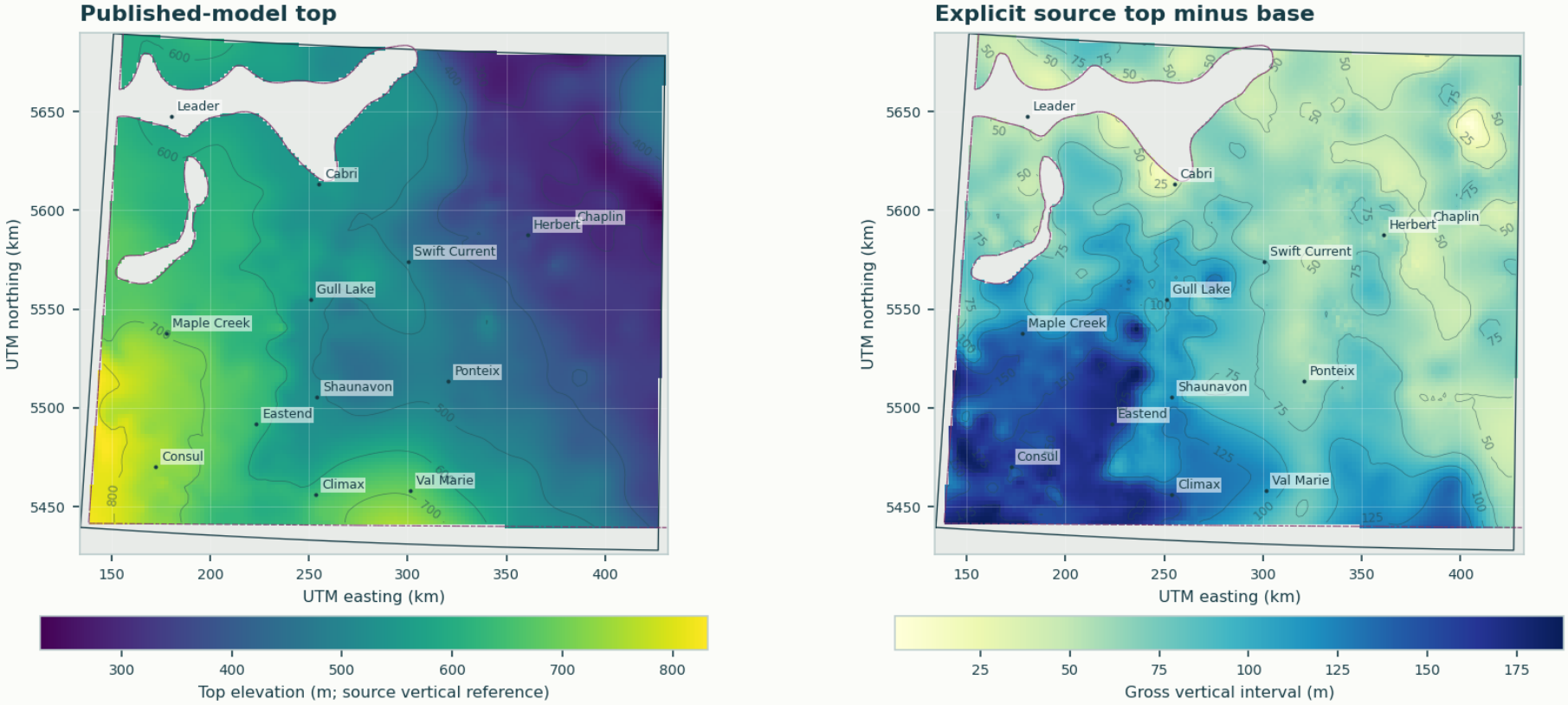


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Belly River | structure and gross interval

Belly River top to Lea Park

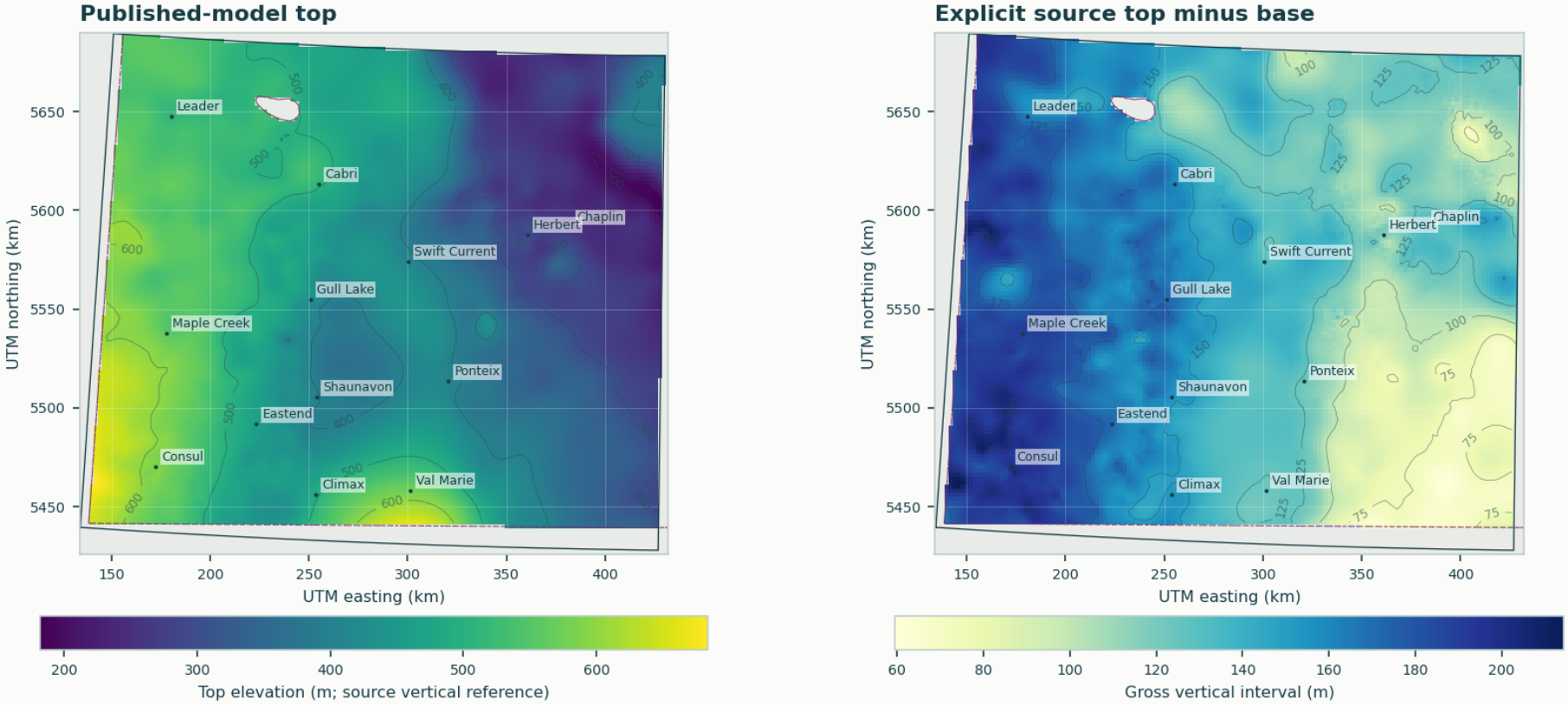


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Lea Park | structure and gross interval

Lea Park top to Unconformity Sub Lea Park

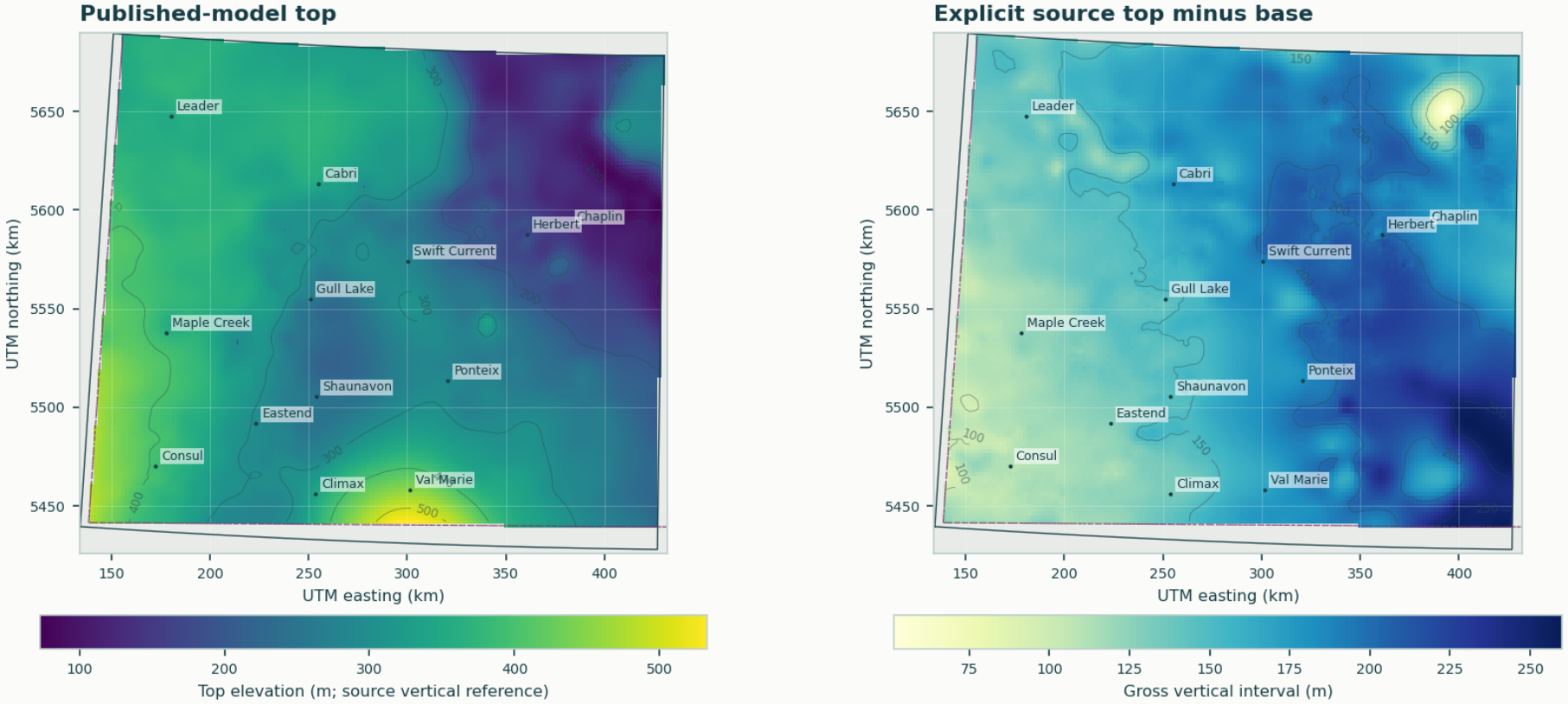


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Milk River | structure and gross interval

Unconformity Sub Lea Park top to Upper Colorado

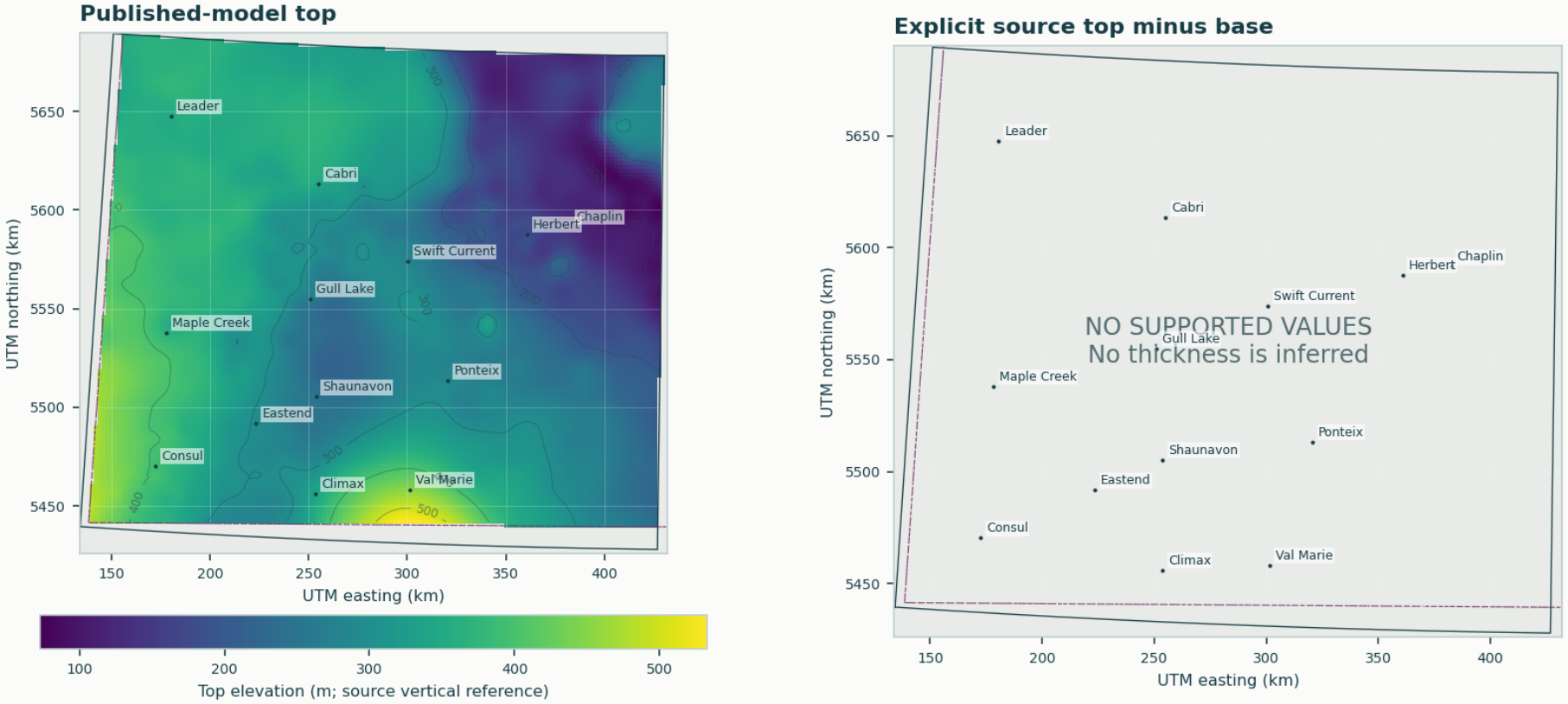


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Sub-Lea Park unconformity | structure and gross interval

Erosional surface only; no thickness.

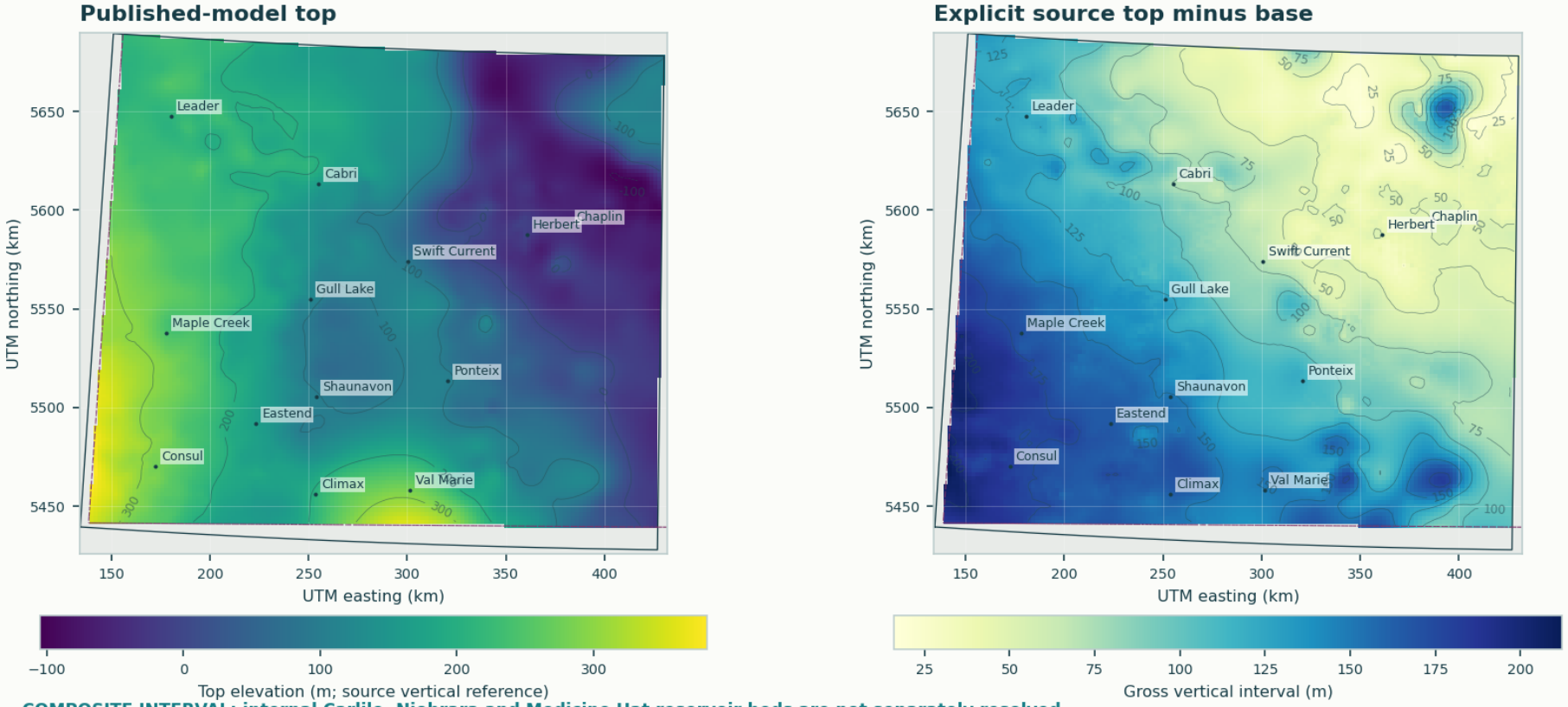


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Upper Colorado | structure and gross interval

Published Upper Colorado top to Second White Specks marker: a composite regional interval.



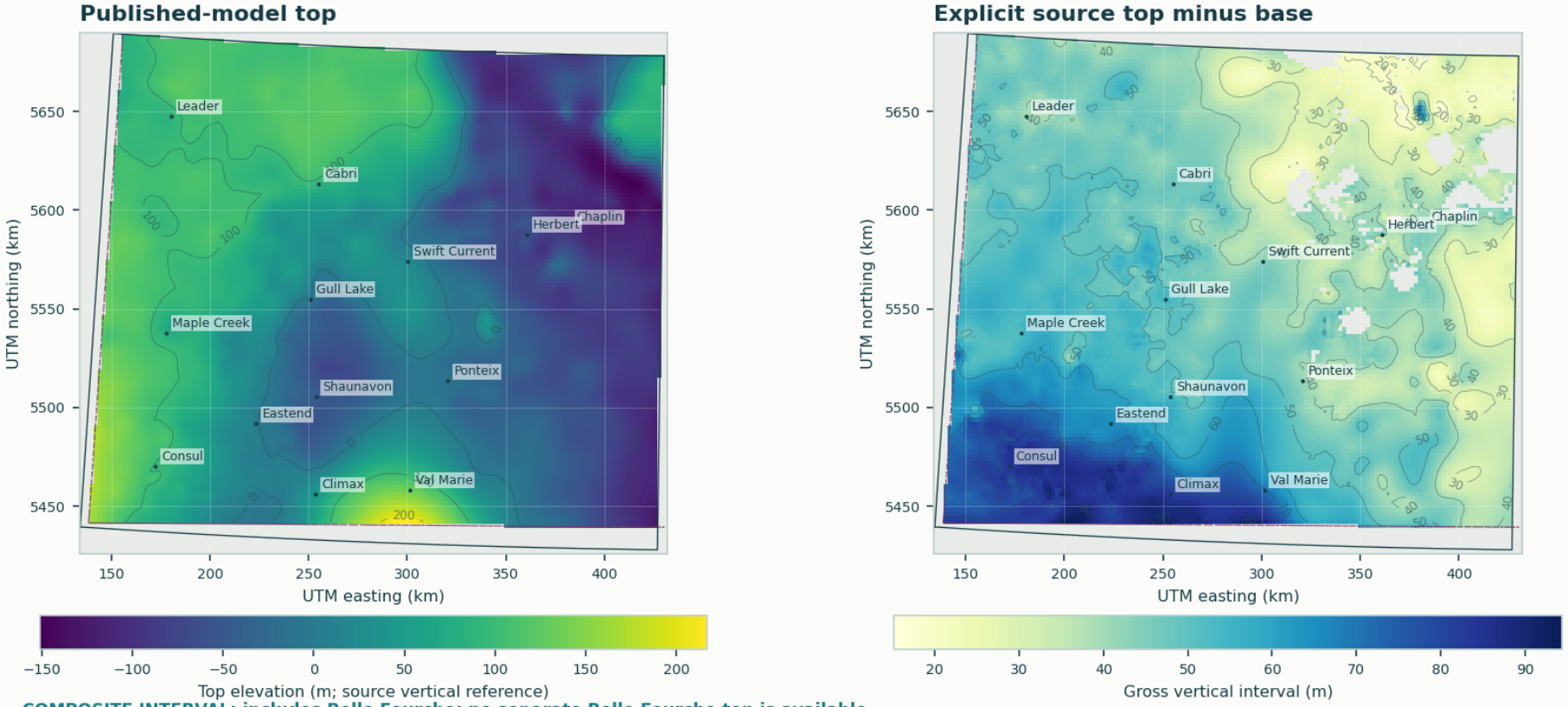
COMPOSITE INTERVAL: internal Carlile, Niobrara and Medicine Hat reservoir beds are not separately resolved.

Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

2nd White Specks | structure and gross interval

Second White Specks marker to Fish Scales marker: a composite interval including Belle Fourche strata.



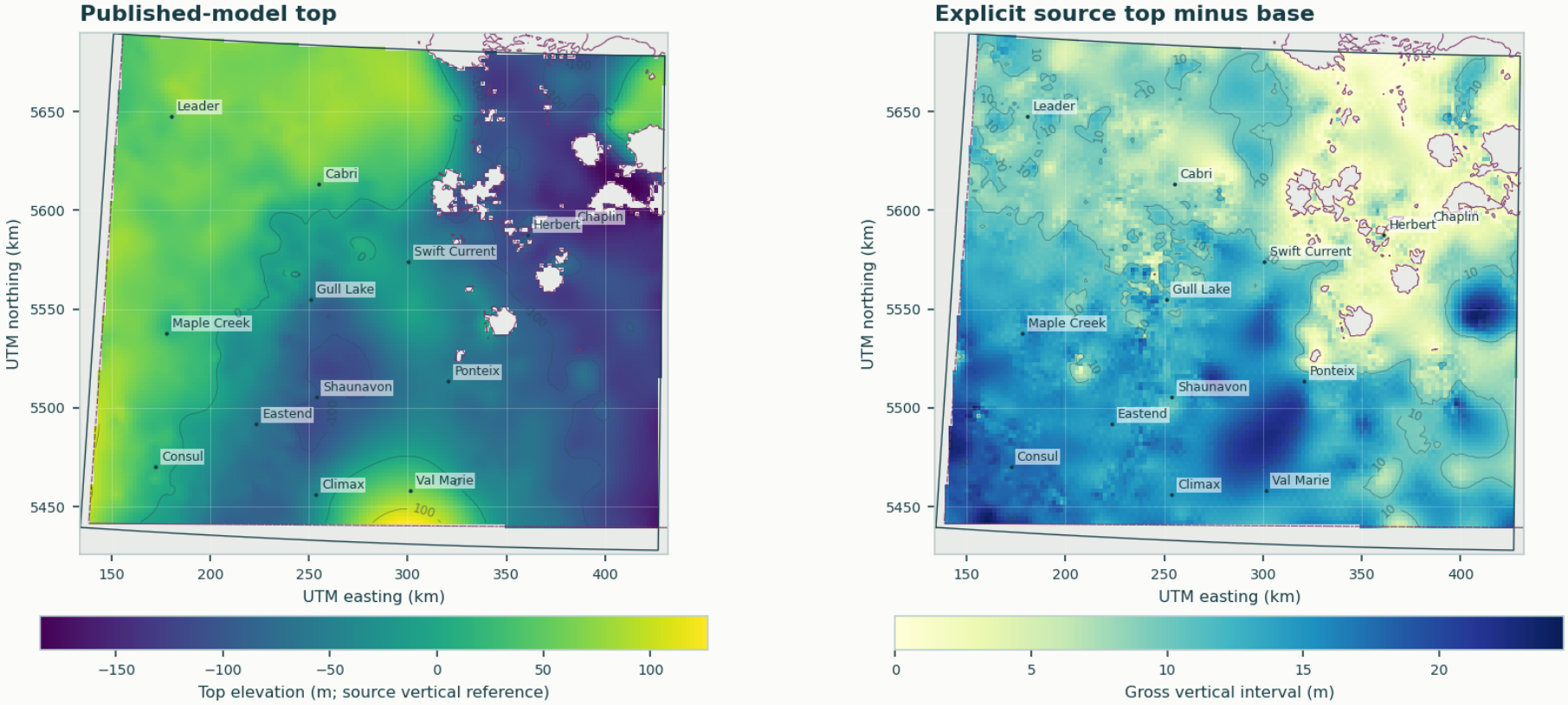
COMPOSITE INTERVAL: includes Belle Fourche; no separate Belle Fourche top is available.

Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Fish Scales | structure and gross interval

Fish Scales top to Westgate

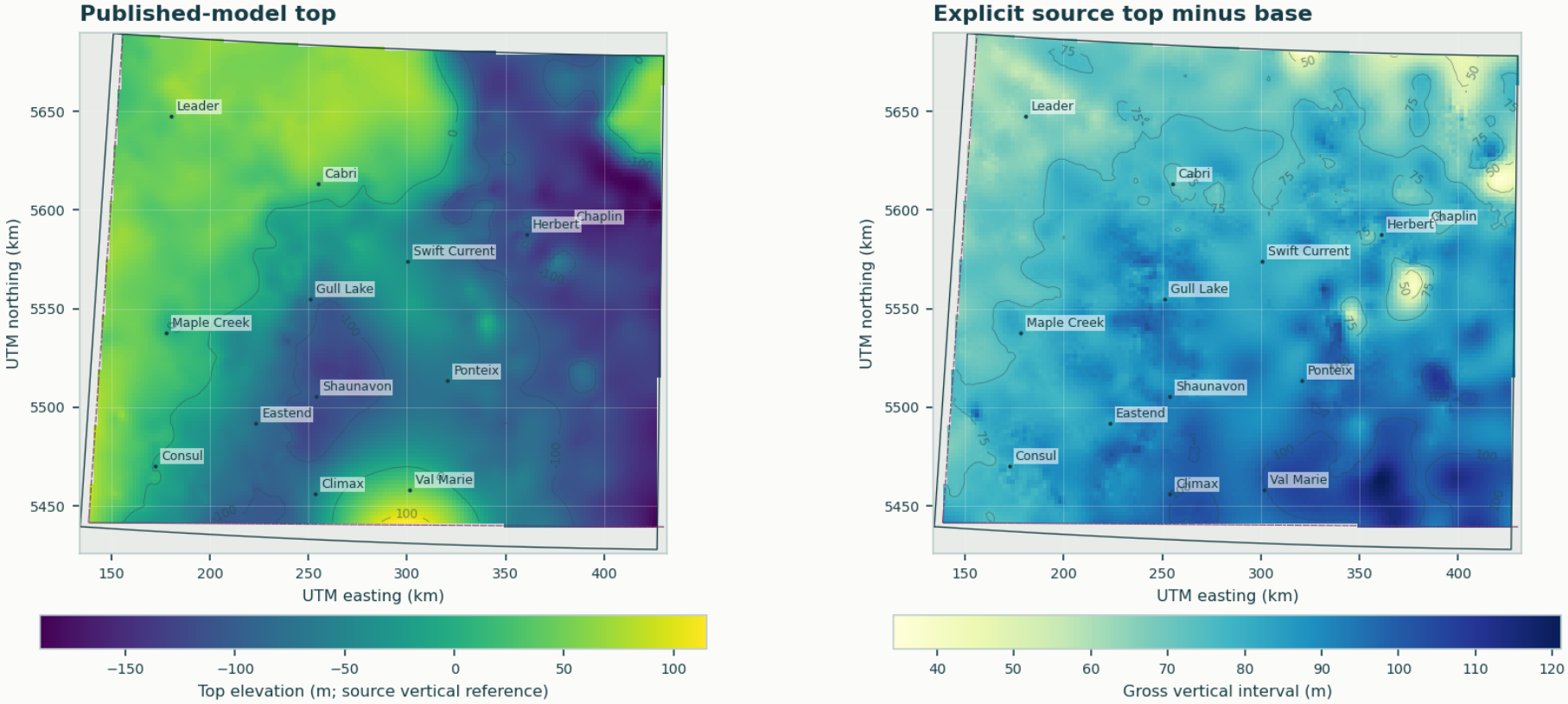


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Westgate | structure and gross interval

Westgate top to Viking Newcastle Flotten Lake

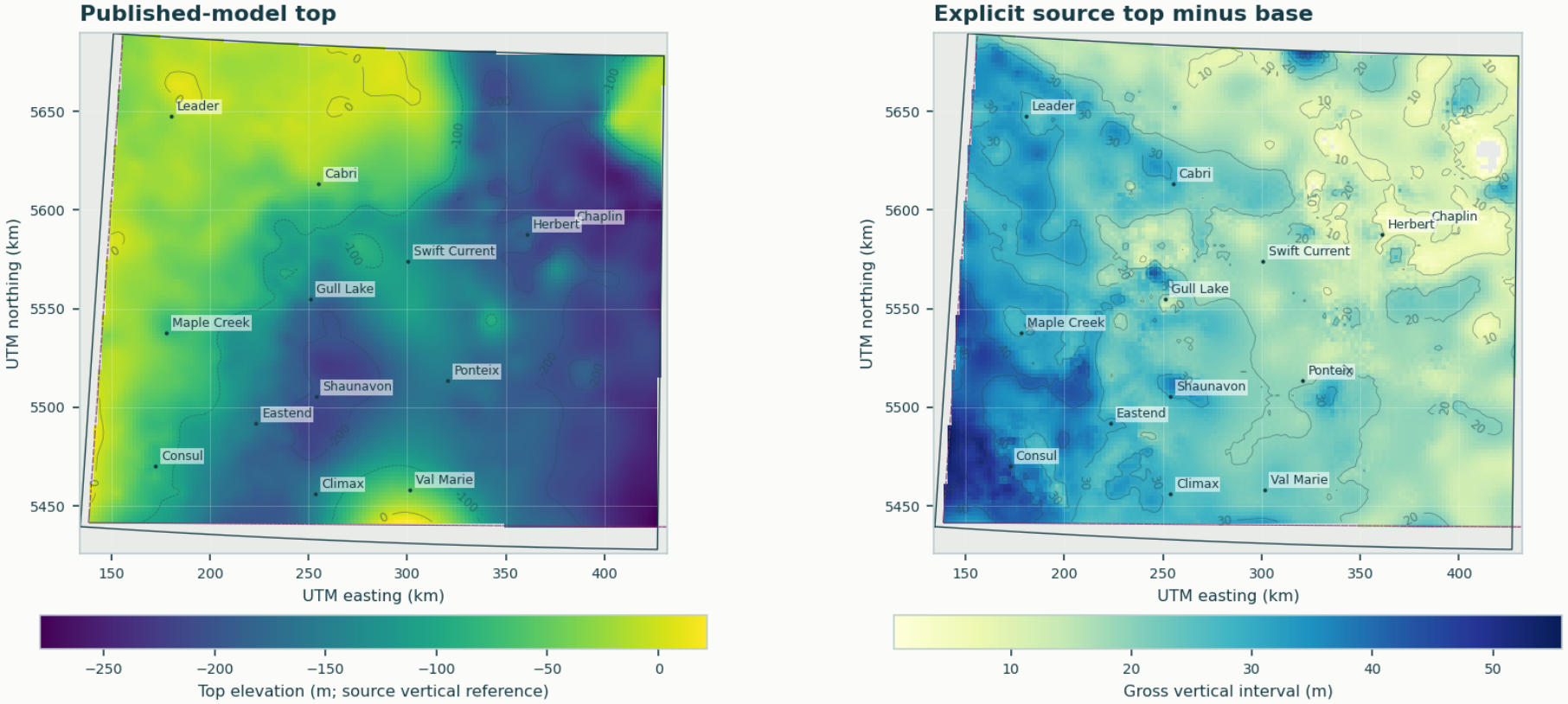


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Viking Newcastle Flotten Lake | structure and gross interval

Viking Newcastle Flotten Lake top to Joli Fou

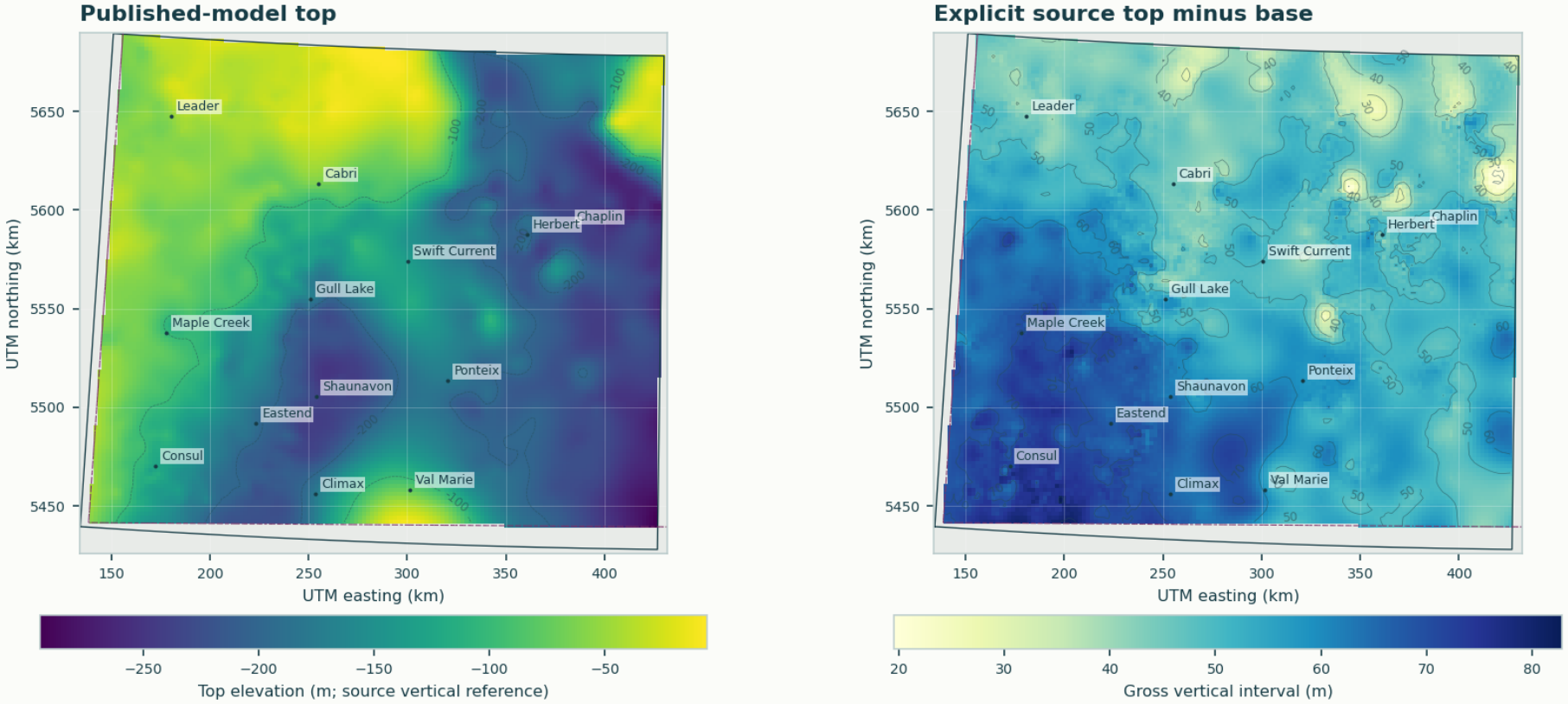


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Joli Fou | structure and gross interval

Joli Fou top to Pense

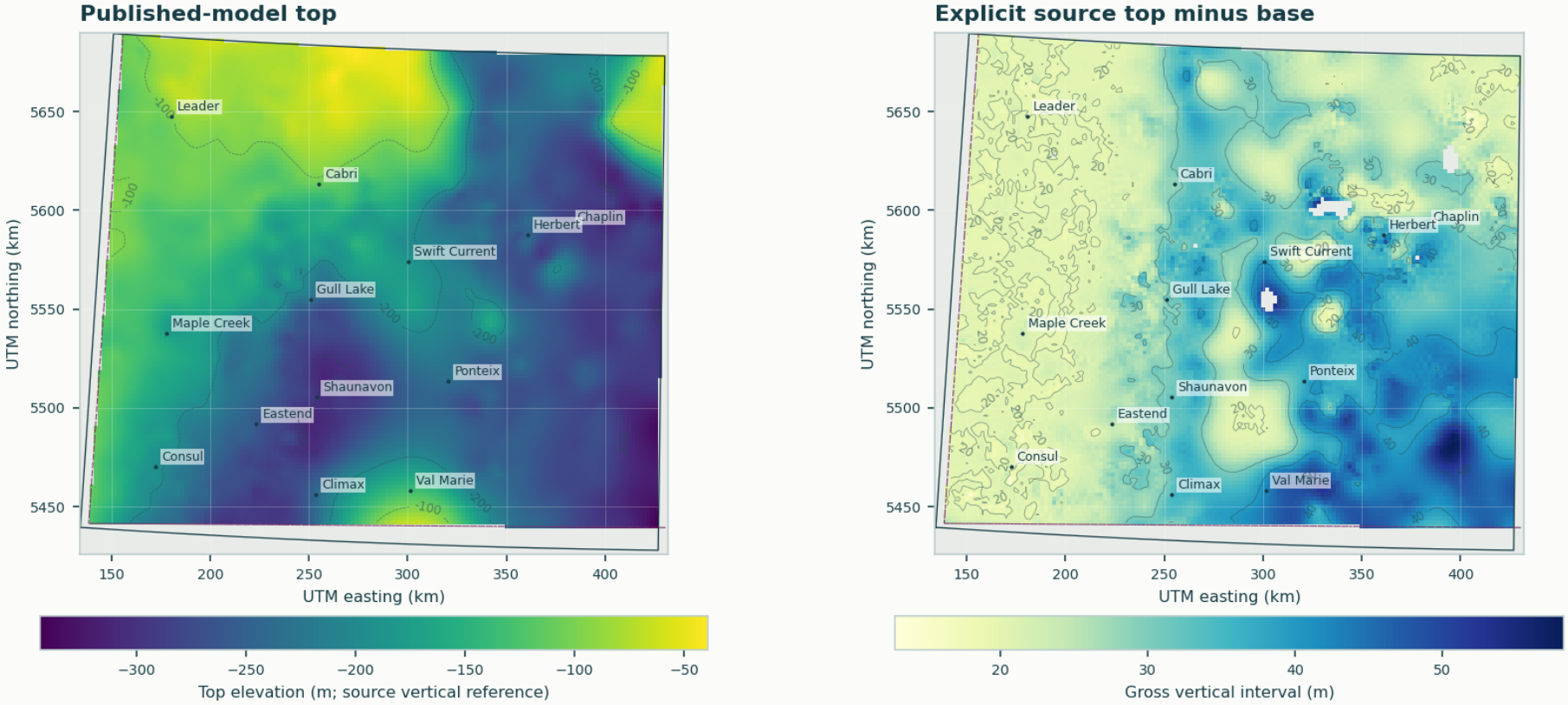


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Pense | structure and gross interval

Pense top to Cantuar

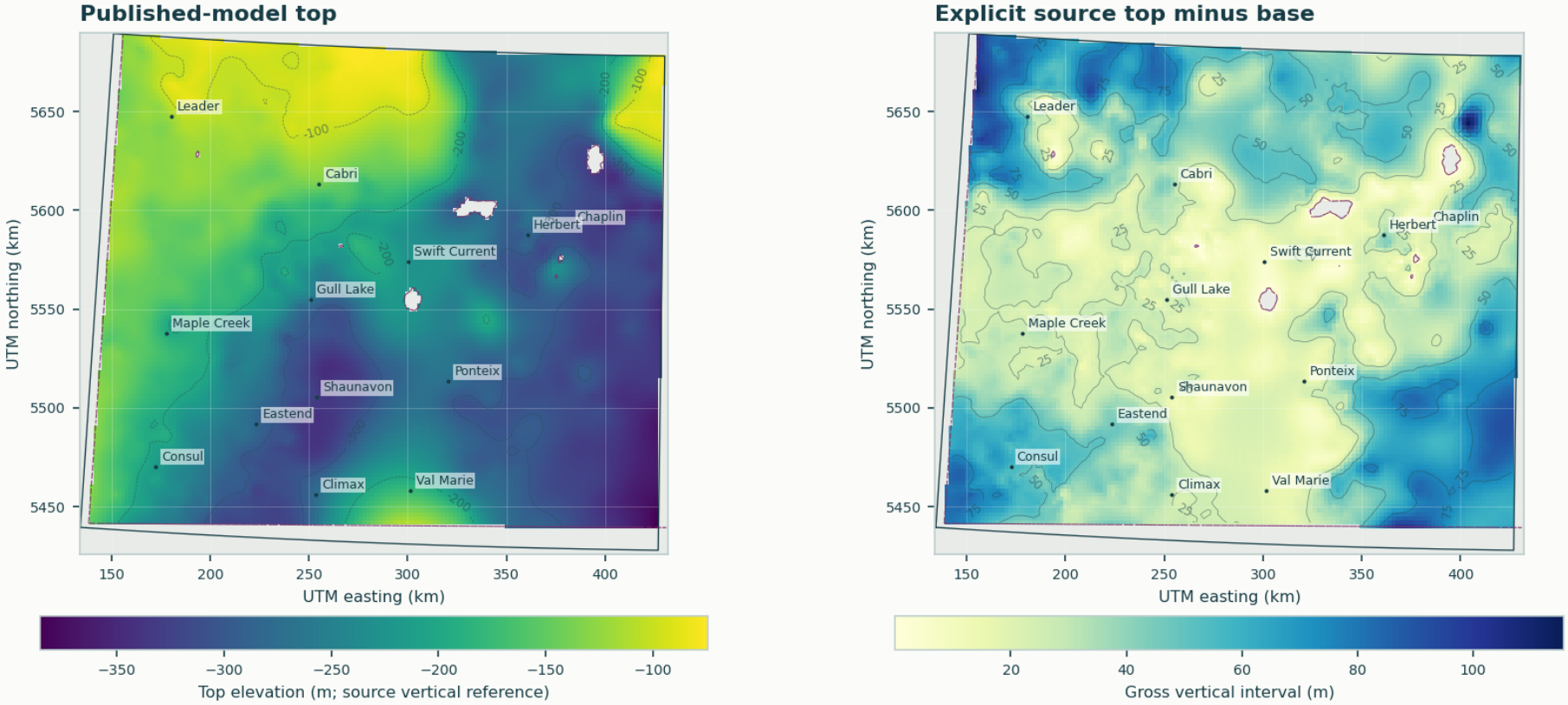


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Cantuar | structure and gross interval

Cantuar top to Unconformity Sub Cantuar

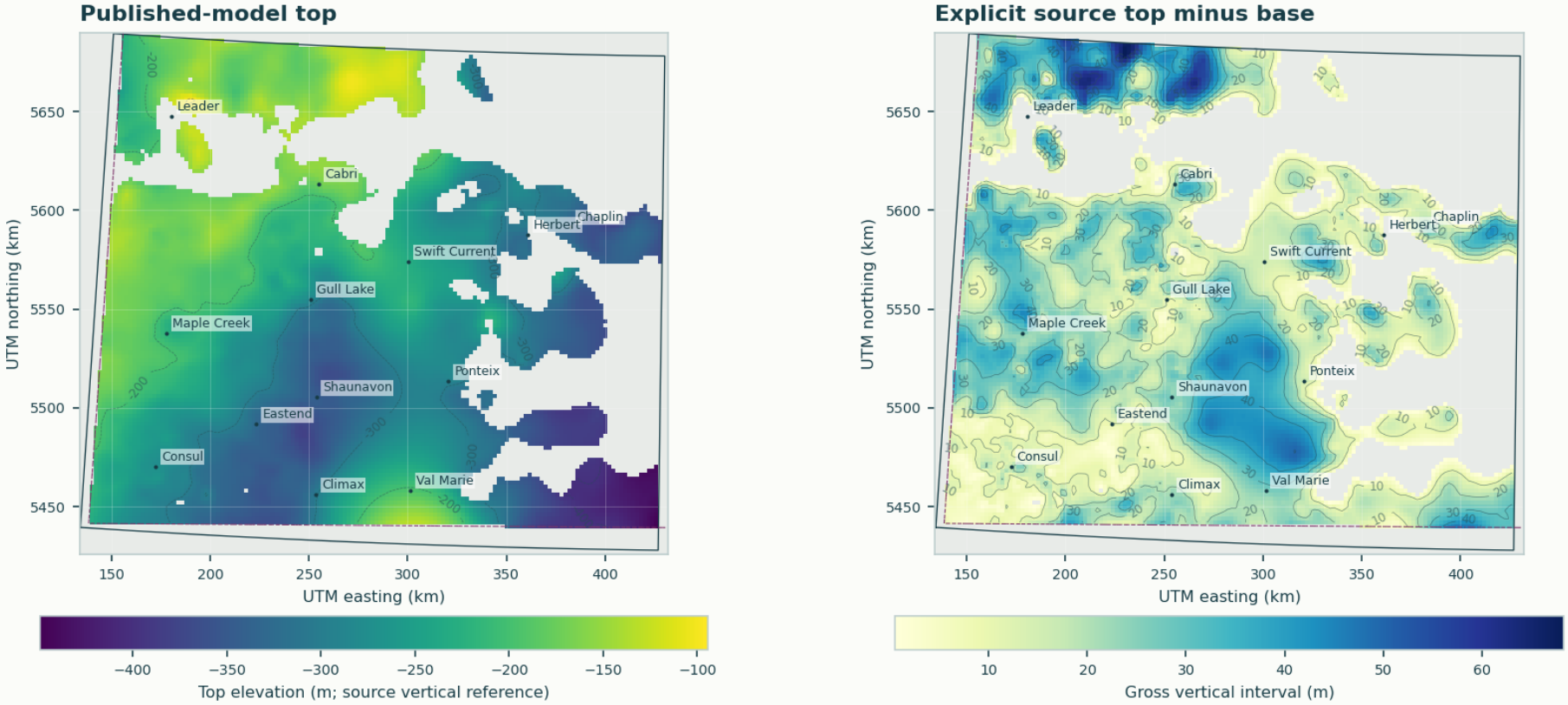


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Success | structure and gross interval

Unconformity Sub Cantuar top to Unconformity Sub Success

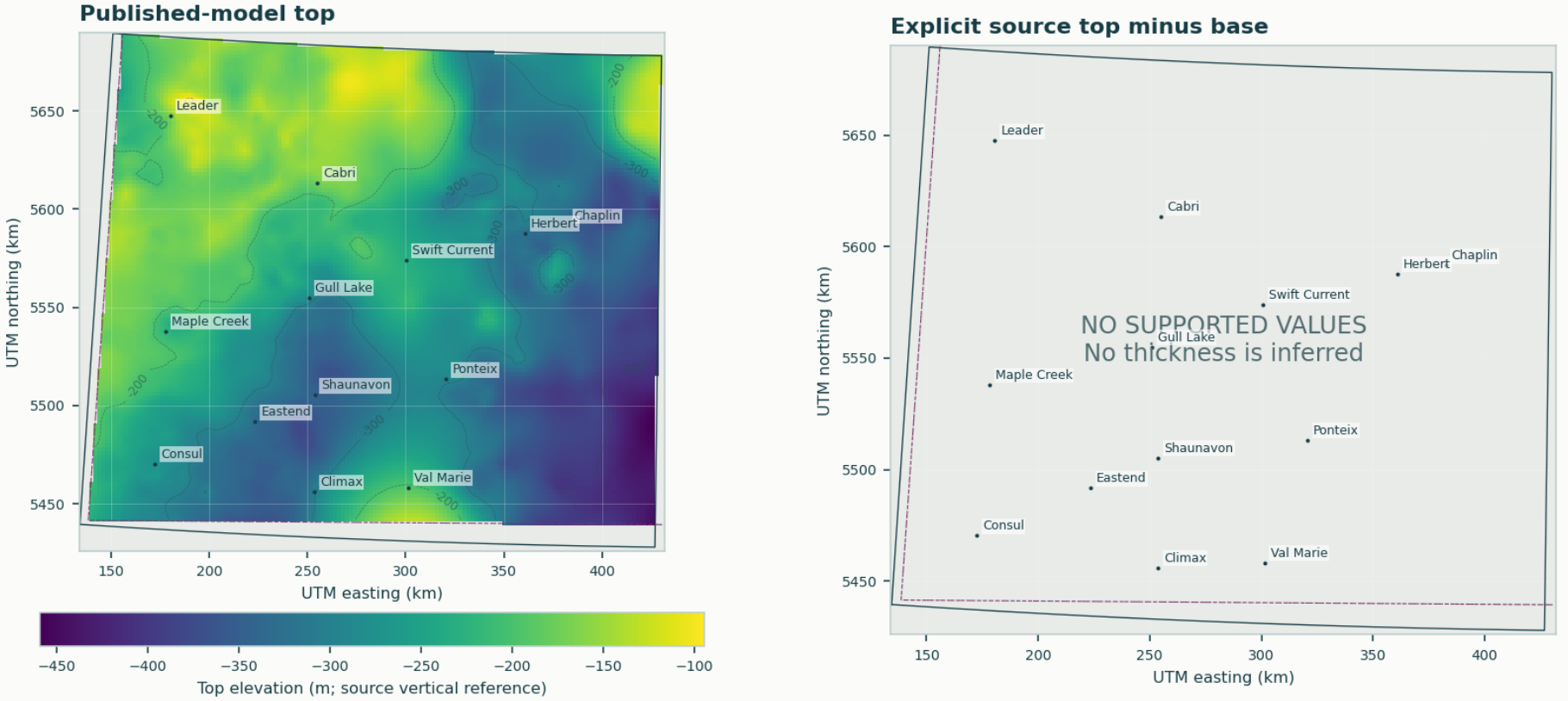


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Sub-Cantuar unconformity | structure and gross interval

Erosional surface only; no thickness.

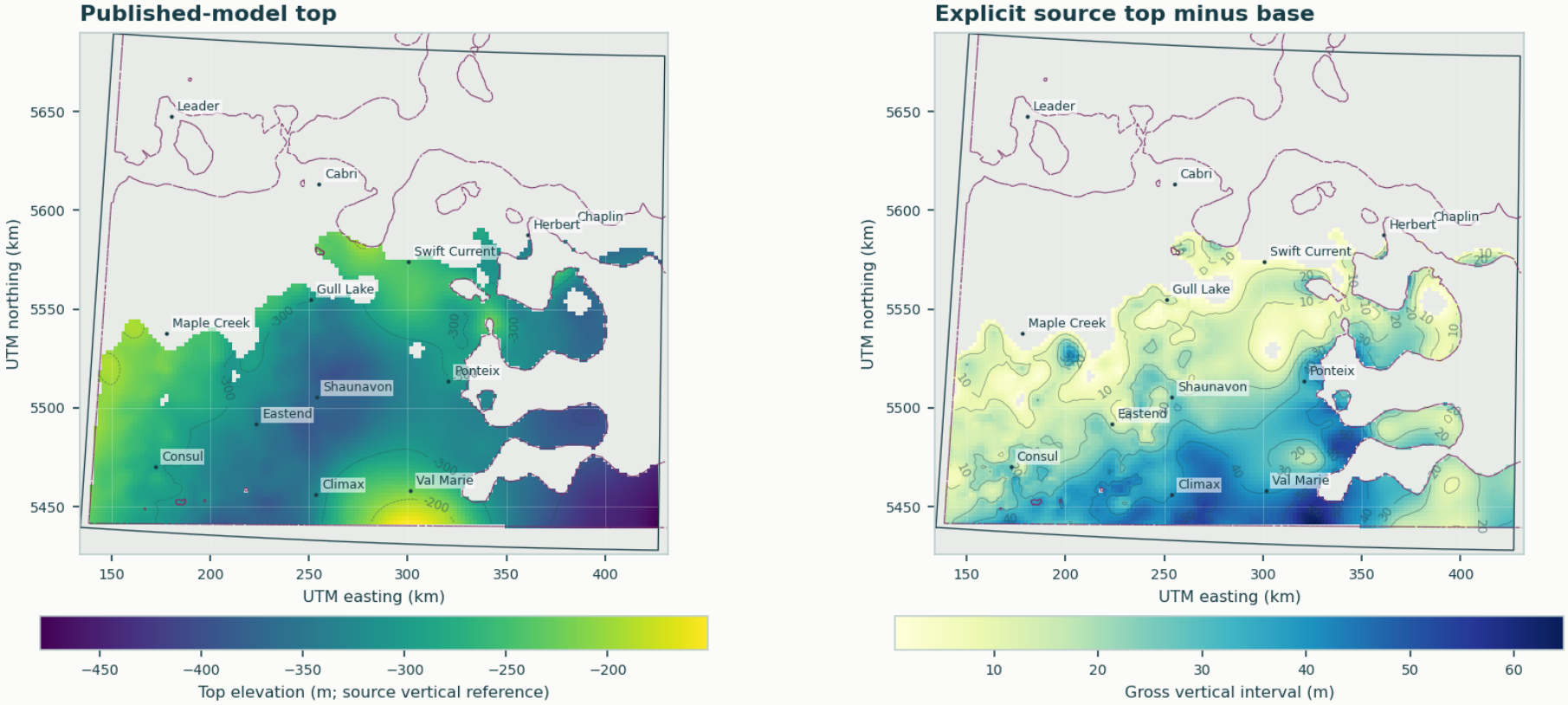


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Masefield | structure and gross interval

Unconformity Sub Success top to Rierdon

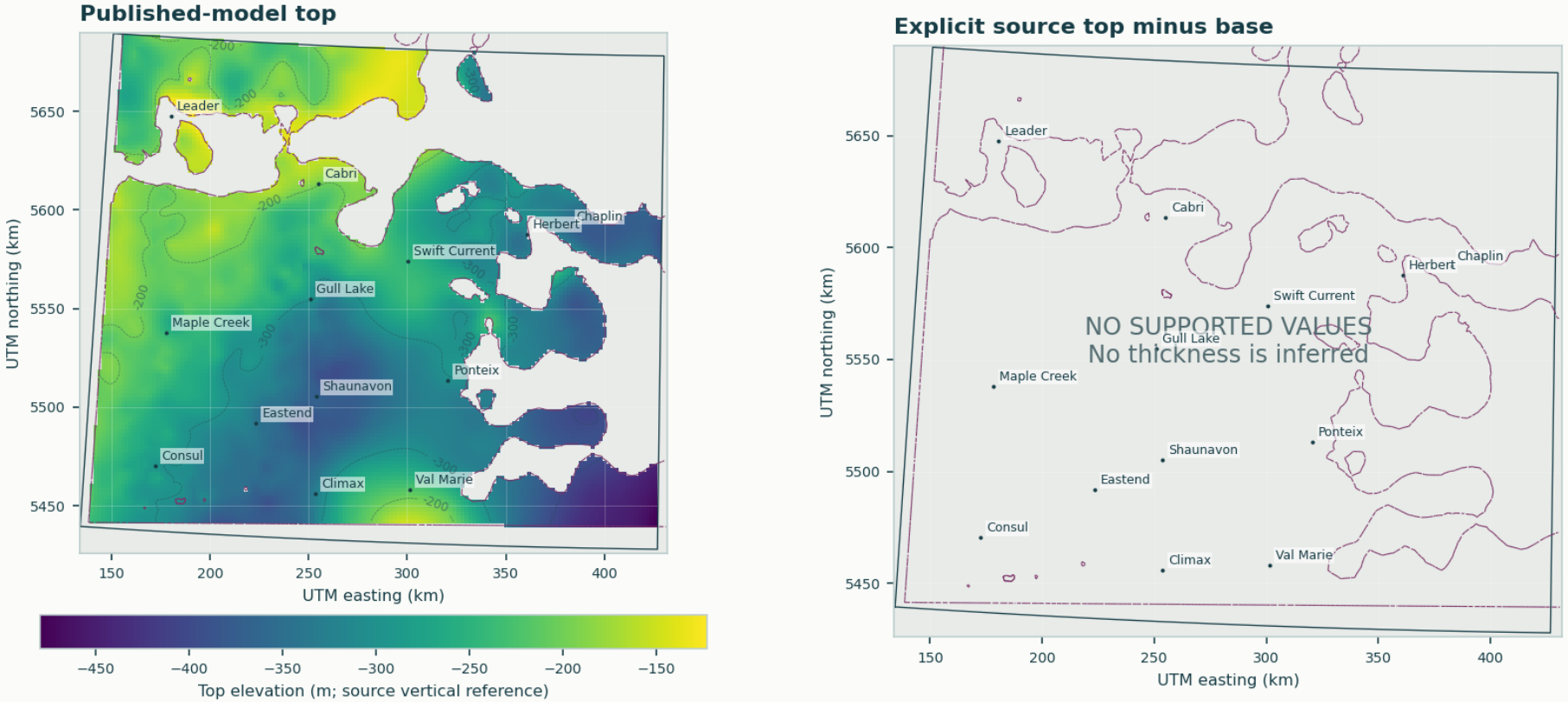


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Sub-Success unconformity | structure and gross interval

Erosional surface only; no thickness.

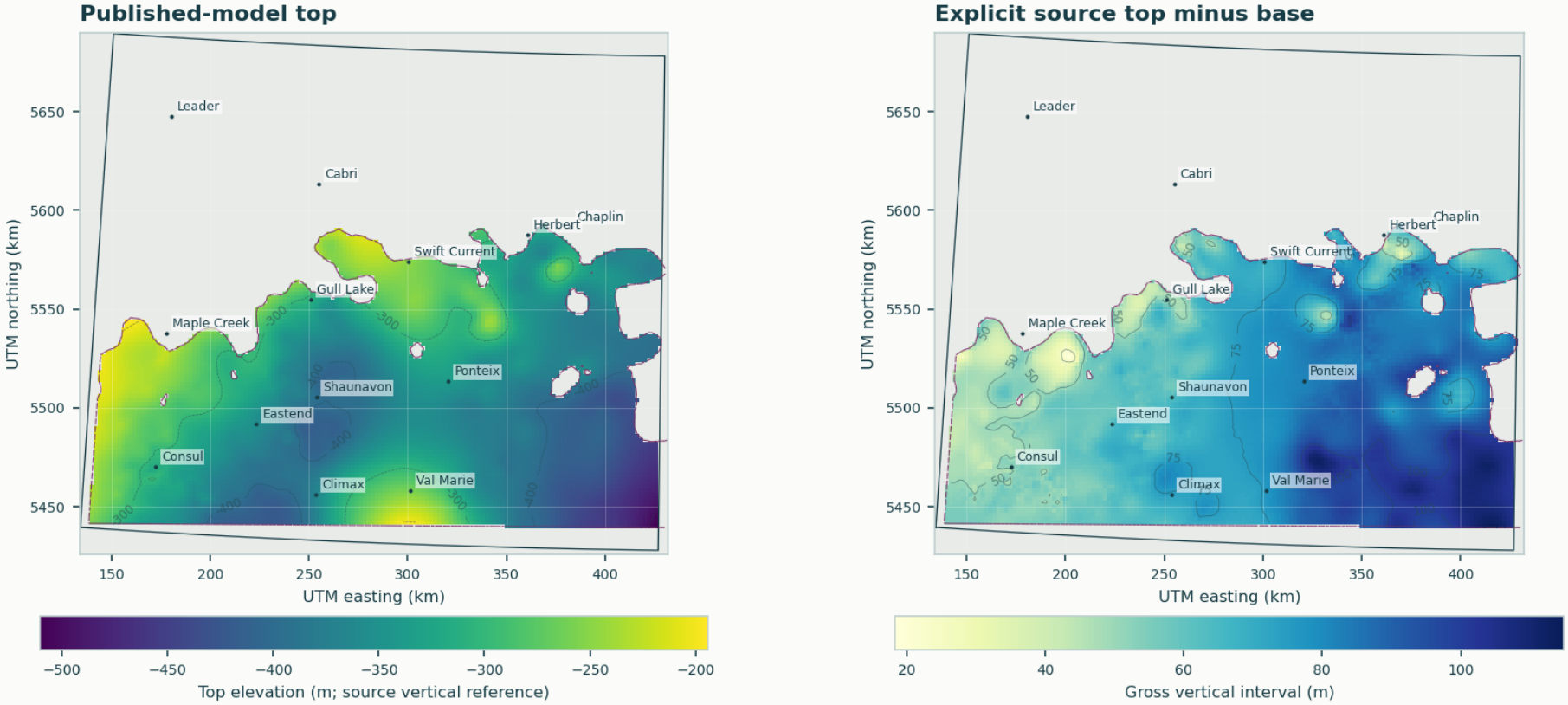


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Rierdon | structure and gross interval

Rierdon top to Upper Shaunavon

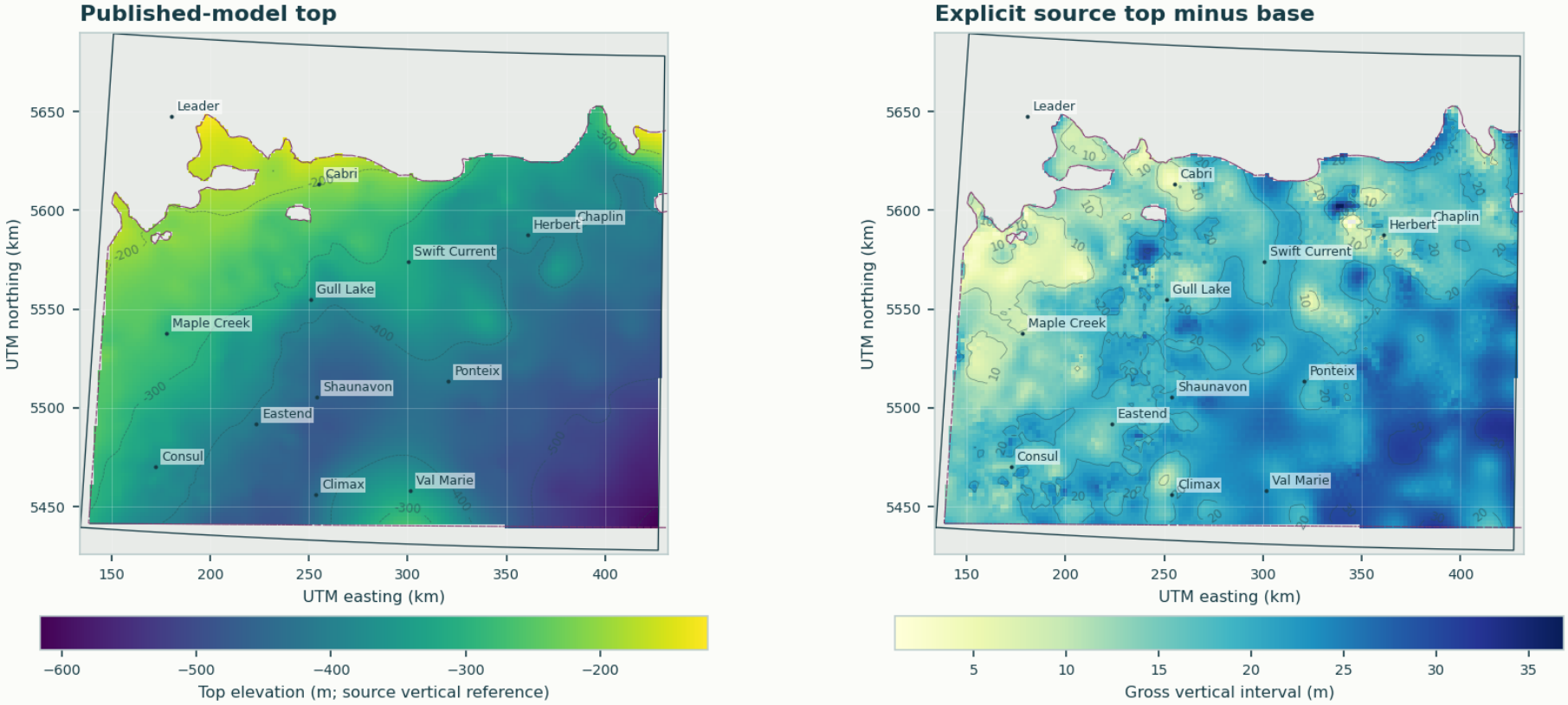


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Upper Shaunavon | structure and gross interval

Upper Shaunavon top to Lower Shaunavon

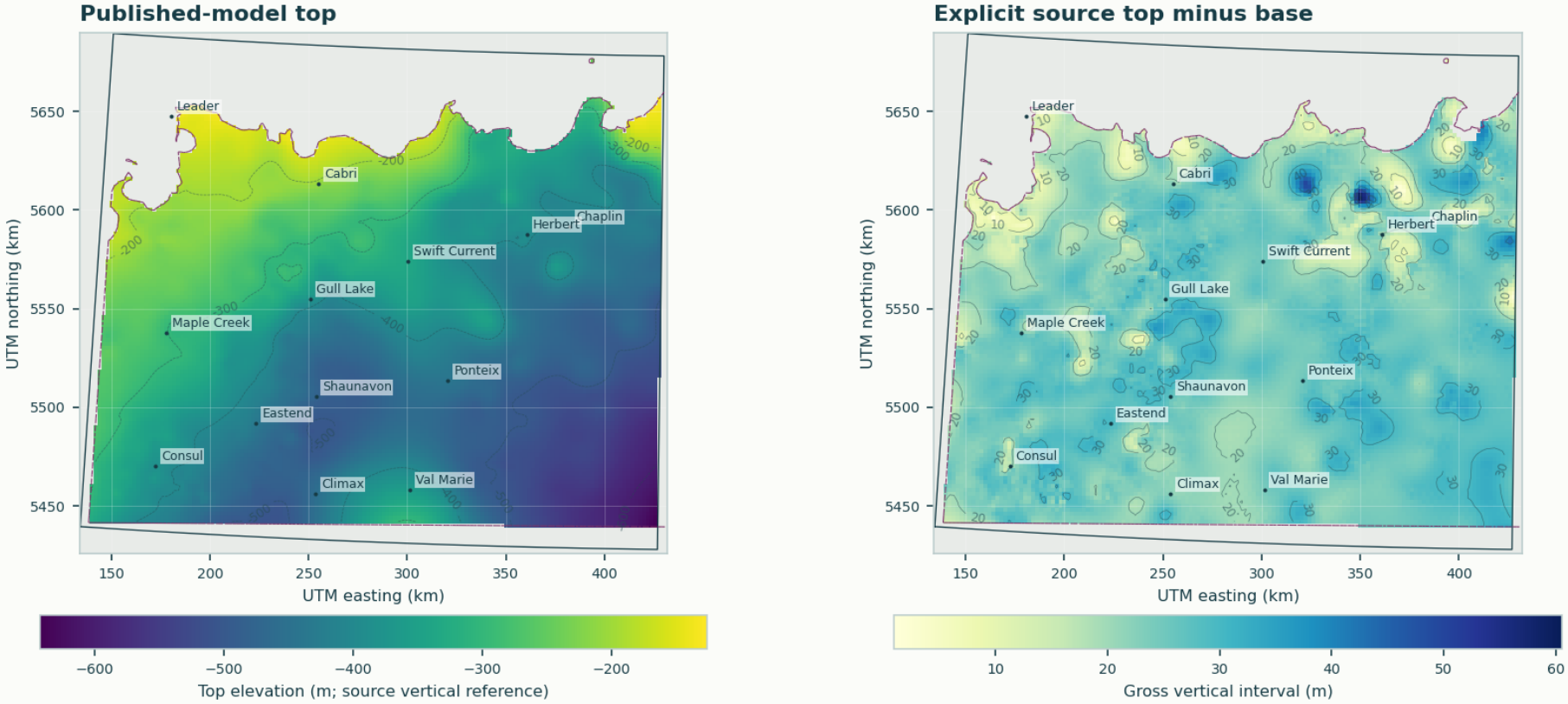


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Lower Shaunavon | structure and gross interval

Lower Shaunavon top to Upper Gravelbourg

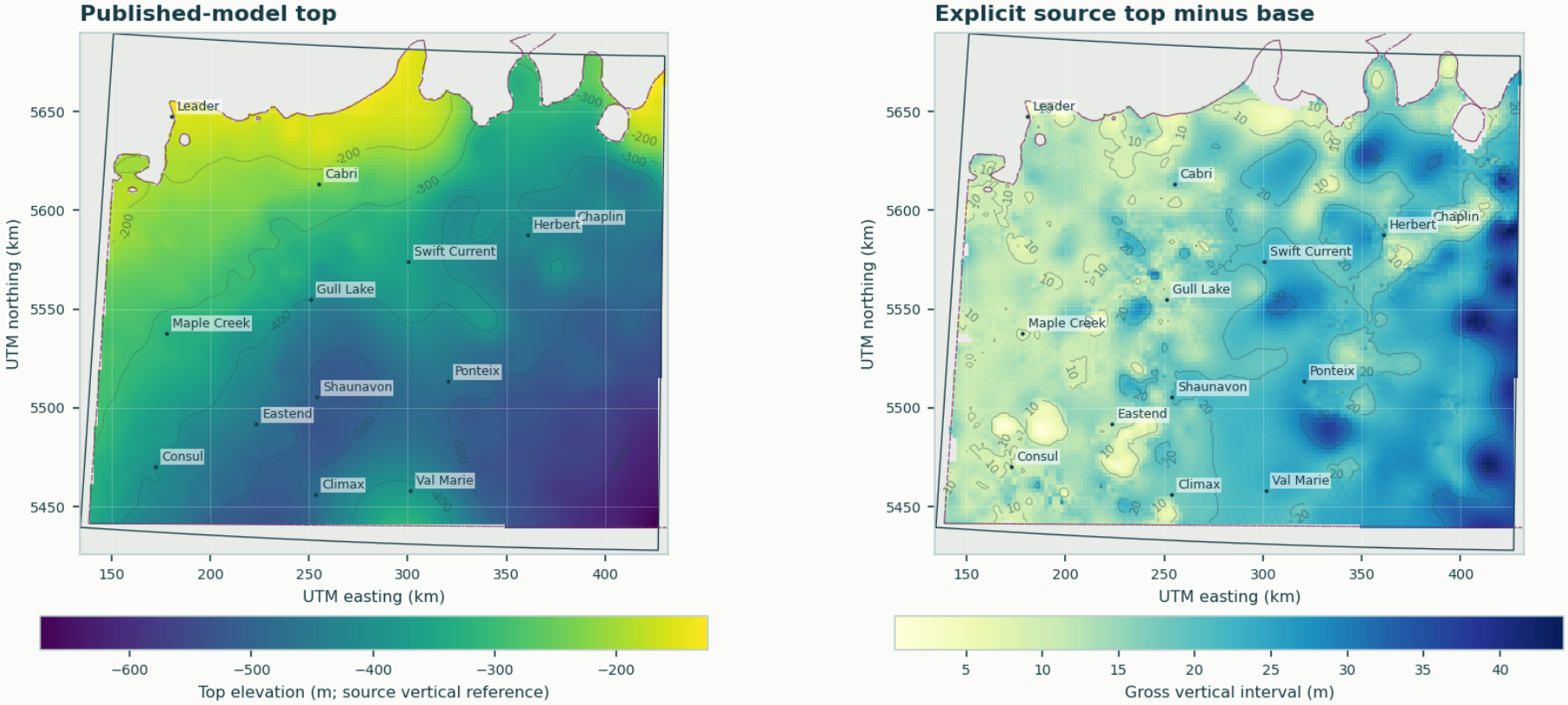


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Upper Gravelbourg | structure and gross interval

Upper Gravelbourg top to Lower Gravelbourg

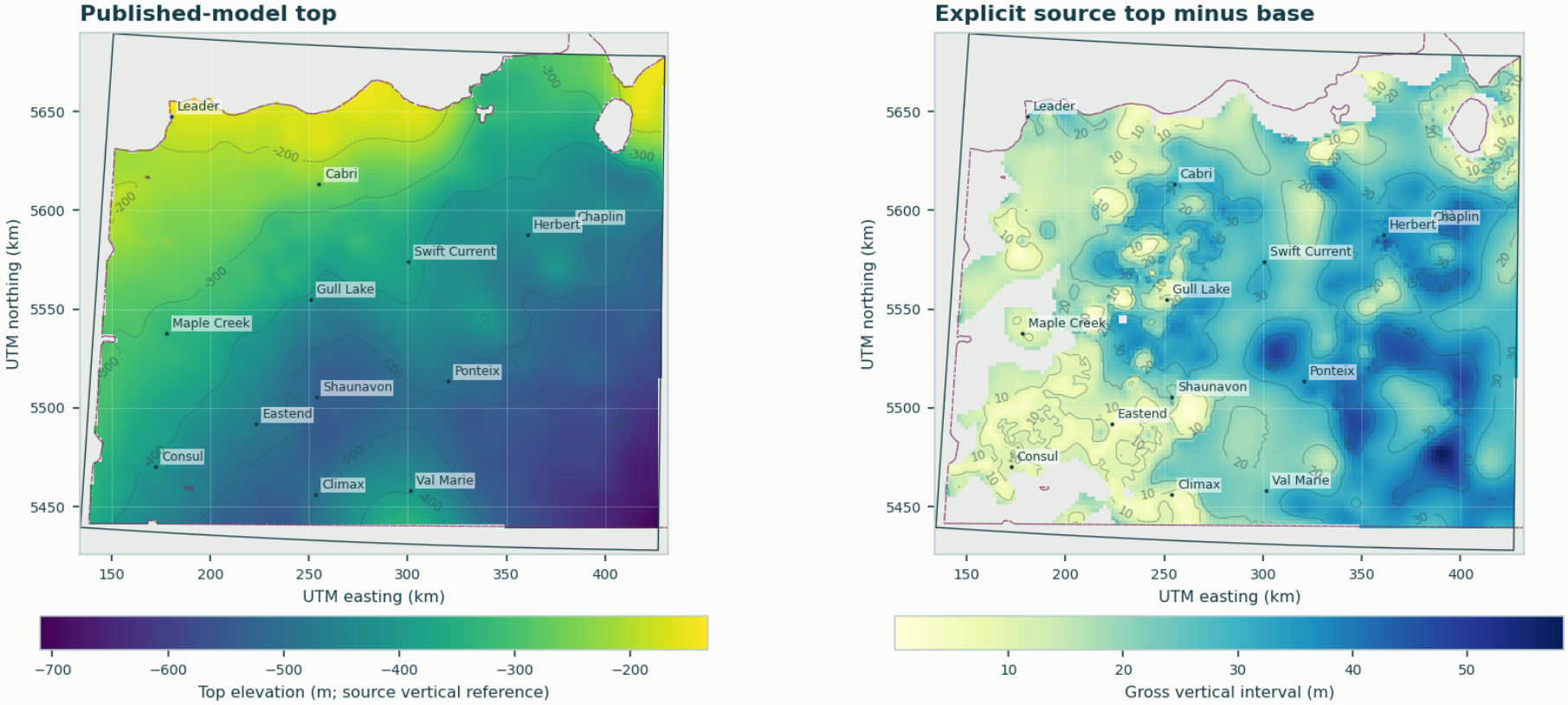


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Lower Gravelbourg | structure and gross interval

Lower Gravelbourg top to Upper Watrous

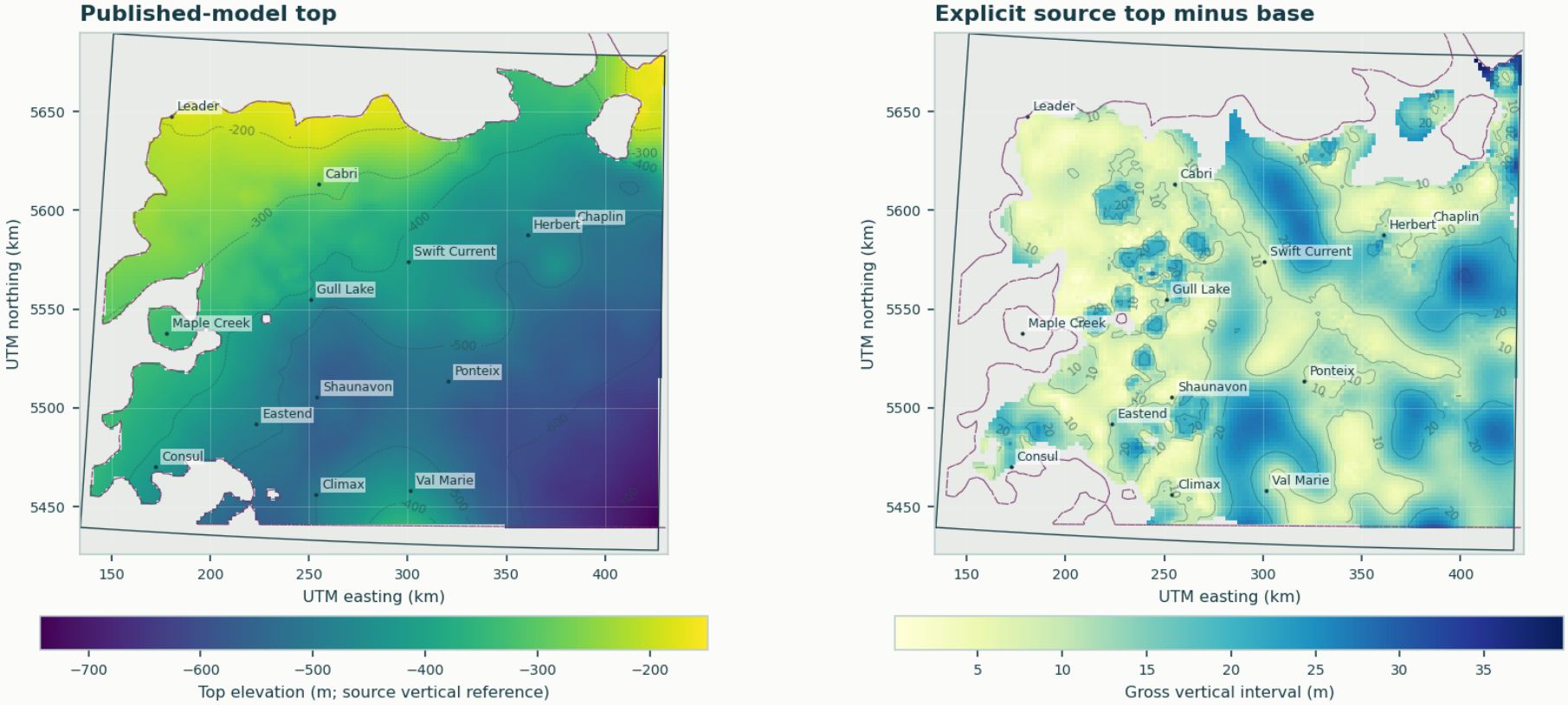


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Upper Watrous | structure and gross interval

Upper Watrous top to Lower Watrous

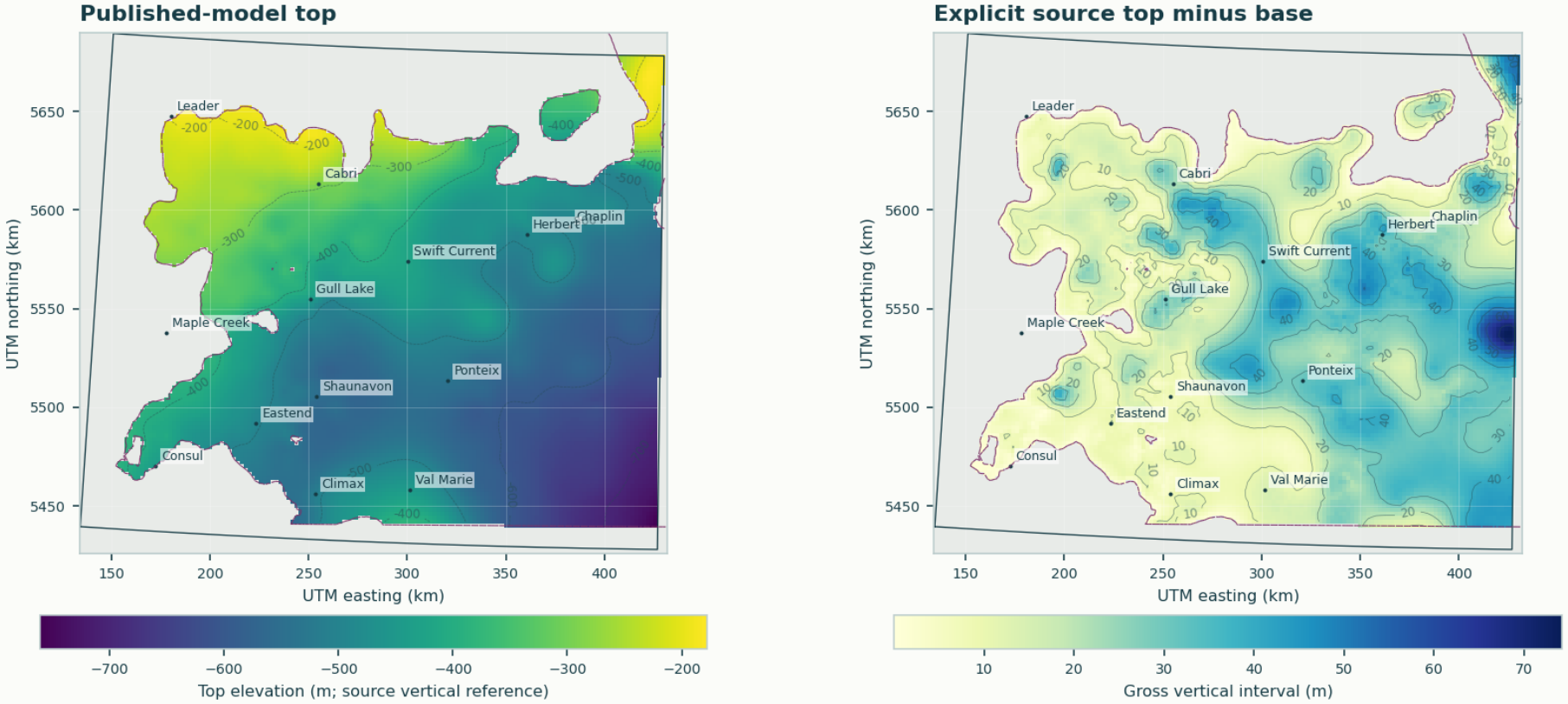


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Lower Watrous | structure and gross interval

Lower Watrous top to Unconformity Sub Mesozoic



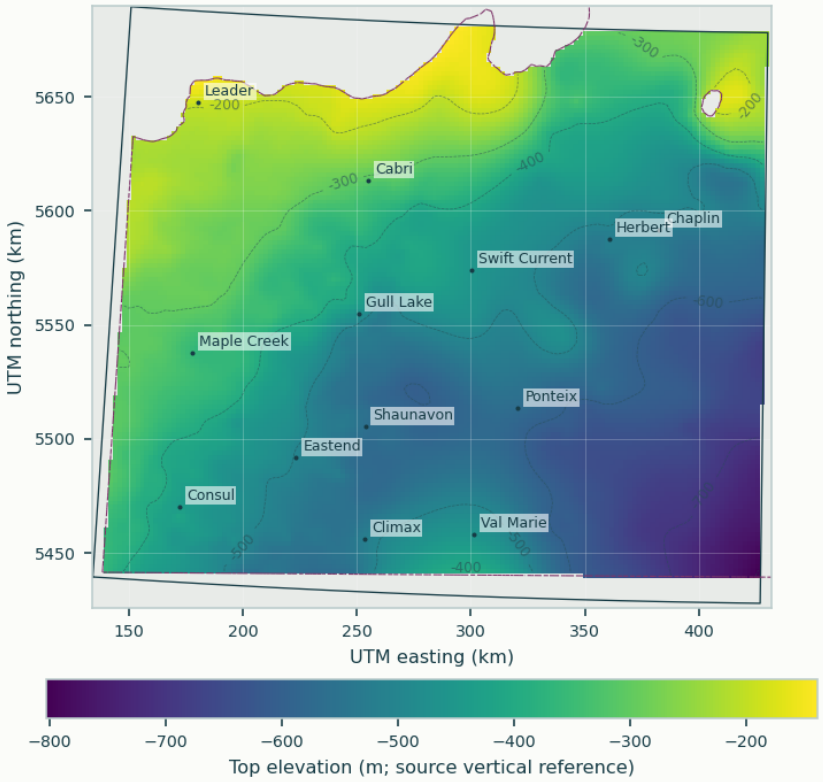
Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

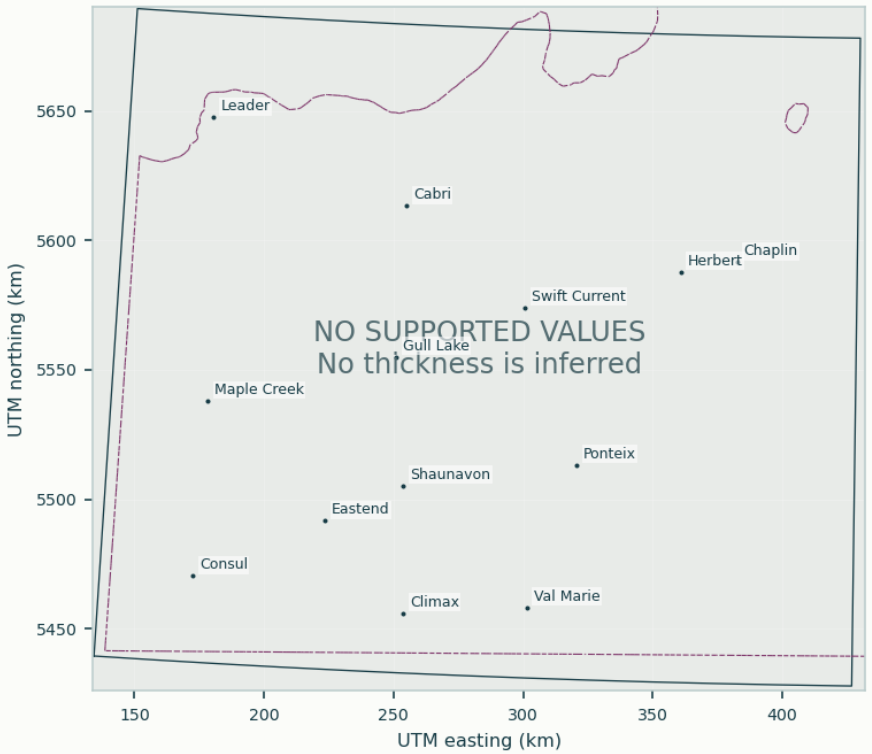
Sub-Mesozoic unconformity | structure and gross interval

Erosional surface only; no thickness.

Published-model top



Explicit source top minus base

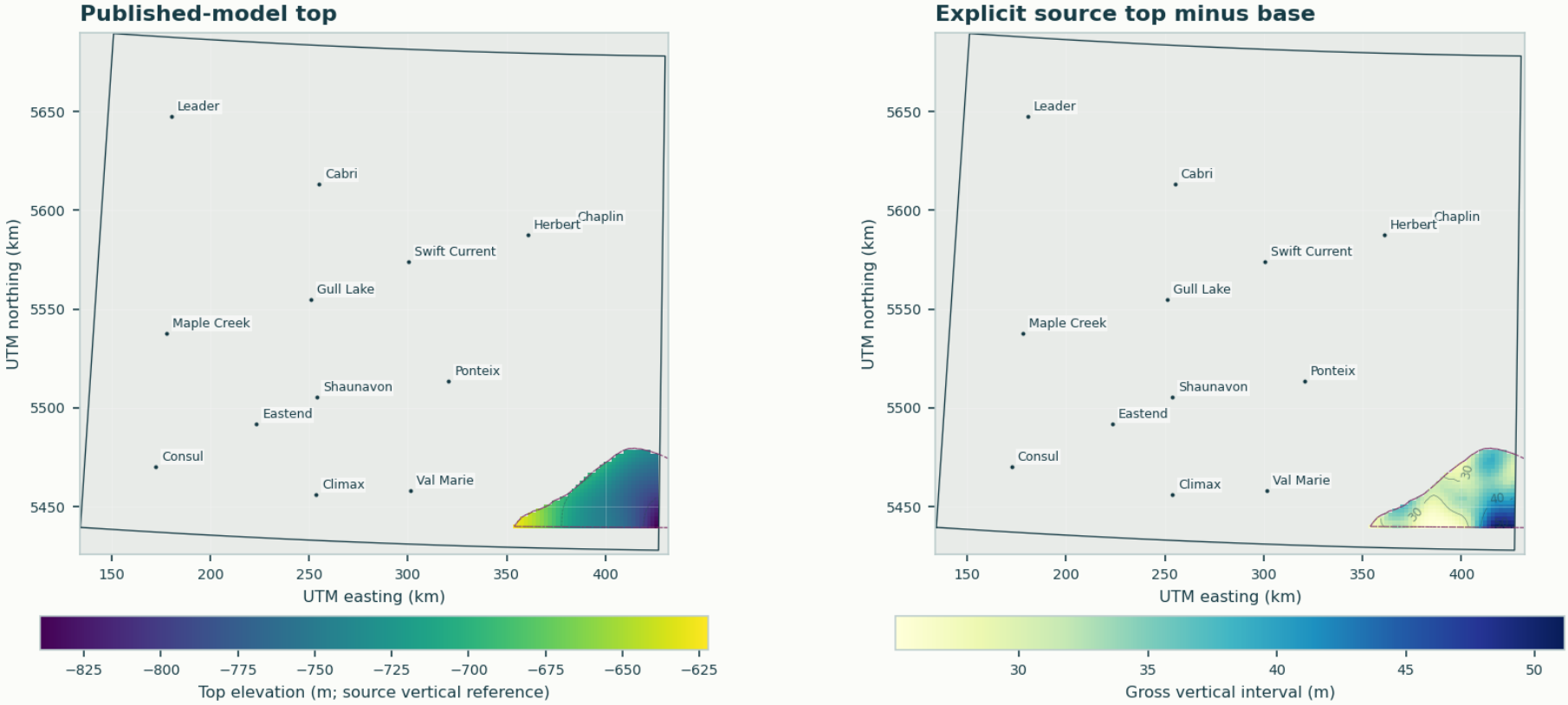


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Ratcliffe | structure and gross interval

Ratcliffe top to Midale

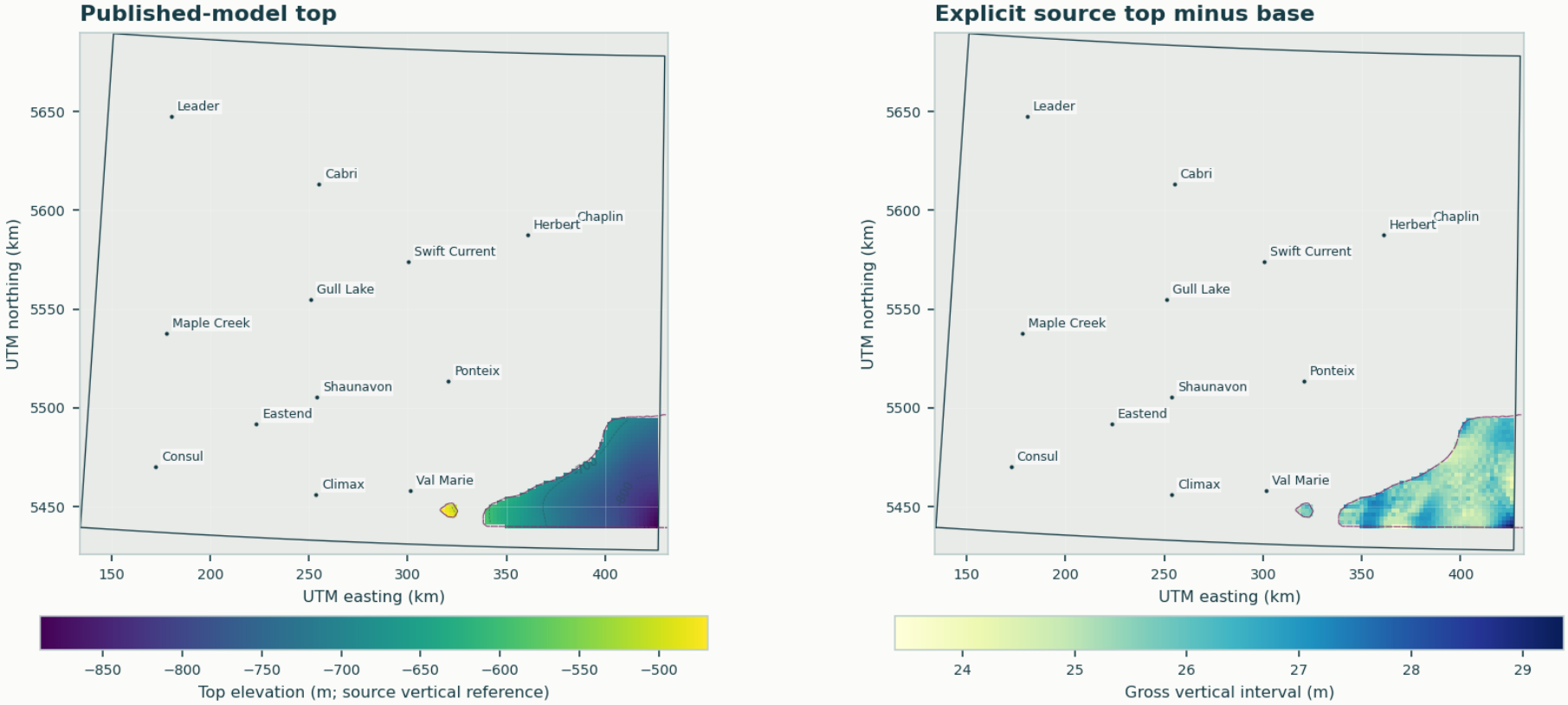


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Midale | structure and gross interval

Midale top to Frobisher

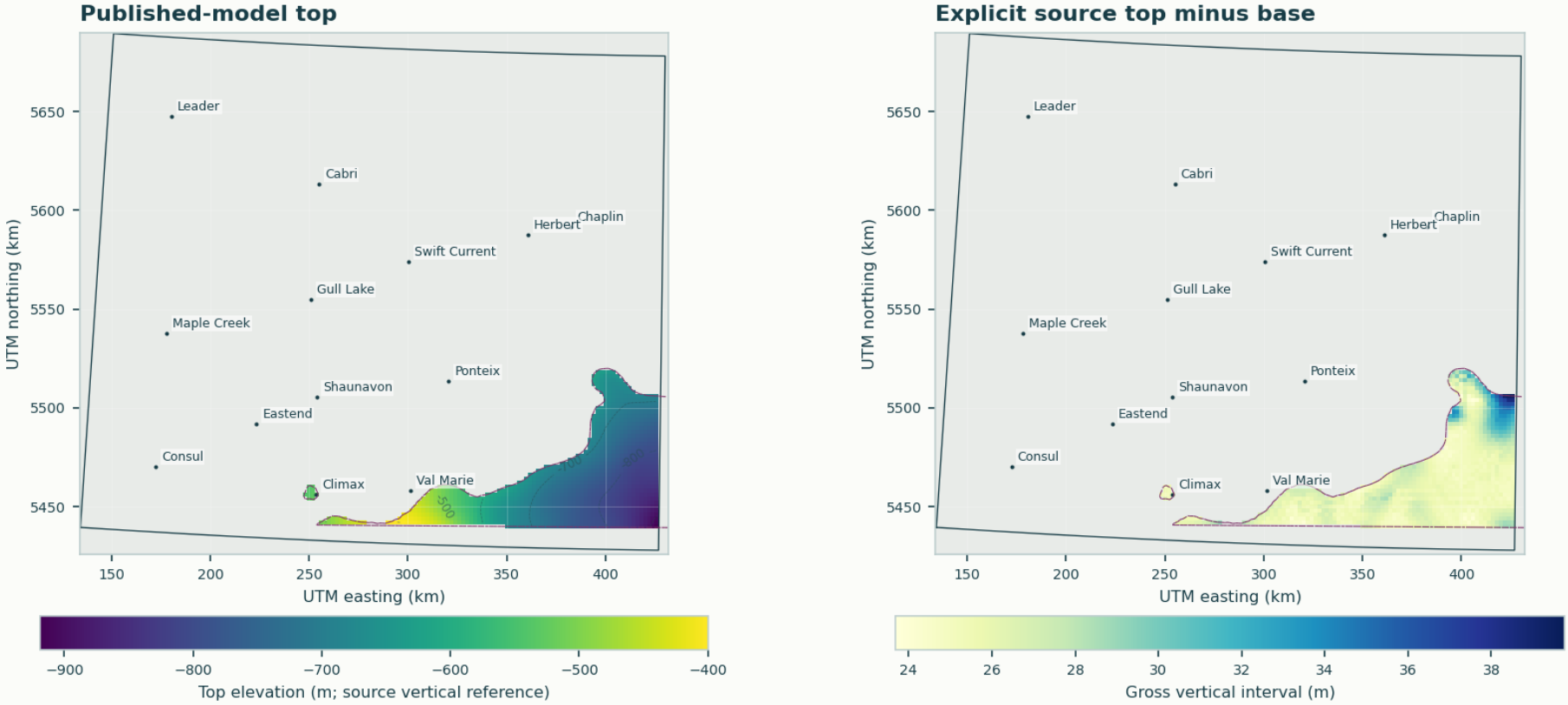


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Frobisher | structure and gross interval

Frobisher top to Kisbey

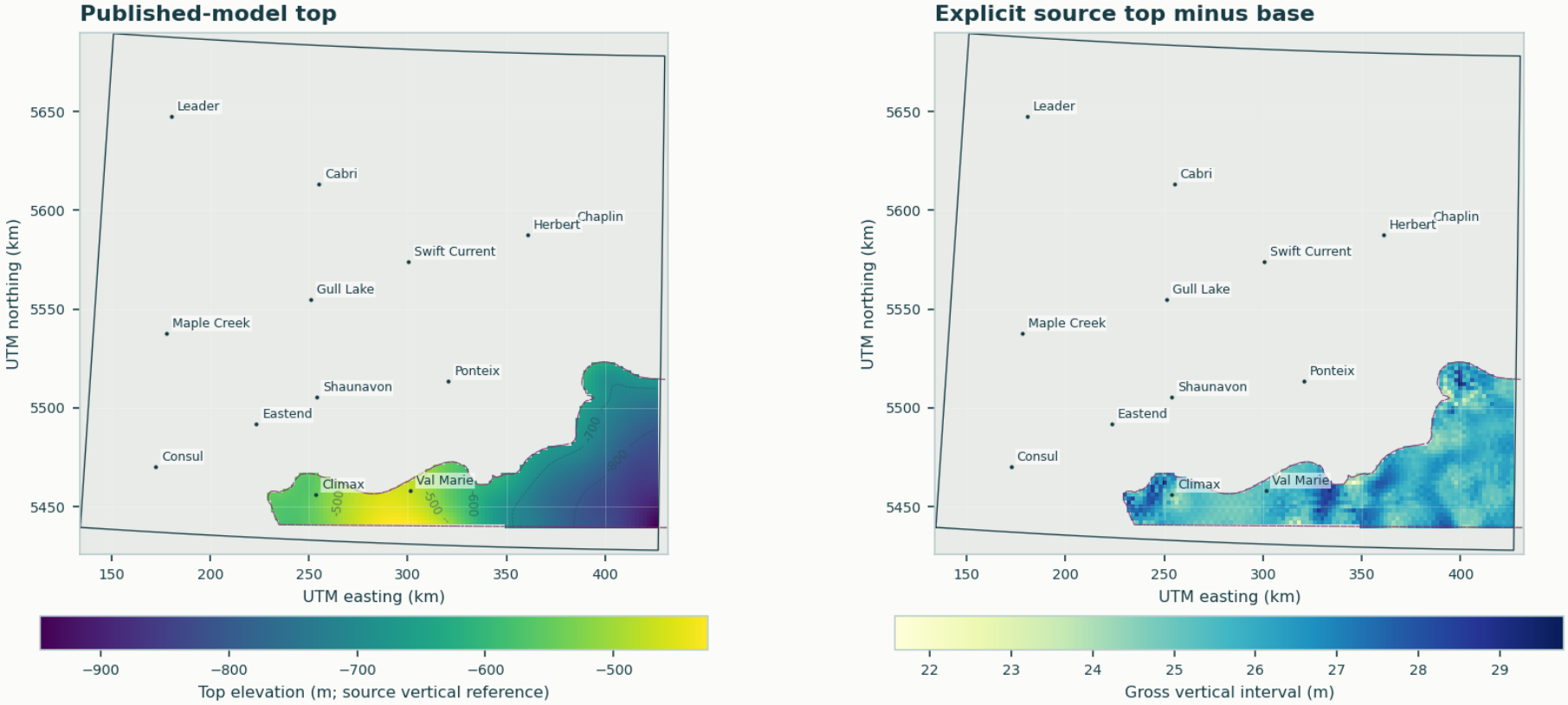


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Kisbey | structure and gross interval

Kisbey top to Alida

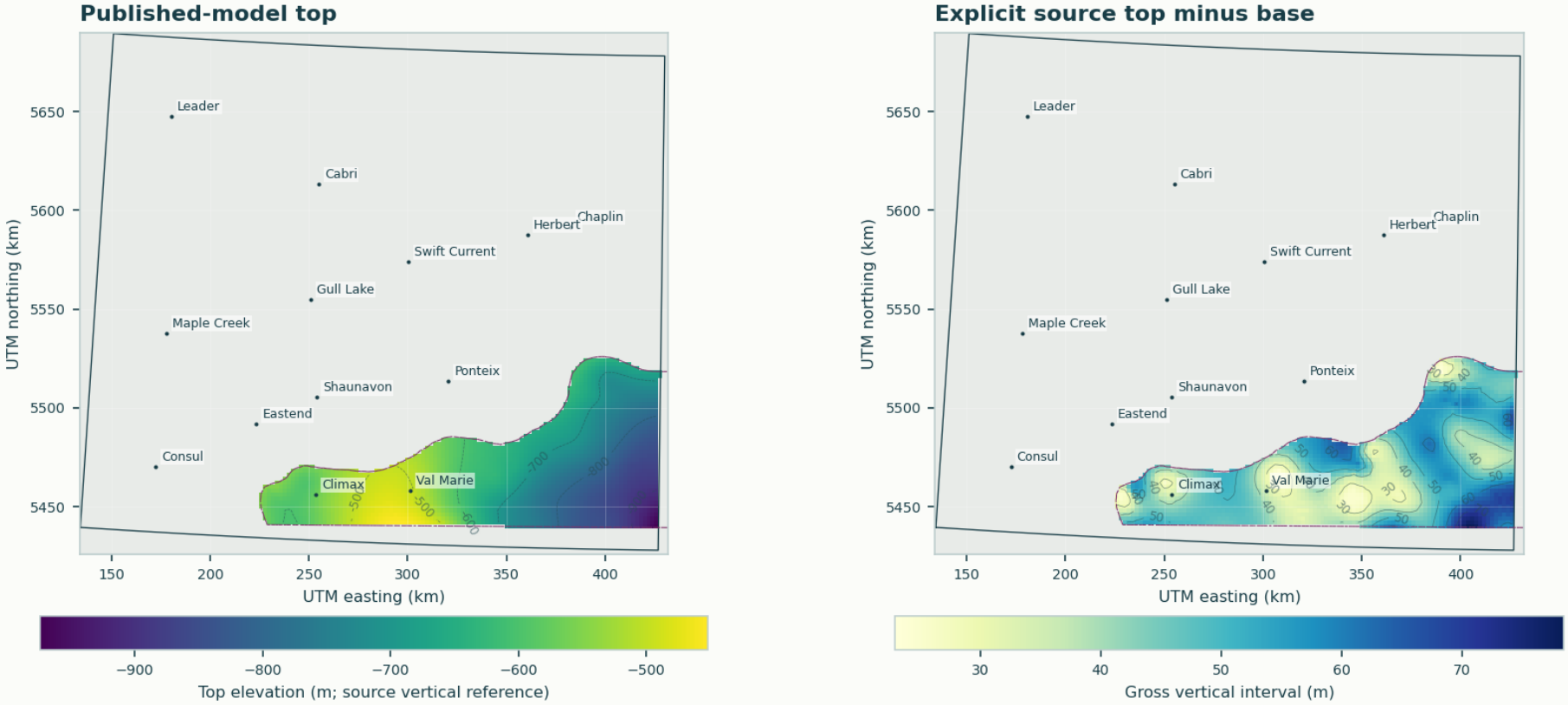


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Alida | structure and gross interval

Alida top to Tilston

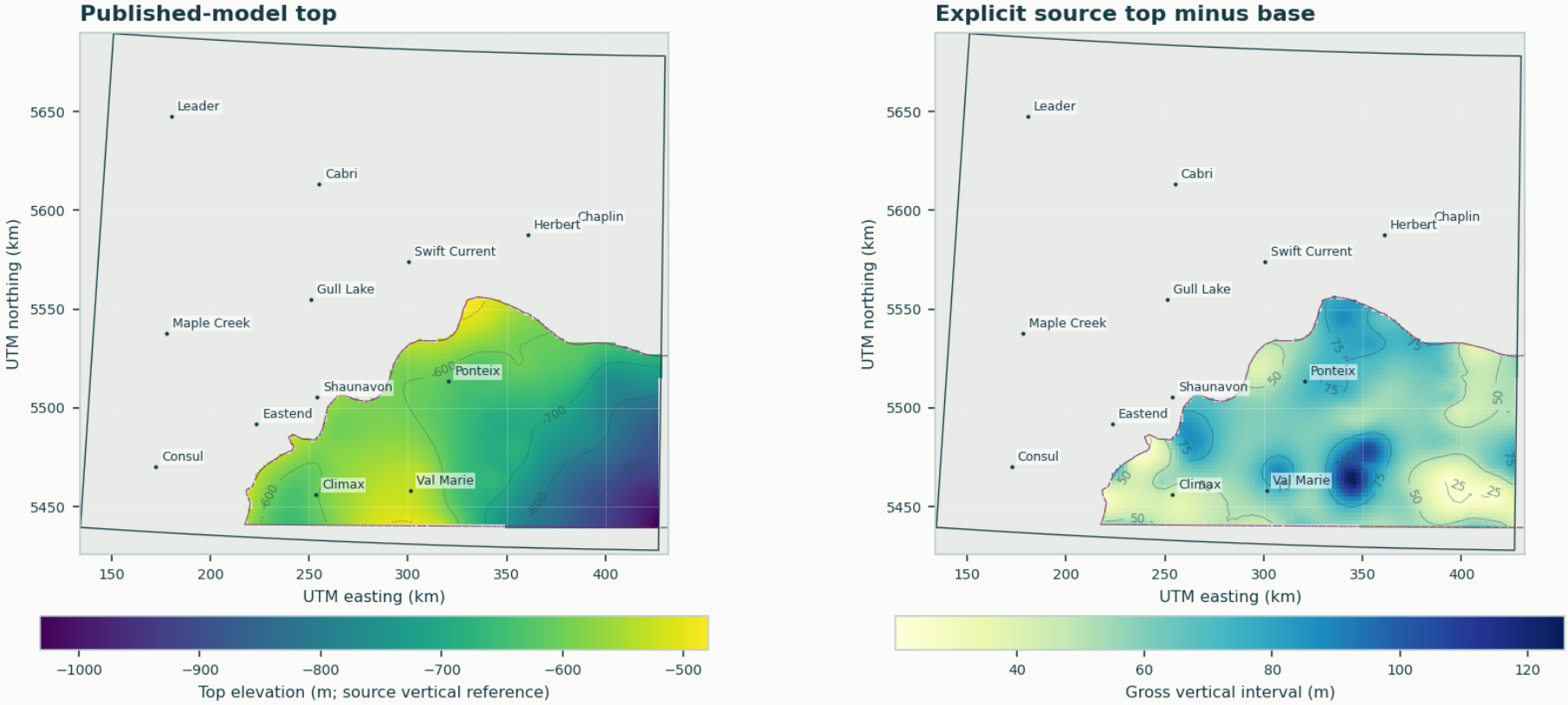


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Tilston | structure and gross interval

Tilston top to Souris Valley

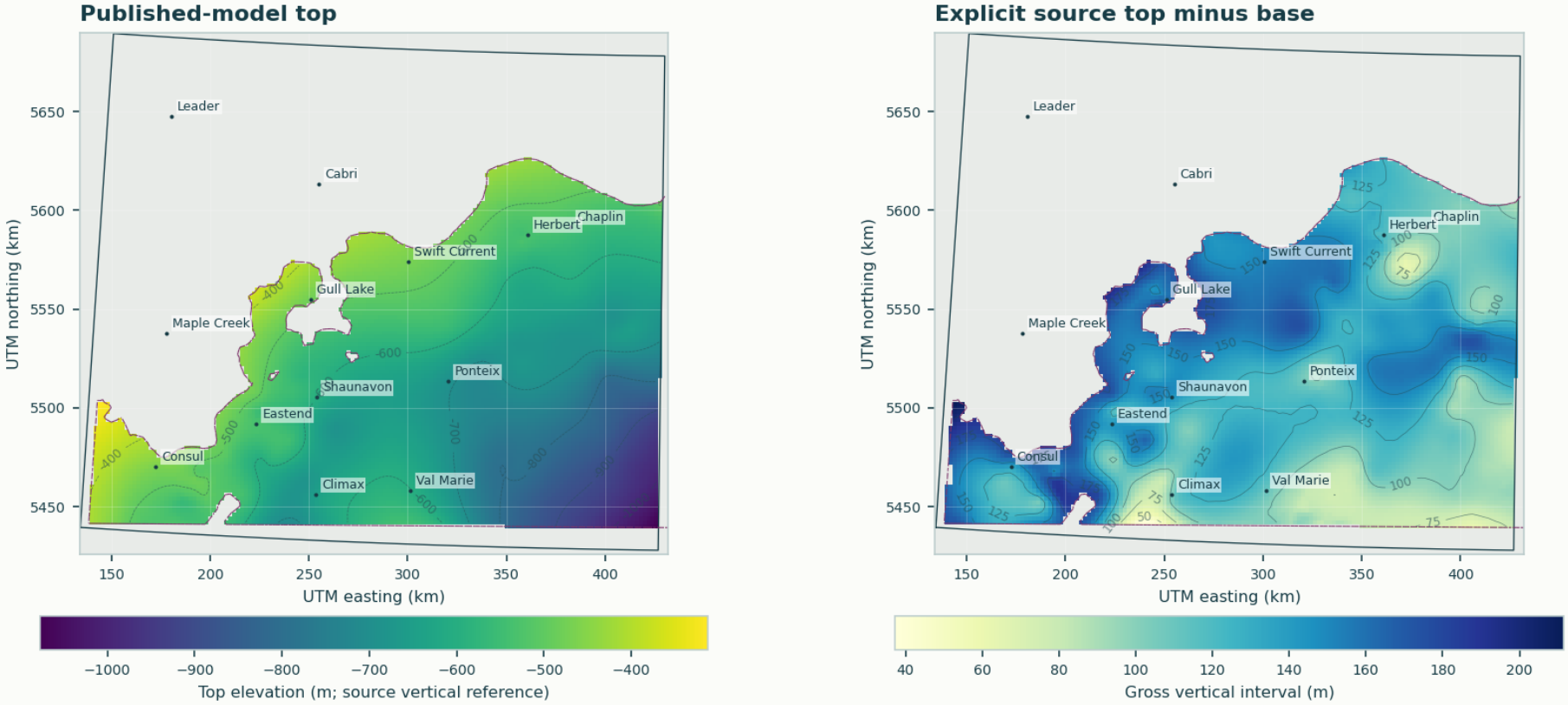


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Souris Valley | structure and gross interval

Souris Valley top to Bakken

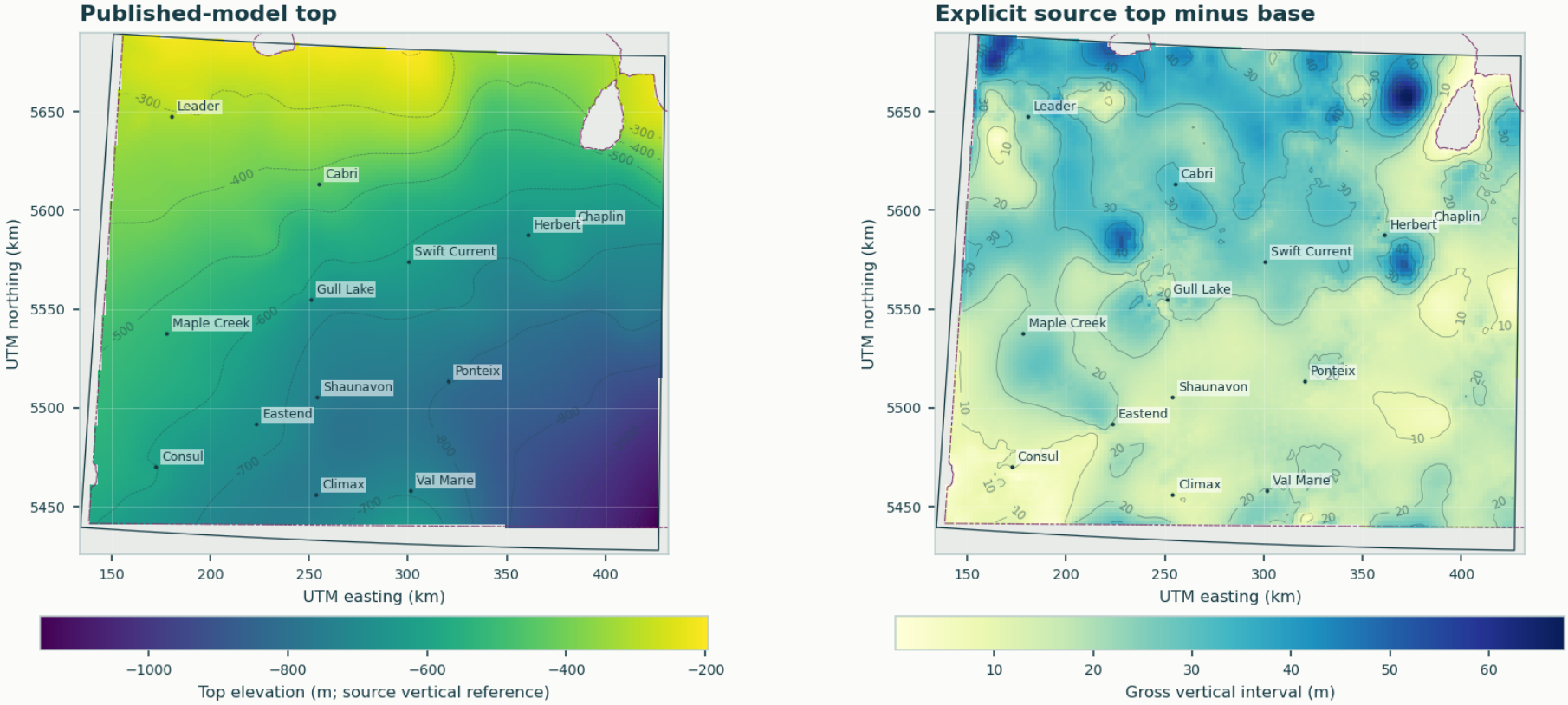


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Bakken | structure and gross interval

Bakken top to Unconformity Sub Mississippian

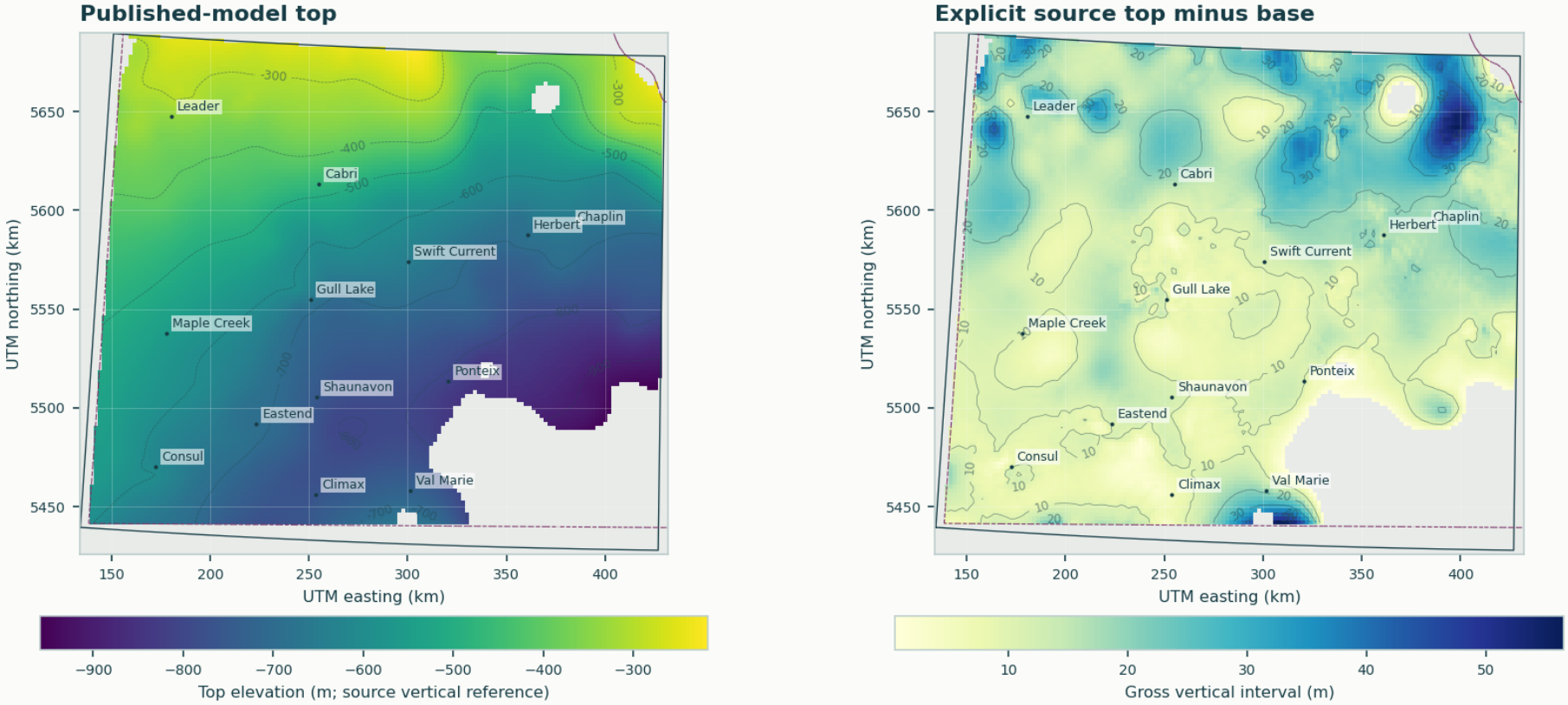


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Big Valley | structure and gross interval

Unconformity Sub Mississippian top to Torquay



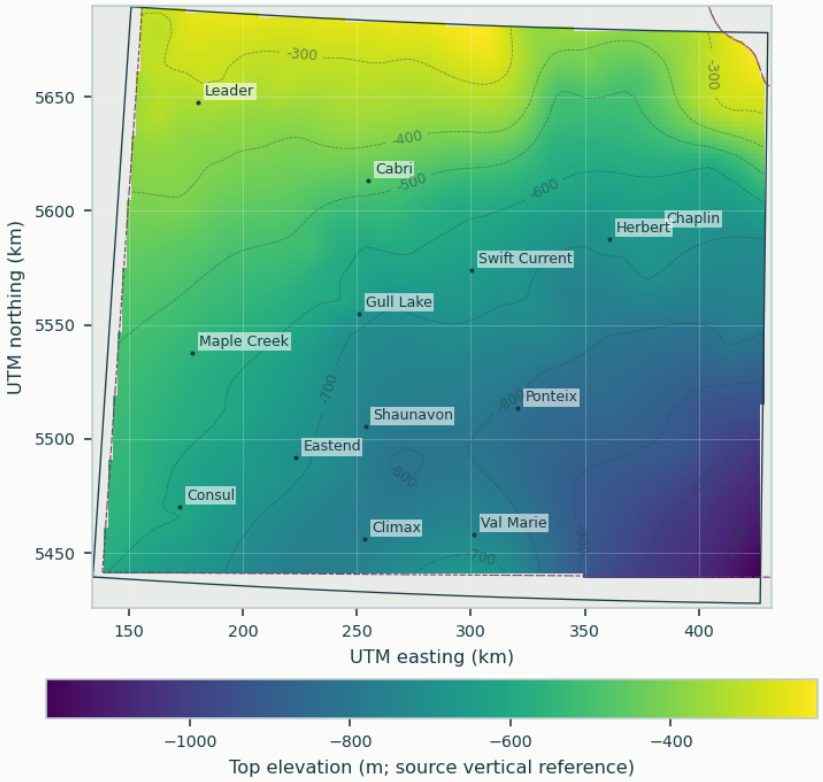
Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

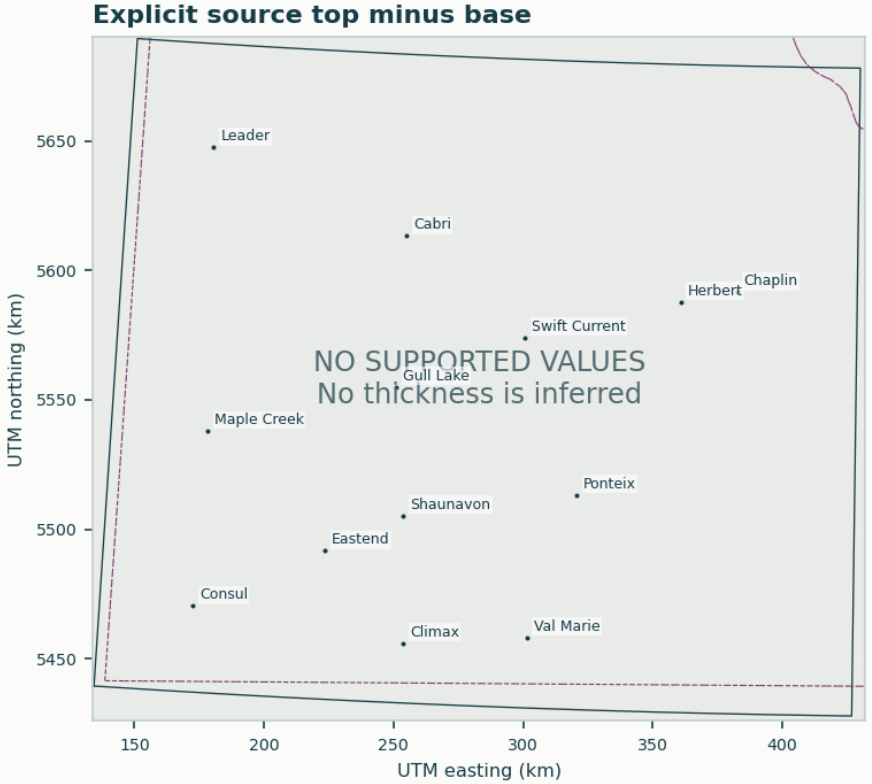
Sub-Mississippian unconformity | structure and gross interval

Erosional surface only; no thickness.

Published-model top



Explicit source top minus base

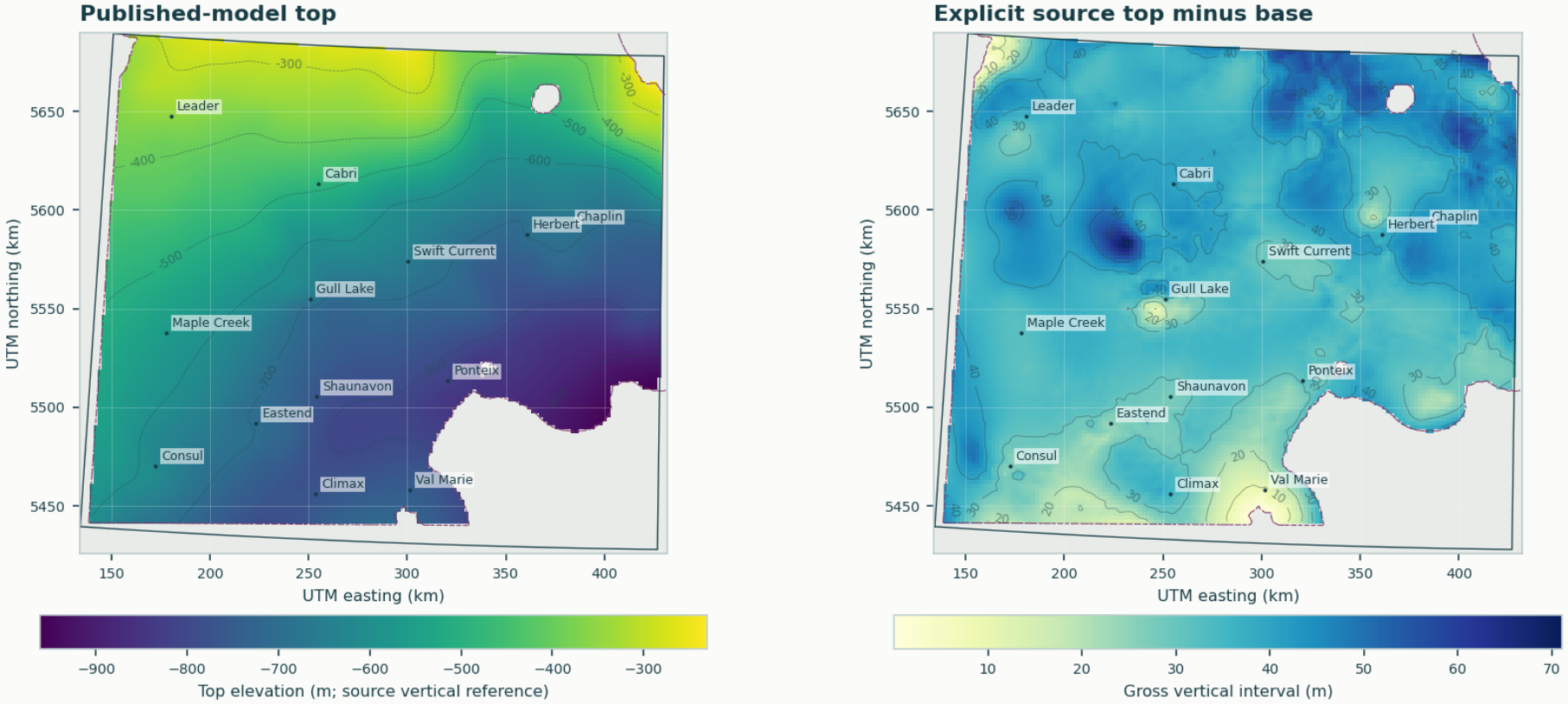


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Torquay | structure and gross interval

Torquay top to Birdbear

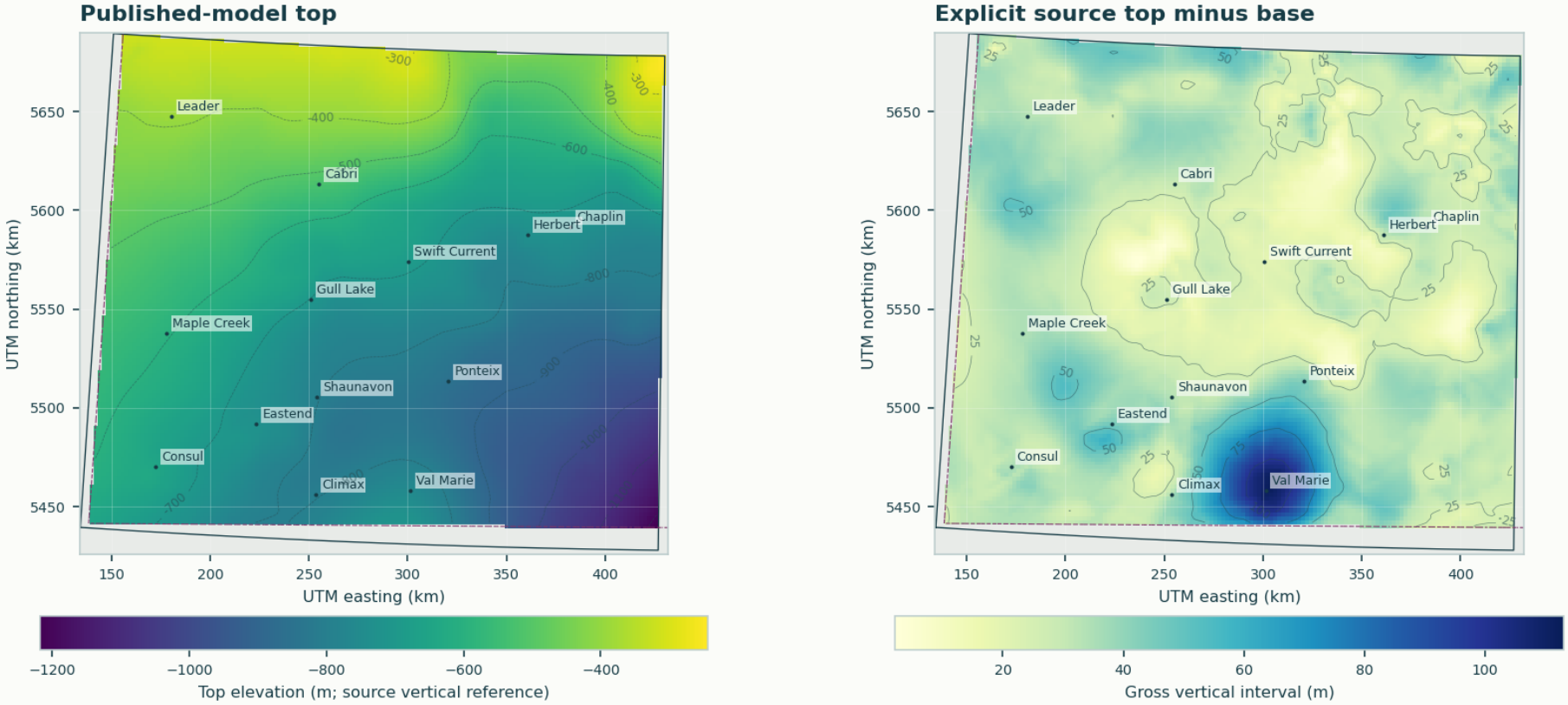


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Birdbear | structure and gross interval

Birdbear top to Duperow

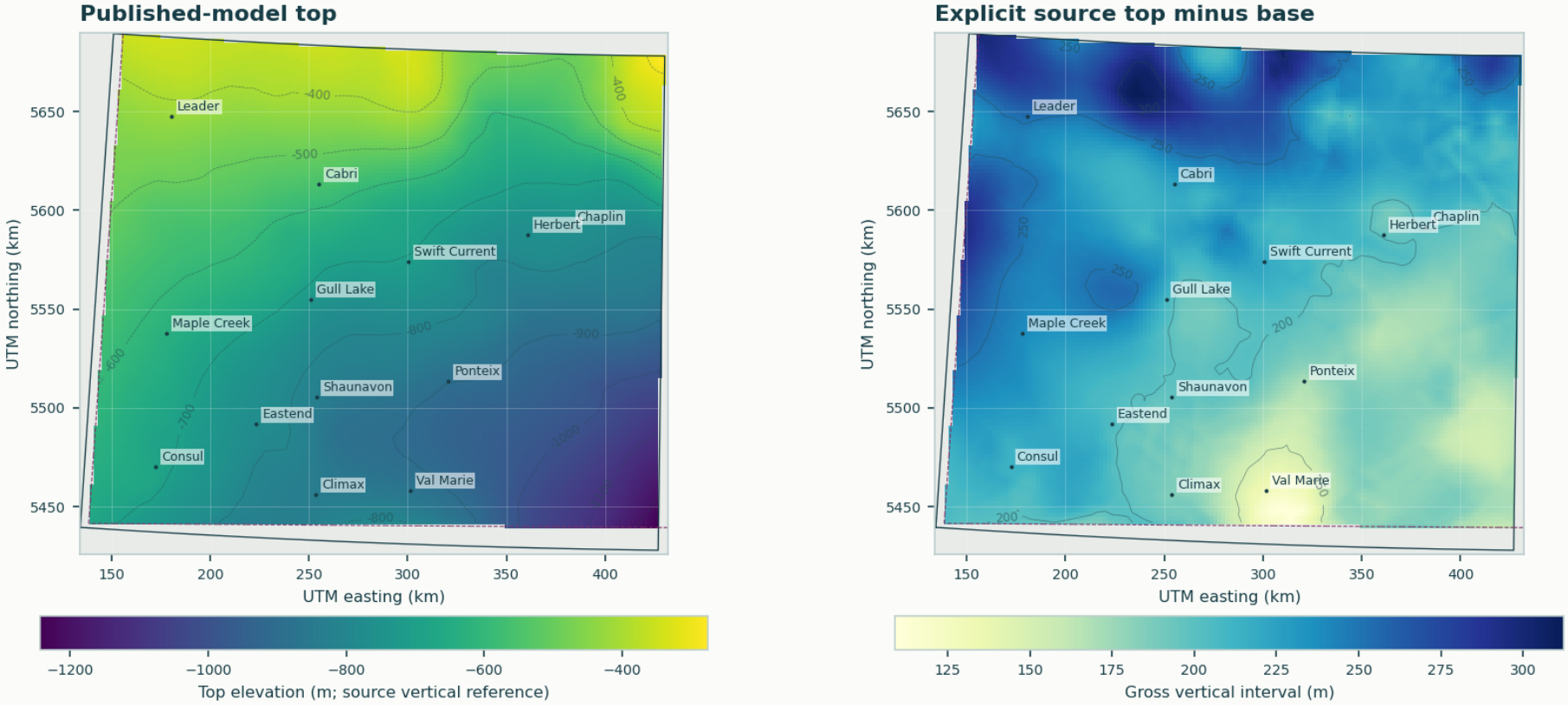


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Duperow | structure and gross interval

Duperow top to Souris River

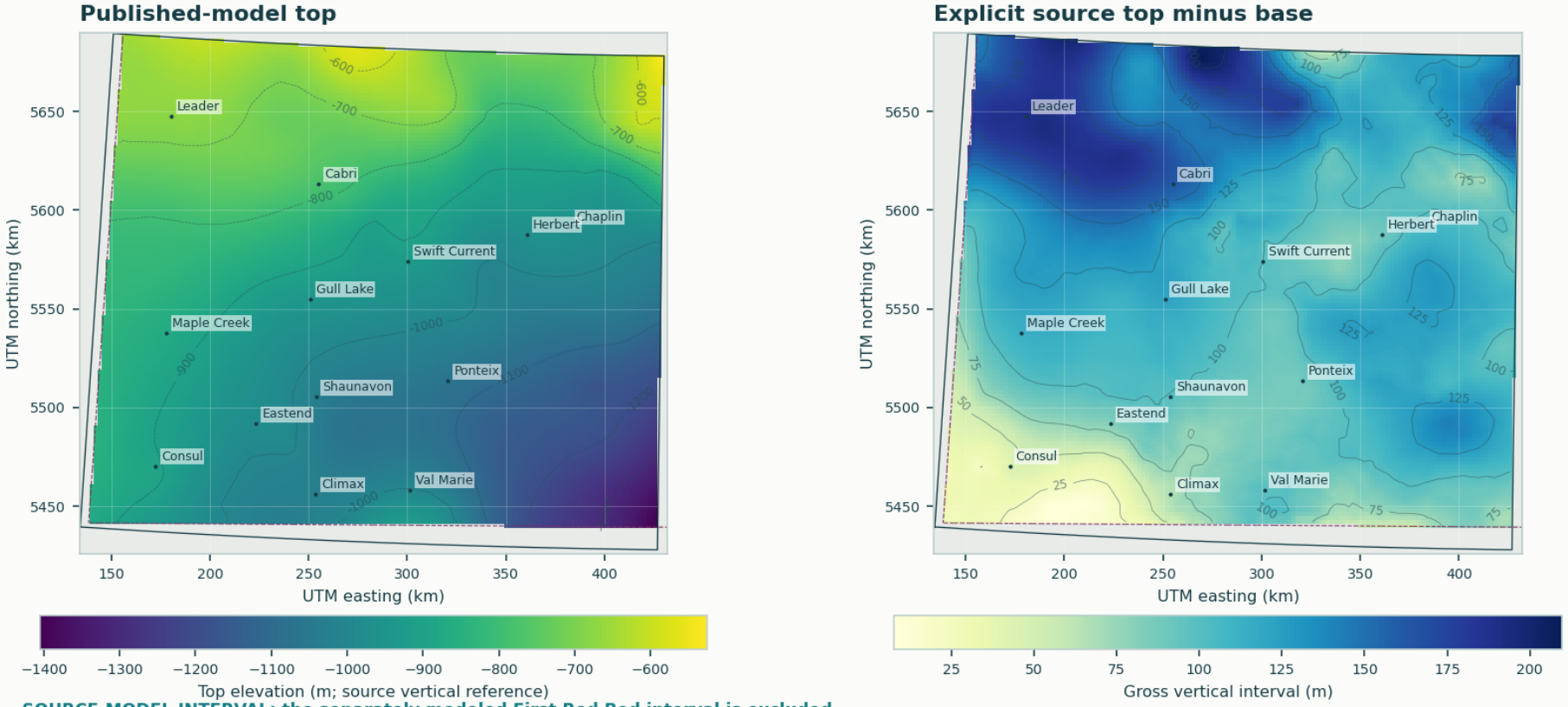


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Souris River | structure and gross interval

Souris River top to 1st Red Bed



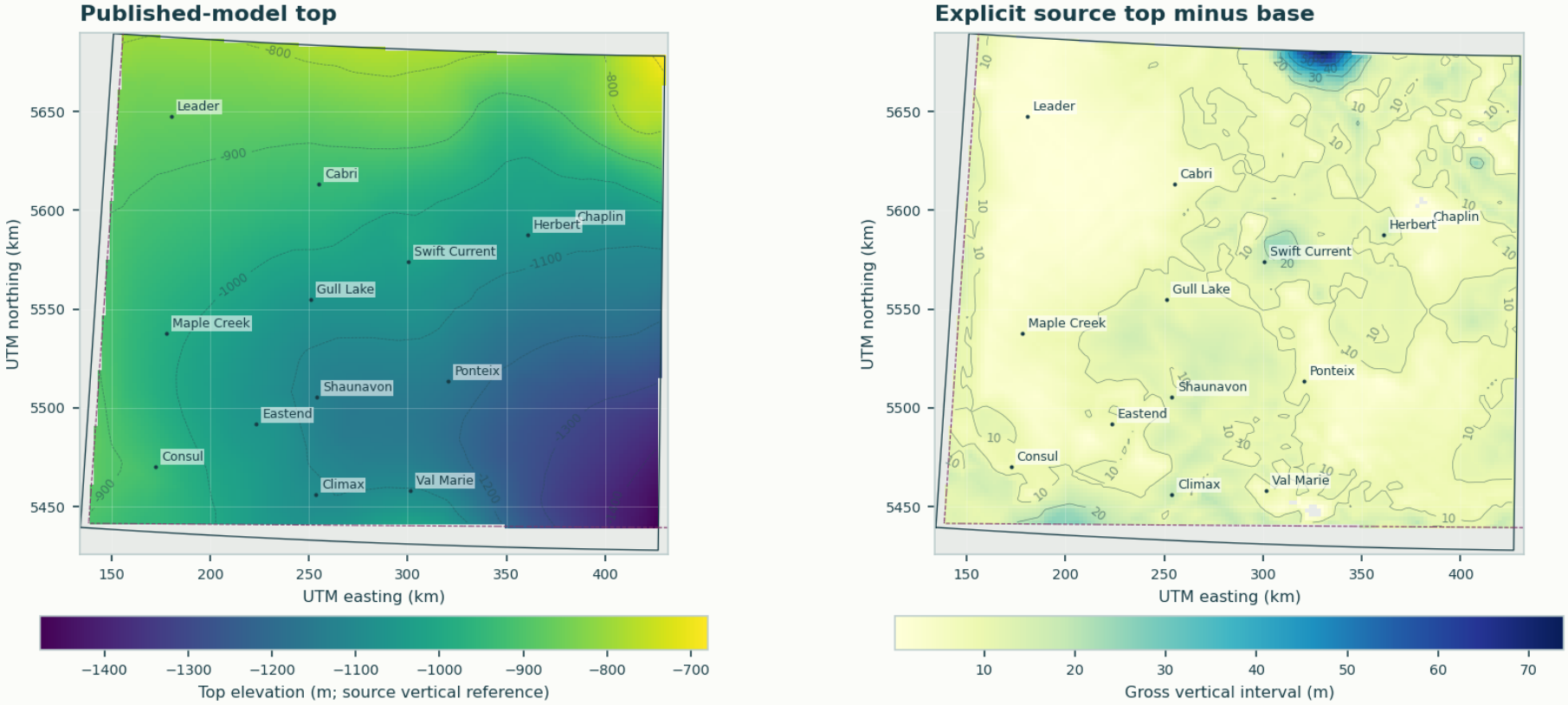
SOURCE-MODEL INTERVAL: the separately modeled First Red Bed interval is excluded.

Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

1st Red Bed | structure and gross interval

1st Red Bed top to Dawson Bay

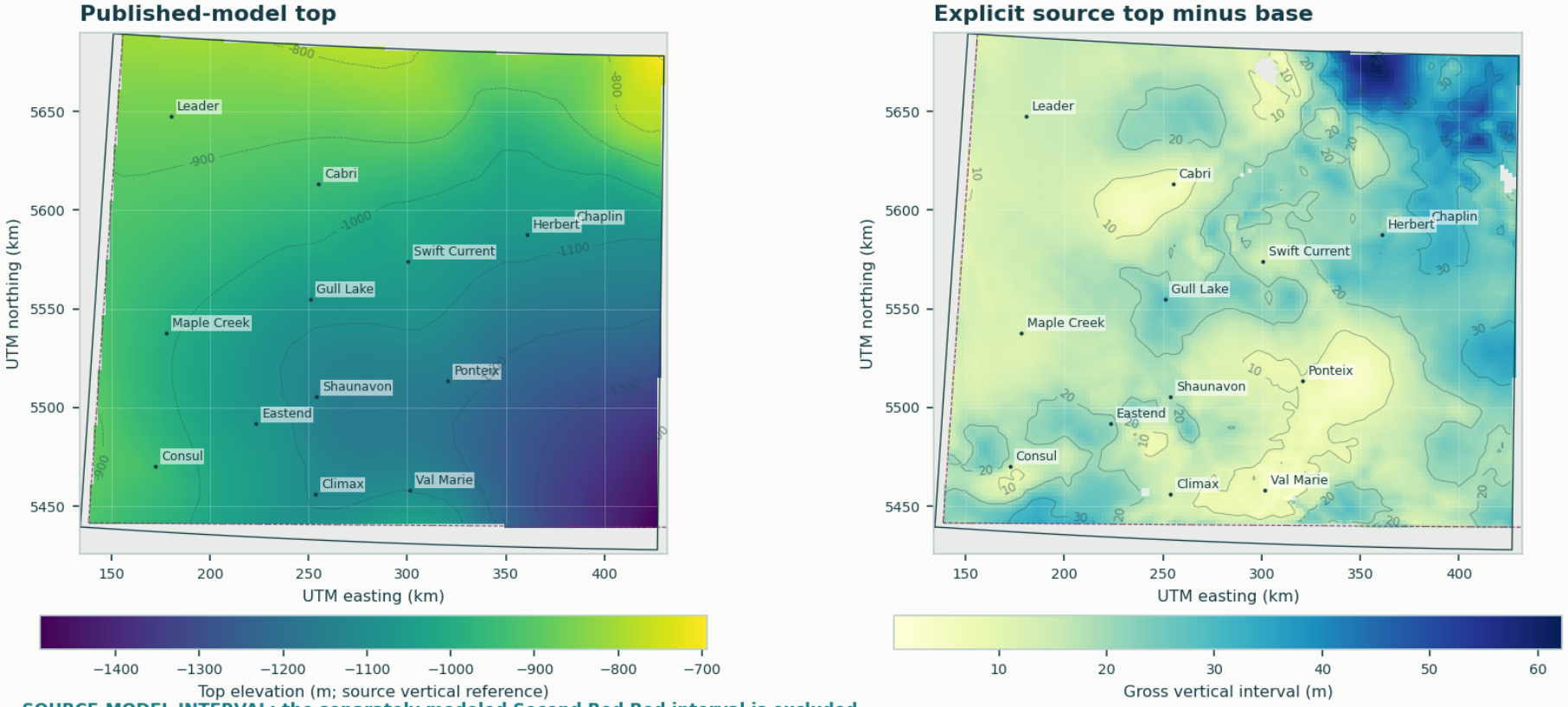


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Dawson Bay | structure and gross interval

Dawson Bay top to 2nd Red Bed



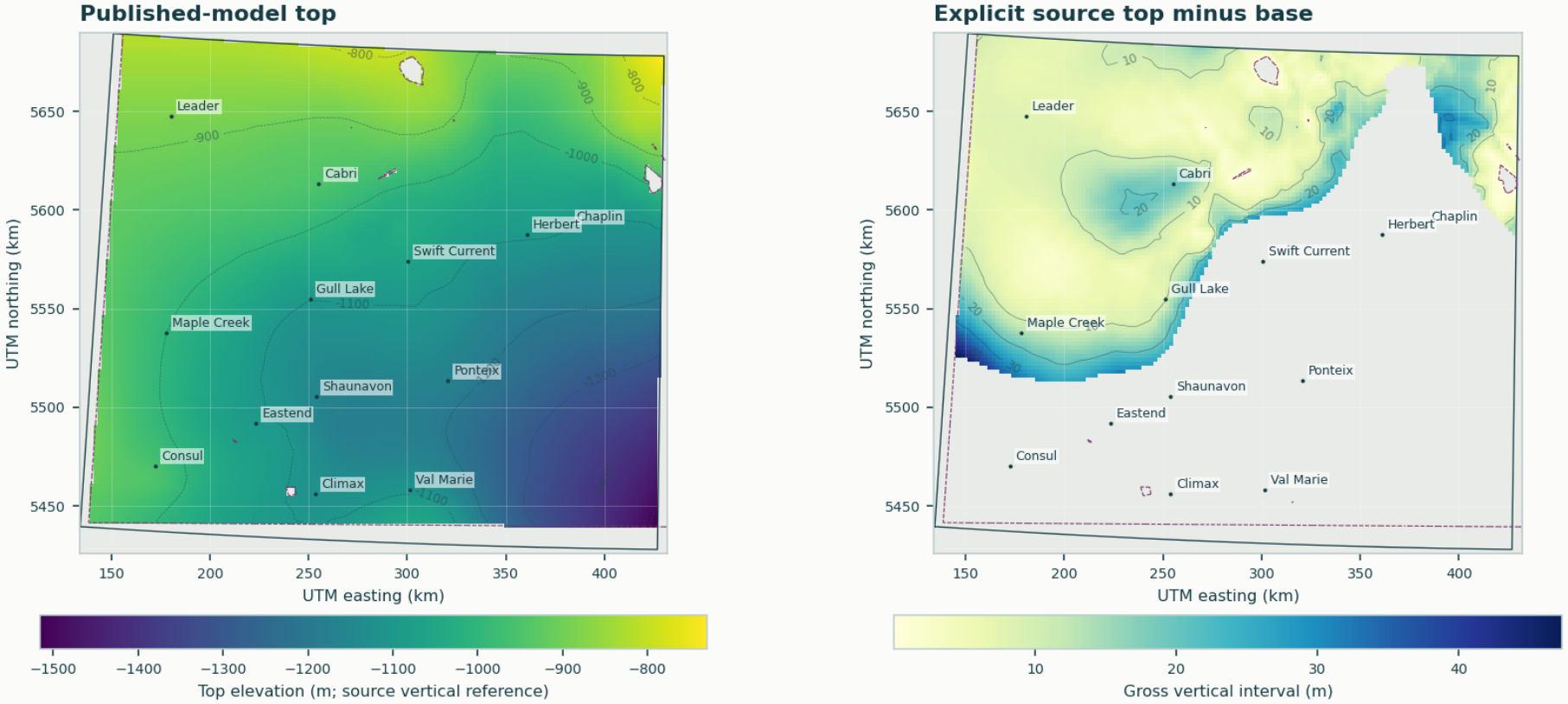
SOURCE-MODEL INTERVAL: the separately modeled Second Red Bed interval is excluded.

Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

2nd Red Bed | structure and gross interval

2nd Red Bed top to Prairie Evaporite

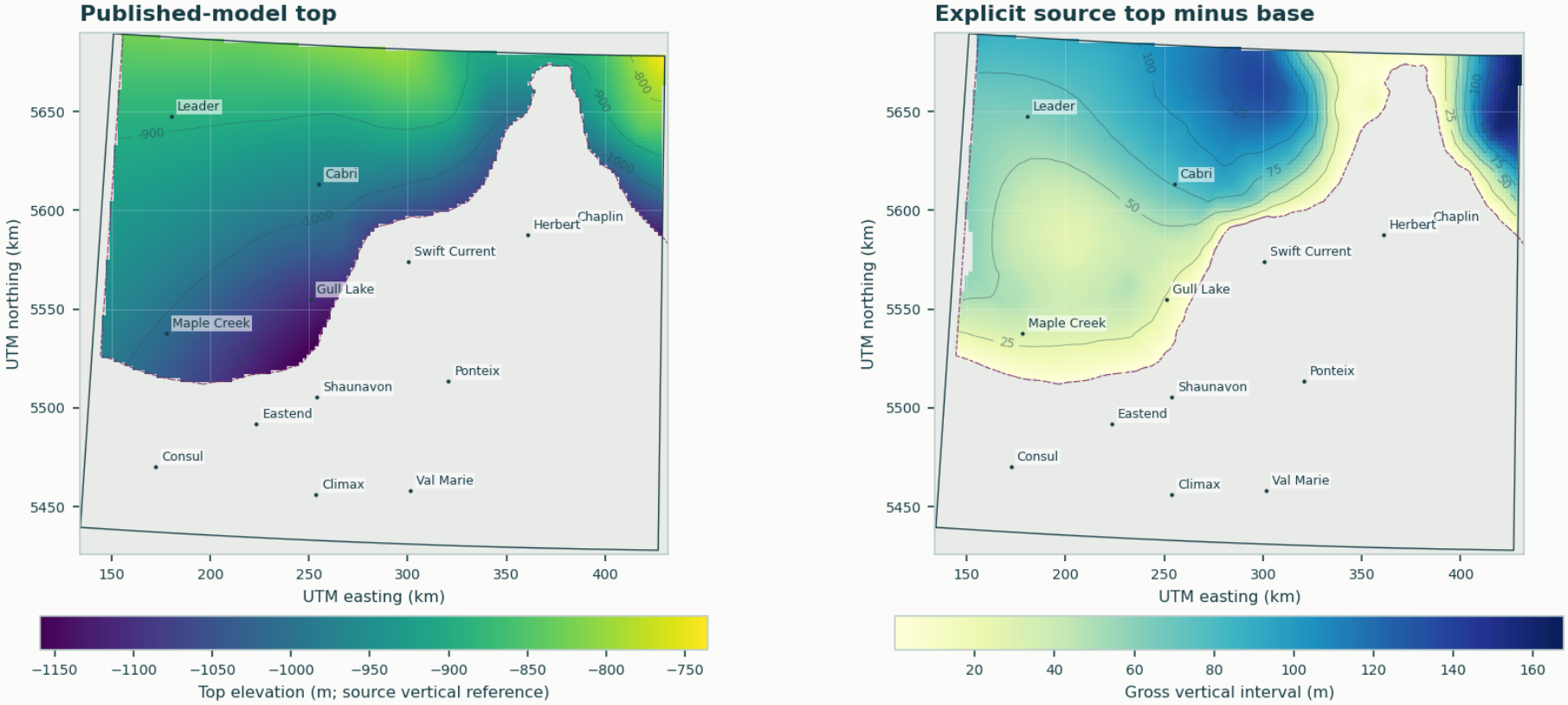


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Prairie Evaporite | structure and gross interval

Prairie Evaporite top to Winnipegosis

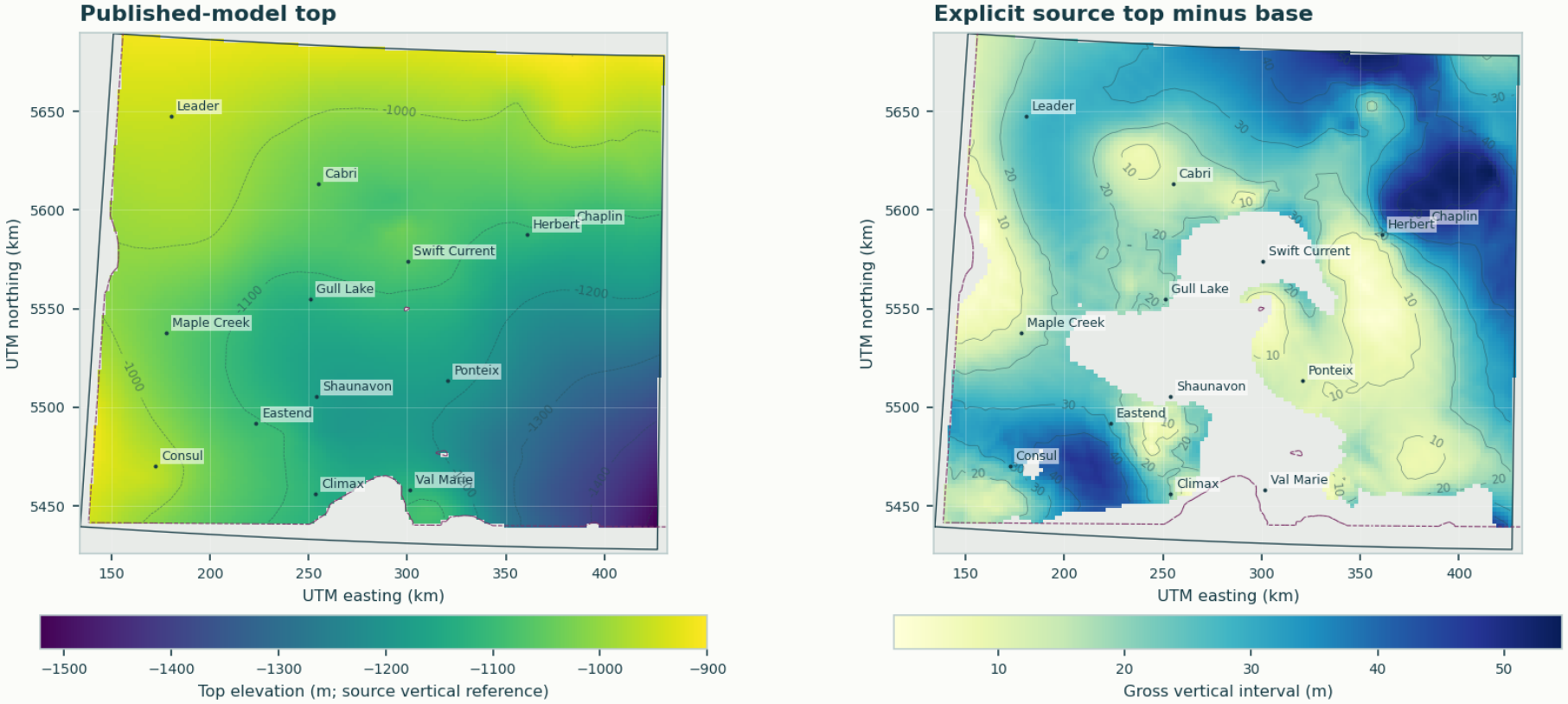


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Winnipegosis | structure and gross interval

Winnipegosis top to Ashern

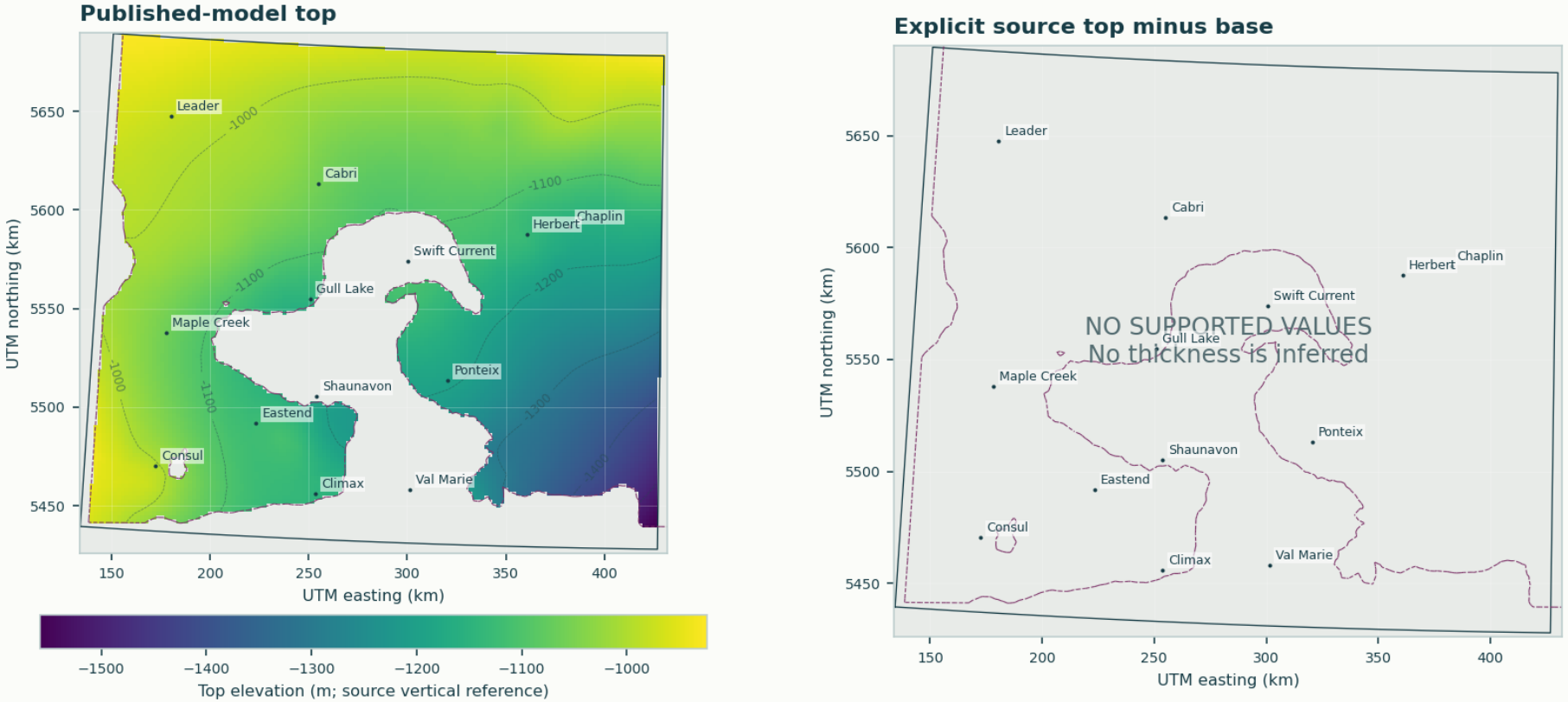


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Ashern | structure and gross interval

Ashern top to Meadow Lake

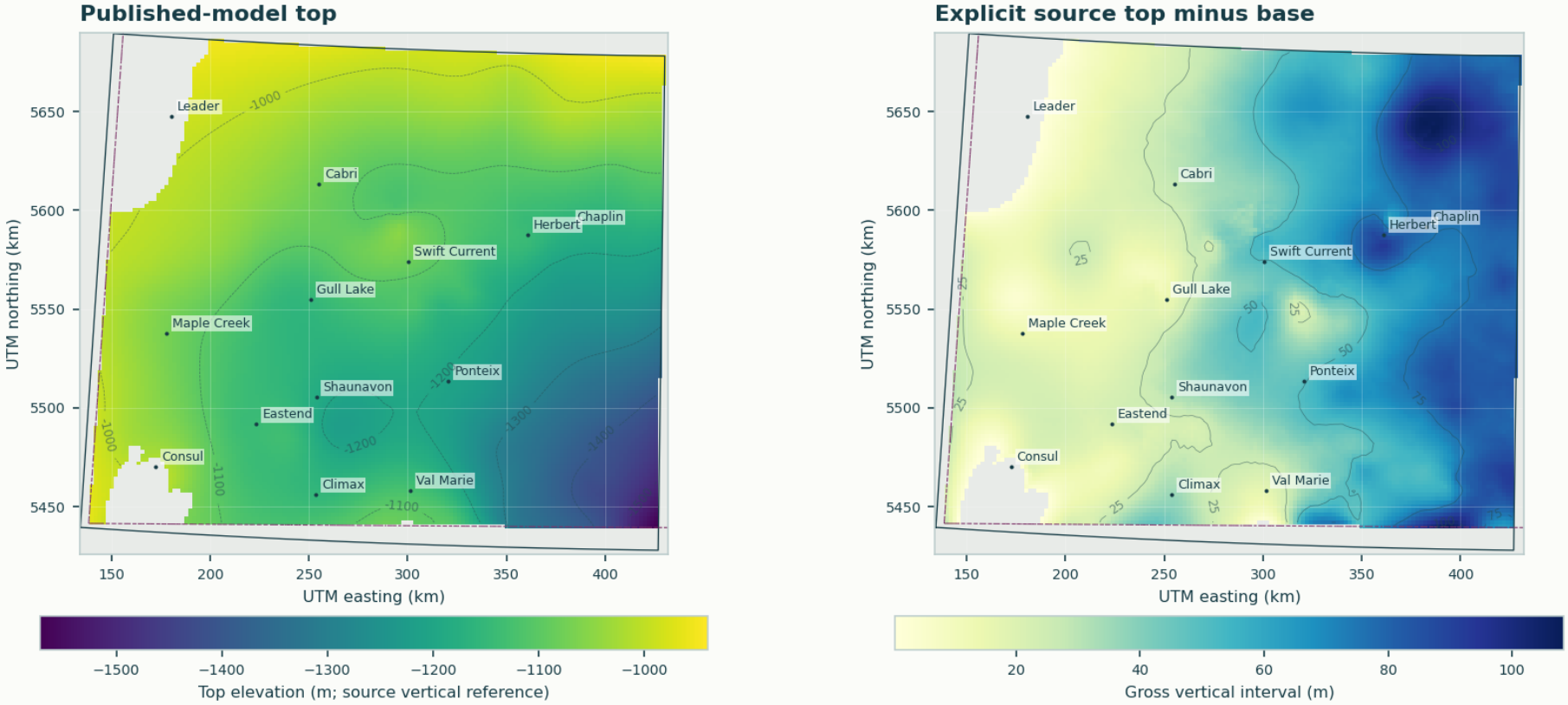


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Interlake | structure and gross interval

Unconformity Top LPaleo top to Stonewall

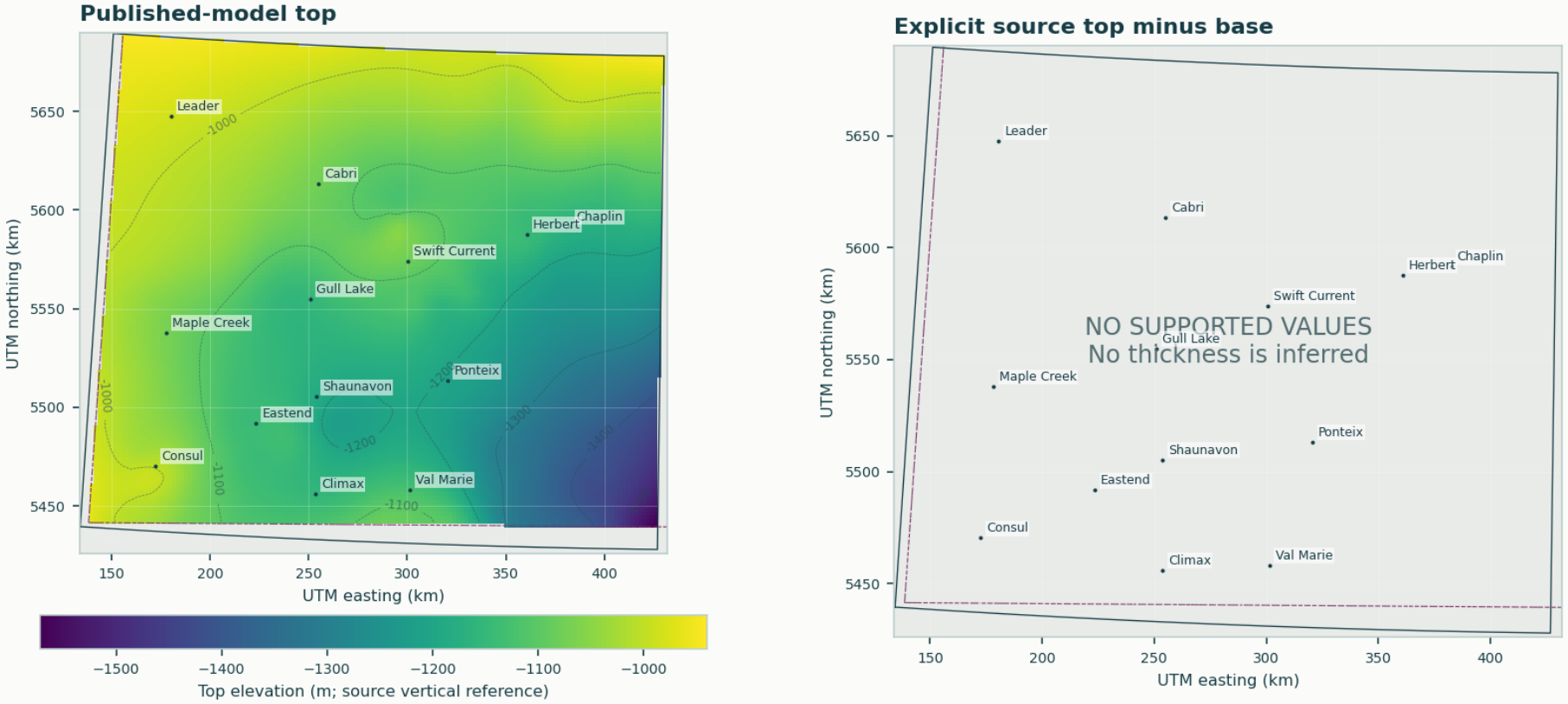


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Top Lower Paleozoic unconformity | structure and gross interval

Erosional surface only; no thickness.

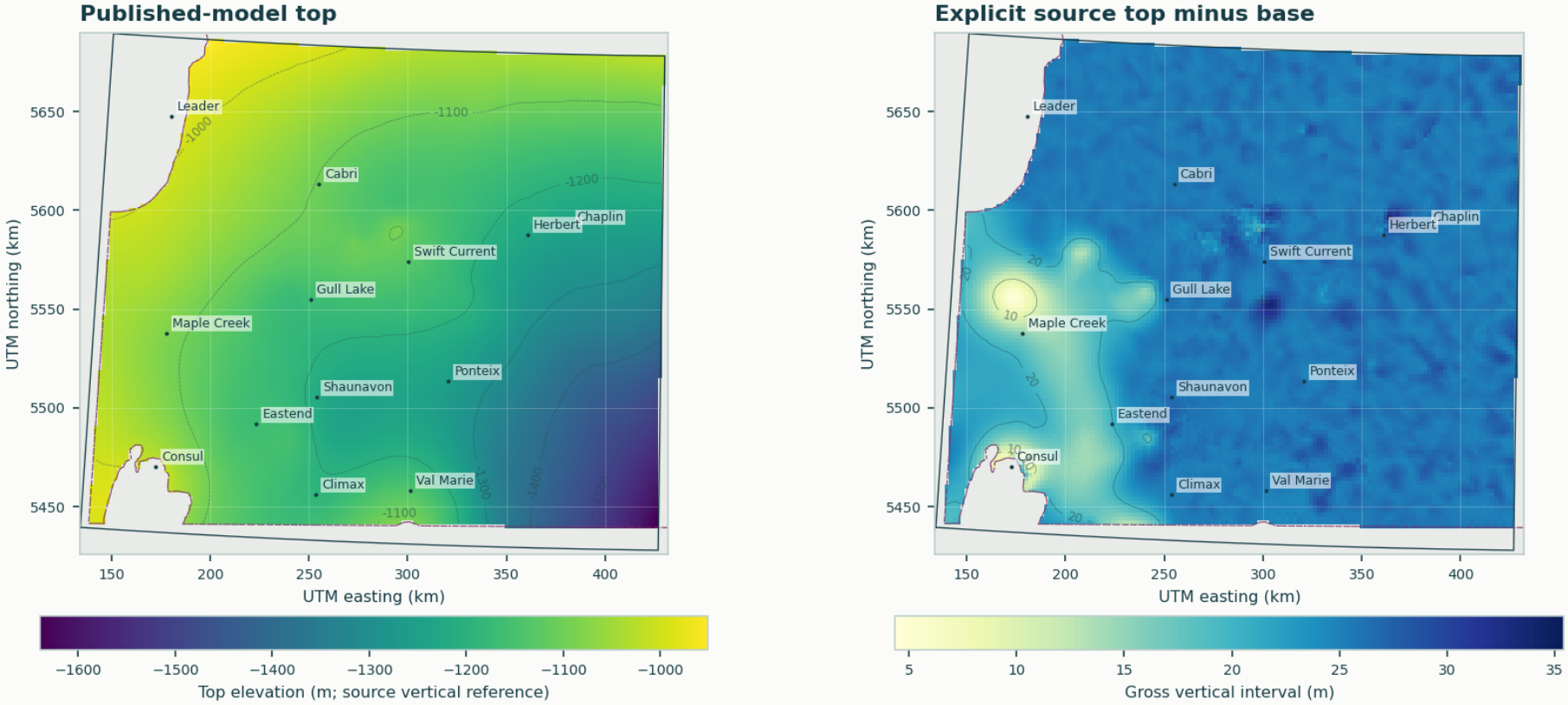


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Stonewall | structure and gross interval

Stonewall top to Stony Mountain

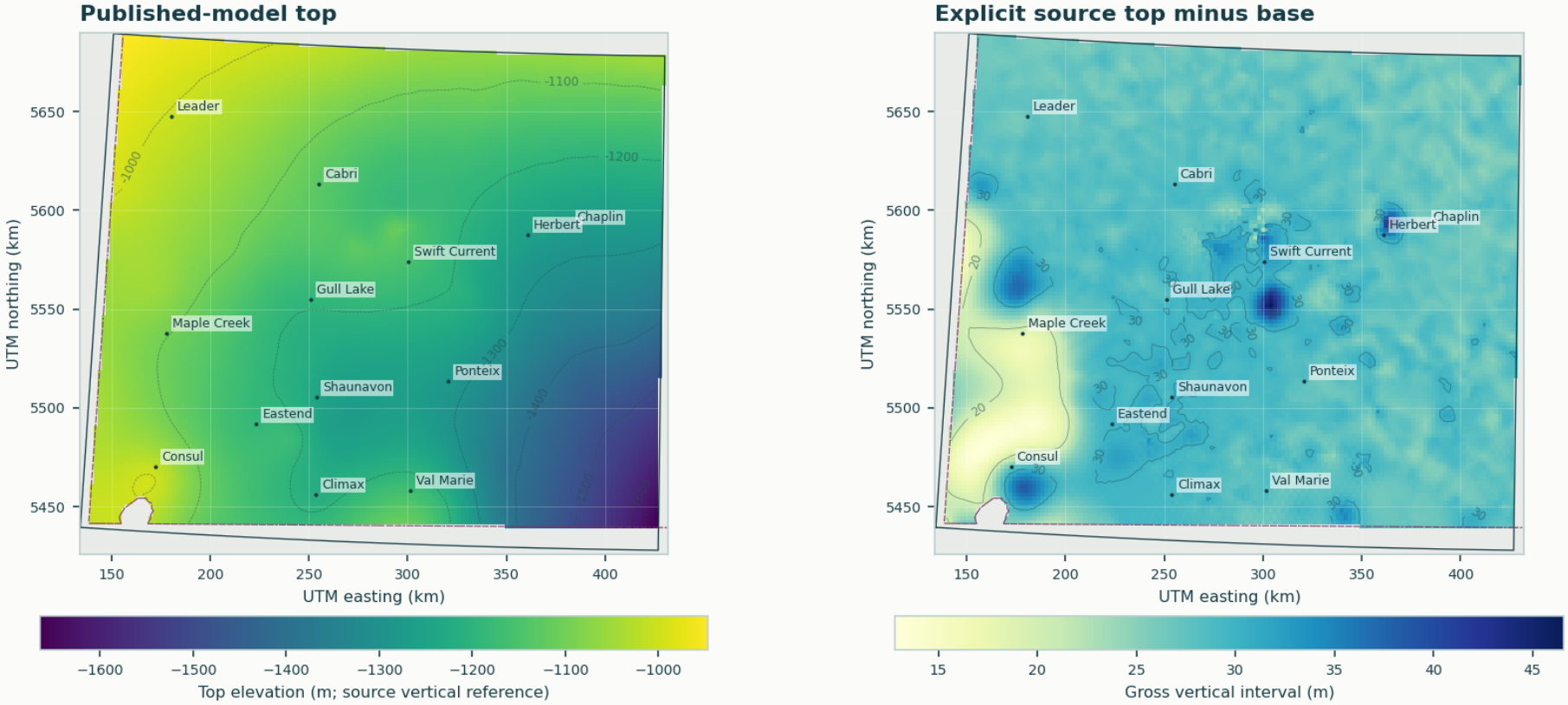


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Stony Mountain | structure and gross interval

Stony Mountain top to Red River

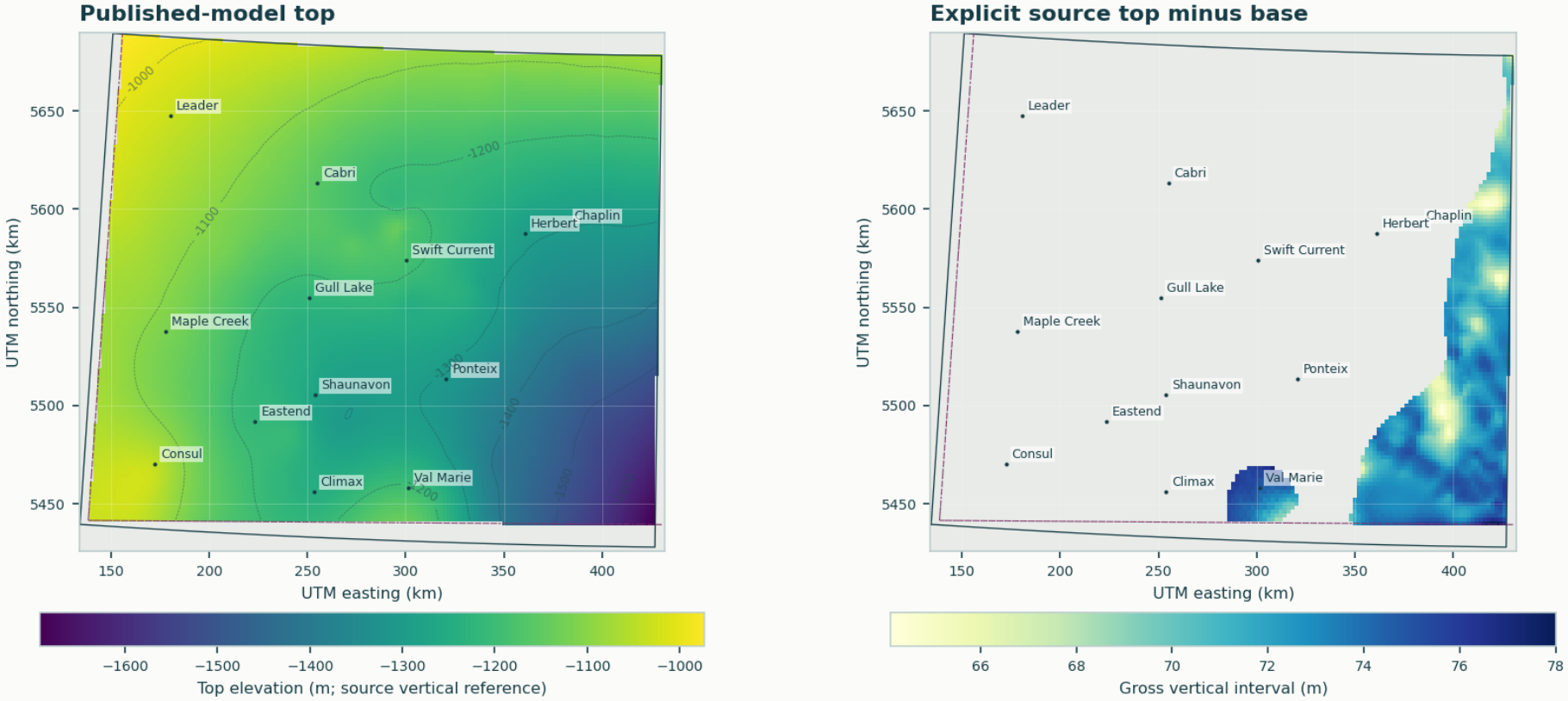


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Red River | structure and gross interval

Red River top to Winnipeg

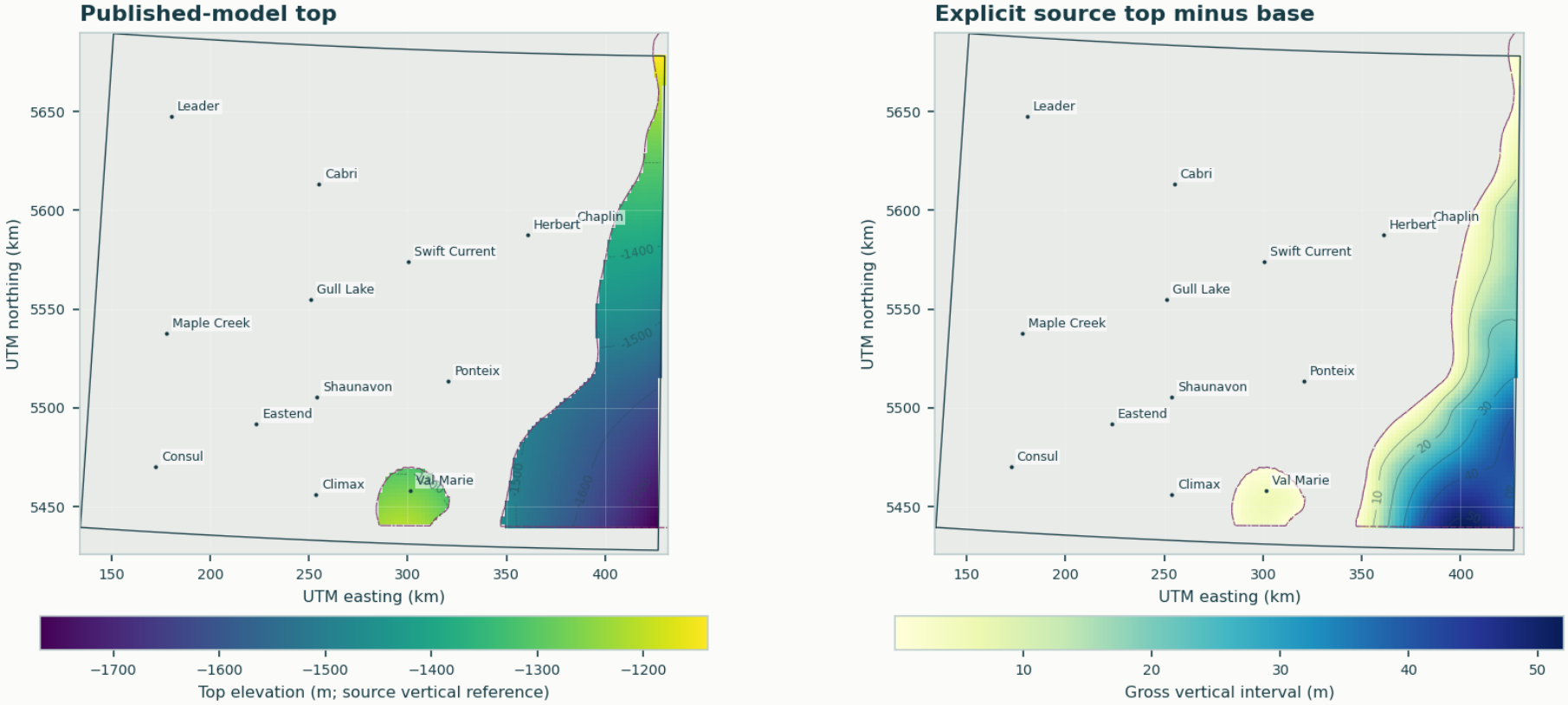


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Winnipeg | structure and gross interval

Winnipeg top to Deadwood

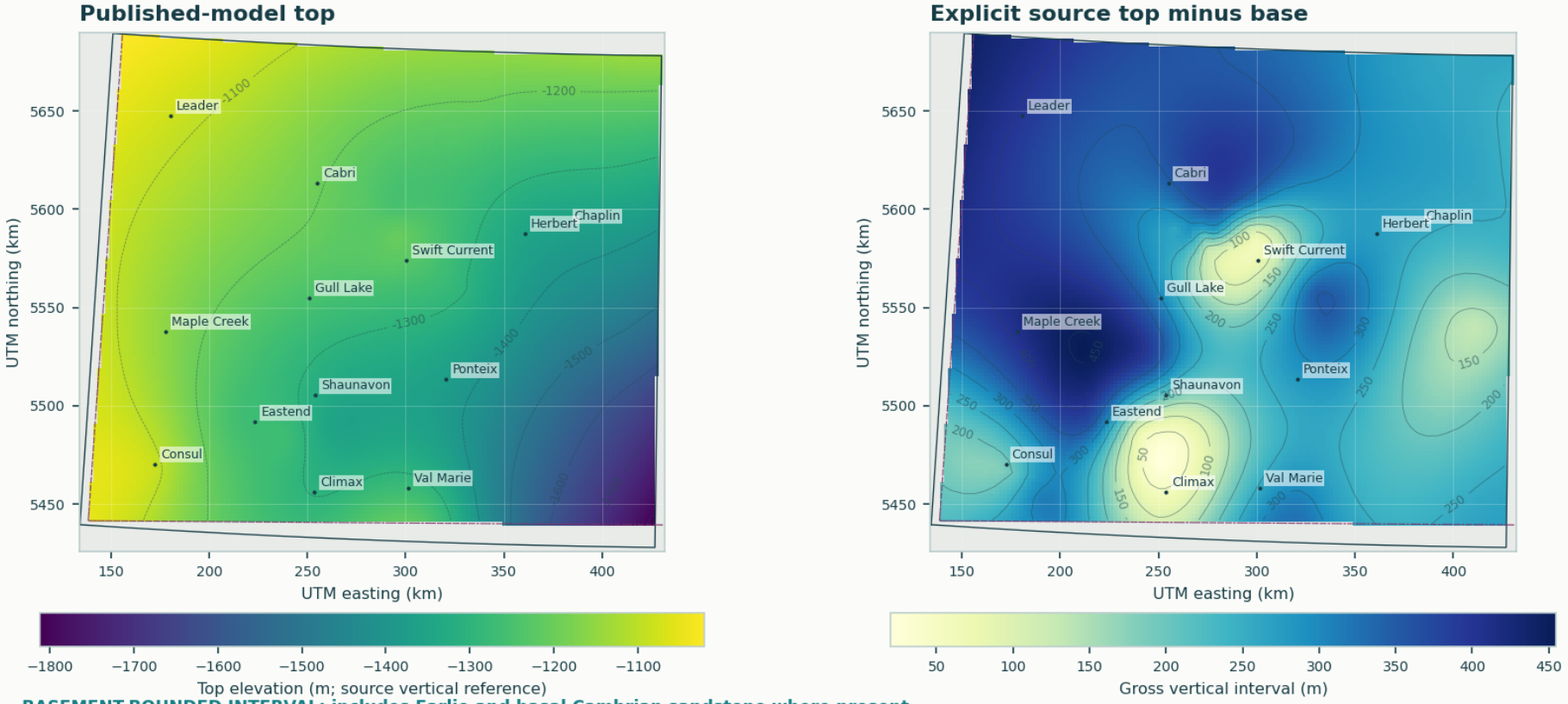


Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Deadwood | structure and gross interval

Deadwood top to Precambrian



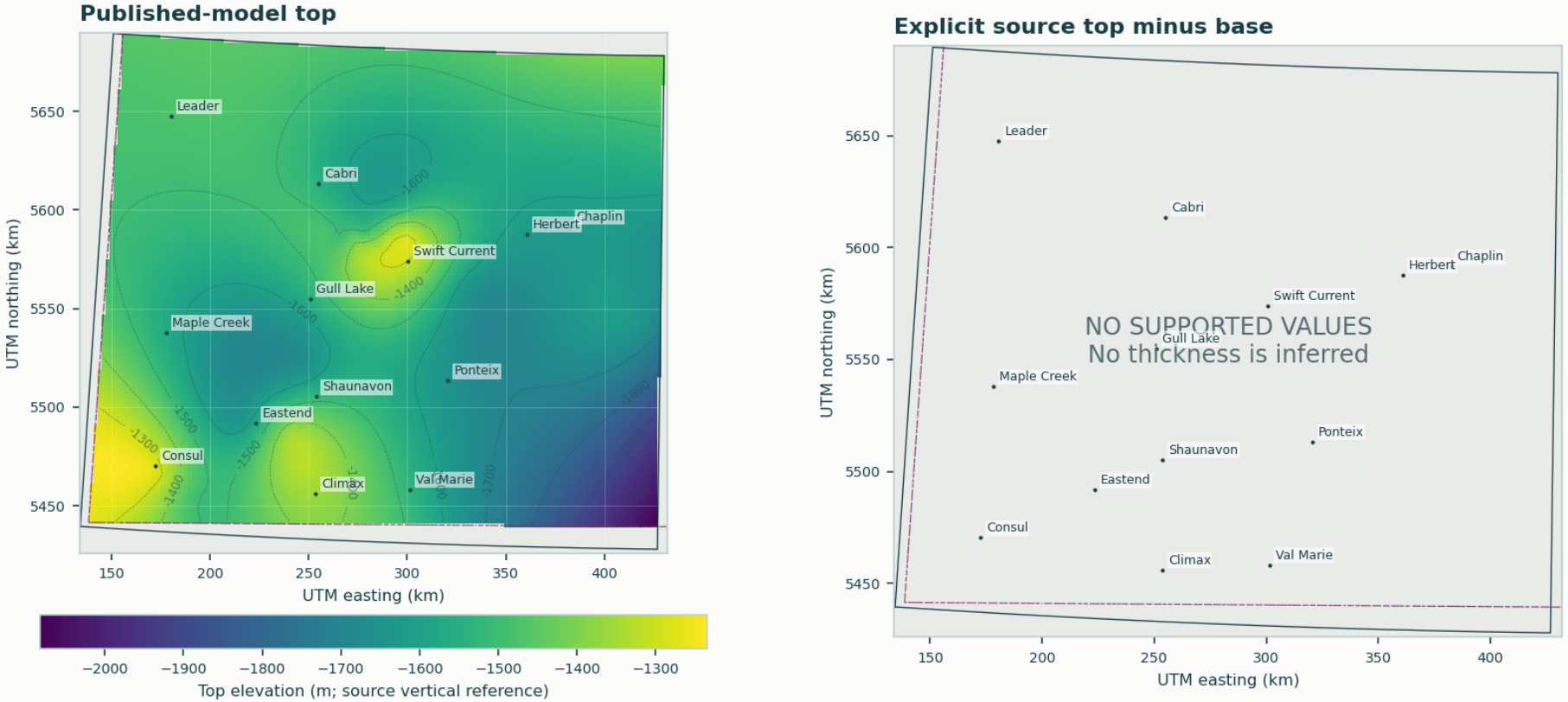
BASEMENT-BOUNDED INTERVAL: includes Earlie and basal Cambrian sandstone where present.

Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.

Precambrian | structure and gross interval

Precambrian top to unknown basement base



Dashed purple: released cut-mesh boundary (geological or model limit). Gray: no supported sample. Neither is automatically a reservoir pinchout.

2 km display grid | NAD83 / UTM zone13N | Bédard et al.(2023), GSC Open File8969 | Not net reservoir or net pay.