

Supplemental Data

Relating glassy rind thicknesses to ambient air temperatures at the Lost Jim flow field in the Imuruk Lake volcanic field, Alaska: a preliminary report

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- Comparison of glassiness and published ages of lava flows
- Maps and images of locations and samples.

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Glass and age of flows

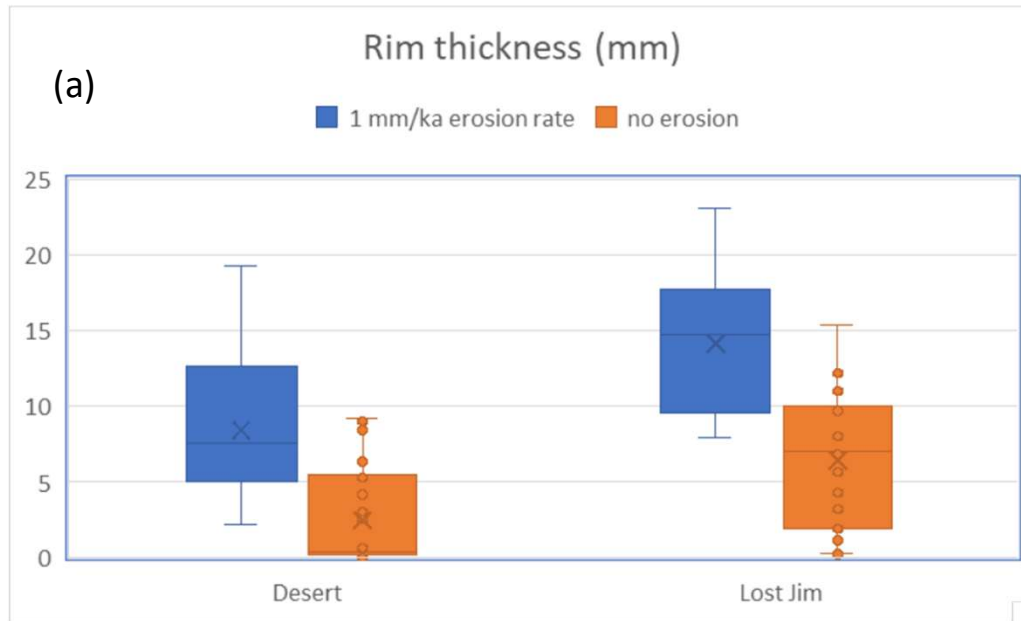


Figure S1. Rim thickness and % glass of the mid-latitude desert comparison group and Lost Jim samples when (a) considering an erosion rate, or (b) age and bulk geochemical factors.

Vent samples



Figure S2. Satellite view from Maxar Technologies of samples.

Imuruk lake samples

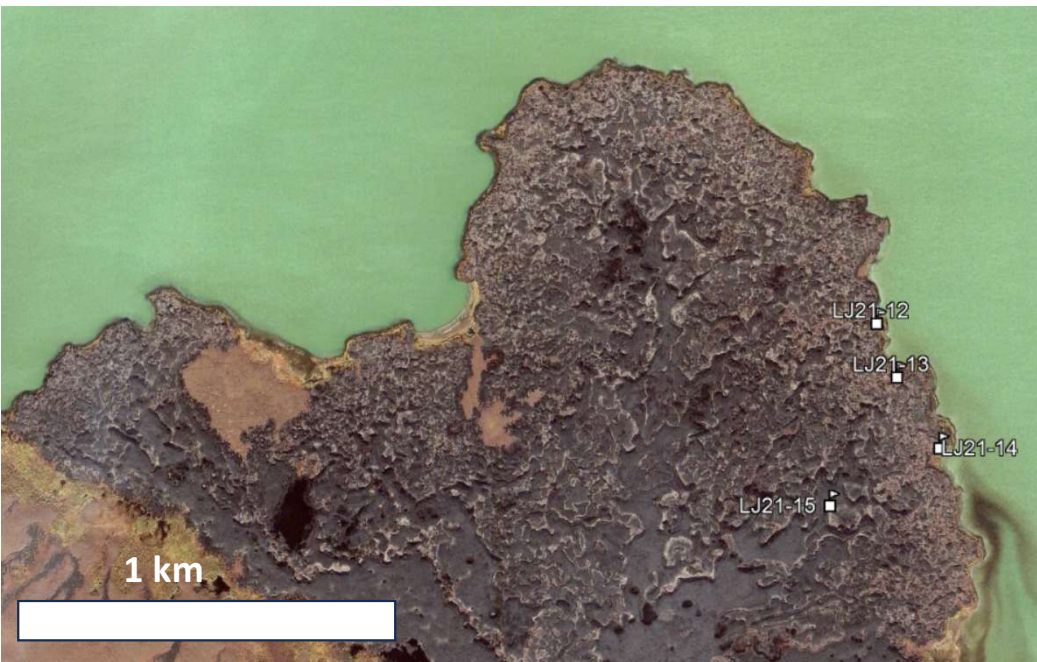


Figure S3. Satellite view from Maxar Technologies of samples.

LJ21-19 and LJ21-20

LJ21-21 is not used in this study as it is the inside of a lava tube

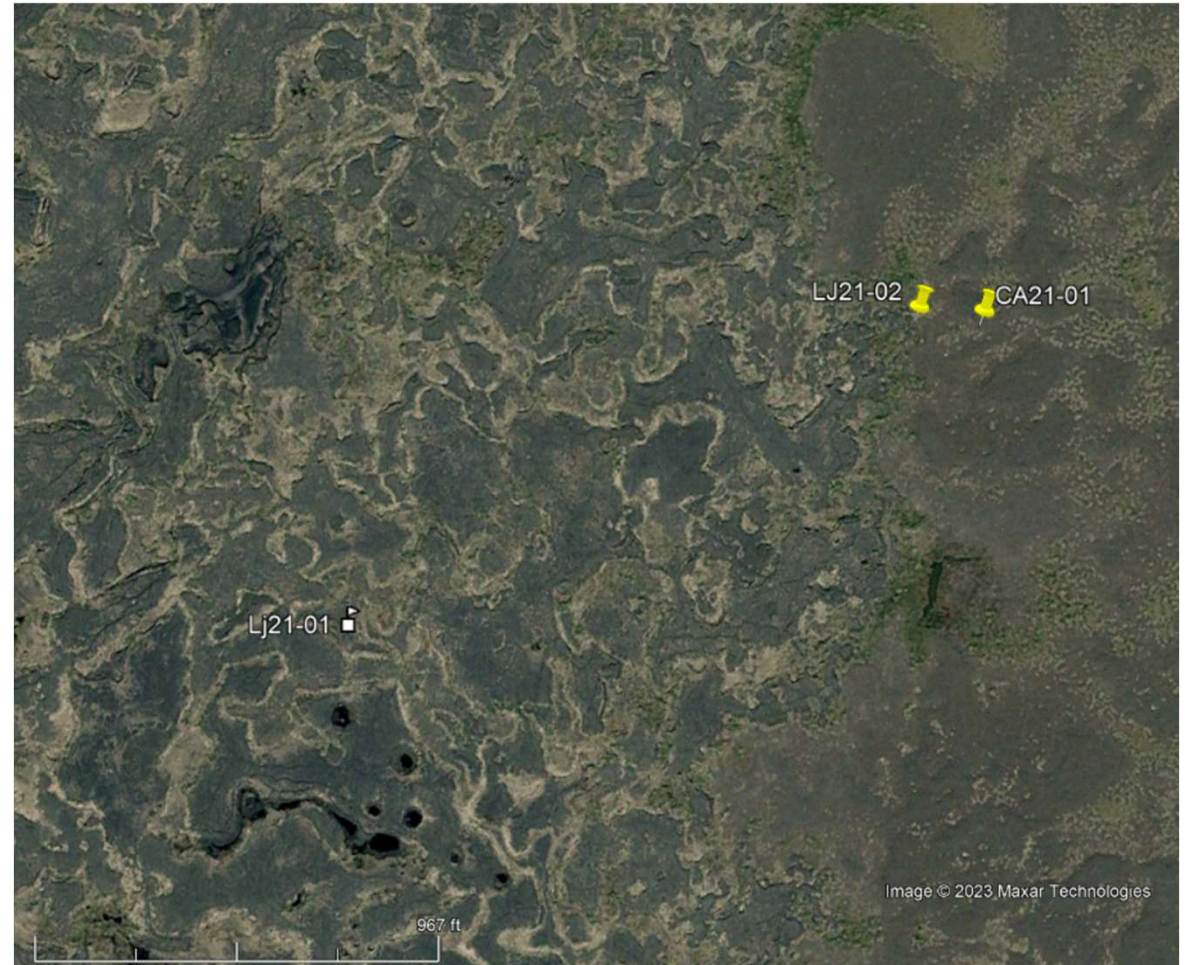
Figure S4. Satellite view from Maxar Technologies of samples.



LJ21-01A+B and LJ21-02

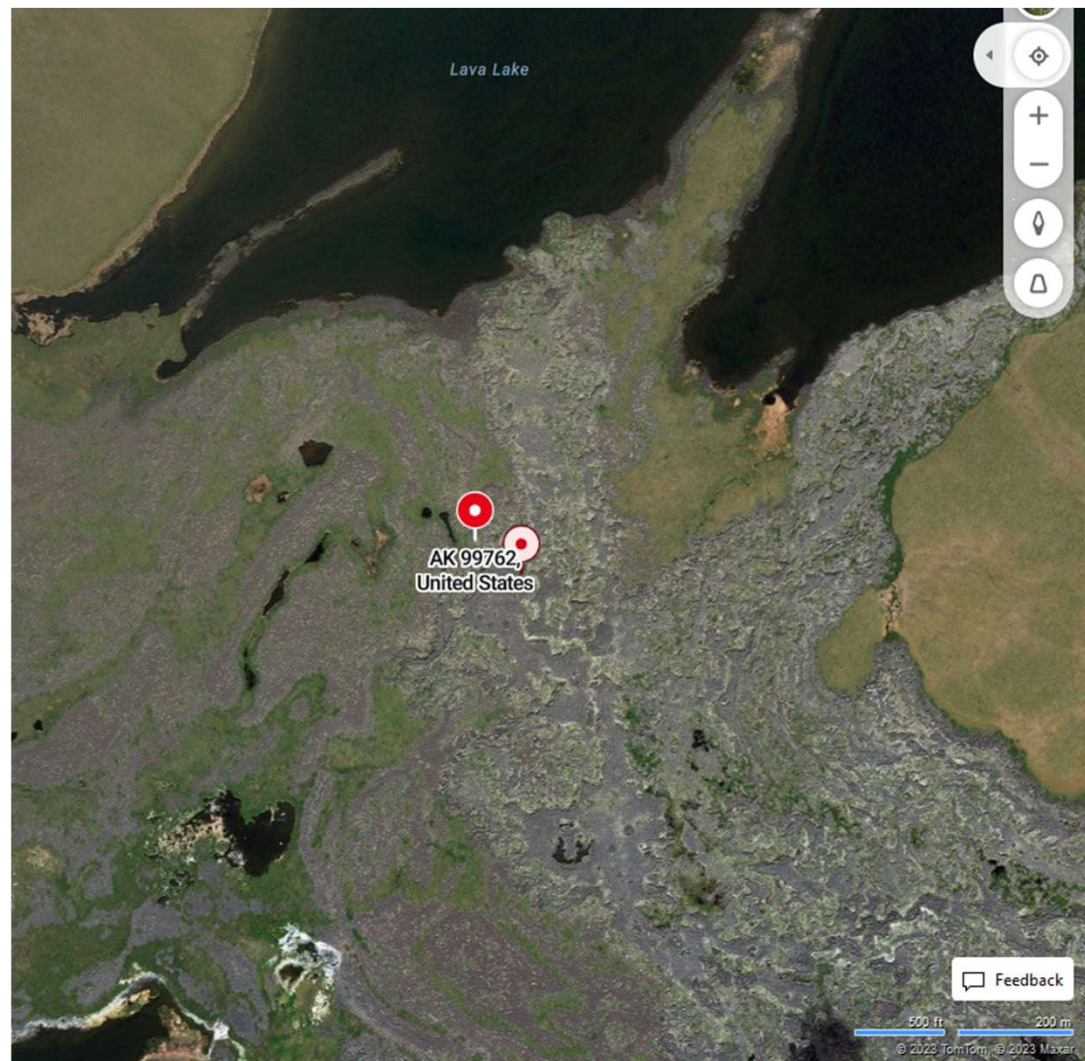
CA21-01 is not used in this study as it is part of the Camille flow.

Figure S5. Satellite view from Maxar Technologies of samples.



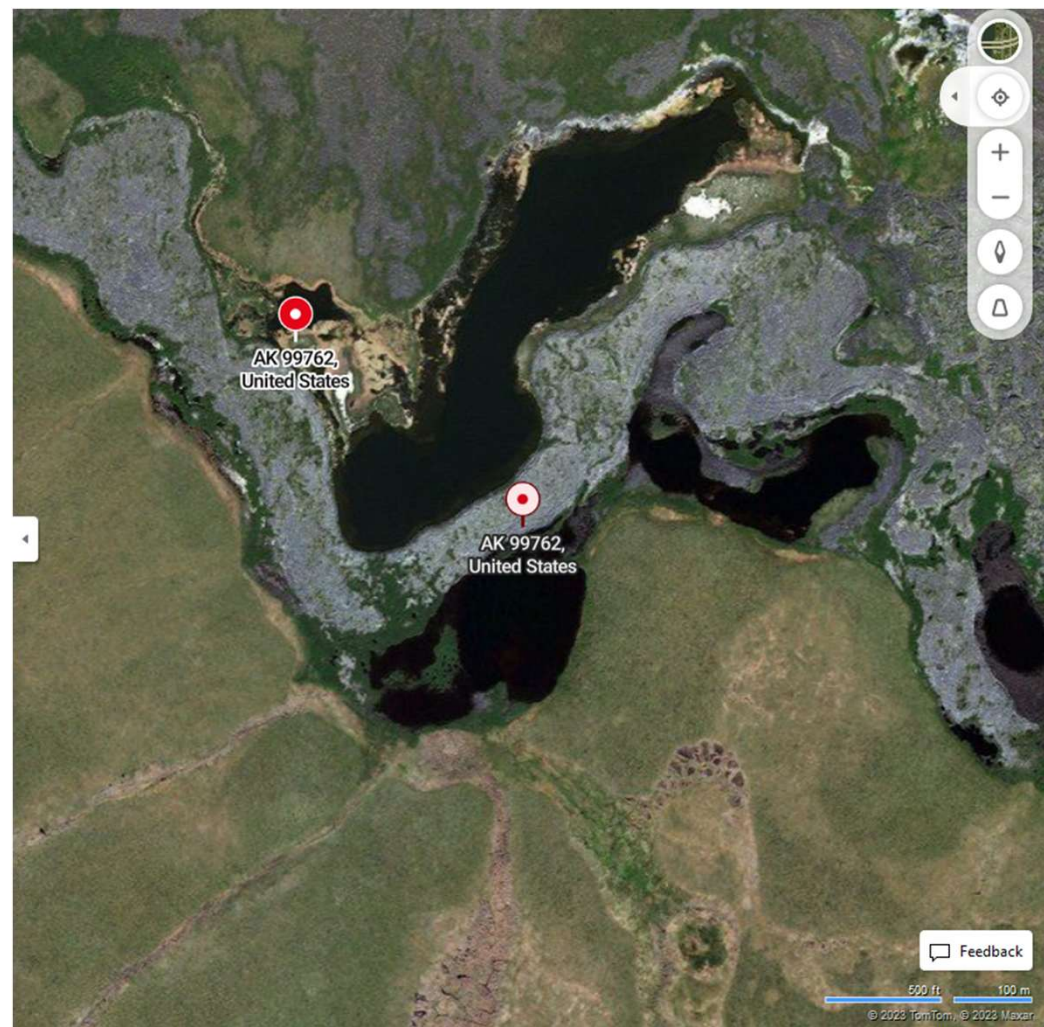
LJ21-03 – white
LJ21-04 – red

Figure S6. Satellite view from Maxar Technologies of samples.



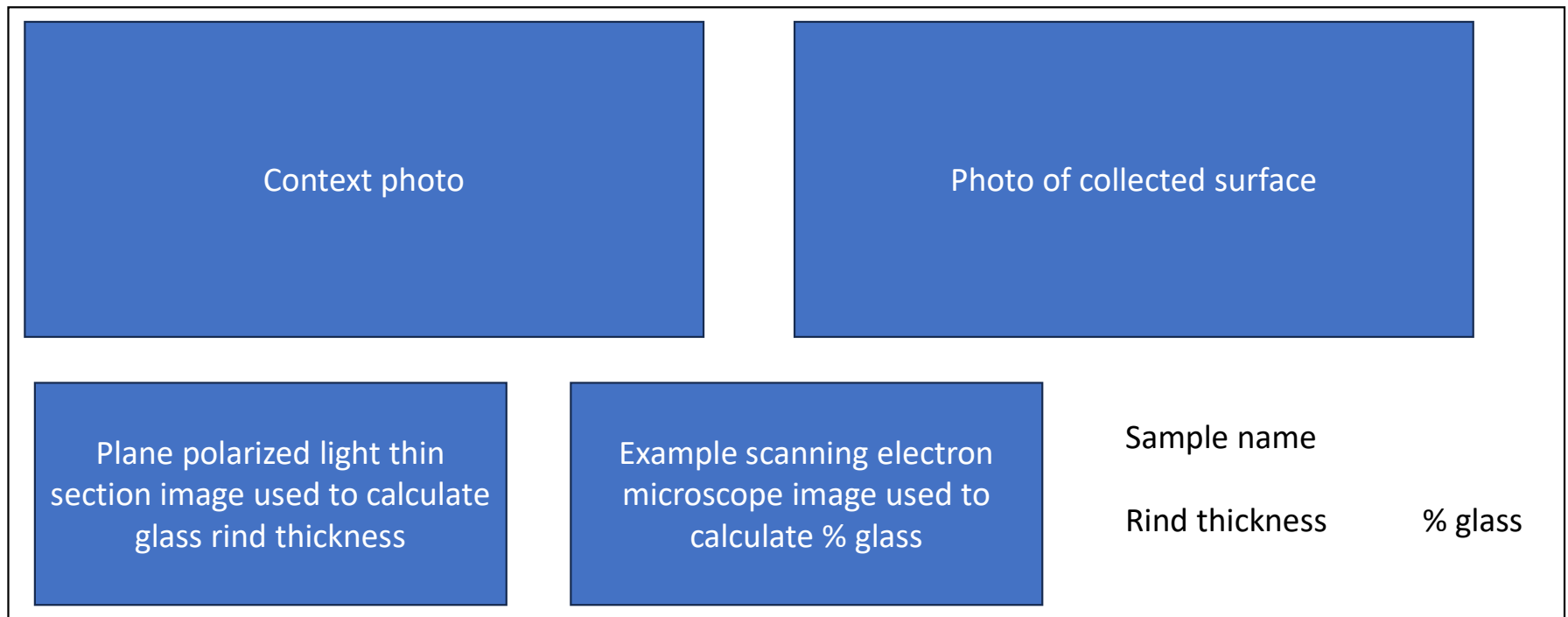
LJ21-22 – red
LJ21-23 – white

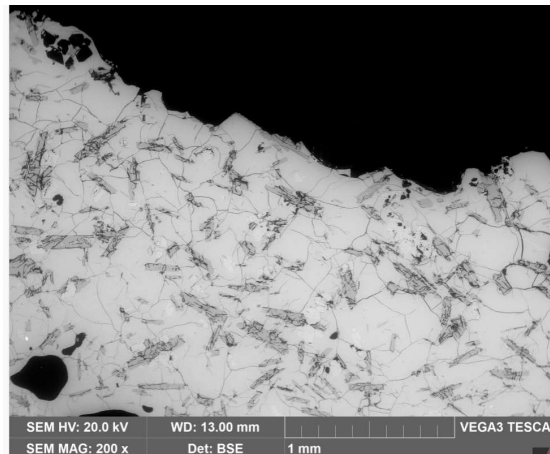
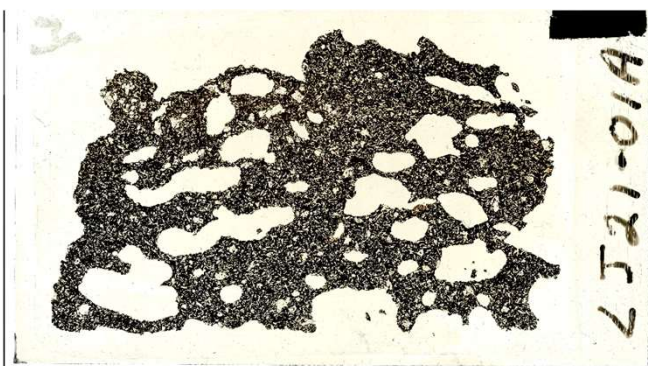
Figure S7. Satellite view from Maxar Technologies of samples.



Caption for the following 22 pages

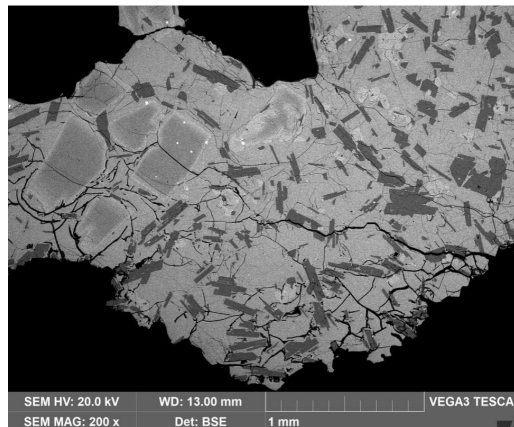
Figure S8. The field and microscope images for each Lost Jim sample used in this study are arranged in the below order. Field photos taken by E. Rader. Thin section images and scanning electron microscope images collected by D. Ruth.





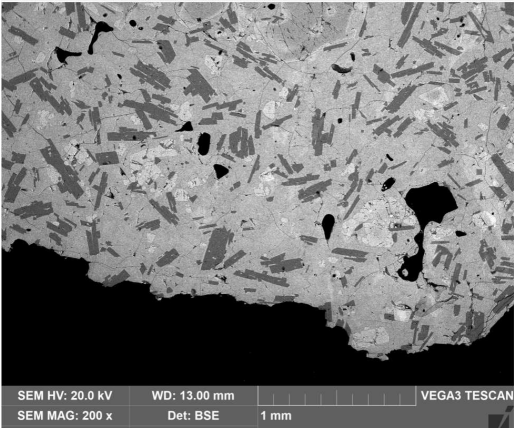
LJ21-01a

Glass Rim Thickness (mm)	Modal % Glass
0.2	70



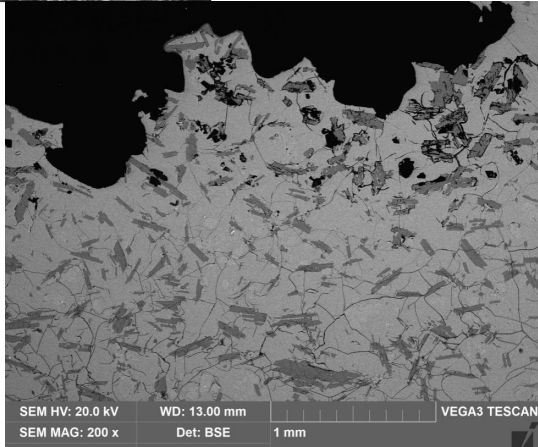
LJ21-01b

Glass Rim Thickness (mm)	Modal % Glass
5.7	66



LJ21-02

Glass Rim Thickness (mm)	Modal % Glass
11	71



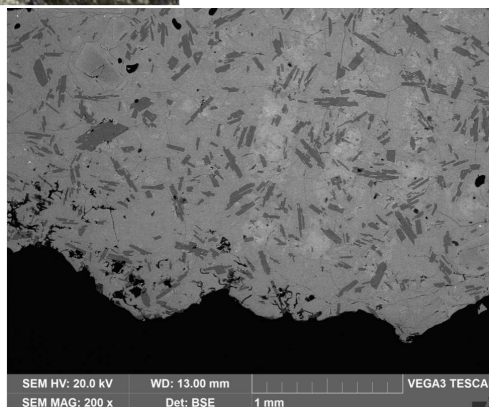
LJ21-03

Glass Rim Thickness (mm)	Modal % Glass
10	74



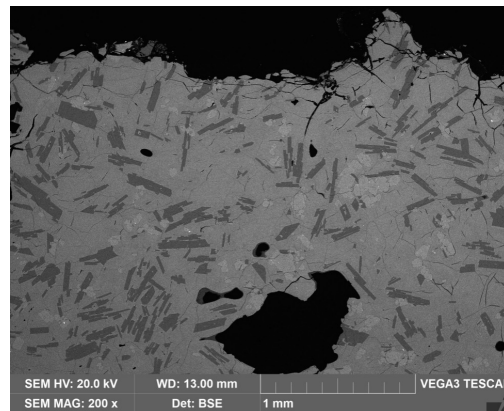
LJ21-04

Glass Rim Thickness (mm)	Modal % Glass
15.4	79



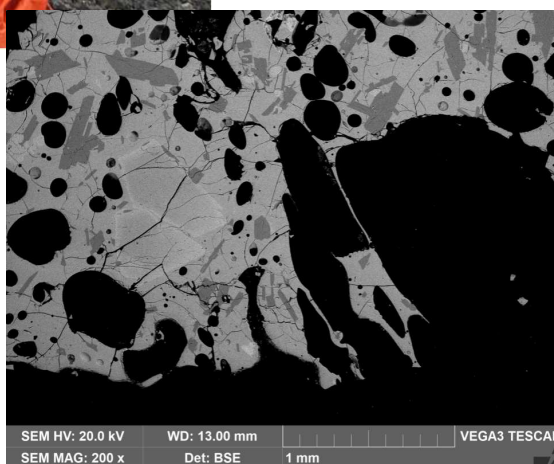
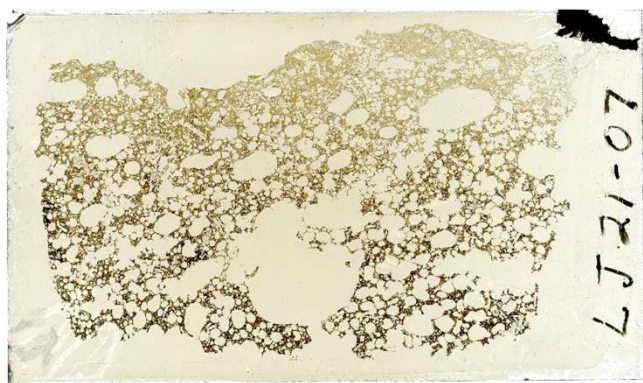
LJ21-05

Glass Rim Thickness (mm)	Modal % Glass
3.2	75



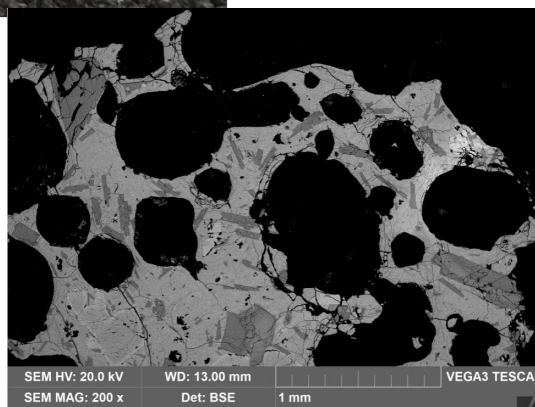
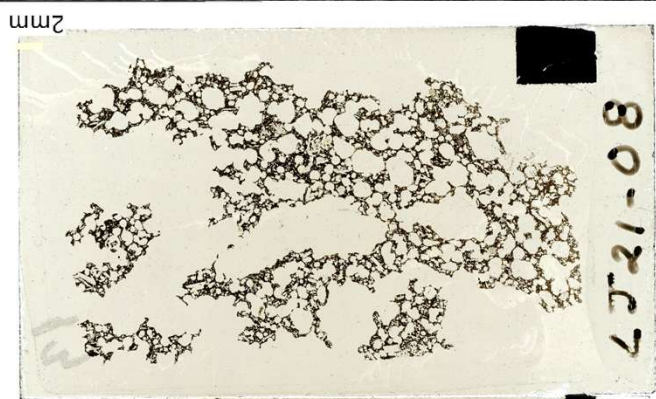
LJ21-06

Glass Rim Thickness (mm)	Modal % Glass
6.8	71



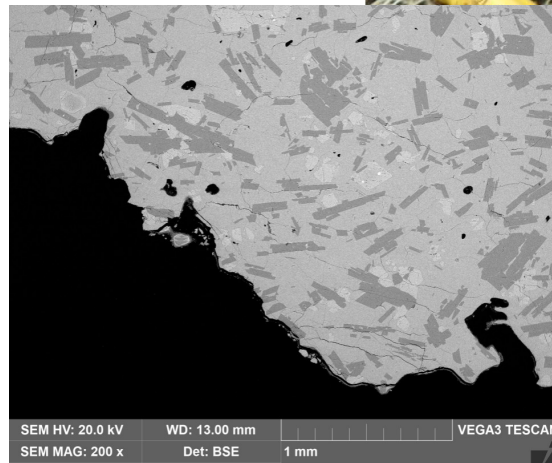
LJ21-07

Glass Rim Thickness (mm)	Modal % Glass
12.2	88



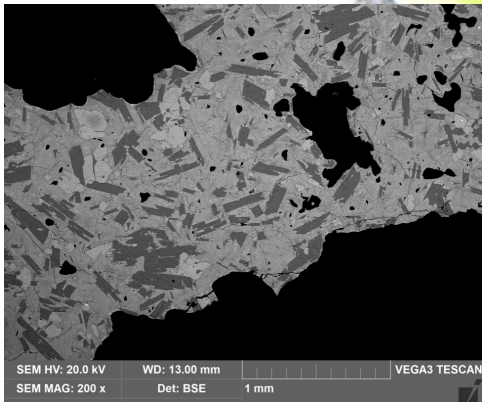
LJ21-08

Glass Rim Thickness (mm)	Modal % Glass
0.2	77



LJ21-10

Glass Rim Thickness (mm)	Modal % Glass
4.3	72



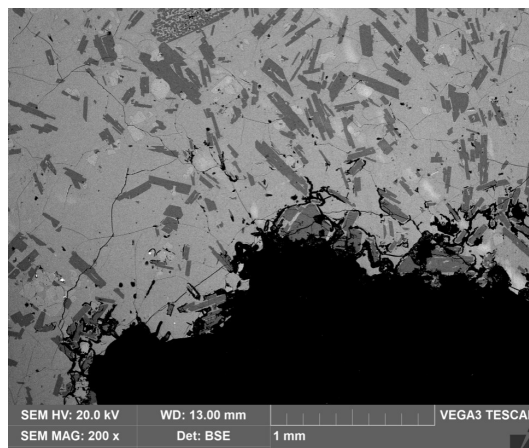
LJ21-11

Glass Rim
Thickness (mm)

1.1

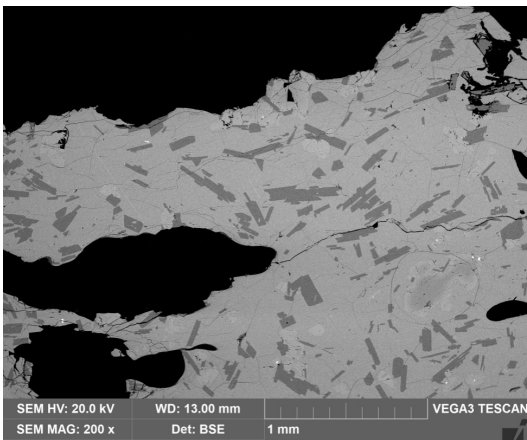
Modal %
Glass

60



LJ21-12

Glass Rim Thickness (mm)	Modal % Glass
8	69

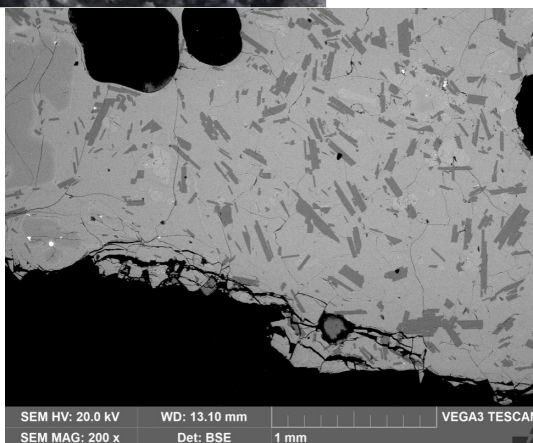


LJ21-13

Glass Rim Thickness (mm)	Modal % Glass
7	76

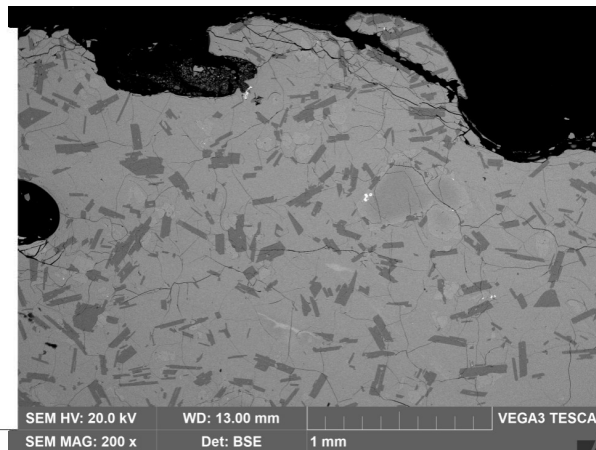


2mm



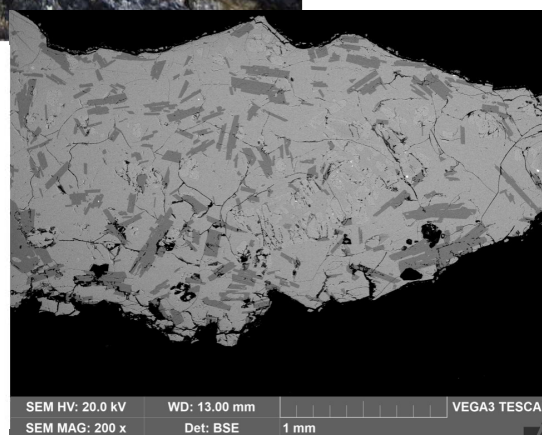
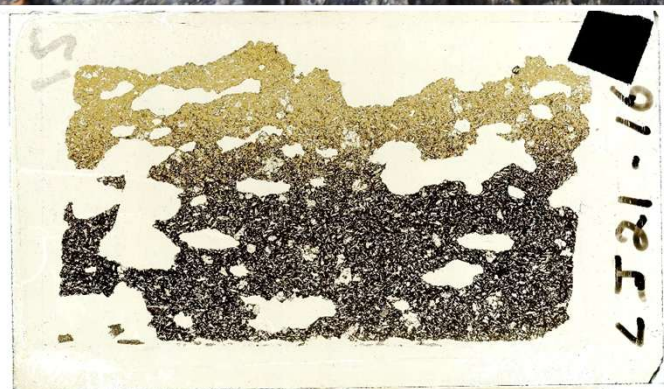
LJ21-14

Glass Rim Thickness (mm)	Modal % Glass
9.7	71



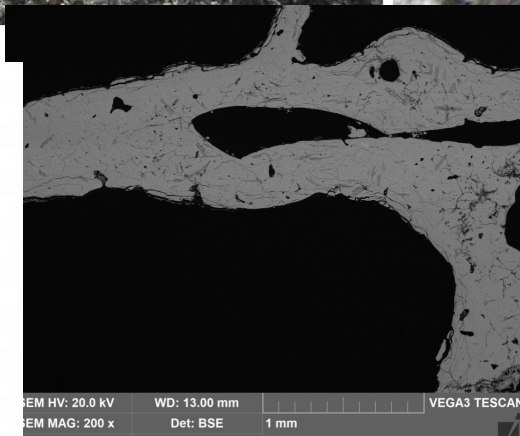
LJ21-15

Glass Rim Thickness (mm)	Modal % Glass
11.1	74



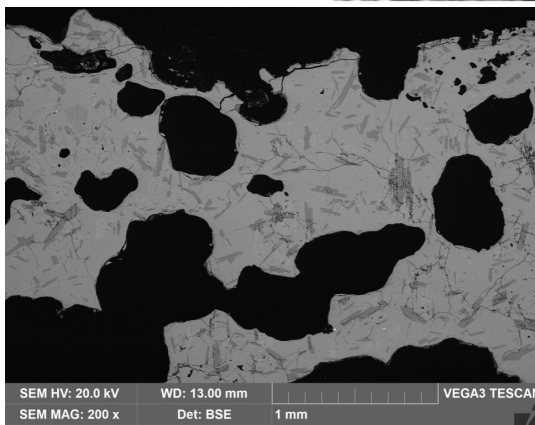
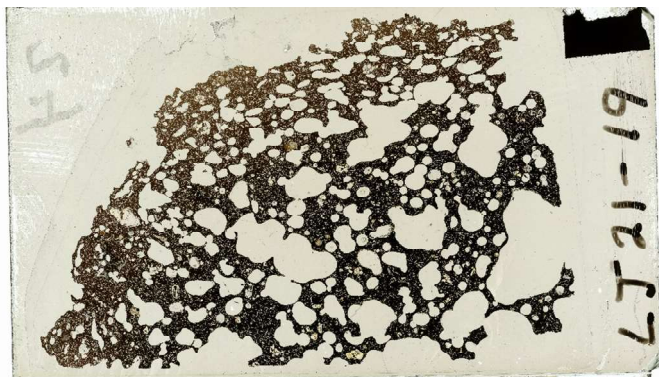
LJ21-16

Glass Rim Thickness (mm)	Modal % Glass
8.3	69



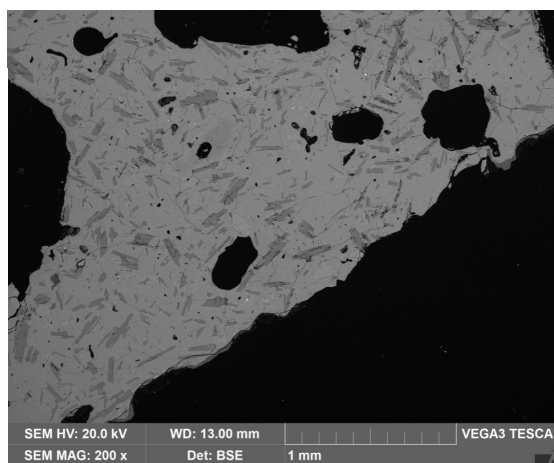
LJ21-18

Glass Rim Thickness (mm)	Modal % Glass
1.9	92



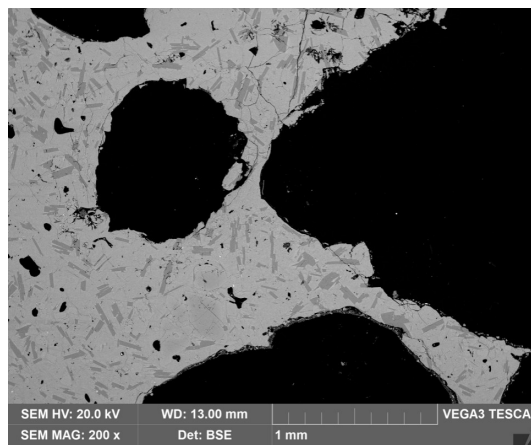
LJ21-19

Glass Rim Thickness (mm)	Modal % Glass
7	64



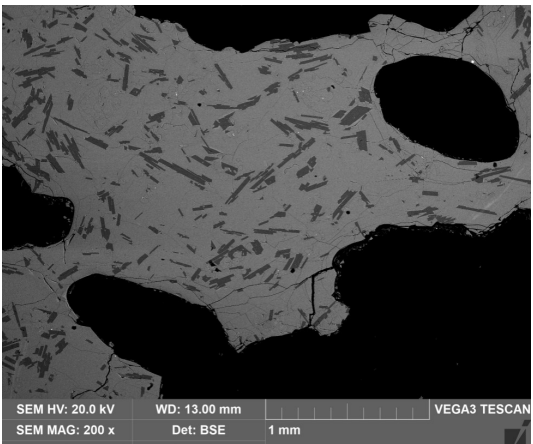
LJ21-20

Glass Rim Thickness (mm)	Modal % Glass
1.3	69



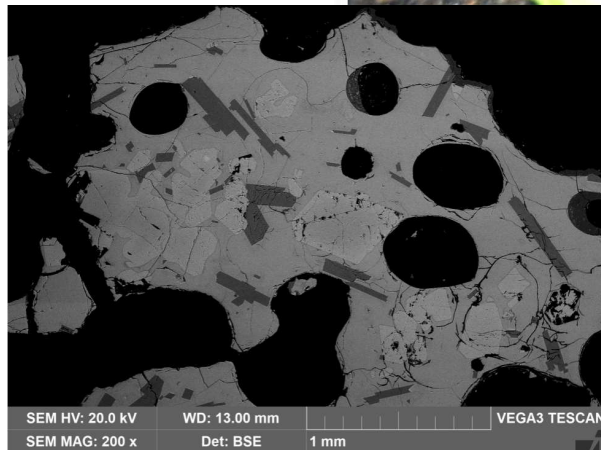
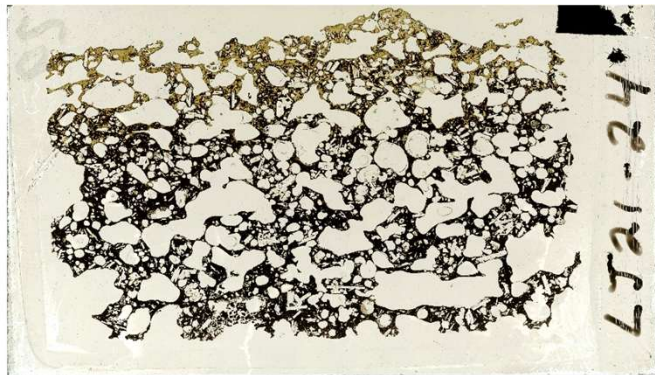
LJ21-22

Glass Rim Thickness (mm)	Modal % Glass
0.2	67



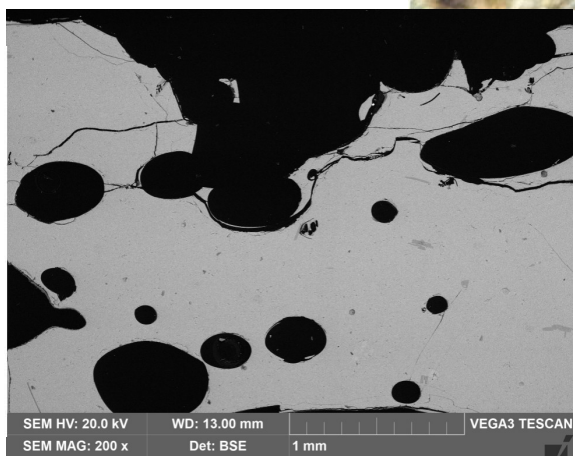
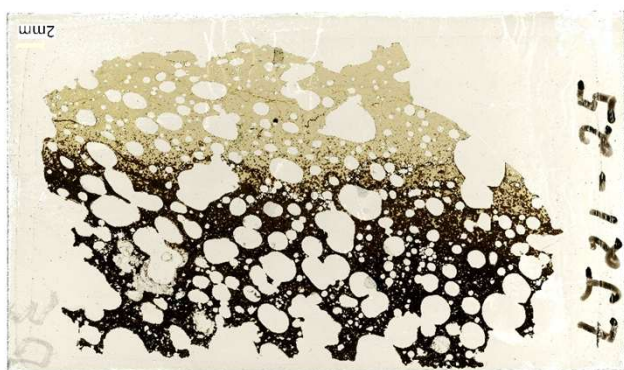
LJ21-23

Glass Rim Thickness (mm)	Modal % Glass
7.2	77



LJ21-24 - vent

Glass Rim Thickness (mm)	Modal % Glass
6	80



LJ21-25 - hornito

Glass Rim Thickness (mm)	Modal % Glass
10.2	95