**Table s1**. Composition of starting glasses.

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Glass 0 2 5 6 7 8 9 10 11 12 13 14 15 16

*wt%*

SiO2 76.00 80.12 78.72 78.56 78.08 77.87 77.69 79.74 79.54 79.35 76.77 76.39 76.12 75.73

Al2O3 14.42 11.87 12.97 12.78 12.65 12.62 12.58 11.81 11.76 11.70 13.62 13.43 13.45 13.34

Na2O 4.88 3.46 3.94 3.82 3.38 2.82 2.24 3.37 2.81 2.24 3.91 2.73 1.65 0.65

K2O 3.67 3.51 3.36 3.87 4.88 5.68 6.49 4.08 4.88 5.69 4.75 6.45 7.79 9.35

CaO 1.03 1.04 1.00 0.97 1.01 1.01 1.00 1.00 1.02 1.01 0.95 1.00 0.99 0.94

Total 100.01 98.47 99.27 99.78 99.54 99.76 98.97 99.23 99.36 99.83 98.52 99.34 98.97 99.06

*wt% normative*

Qz 31.37 44.30 40.80 39.46 37.58 37.56 37.67 42.41 42.34 42.36 33.81 33.69 34.61 34.18

Ab 41.29 29.30 33.33 32.31 28.56 23.83 18.98 28.48 23.76 18.99 33.07 23.08 13.94 5.47

Or 21.69 20.76 19.88 22.86 28.85 33.59 38.33 24.12 28.85 33.62 28.07 38.13 46.04 55.24

An 5.11 5.14 4.95 4.82 5.03 5.02 4.96 4.95 5.04 5.02 4.73 4.94 4.91 4.66

Co 0.55 0.49 1.04 0.54 -0.03 0.00 0.05 0.04 0.01 0.01 0.32 0.15 0.51 0.45

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Data are averages of electron microprobe analyses normalized to 100%. Unnormalized total is reported.

Abbreviations: Qz: quartz, Ab: albite, Or: K-feldspar, An: anorthite, Co: corundum. Negative Co (glass 7) indicates

a slightly peralkaline composition. Note that composition 12 was not experimentally investigated.