

K isotopic fractionation in K-feldspar: Effects of mineral chemistry

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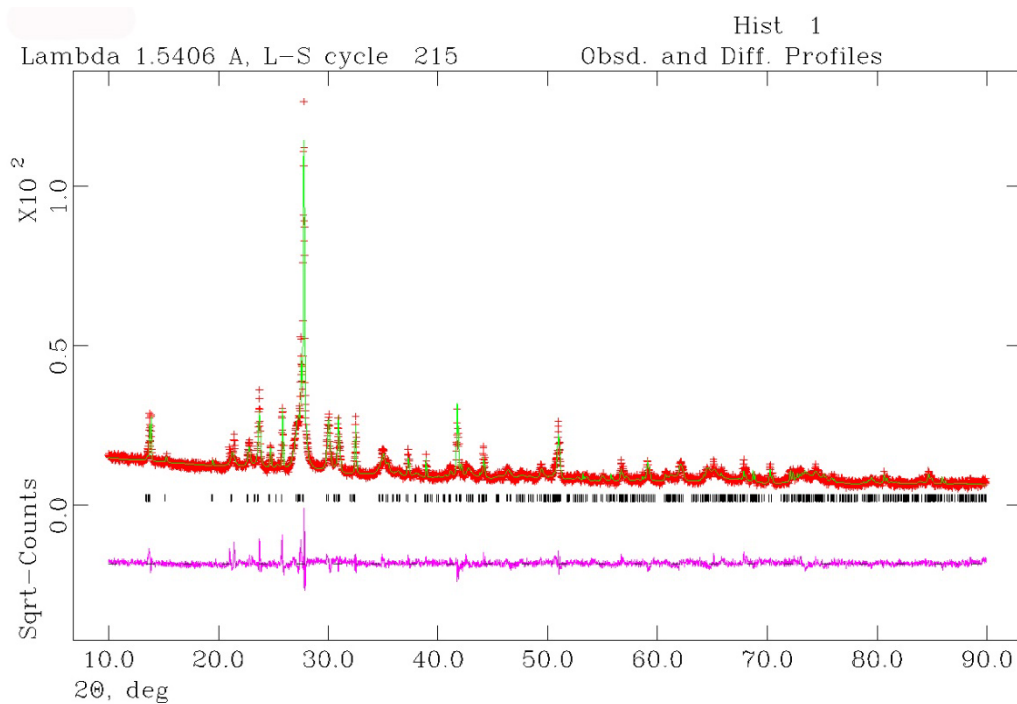


Figure S1. Rietveld fit of FHS-1. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of sanidine. The curve at the bottom shows the difference between observed and calculated patterns.

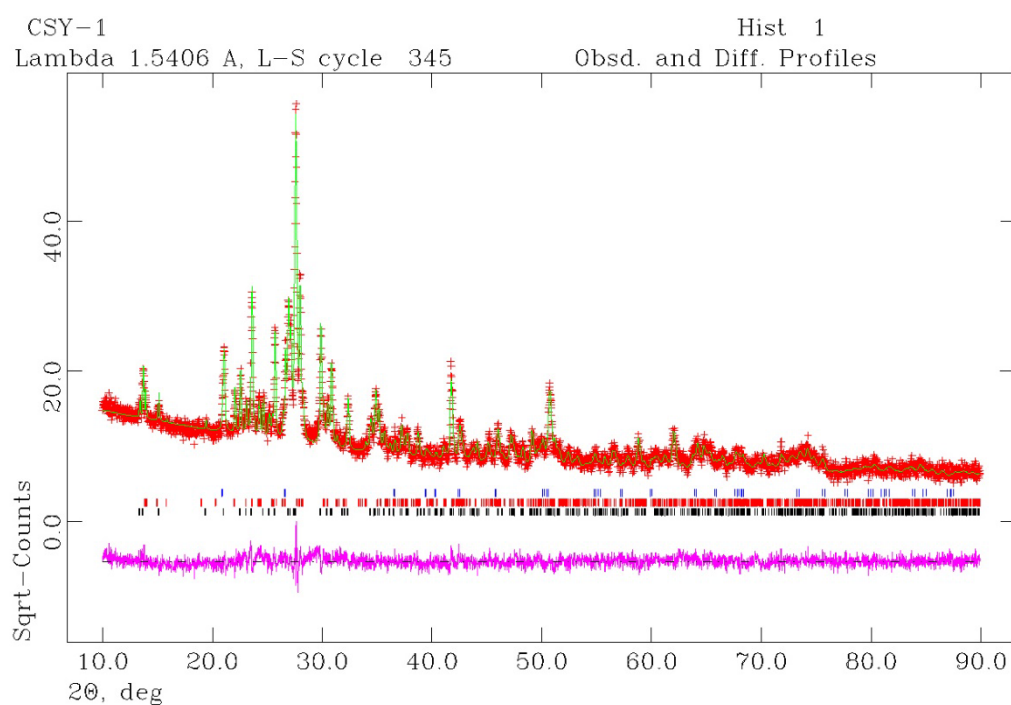


Figure S2. Rietveld fit of CSY-1. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar, albite, and quartz, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

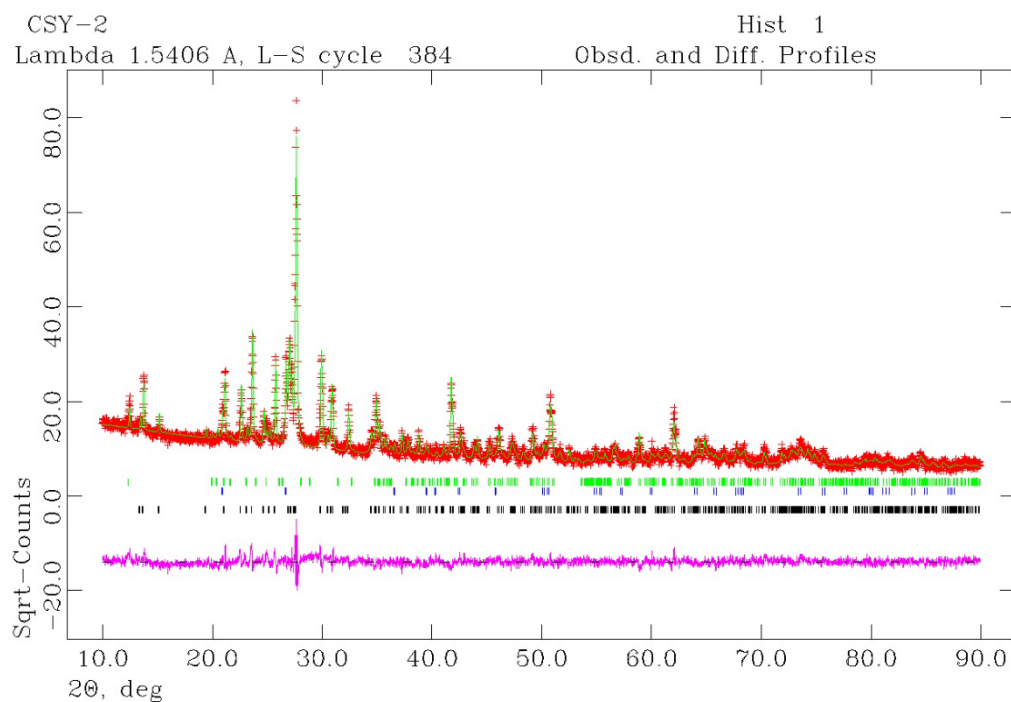


Figure S3. Rietveld fit of CSY-2. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar, quartz, and kaolinite, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

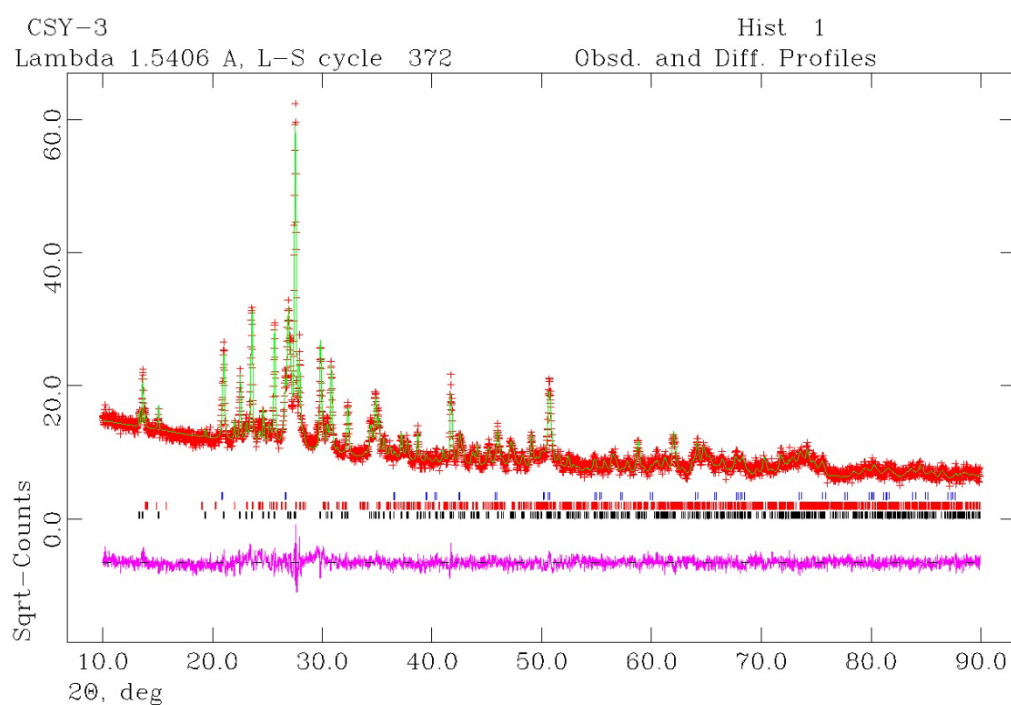


Figure S4. Rietveld fit of CSY-3. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar, albite, and quartz, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

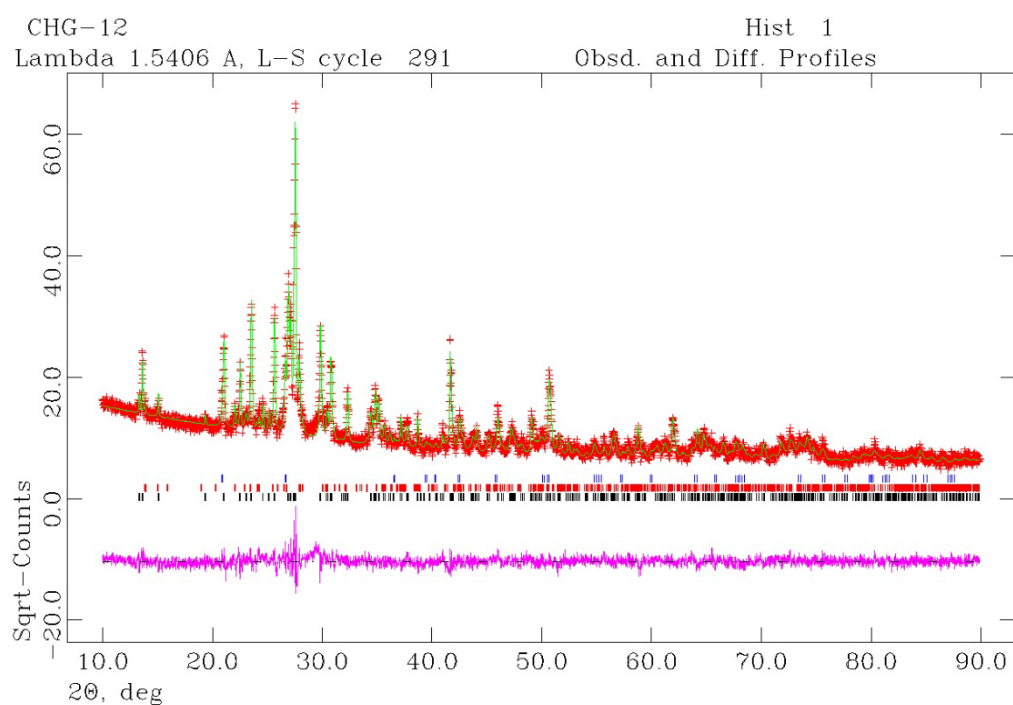


Figure S5. Rietveld fit of CHG-12. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar, albite, and quartz, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

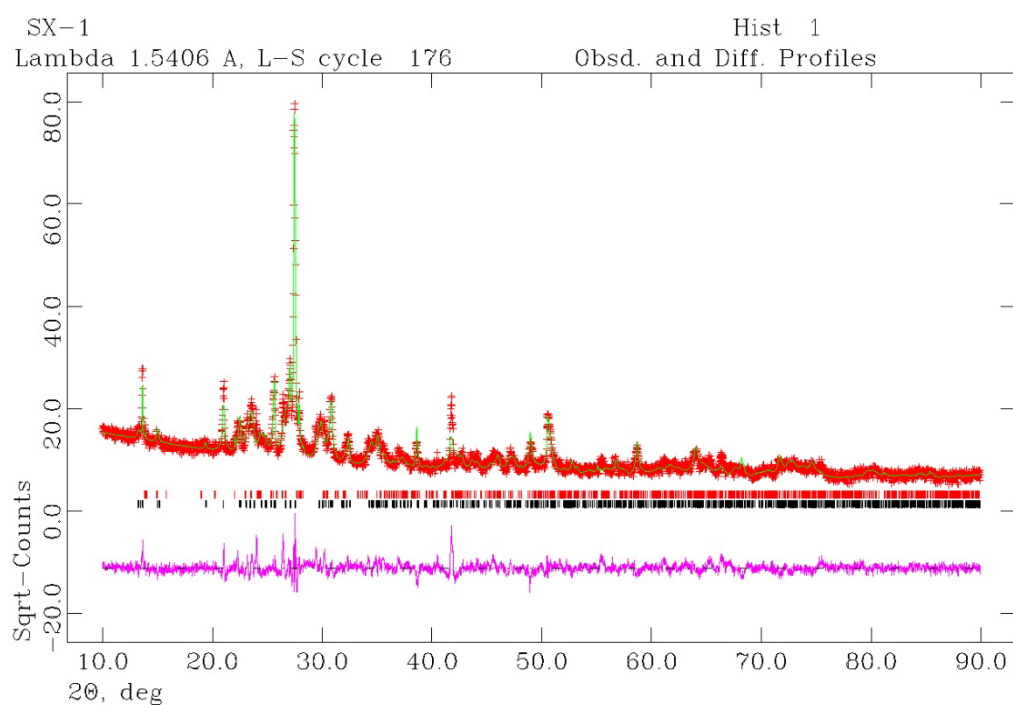


Figure S6. Rietveld fit of SX-1. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar and albite, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

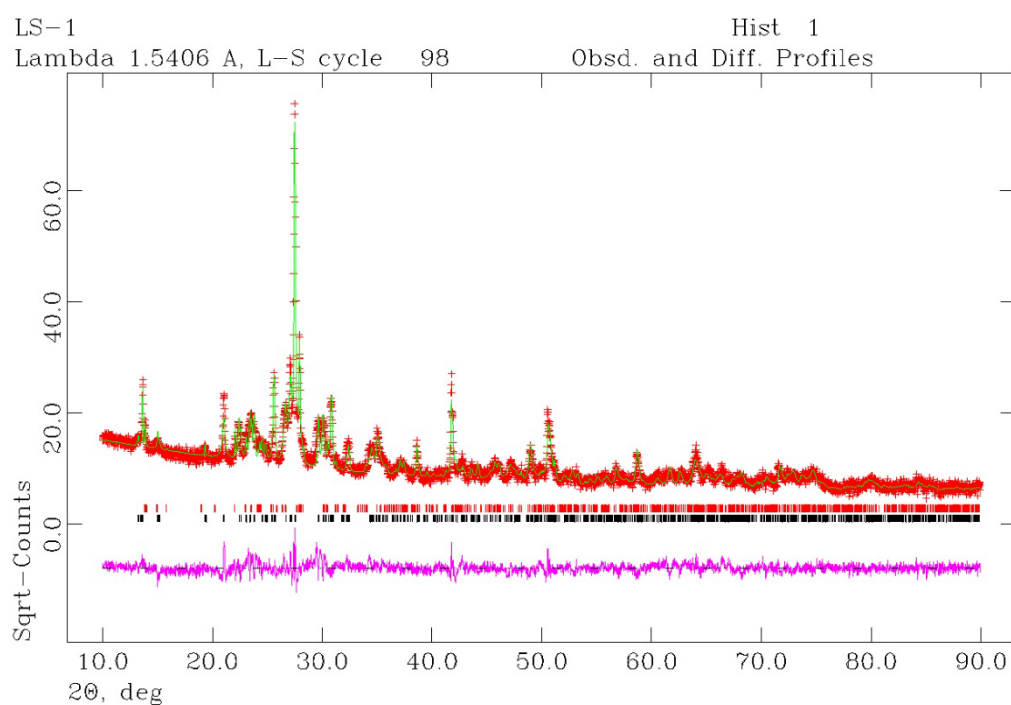


Figure S7. Rietveld fit of LS-1. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar and albite, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

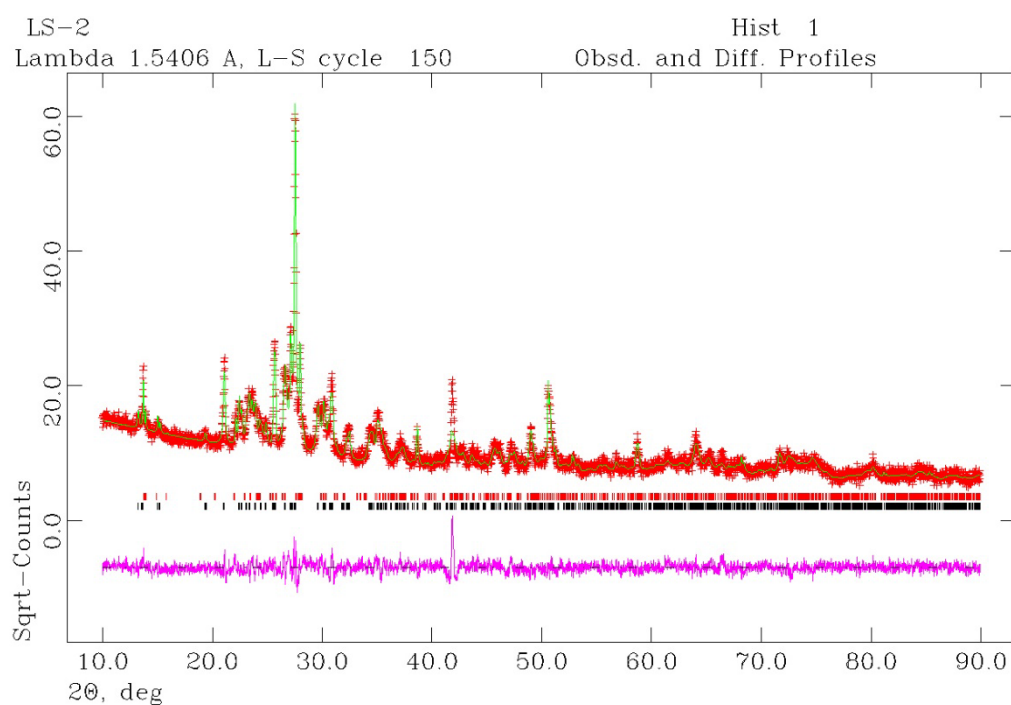


Figure S8. Rietveld fit of LS-2. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar and albite, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

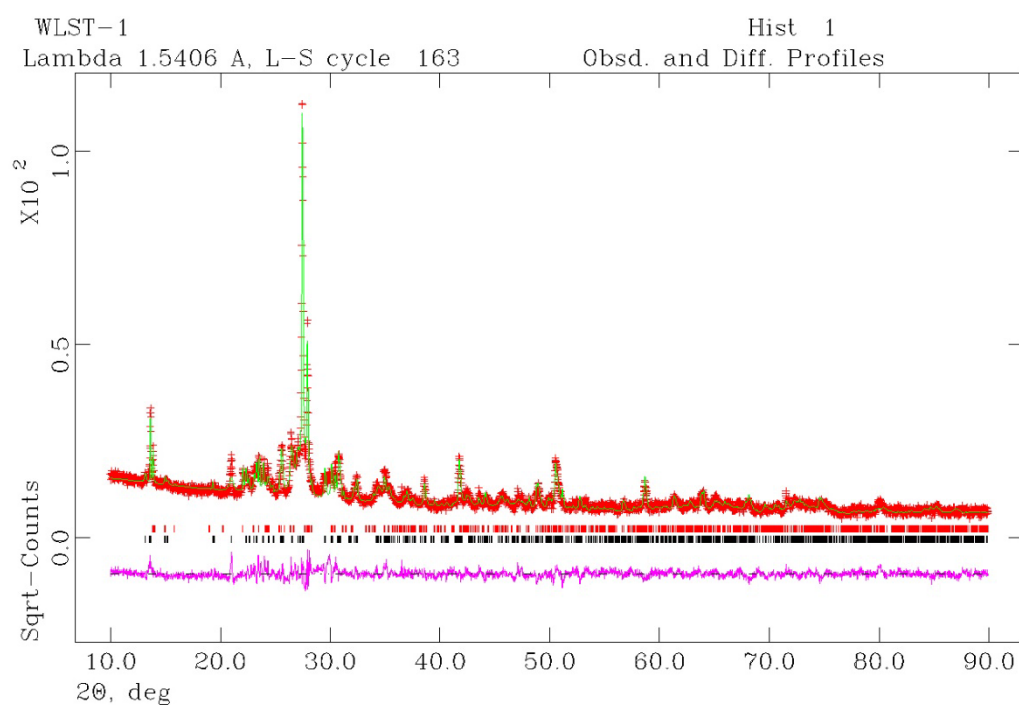


Figure S9. Rietveld fit of WLST-1. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar and albite, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

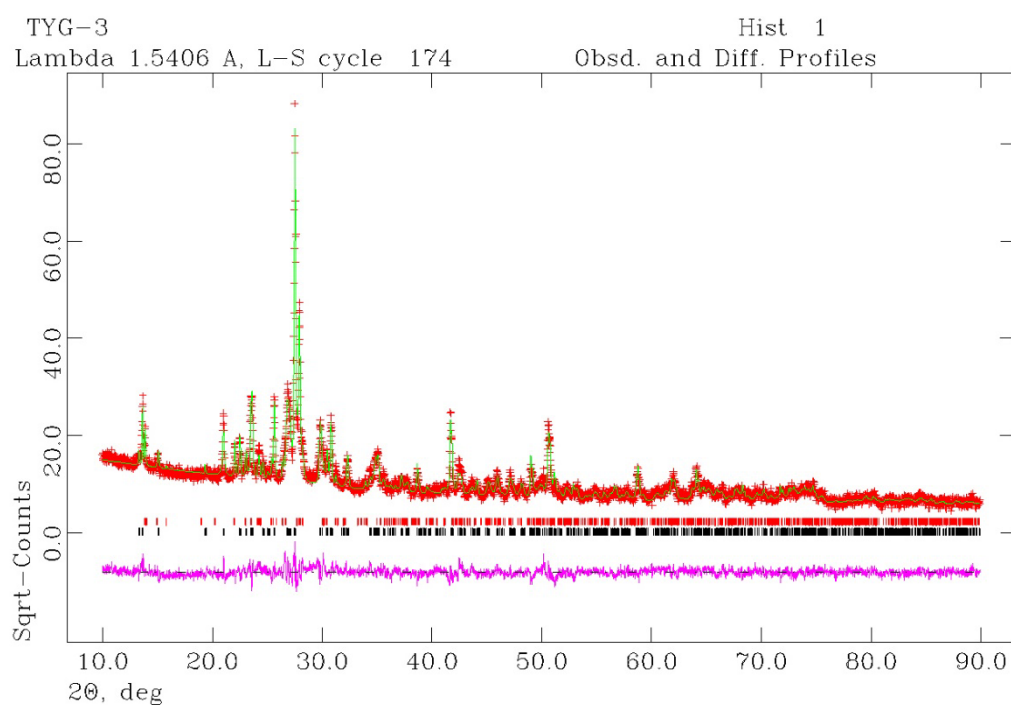


Figure S10. Rietveld fit of TG-3. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar and albite, respectively. The curve at the bottom shows the difference between observed and calculated patterns.

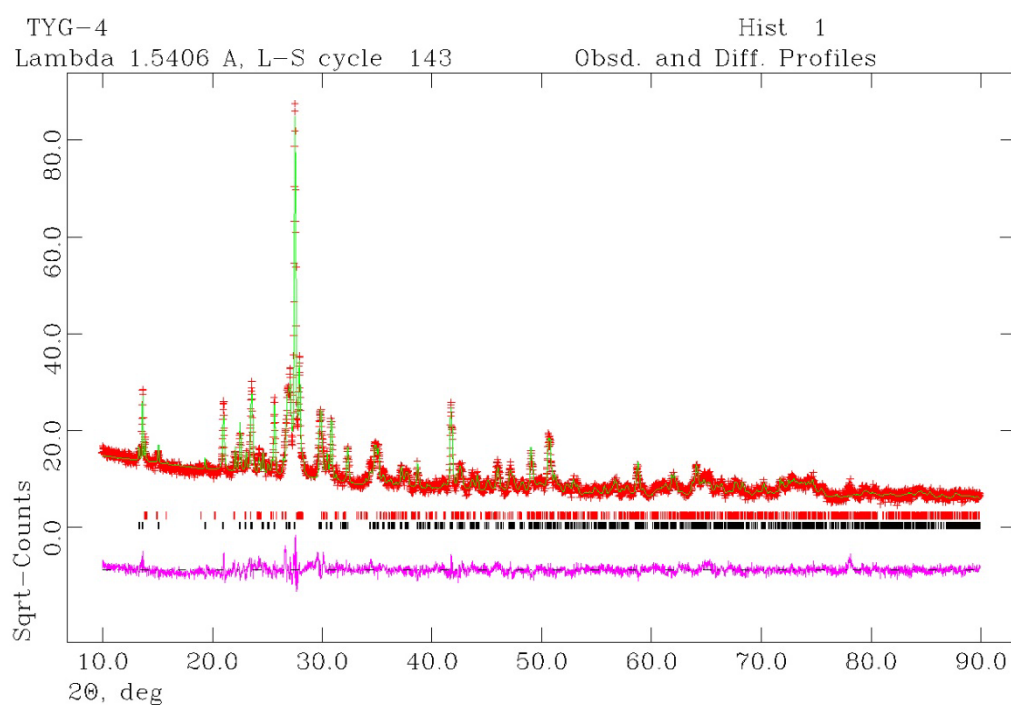


Figure S11. Rietveld fit of TG-4. The upper curves are observed (crosses) and calculated (line) diffraction patterns. Lower vertical marks from bottom to top indicate the positions of allowed $K\alpha_1$ and $K\alpha_2$ reflections of K-feldspar and albite, respectively. The curve at the bottom shows the difference between observed and calculated patterns.