

Supplementary Material: Reference density database for 20 aqueous alkali halide solutions

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The GMM (Figures 1-19) and Williams (Figures 20-38) plots for the 19 aqueous alkali halide solutions are provided in this document. The graphs for KCl are provided in the main text. An excel file containing all the data, and an executable program for density calculation are provided in separate files.

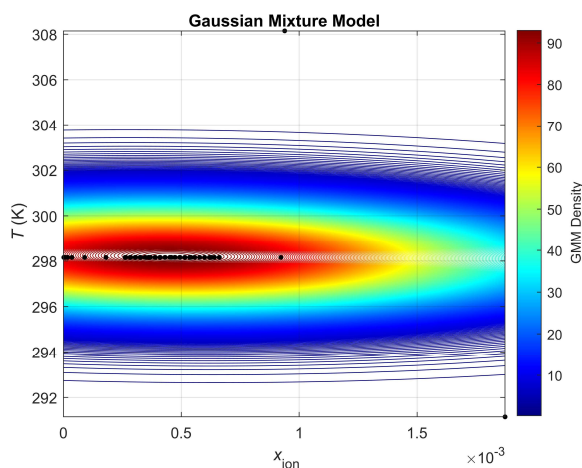


Figure S1. Gaussian mixture model for the density data of the (water + LiF) system.

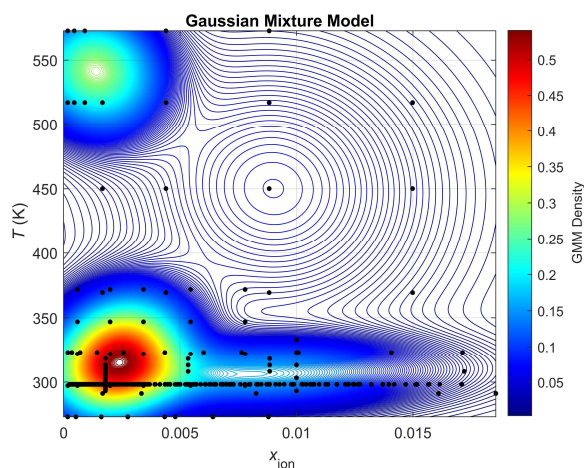


Figure S2. Gaussian mixture model for the density data of the (water + NaF) system.

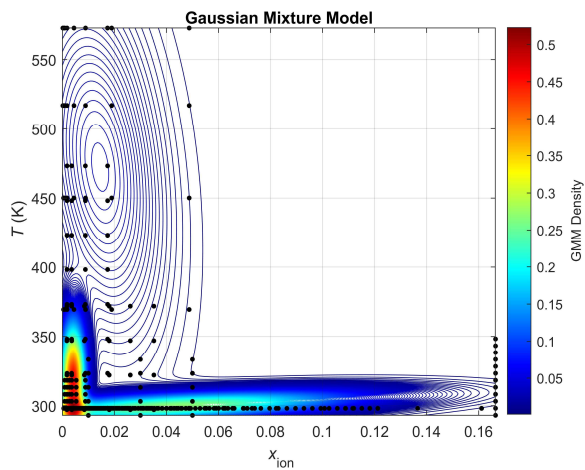


Figure S3. Gaussian mixture model for the density data of the (water + KF) system.

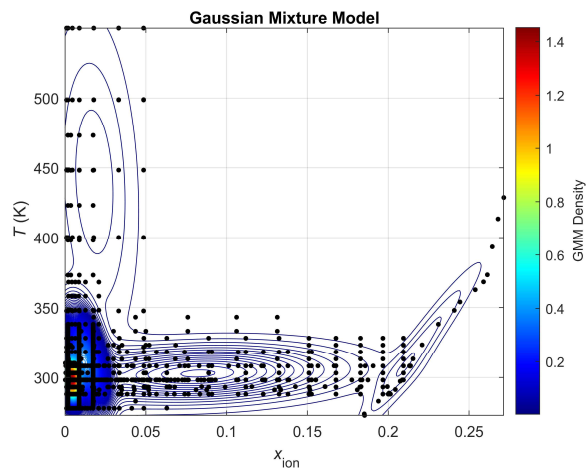


Figure S6. Gaussian mixture model for the density data of the (water + LiCl) system.

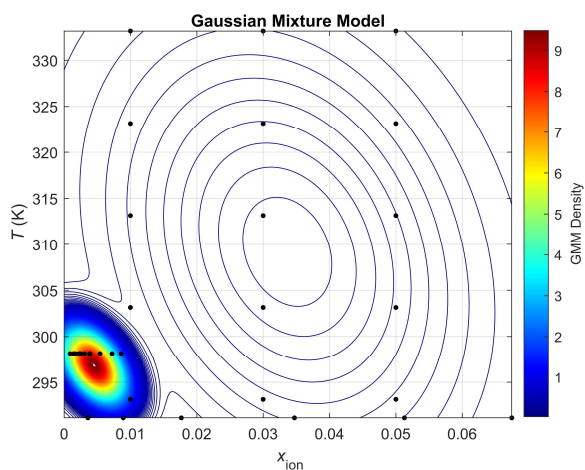


Figure S4. Gaussian mixture model for the density data of the (water + RbF) system.

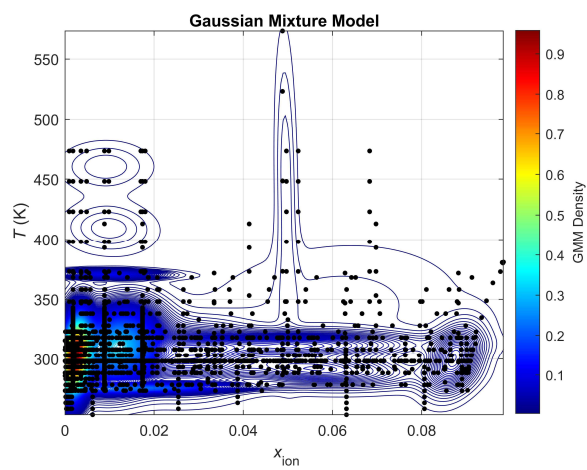


Figure S7. Gaussian mixture model for the density data of the (water + NaCl) system.

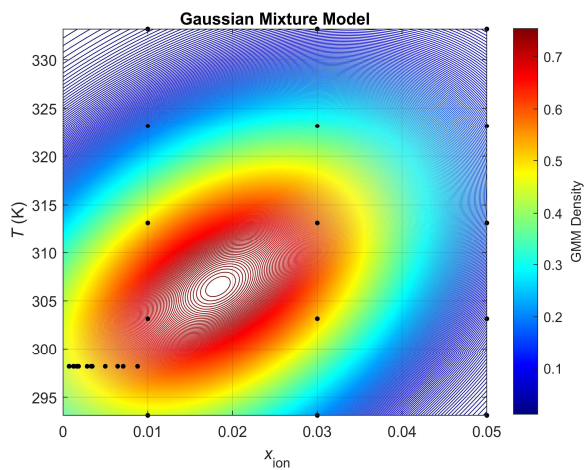


Figure S5. Gaussian mixture model for the density data of the (water + CsF) system.

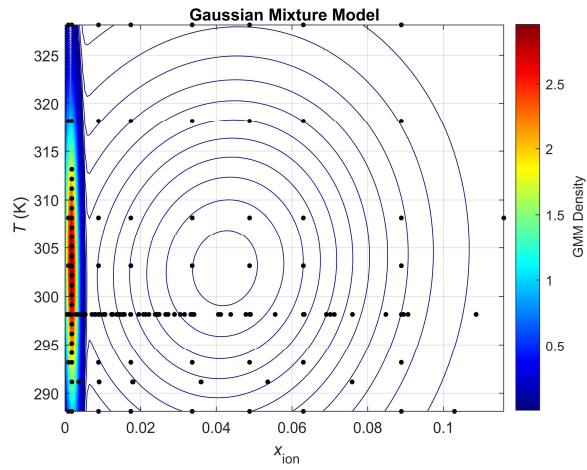


Figure S8. Gaussian mixture model for the density data of the (water + RbCl) system.

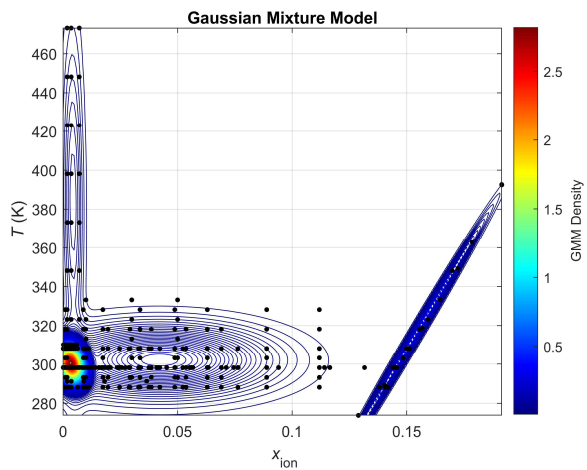


Figure S9. Gaussian mixture model for the density data of the (water + CsCl) system.

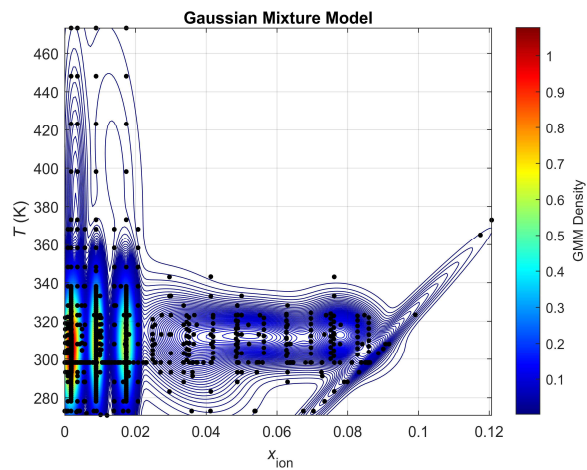


Figure S12. Gaussian mixture model for the density data of the (water + KBr) system.

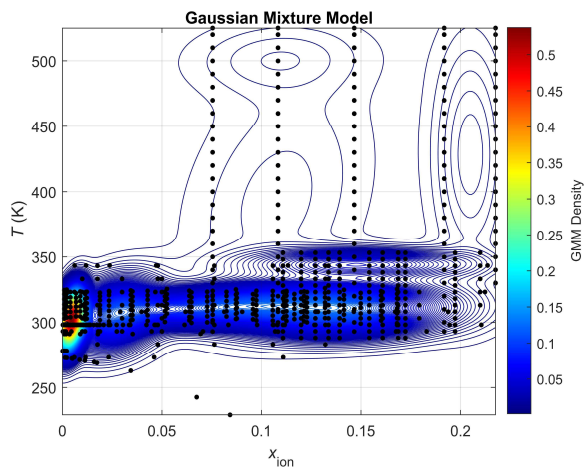


Figure S10. Gaussian mixture model for the density data of the (water + LiBr) system.

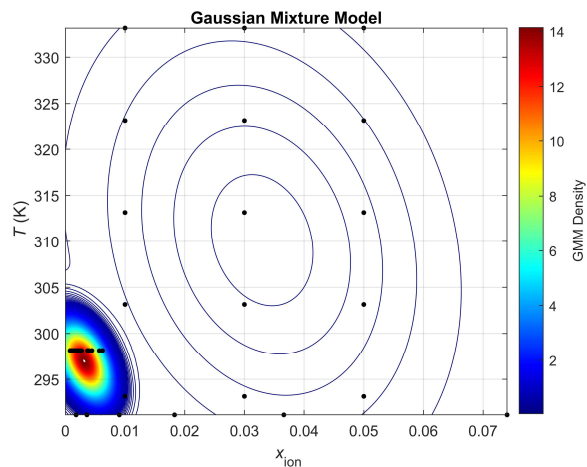


Figure S13. Gaussian mixture model for the density data of the (water + RbBr) system.

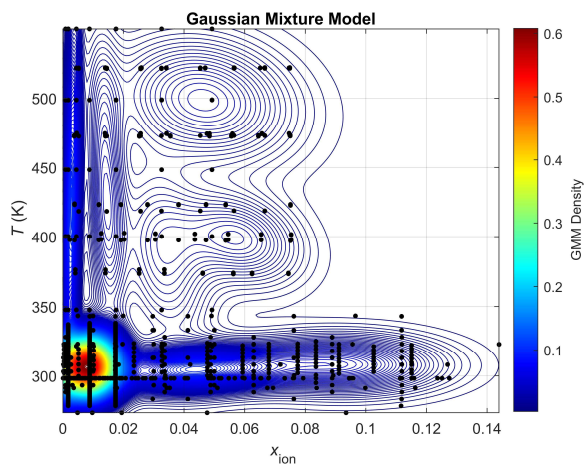


Figure S11. Gaussian mixture model for the density data of the (water + NaBr) system.

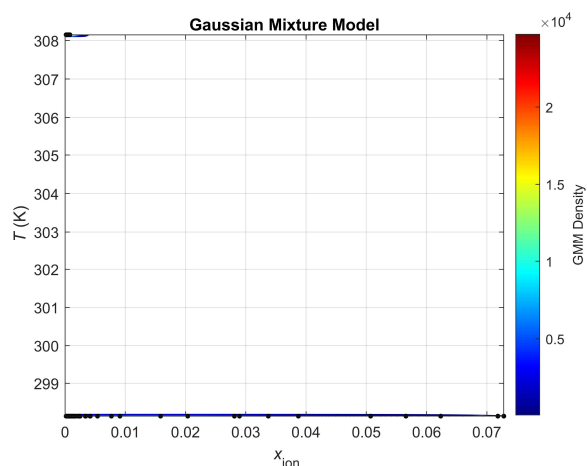


Figure S14. Gaussian mixture model for the density data of the (water + CsBr) system.

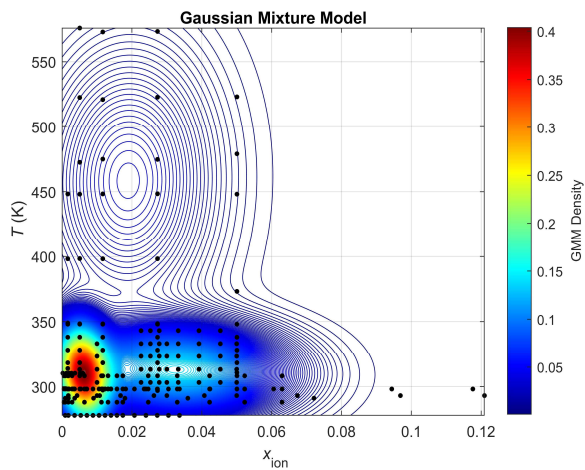


Figure S15. Gaussian mixture model for the density data of the (water + LiI) system.

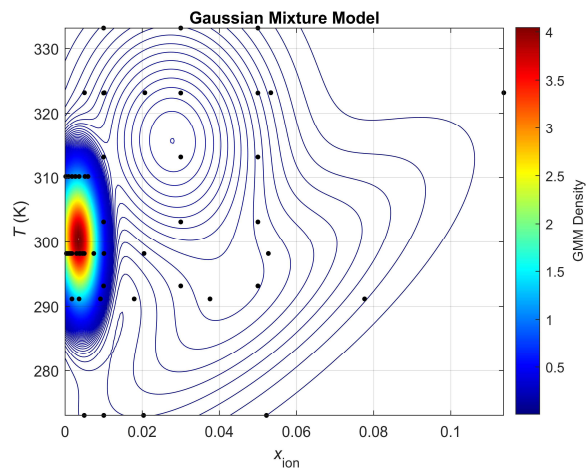


Figure S18. Gaussian mixture model for the density data of the (water + RbI) system.

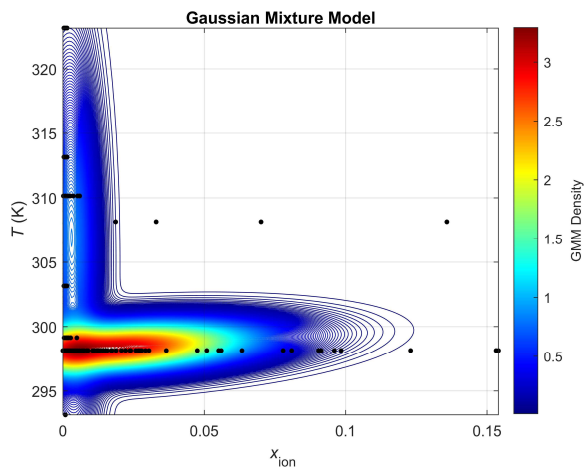


Figure S16. Gaussian mixture model for the density data of the (water + NaI) system.

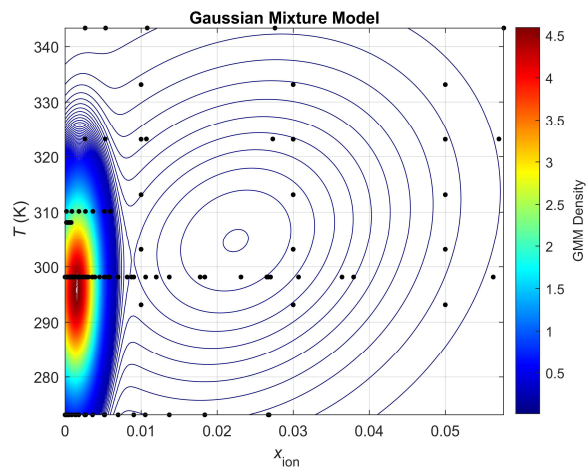


Figure S19. Gaussian mixture model for the density data of the (water + CsI) system.

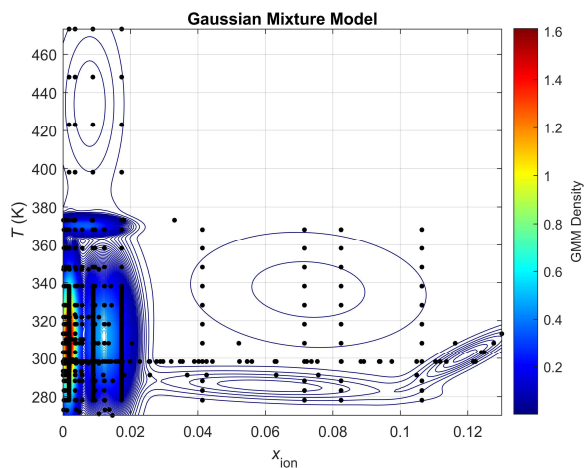


Figure S17. Gaussian mixture model for the density data of the (water + KI) system.

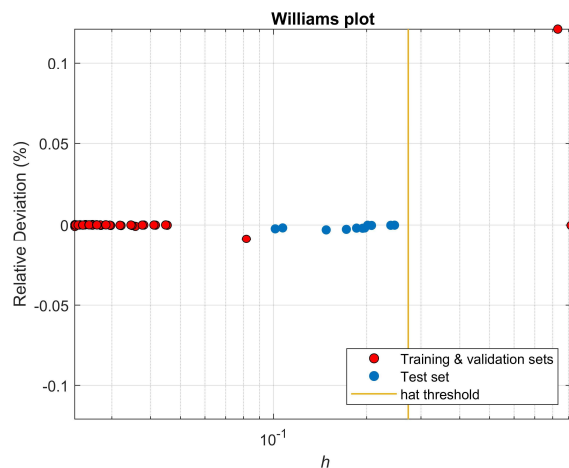


Figure S20. Williams plot for the density data of the (water + LiF) system.



Figure S21. Williams plot for the density data of the (water + NaF) system.

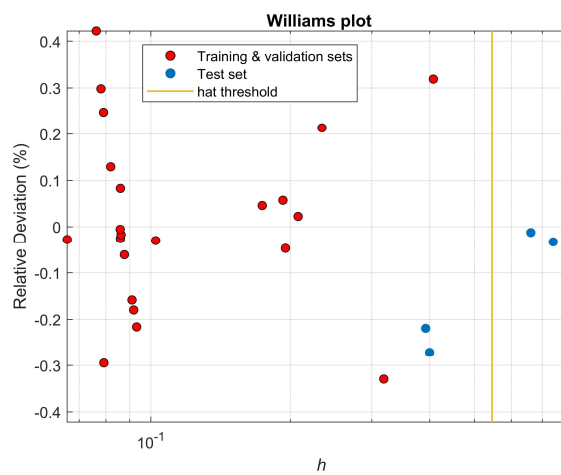


Figure S24. Williams plot for the density data of the (water + CsF) system.

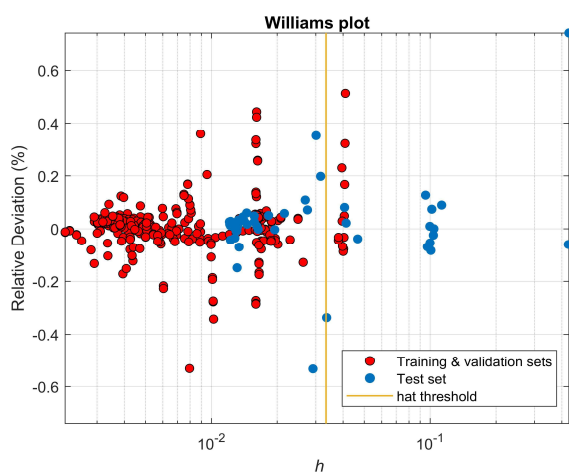


Figure S22. Williams plot for the density data of the (water + KF) system.

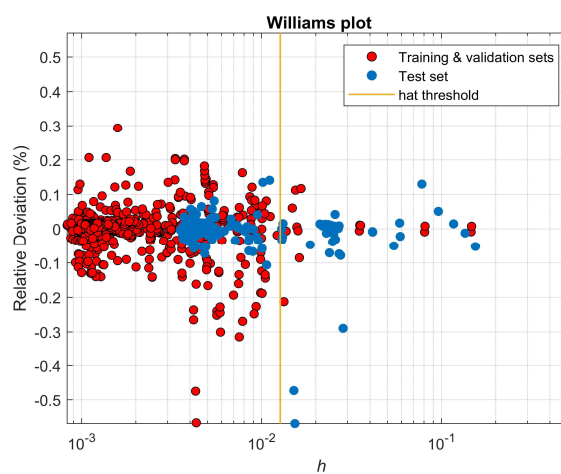


Figure S25. Williams plot for the density data of the (water + LiCl) system.



Figure S23. Williams plot for the density data of the (water + RbF) system.

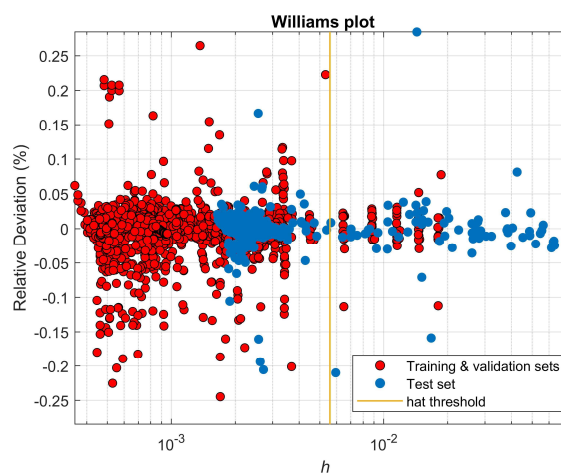


Figure S26. Williams plot for the density data of the (water + NaCl) system.



Figure S27. Williams plot for the density data of the (water + RbCl) system.



Figure S30. Williams plot for the density data of the (water + NaBr) system.

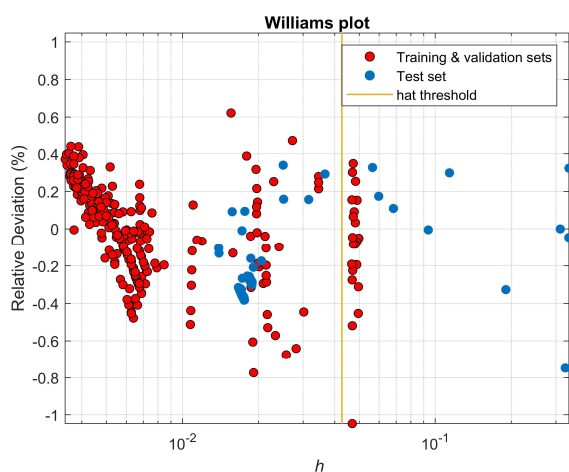


Figure S28. Williams plot for the density data of the (water + CsCl) system.



Figure S31. Williams plot for the density data of the (water + KBr) system.

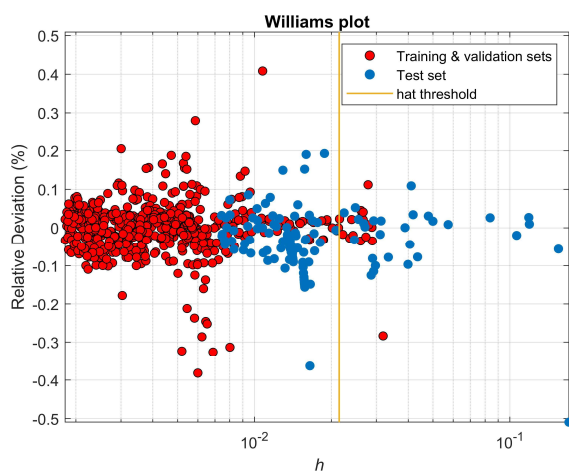


Figure S29. Williams plot for the density data of the (water + LiBr) system.

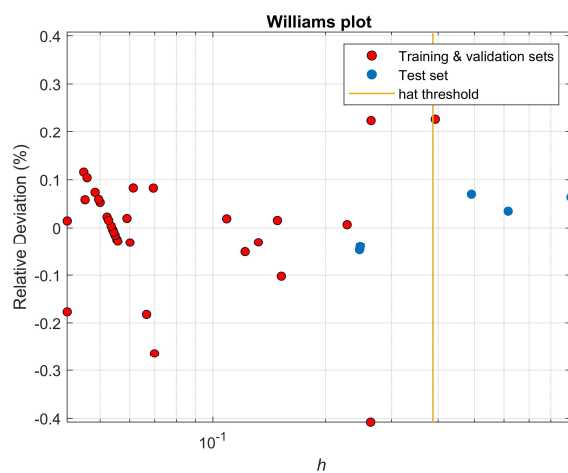


Figure S32. Williams plot for the density data of the (water + RbBr) system.

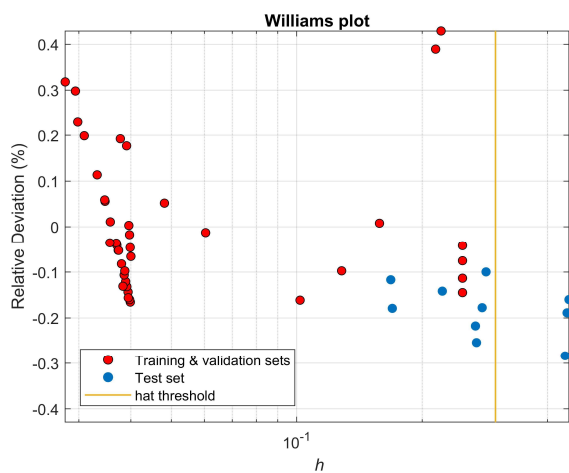


Figure S33. Williams plot for the density data of the (water + CsBr) system.

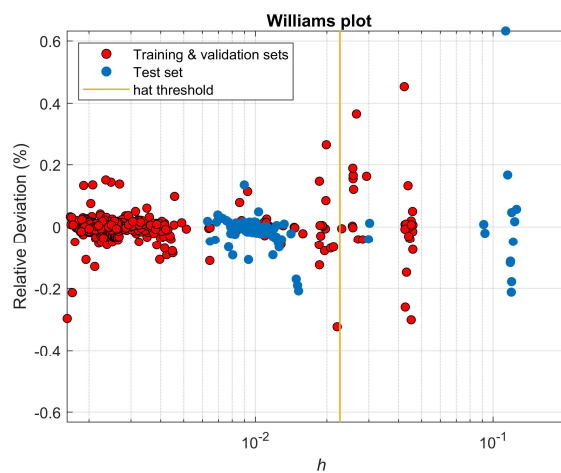


Figure S36. Williams plot for the density data of the (water + KI) system.

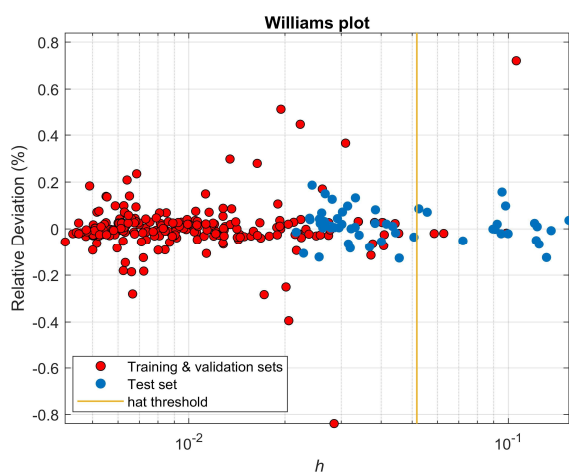


Figure S34. Williams plot for the density data of the (water + LiI) system.

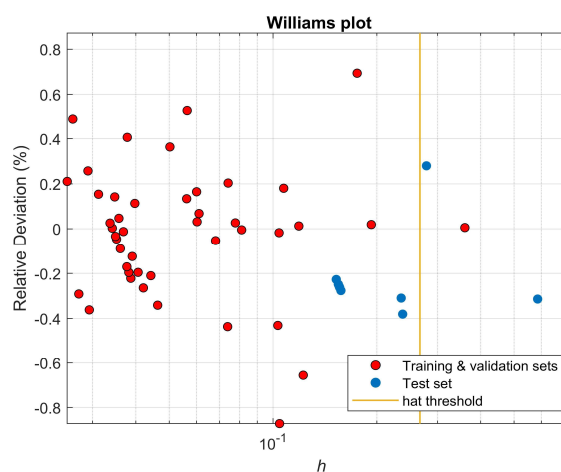


Figure S37. Williams plot for the density data of the (water + RbI) system.

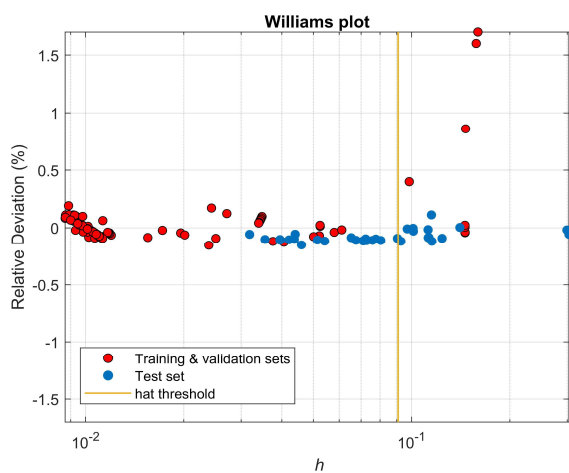


Figure S35. Williams plot for the density data of the (water + NaI) system.

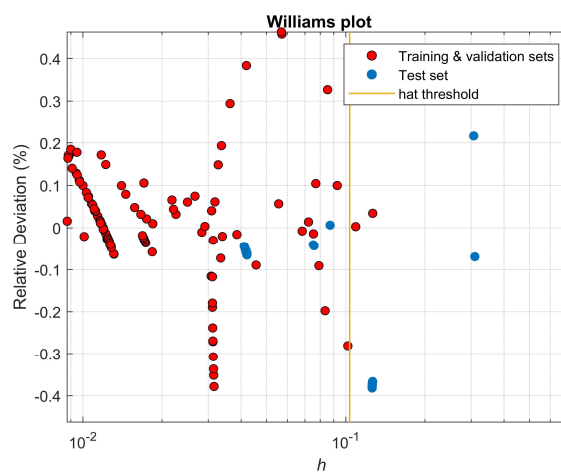


Figure S38. Williams plot for the density data of the (water + CsI) system.