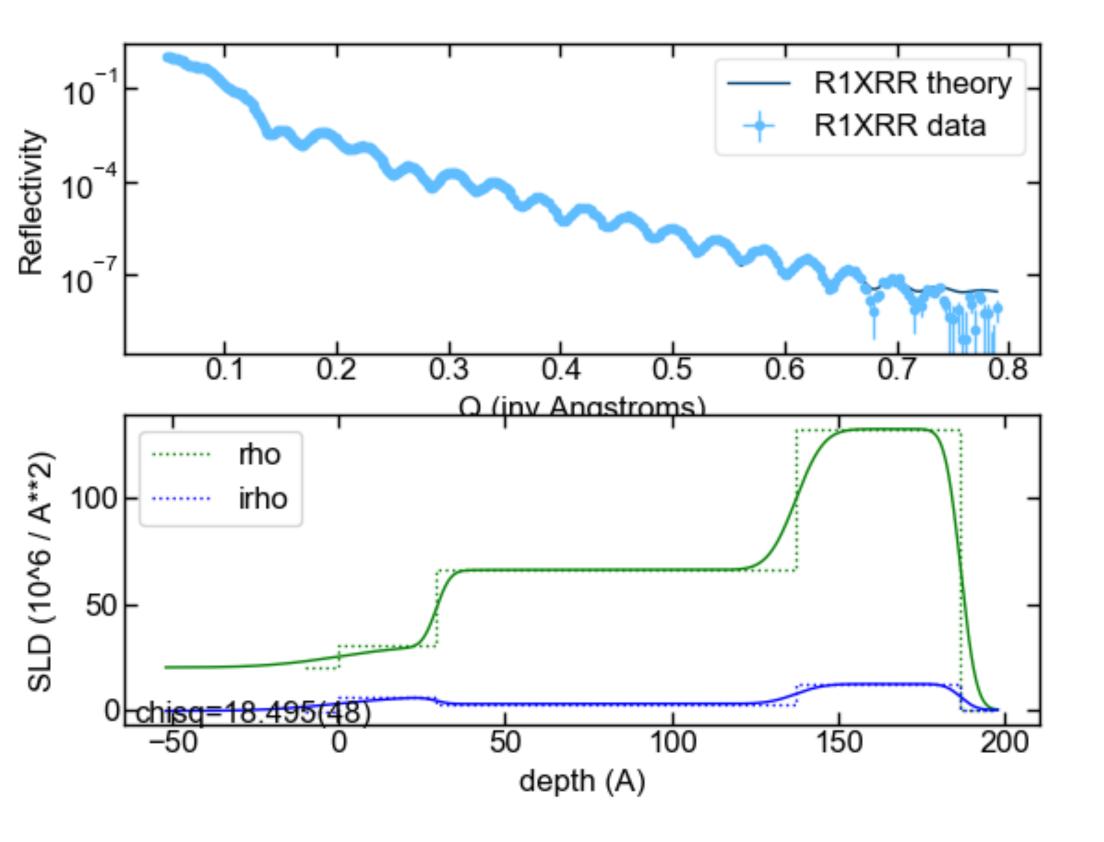
X-ray Reflectivity Best Fit: 5-Layer Box Model



Parameter	Silicon	Oxide	Permalloy	Platinum	Air
roughness, σ (Å)	17.33	3.322	6.603	3.711	0.0
incoherent SLD, ρ_i (× 10–6 Å–2)	-0.458	6.436	2.904	12.24	0.0
SLD, ρ (× 10 ⁻⁶ Å ⁻²)	20.07	30.37	66.07	132.5	0.0
thickness, t (Å)	0.0	29.32	108.1	49.54	0.0

Simple box model composed of five layers:

silicon, oxide, permalloy, platinum, and air

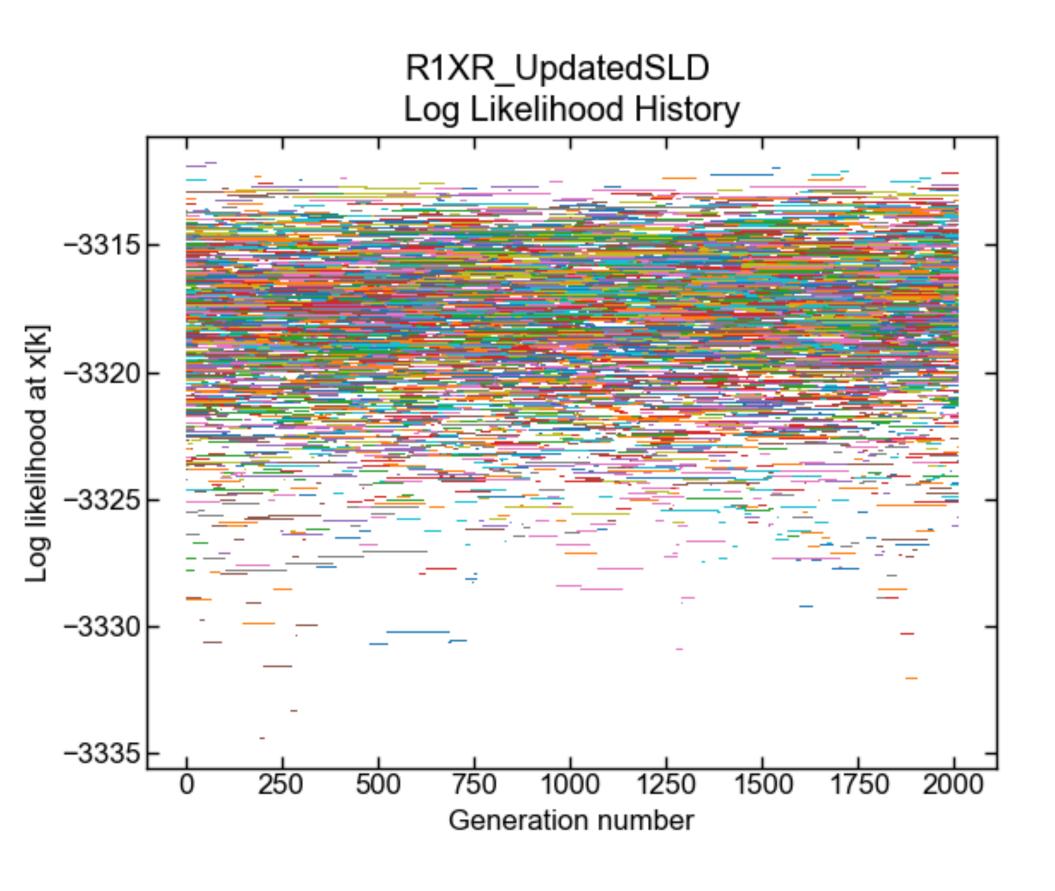
All parameters in the silicon and air layers were fixed to a priori value (except for silicon roughness)

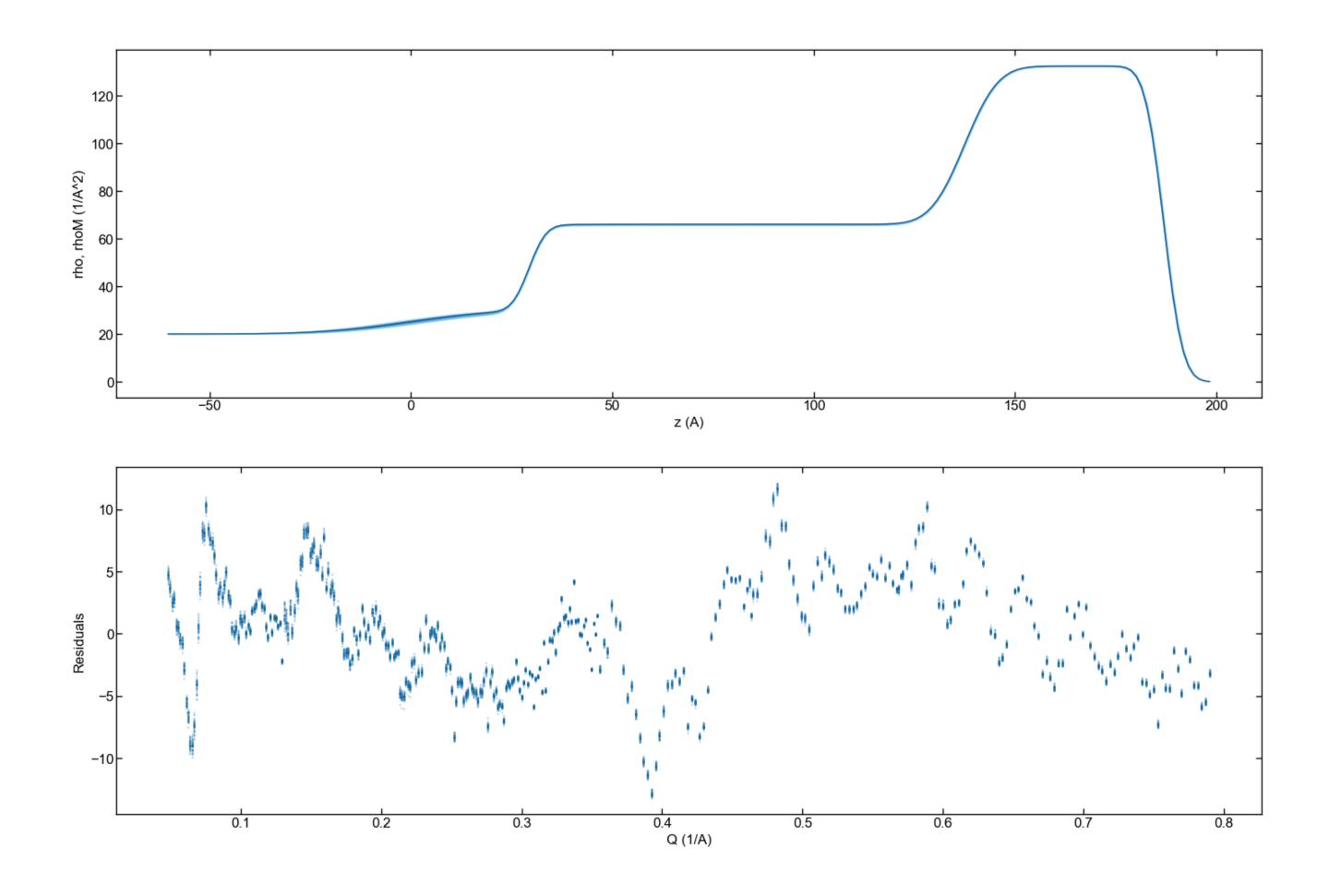
SLD of oxide layer is much greater than the nominal value, which we take to mean that there is some alloy due to the permalloy

Measured Value: $30.37 \times 10^{-6} \text{ Å}^{-2}$ Nominal Value: $17.7 \times 10^{-6} \text{ Å}^{-2}$

Thicknesses and surface roughnesses for the permalloy and platinum layers are very similar to the values measured in the neutron fits

X-ray Reflectivity Best Fit: Convergence and Model Uncertainty





X-ray Reflectivity Best Fit: Variance and Correlations

