Appendix S8: Supporting information for

Title: A workflow to optimize spatial sampling in ecoacoustic studies

Journal: Landscape Ecology

Authors: Martínez-Arias, V. M.[1,3]; Paniagua-Villada[1,3], C.; Guerrero, M.J.; Daza, J. M.[1]

Author affiliations at the time the work was conducted:

1 Grupo Herpetológico de Antioquia GHA, Instituto de Biología, Facultad de Ciencias Exactas y Naturales,

Universidad de Antioquia UdeA, Calle 70 No. 52 - 21, Medellín, Colombia.

2 SISTEMIC, Facultad de Ingeniería, Universidad de Antioquia UdeA, Medellín, Colombia

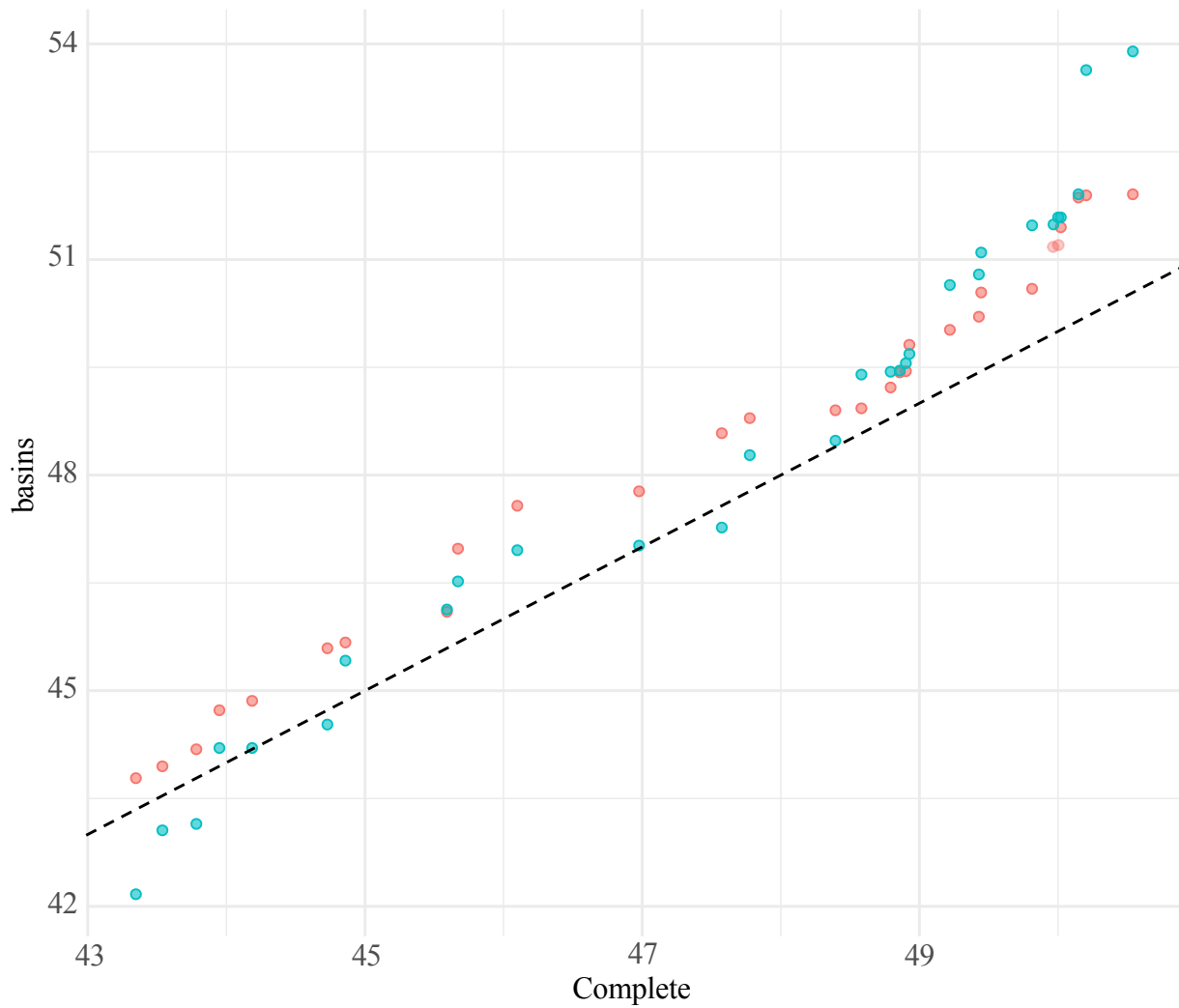
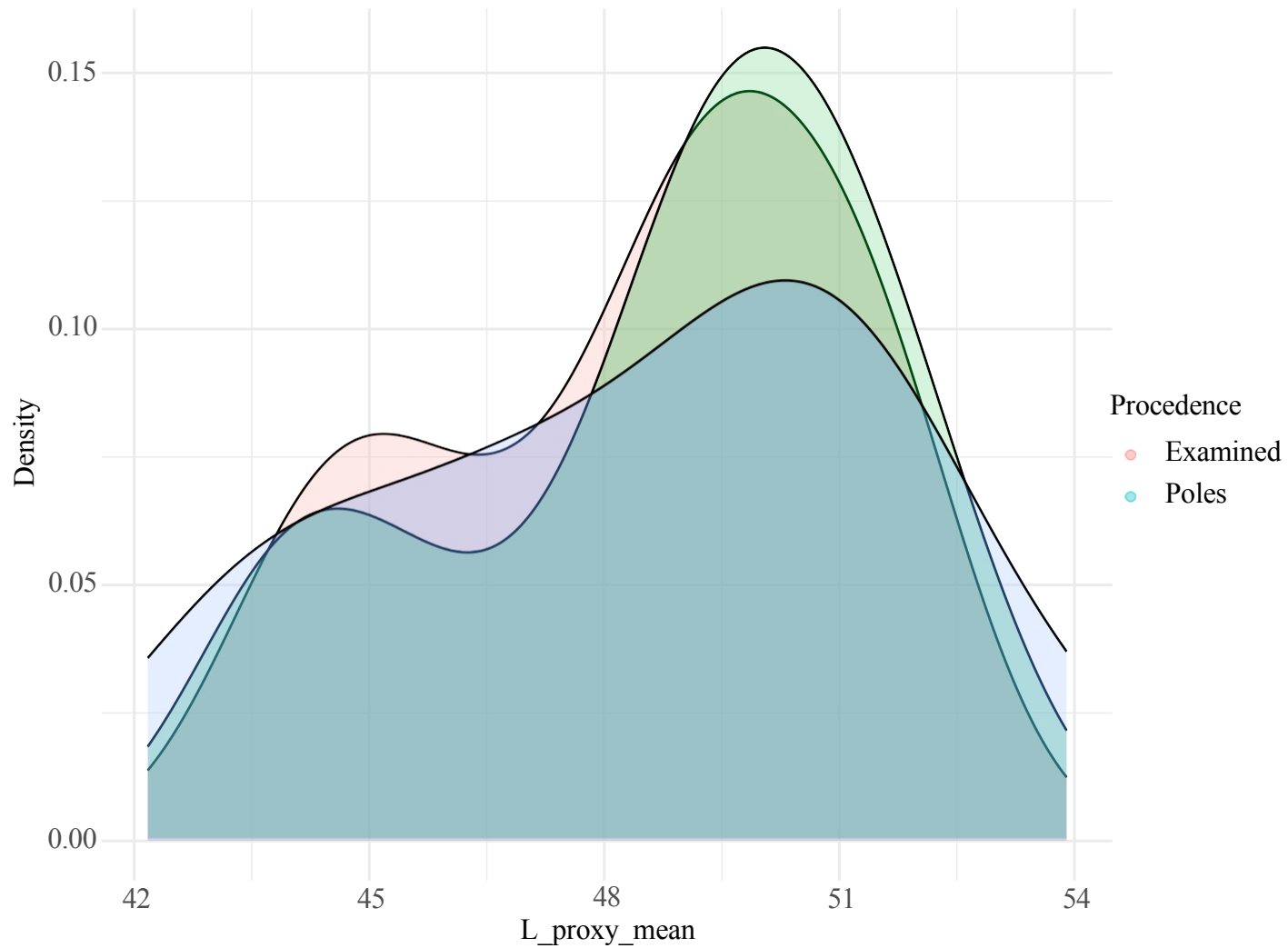
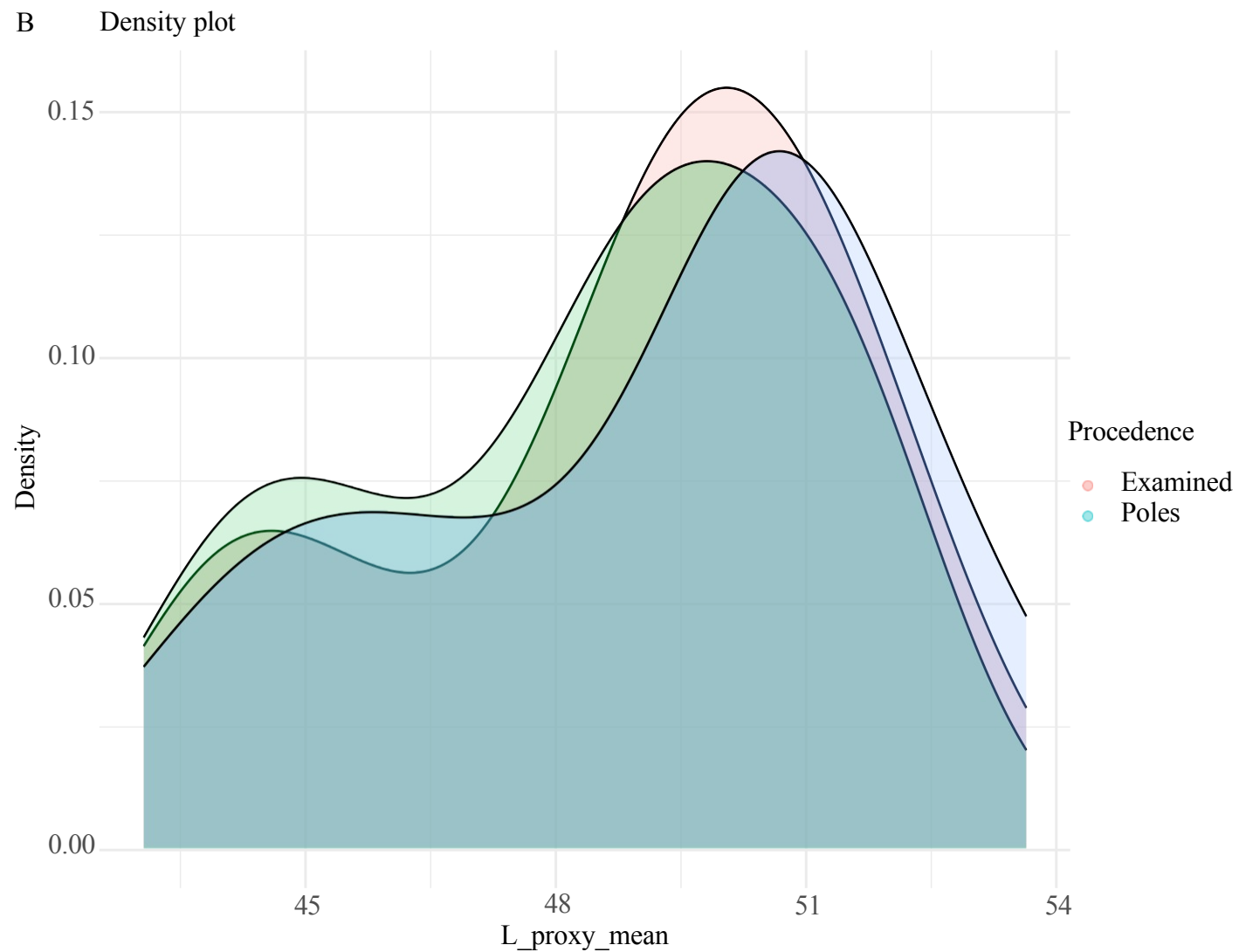
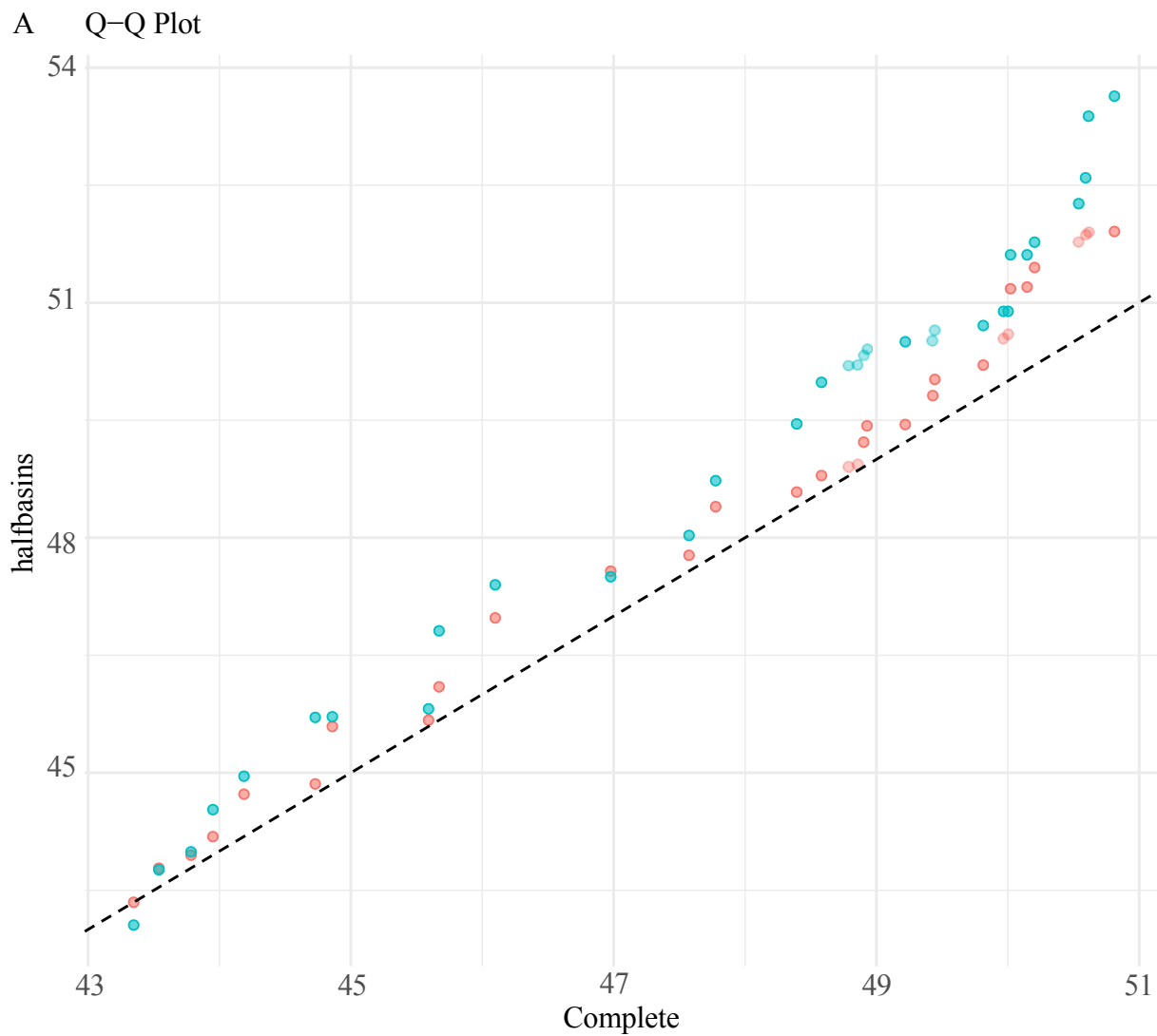
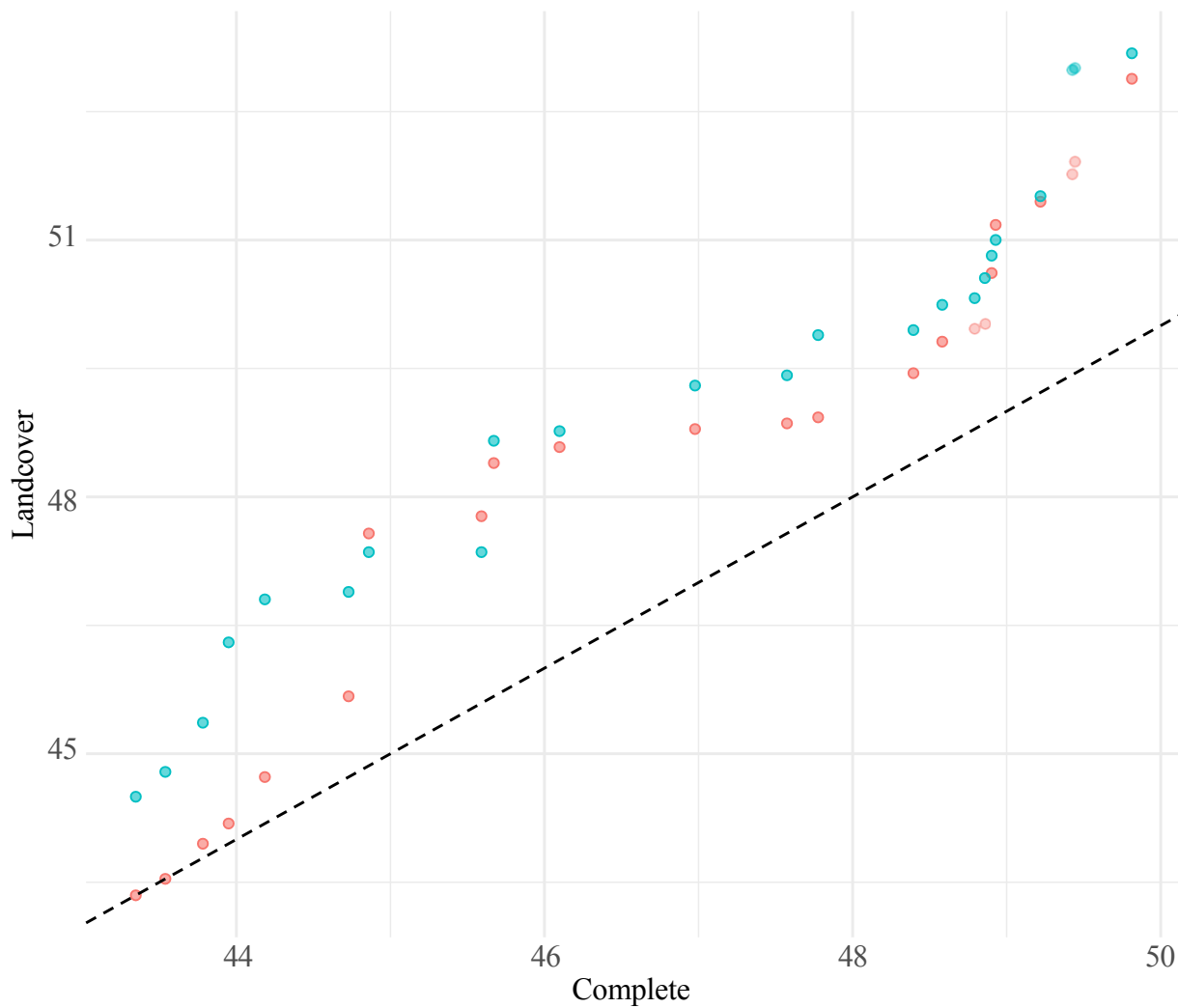
3 Corporación Merceditas, Calle 3 29A-11, casa 110, Medellín, Colombia

*Corresponding author: Victor M. Martínez Arias

Email: vmanuel.martinez@udea.edu.co

SUPPLEMENTARY INFORMATION S8: Distributional comparison of landscape heterogeneity across stratified sub sampling strategies.

Kernel density estimates (Density plot B) and quantile-quantile plots (Q-Q plot A) illustrate how the mean landscape proxy values (L_proxy_mean) from each subsample compare with the full sampling grid across different strategies (Basins, Halfbasins, Landcover, SLIC) and localities (Andean Rural, Andean Urban, Plains). Sub samples were grouped by point selection origin: poles of inaccessibility or directly examined locations. Statistical differences in distributions were assessed using Kolmogorov-Smirnov tests and Wasserstein distances.

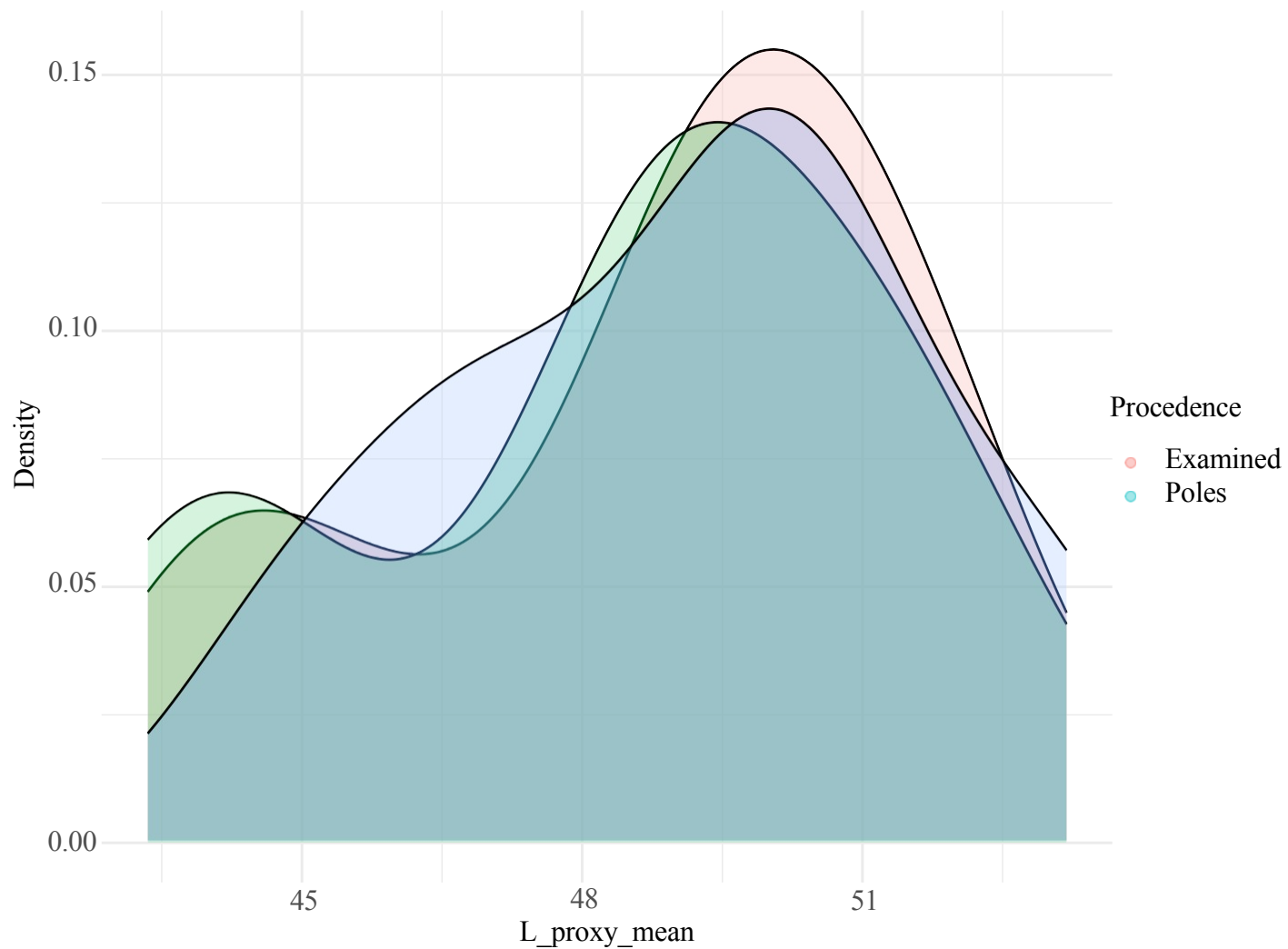
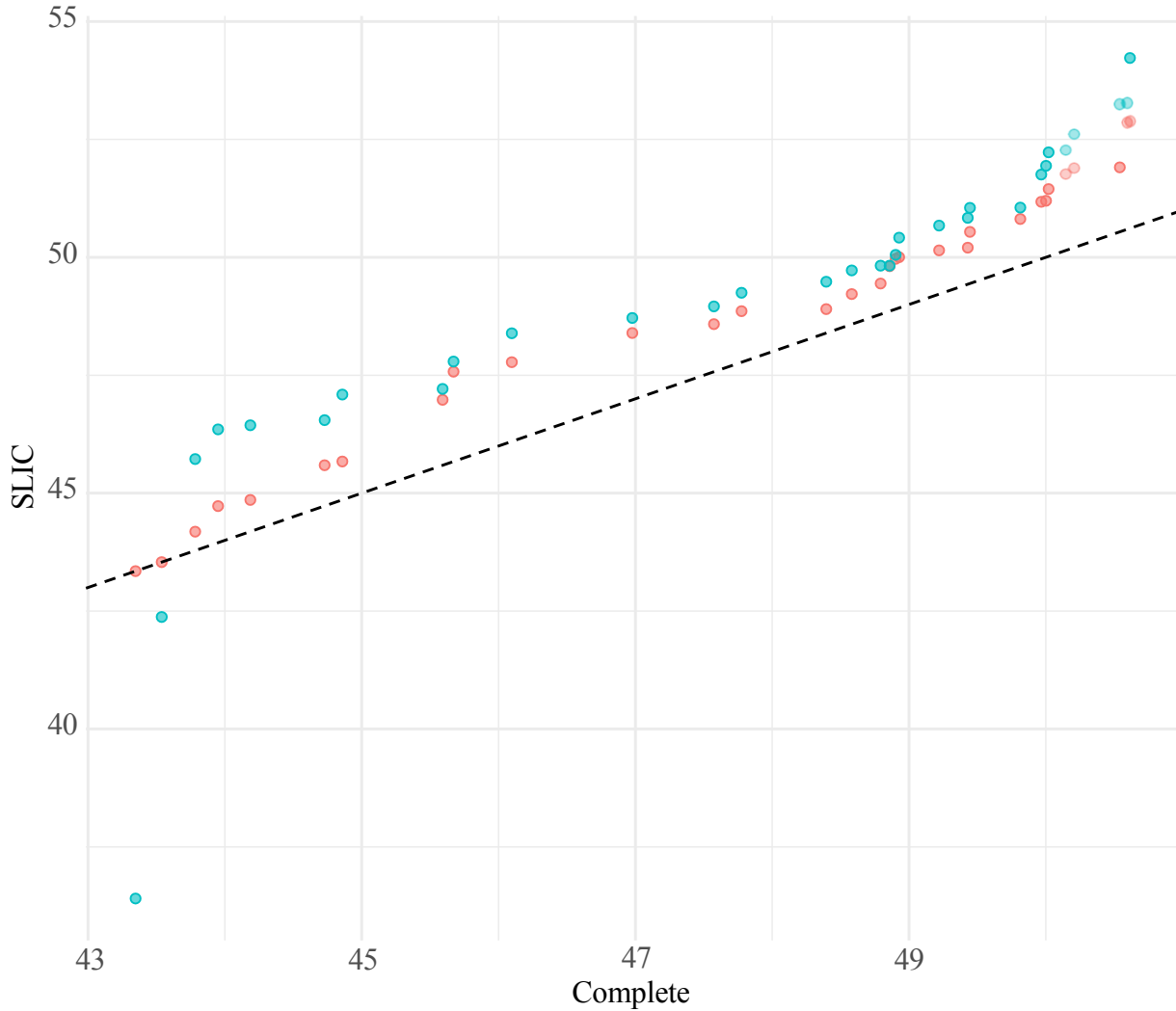
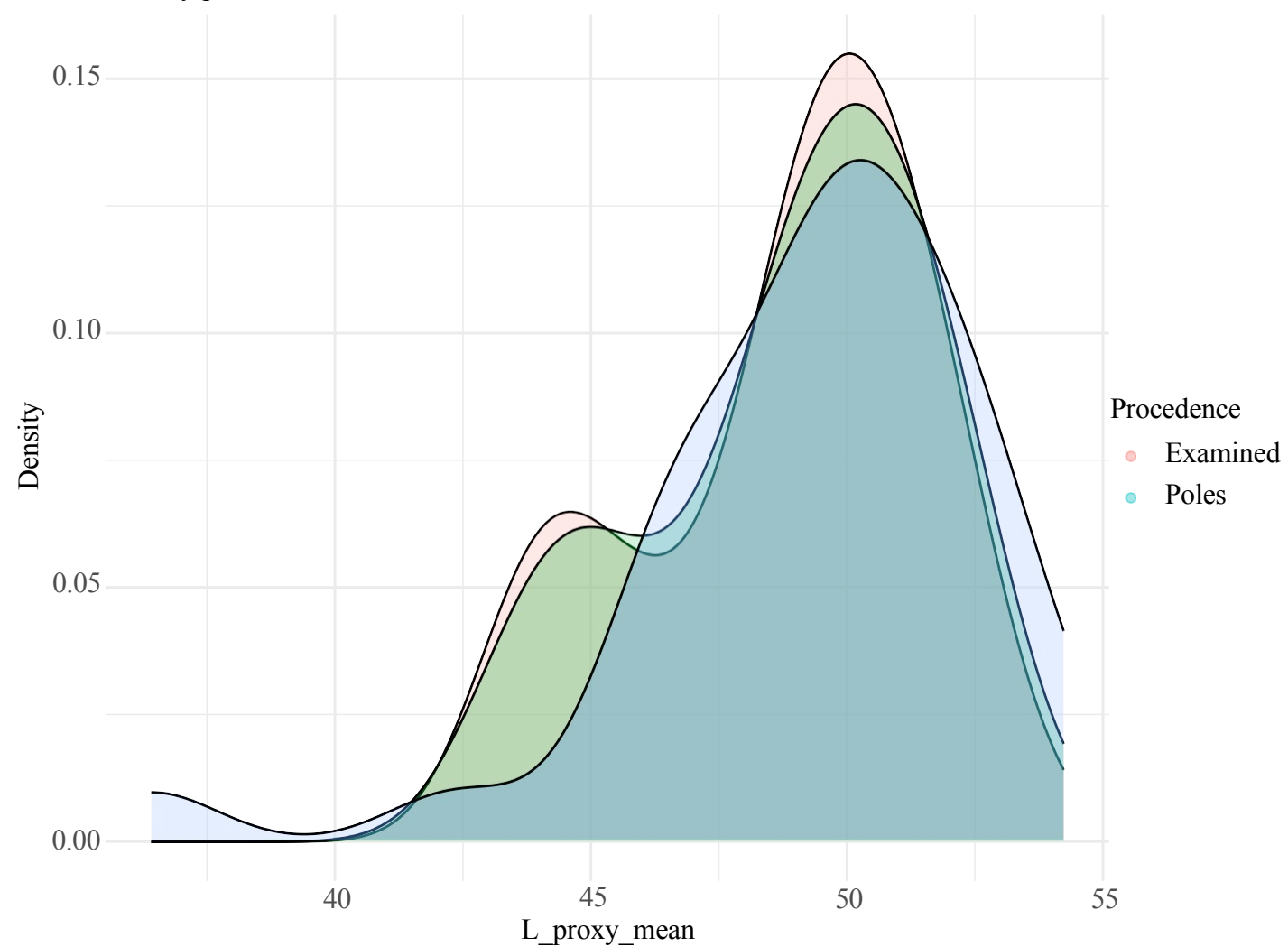
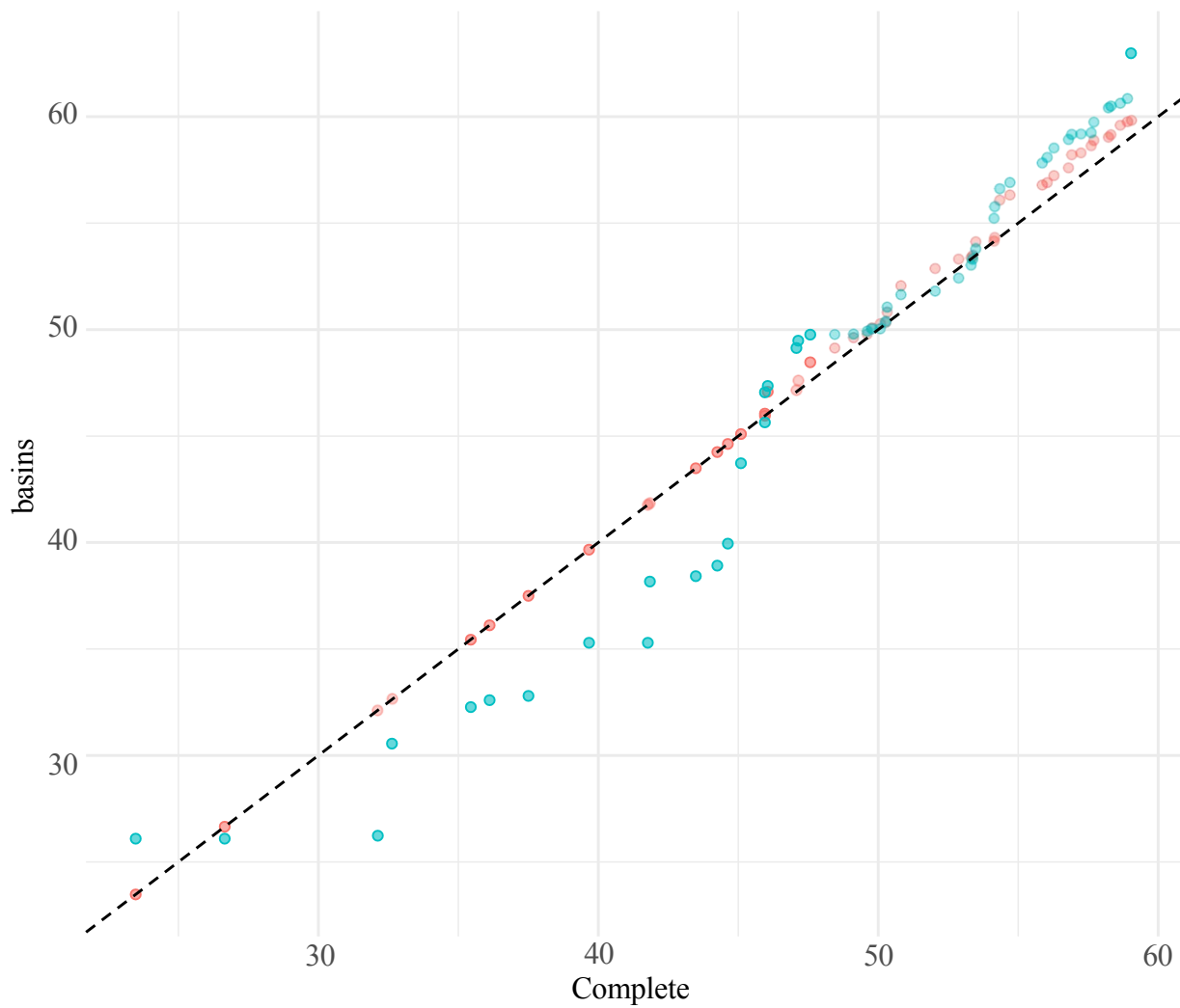
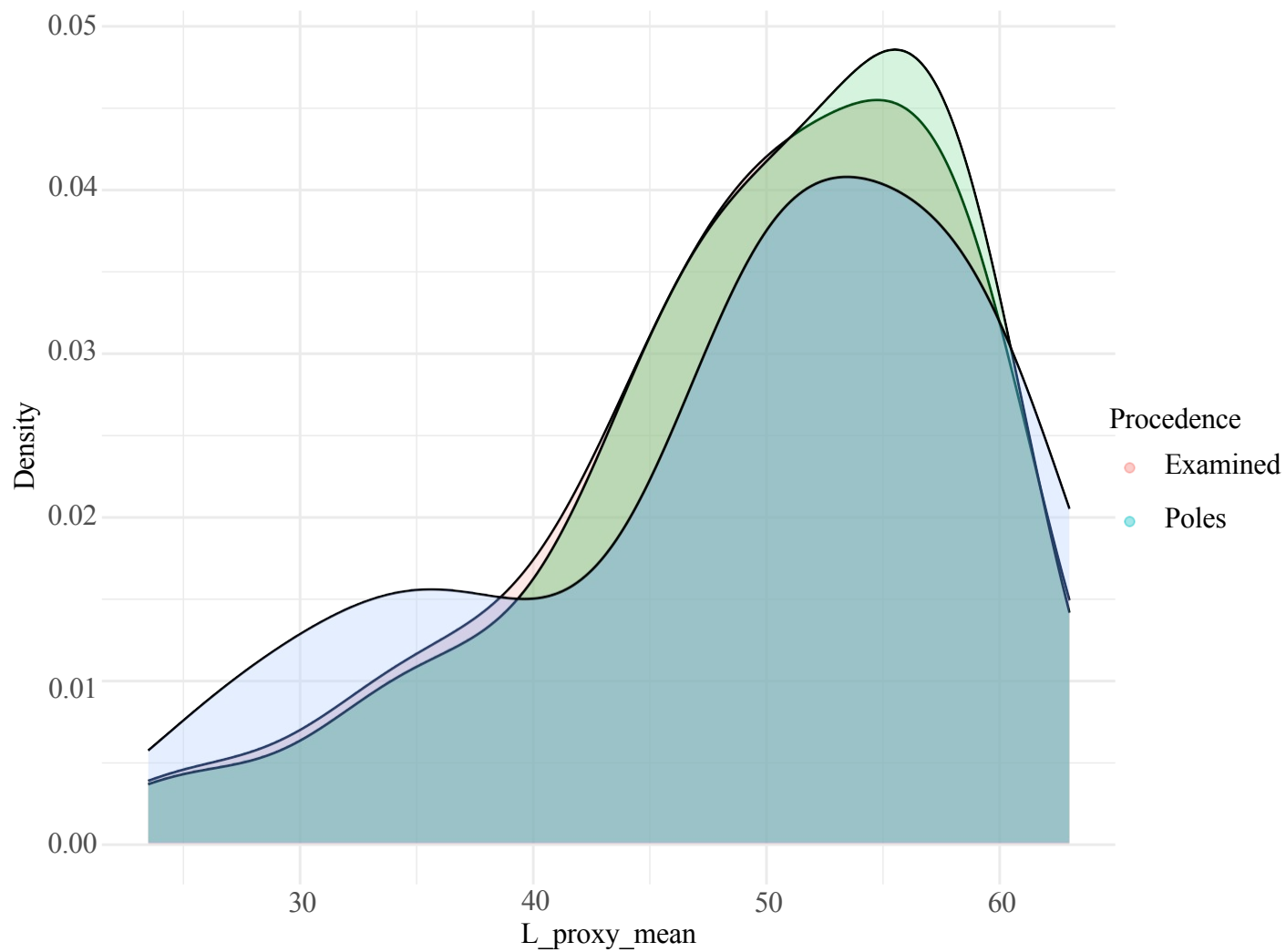
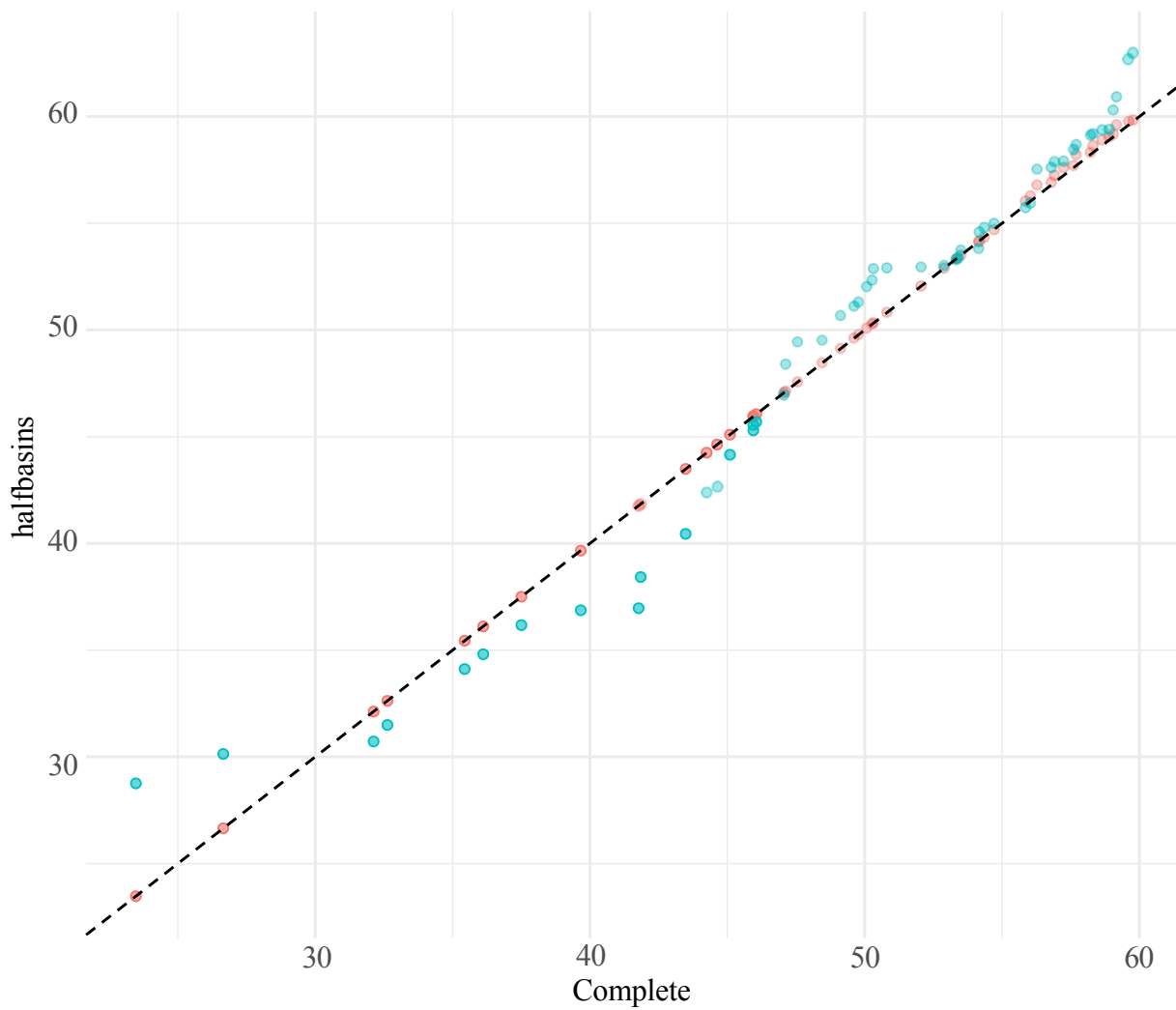
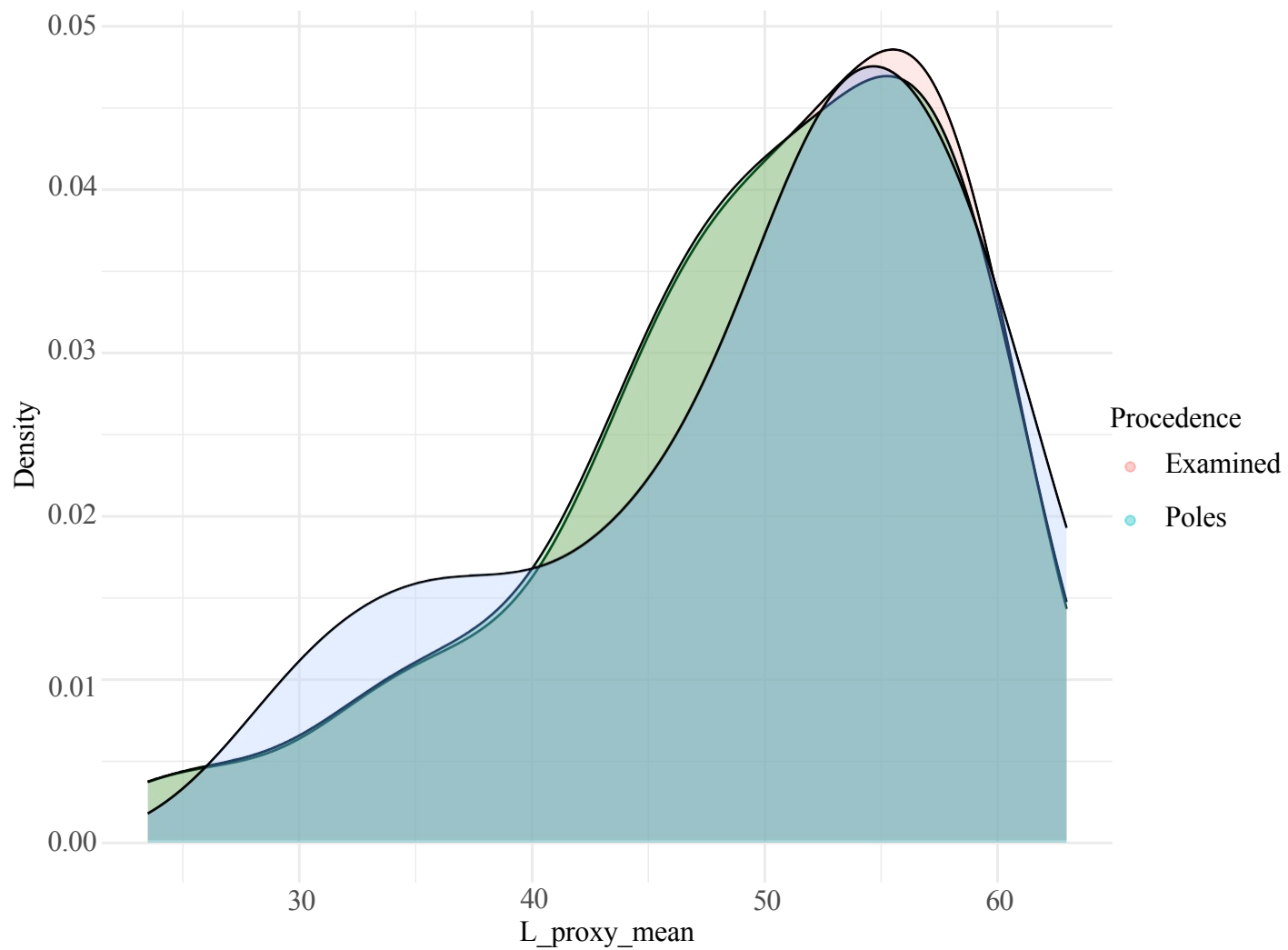
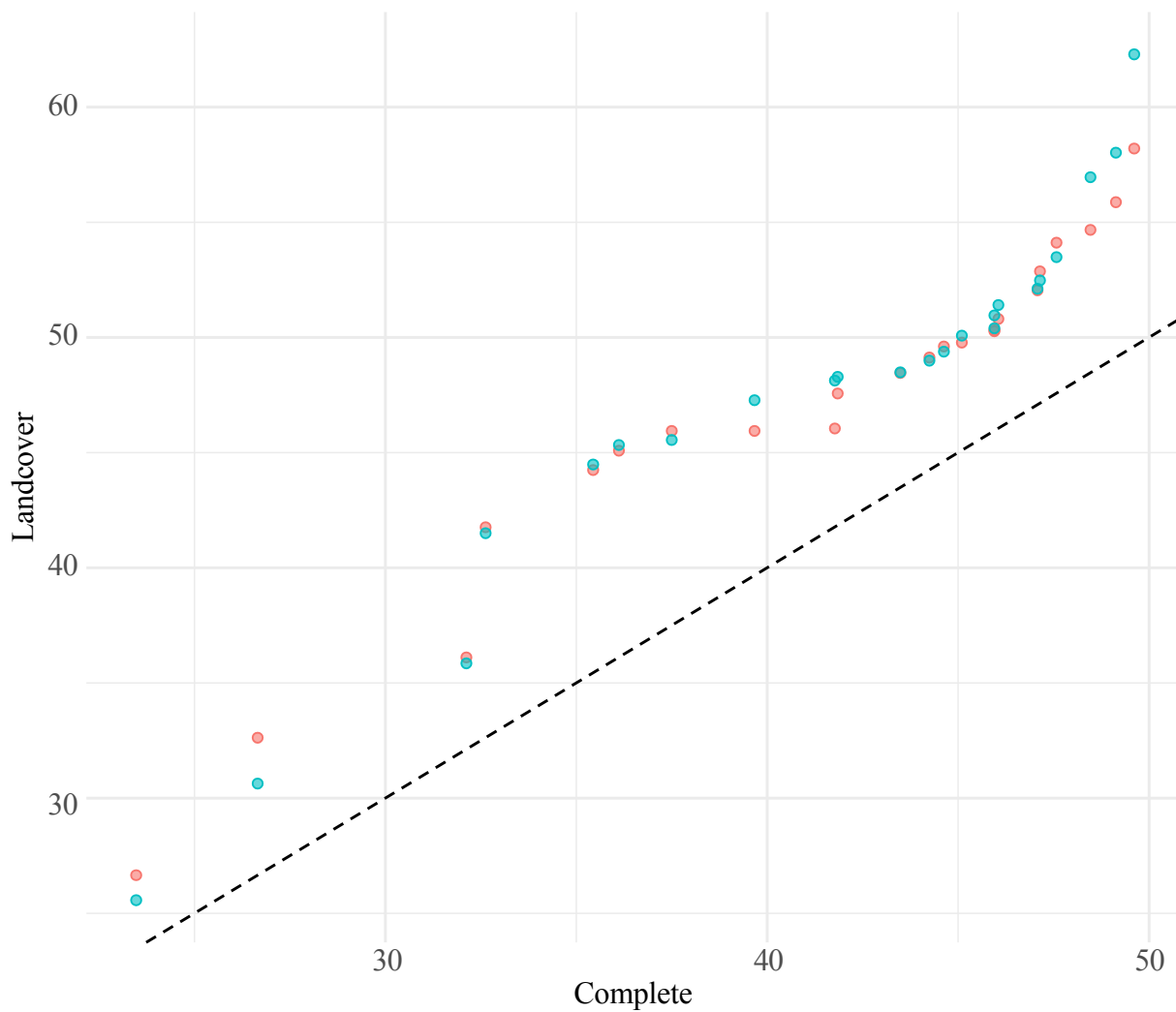
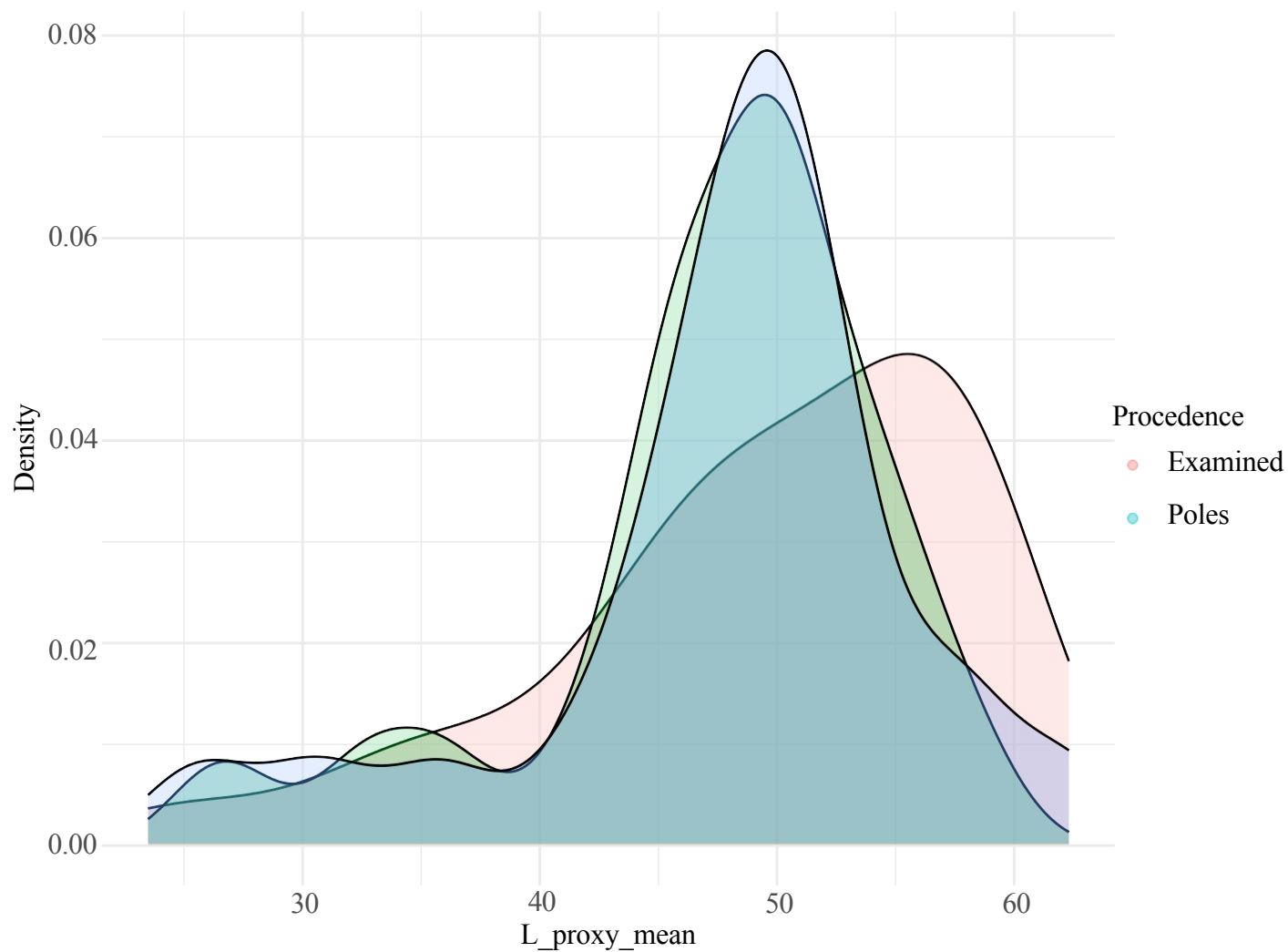
AndeanRural / halfbasins / Comparison with Examined & Poles

A Q–Q Plot

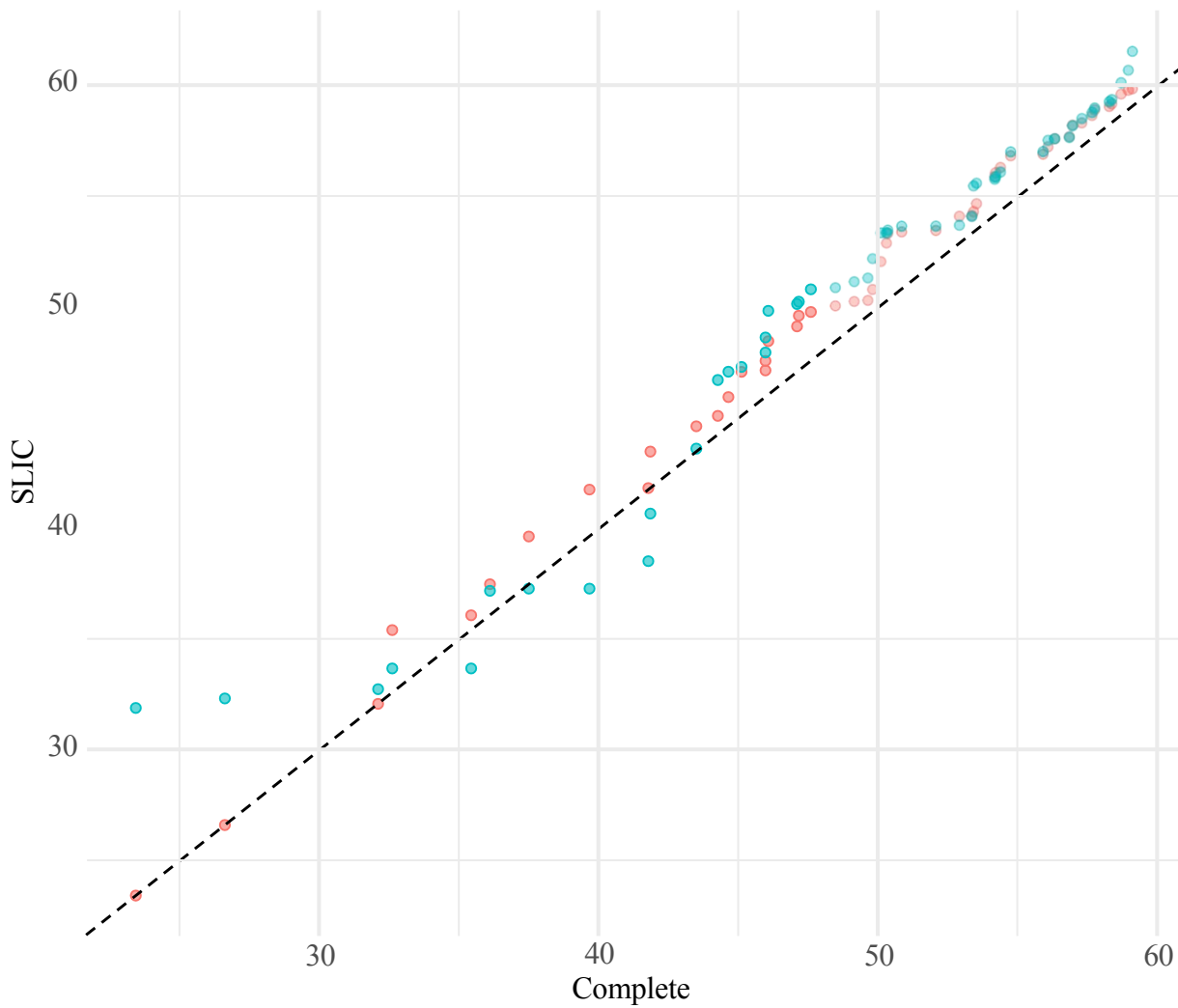
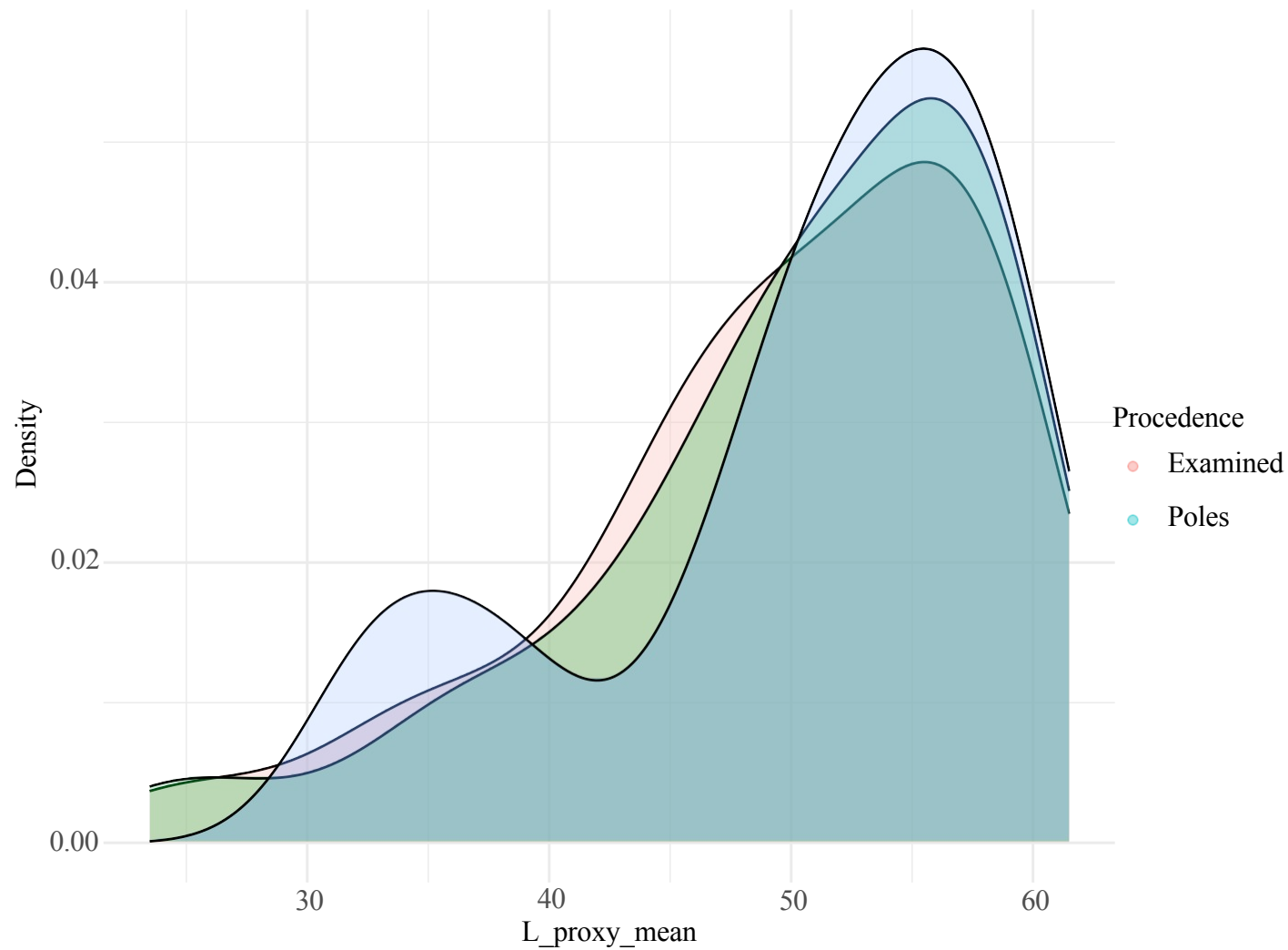
B Density plot

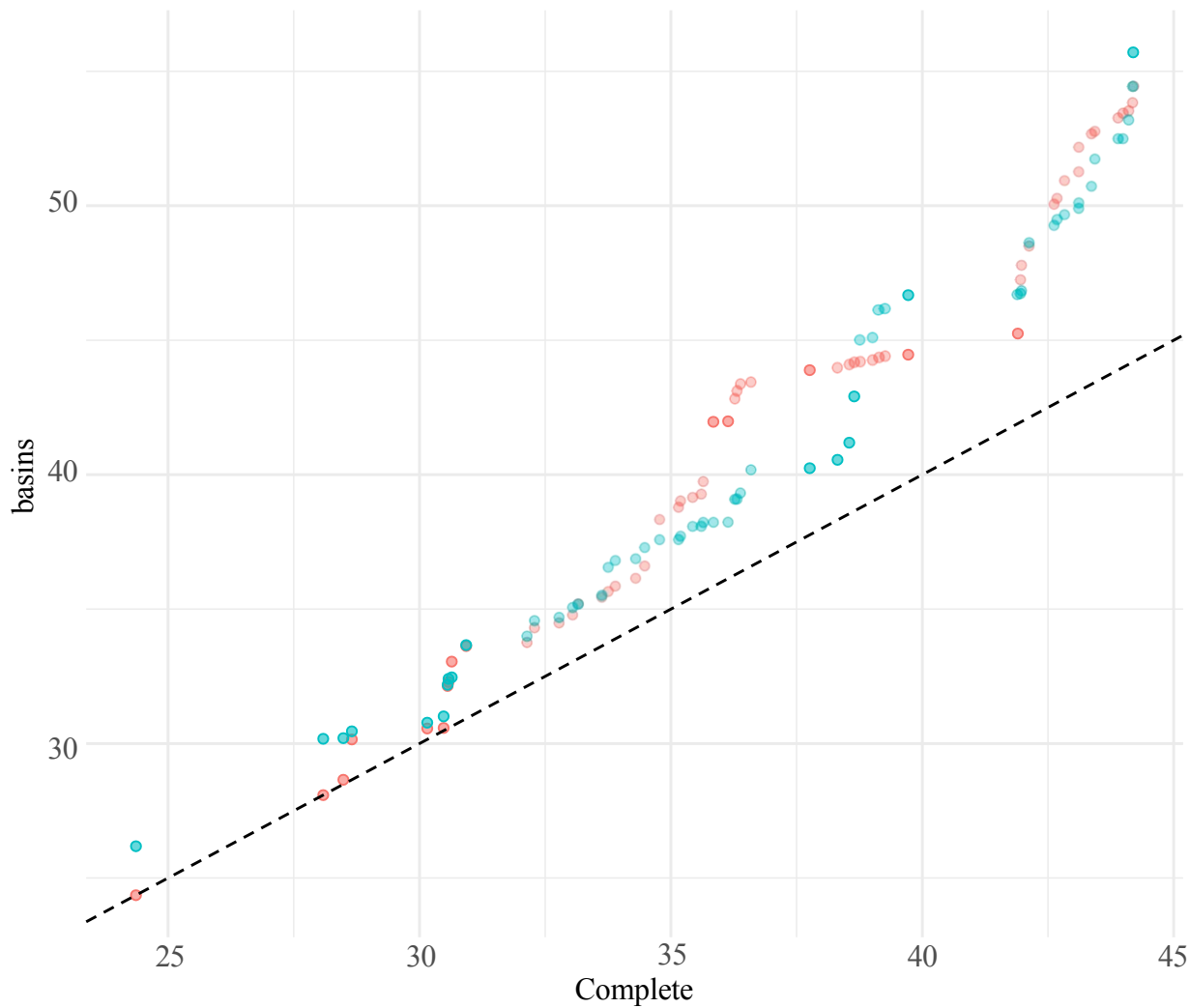
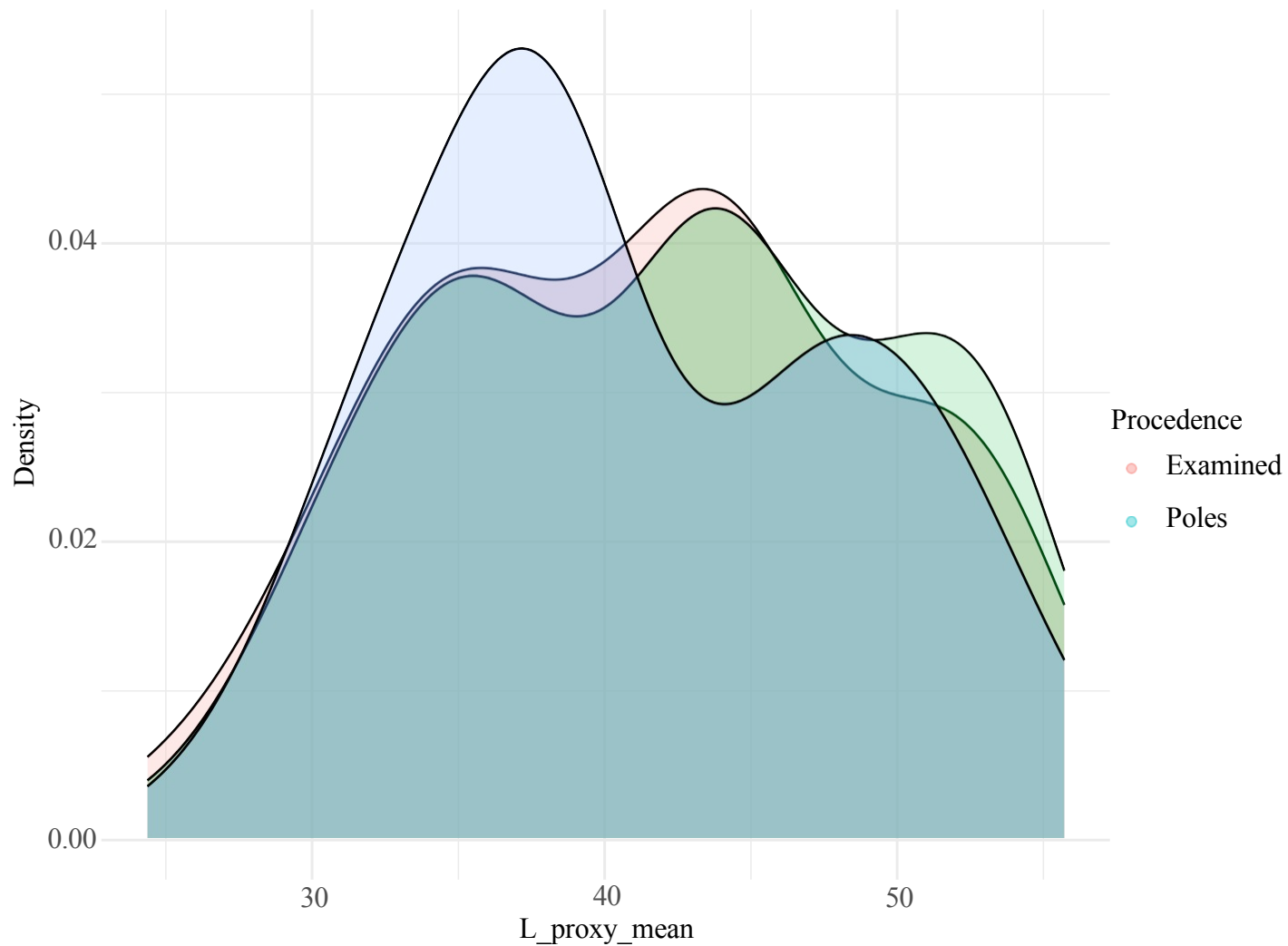
AndeanRural / Landcover / Comparison with Examined & Poles

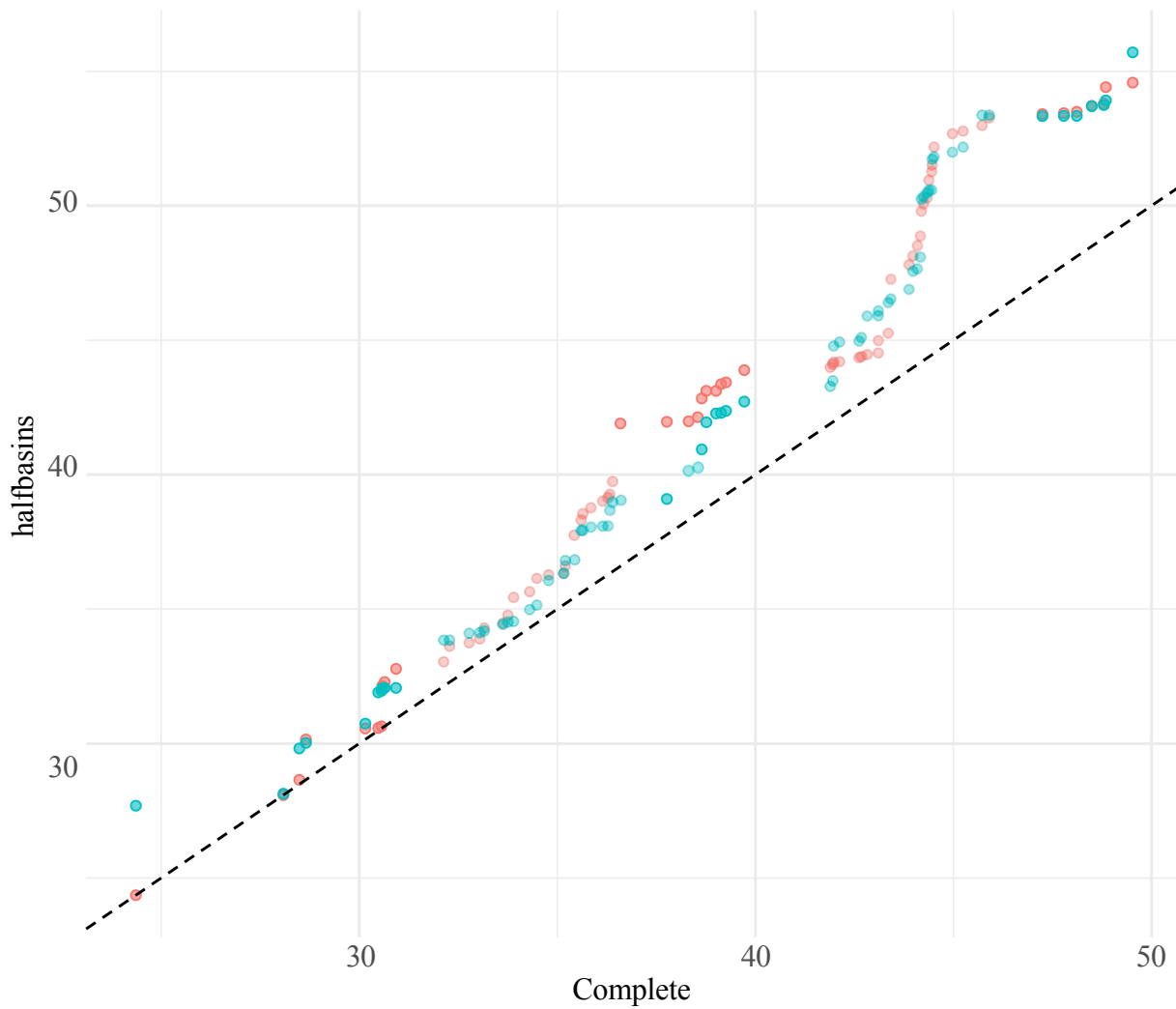
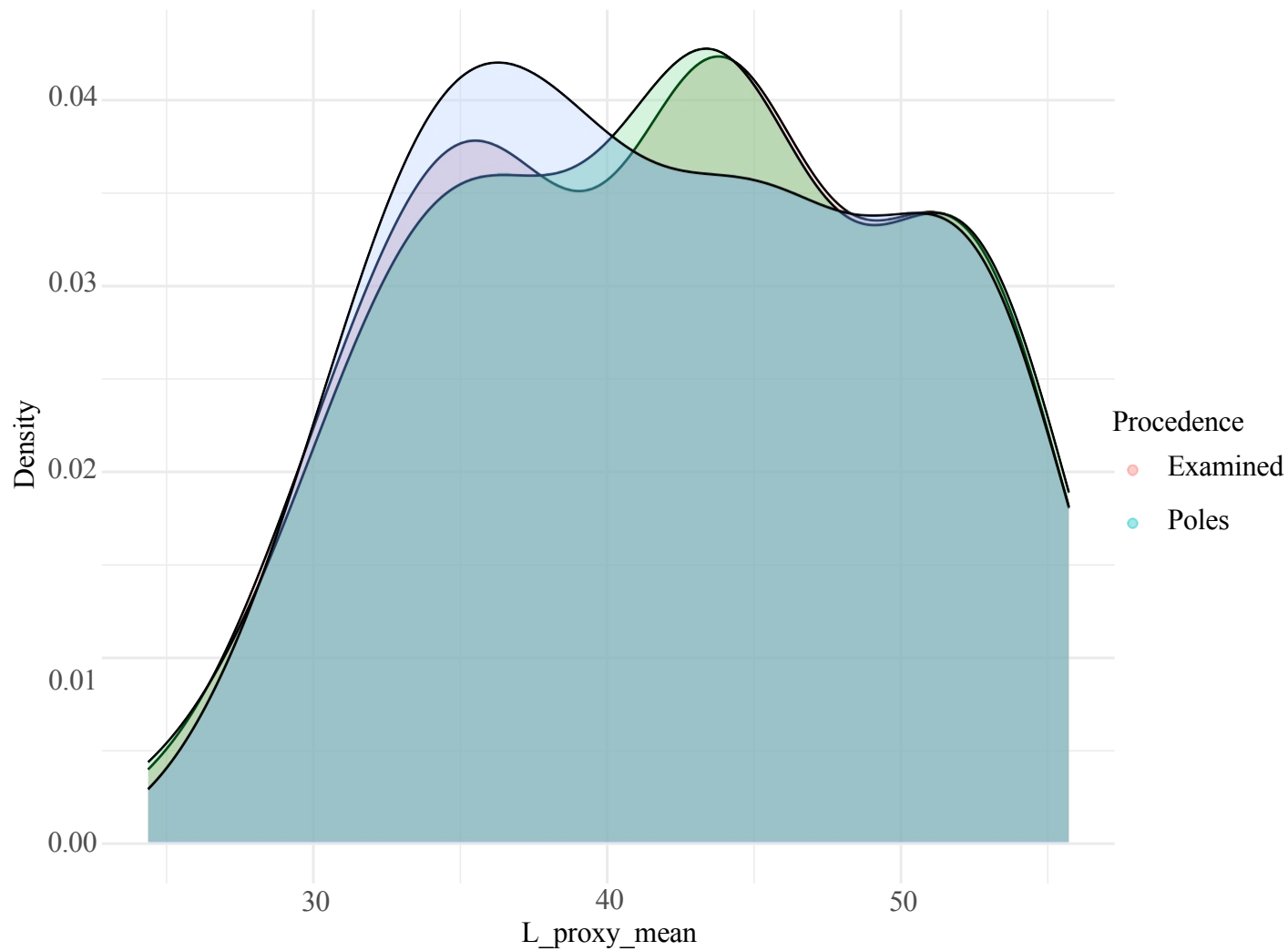
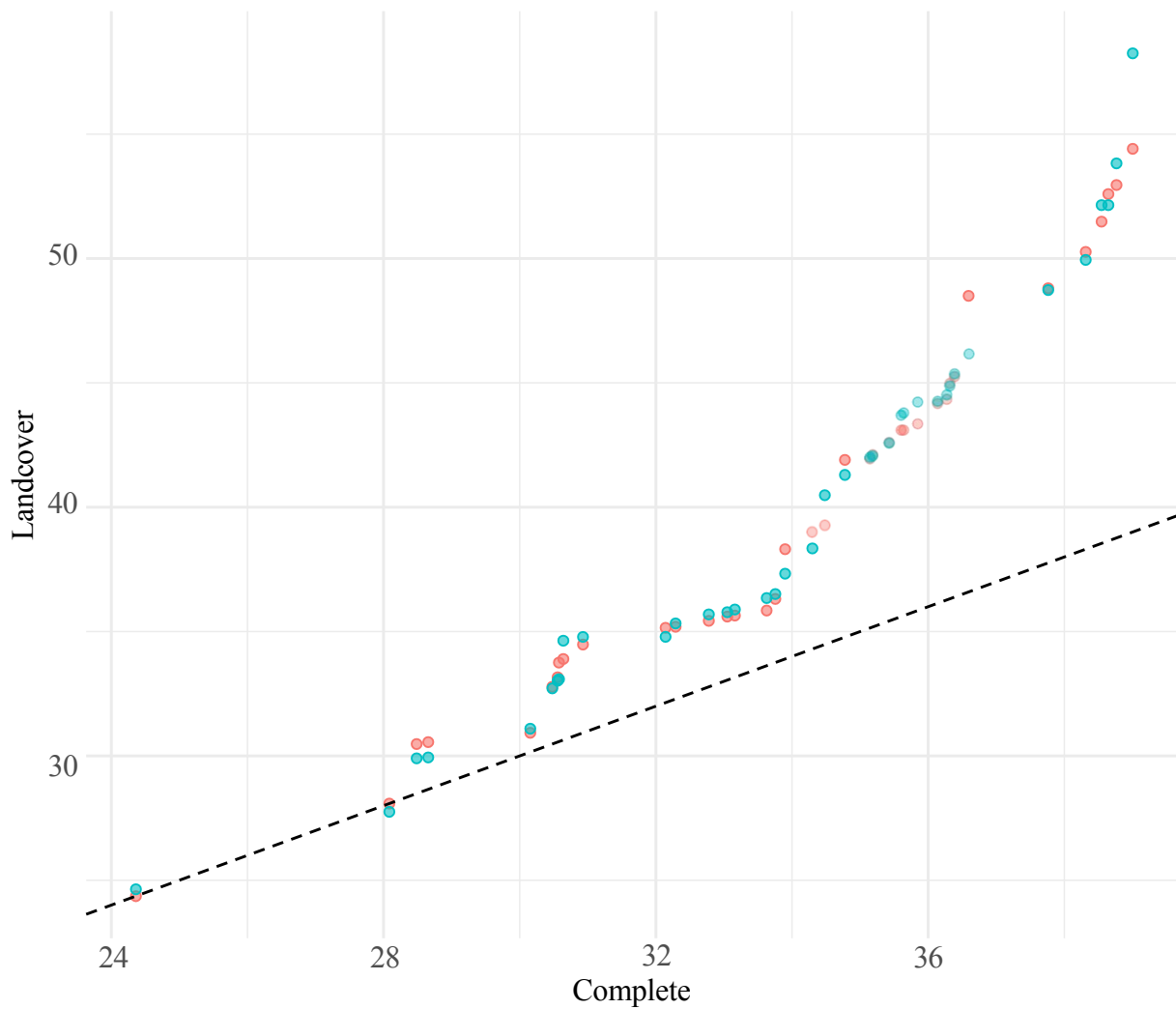
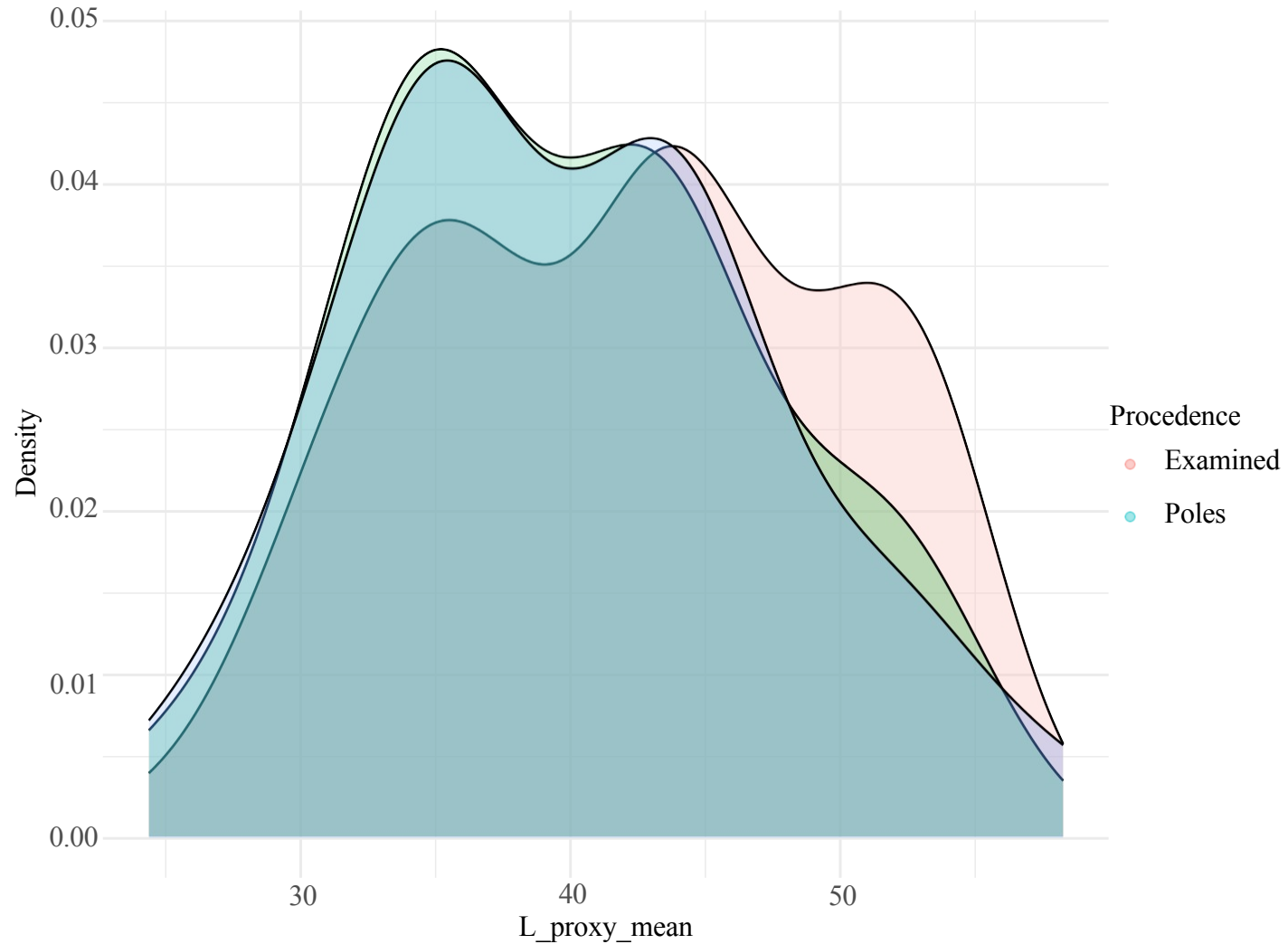
A Q-Q Plot

B Density plot

AndeanUrban / basins / Comparison with Examined & Poles

A Q−Q Plot

B Density plot

AndeanUrban / halfbasins / Comparison with Examined & Poles

AndeanUrban / Landcover / Comparison with Examined & Poles

A   Q−Q Plot

B   Density plot

AndeanUrban / SLIC / Comparison with Examined & Poles

A   Q−Q Plot

B   Density plot

Plains / basins / Comparison with Examined & Poles

A   Q−Q Plot

B   Density plot

Plains / halfbasins / Comparison with Examined & Poles

Plains / Landcover / Comparison with Examined & Poles

A Q−Q Plot

B Density plot

Plains / SLIC / Comparison with Examined & Poles

A   Q–Q Plot

B   Density plot