



*Supplement of*

## **Organic matter transformations are disconnected between surface water and the hyporheic zone**

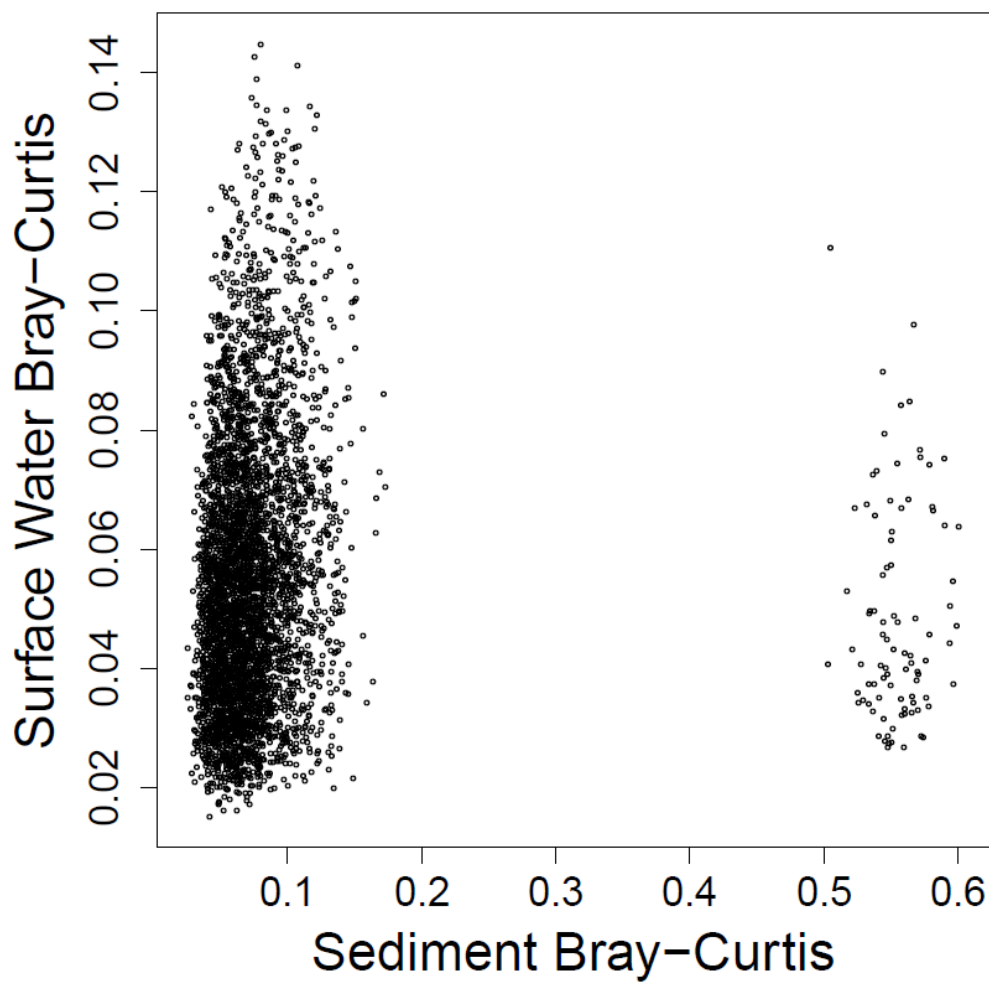
**James C. Stegen et al.**

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**Table S1.** Definitions of acronyms used in the manuscript. Acronyms are also defined upon first use.

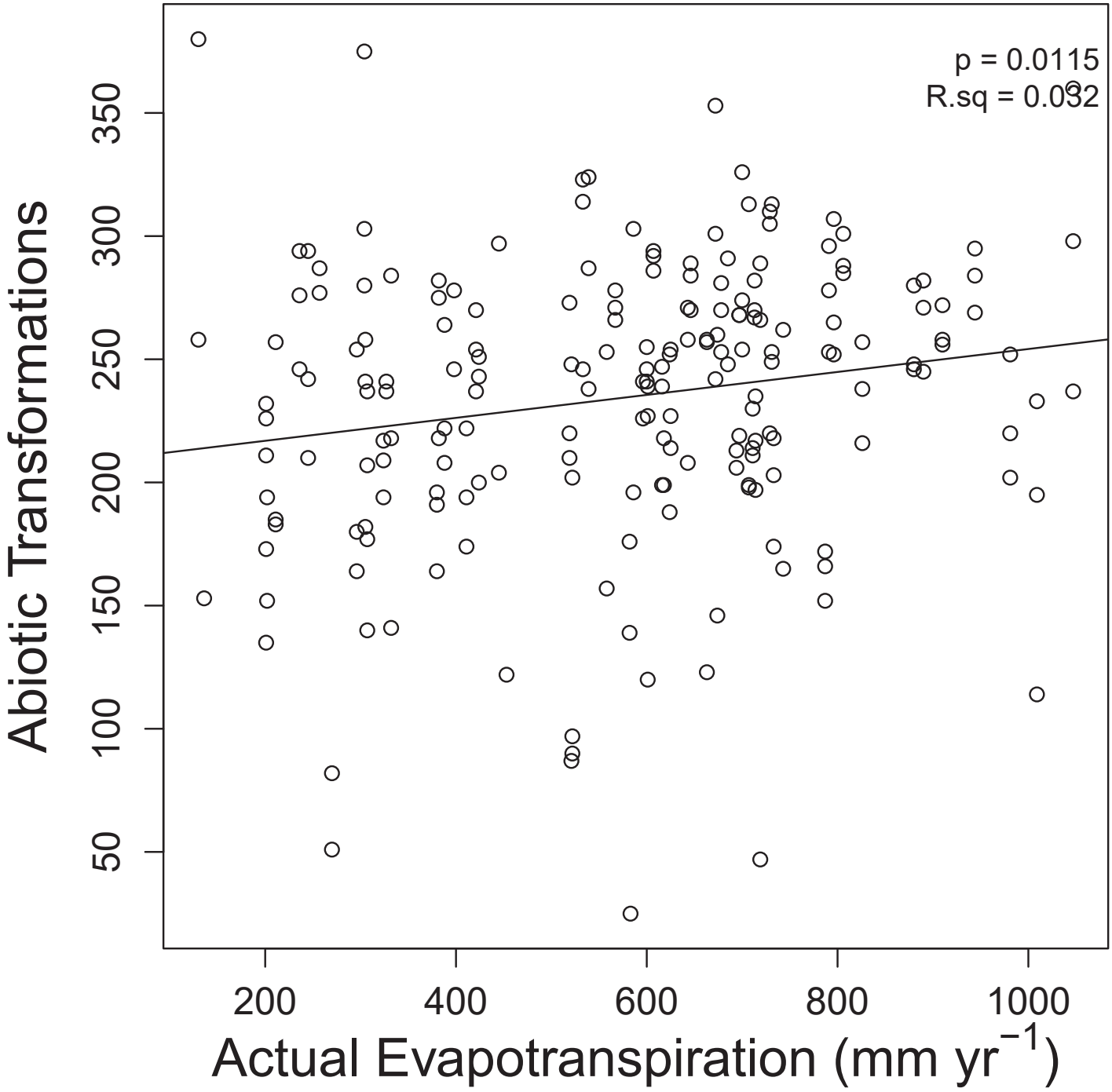
<b>Acronym/Abbreviation</b>	<b>Definition</b>
OM	Organic Matter
FTICR-MS	Fourier Transform Ion Cyclotron Resonance Mass Spectrometry
SW	Surface Water
Sed.	Sediment
MAP	Mean Annual Precipitation
MAT	Mean Annual Temperature
PET	Potential Evapotranspiration
AET	Actual Evapotranspiration
Da	Dalton
ppm	Parts per Million
S/N	Signal-to-Noise Ratio
m/z	Mass-to-Charge Ratio
ml	Milliliter
mg	Milligram
NPOC	Non-Purgable Organic Carbon
DI	Deionized
PNNL	Pacific Northwest National Lab
EMSL	Environmental Molecular Science Lab
WHONDRS	Worldwide Hydrobiogeochemistry Observation Network for Dynamic River Systems
ConUS	Contiguous United States



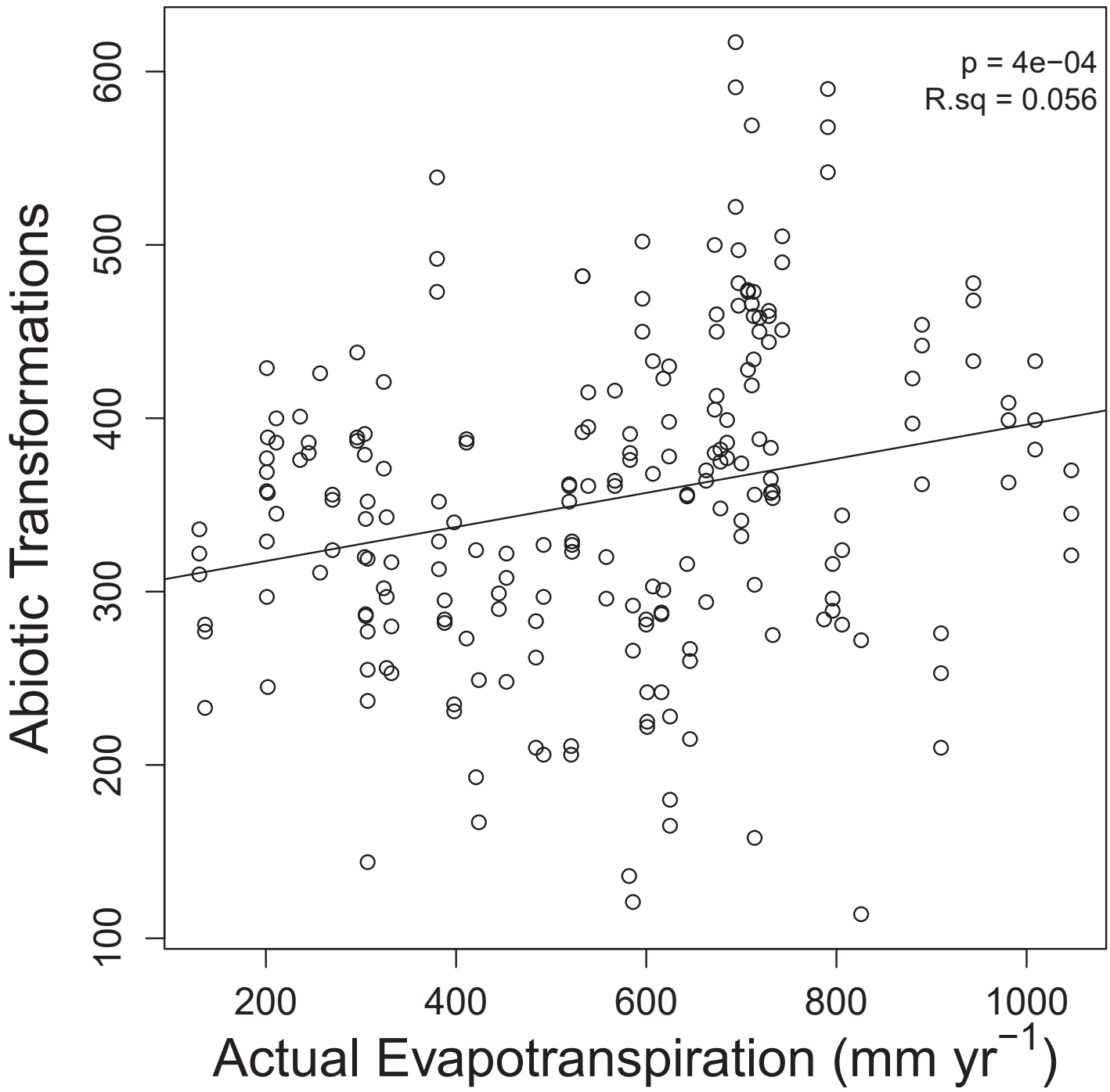
**Figure S1 (above).** Transformation profiles in sediments and surface water were weakly related to each other. Bray-Curtis dissimilarities in surface water and sediments are plotted against each other. Relative to Figure 4, this figure includes all pairwise comparisons for an outlier sample. The conceptual inference remains the same as that from Figure 4; there is no meaningful relationship between surface water and sediment OM transformation profiles.

**Additional Supplementary Figures (below).** Regression analysis for the number of abiotic and biotic transformations related to different potential explanatory variables. Panels use abbreviations and acronyms as follows: sediment (Sed.) and surface water (SW) transformation counts and latitude, longitude, mean annual precipitation (MAP), mean annual temperature (MAT), potential evapotranspiration (PET), and actual evapotranspiration (AET). Each open circle is from one sampling site. Regression statistics are provided on each panel and the solid line represents the regression model, even if it was not significant. See Table S1 for all acronyms and abbreviations.

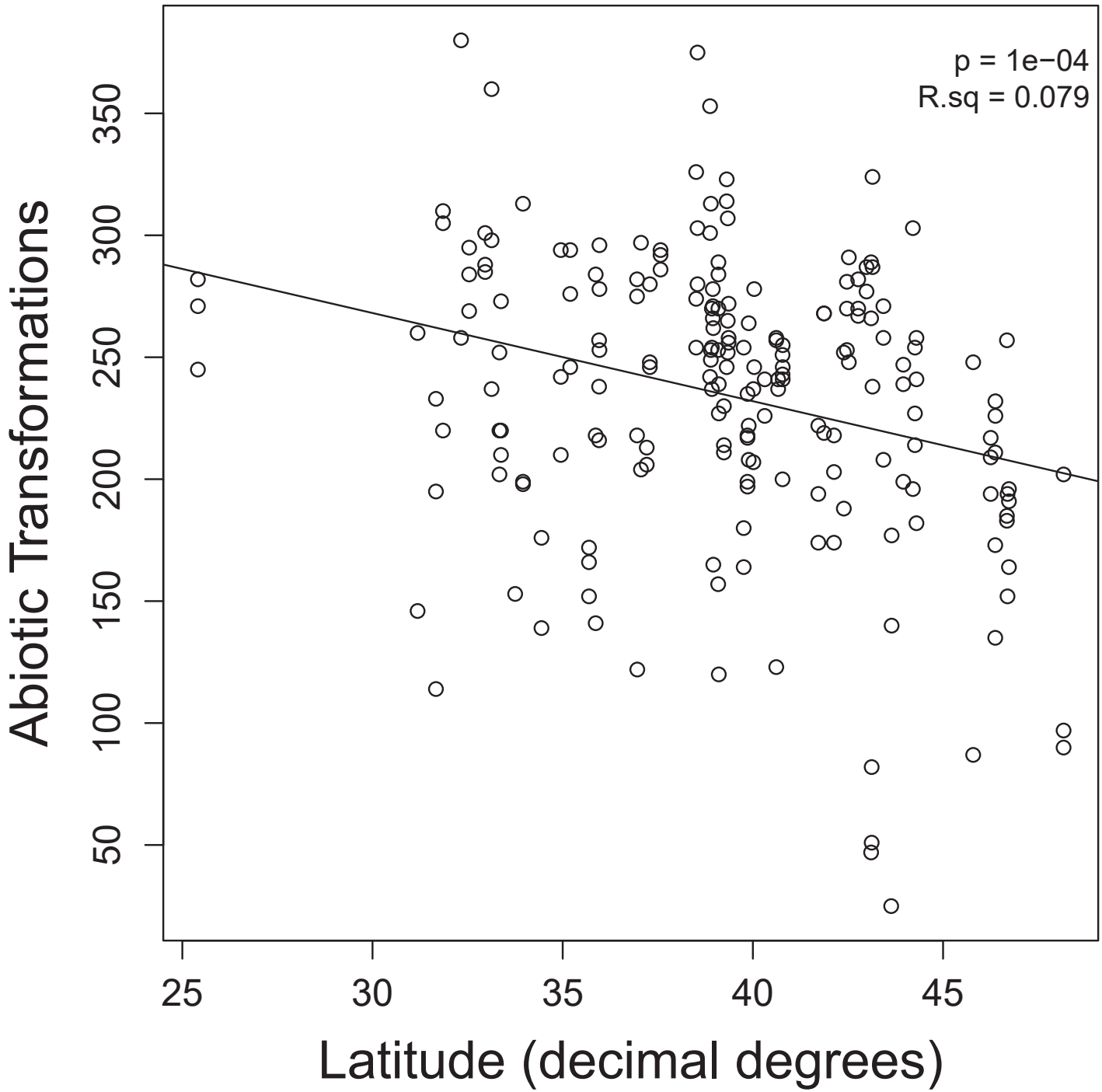
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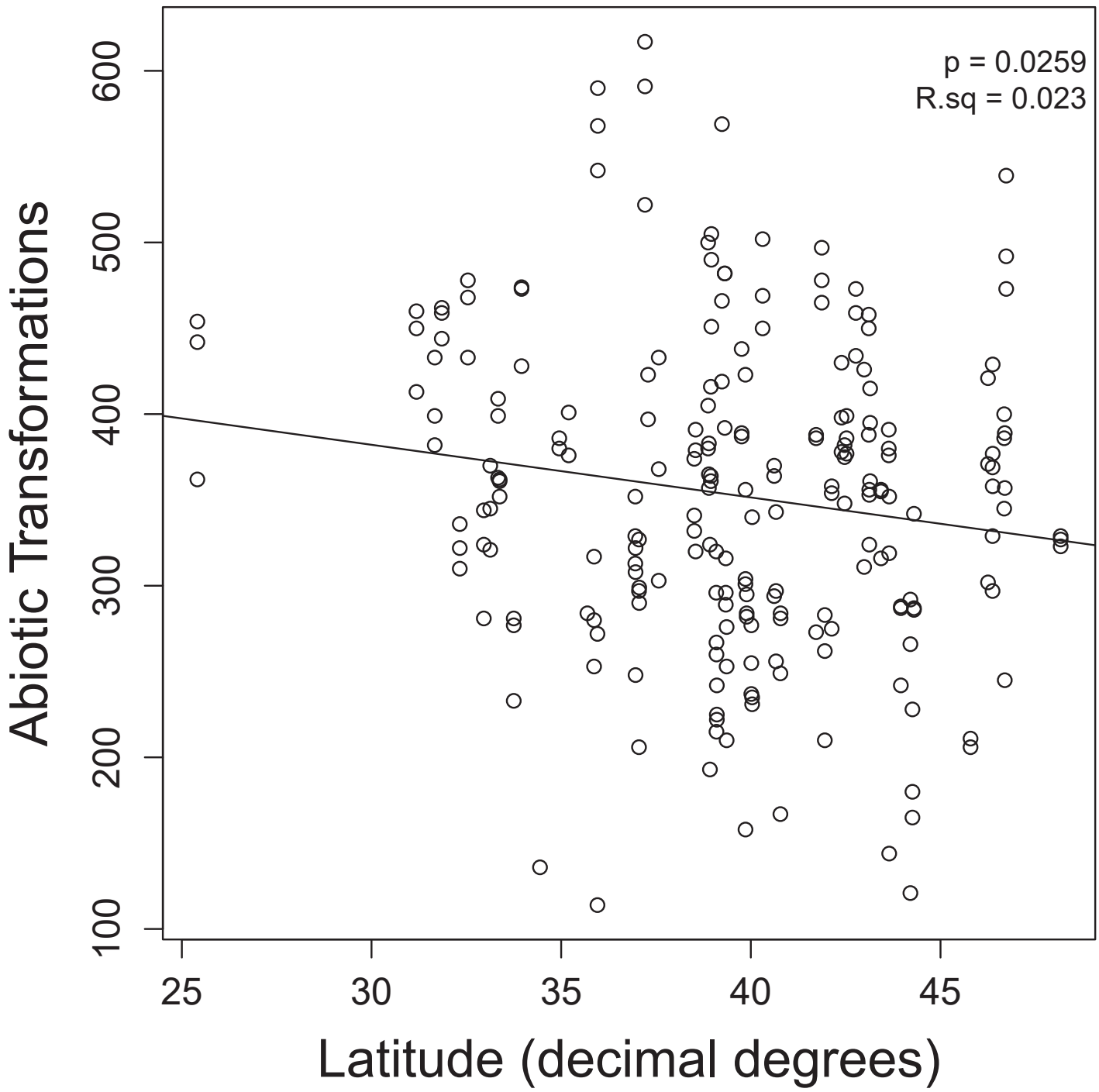
# Surface Water



# Sediment

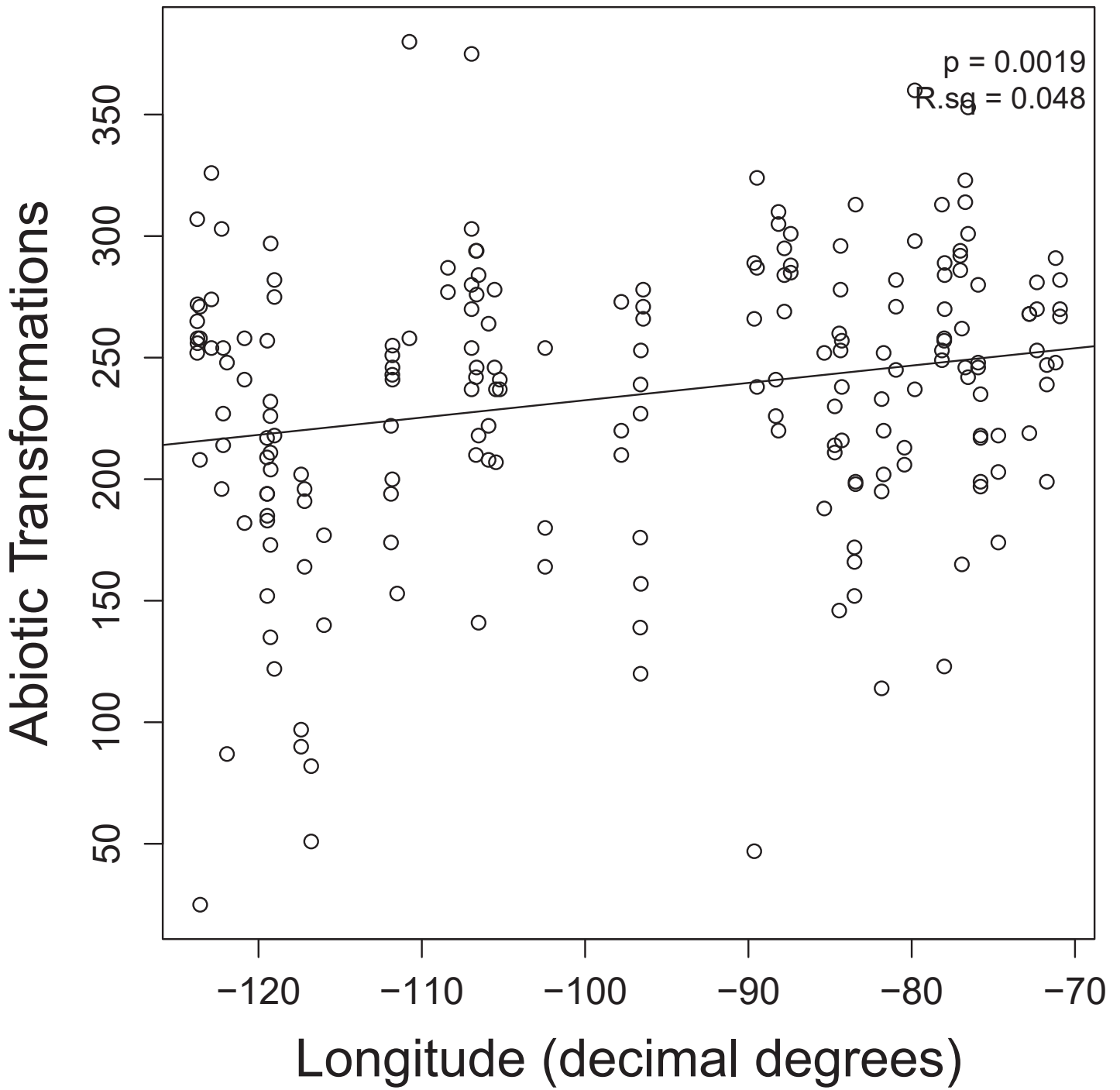


# Surface Water

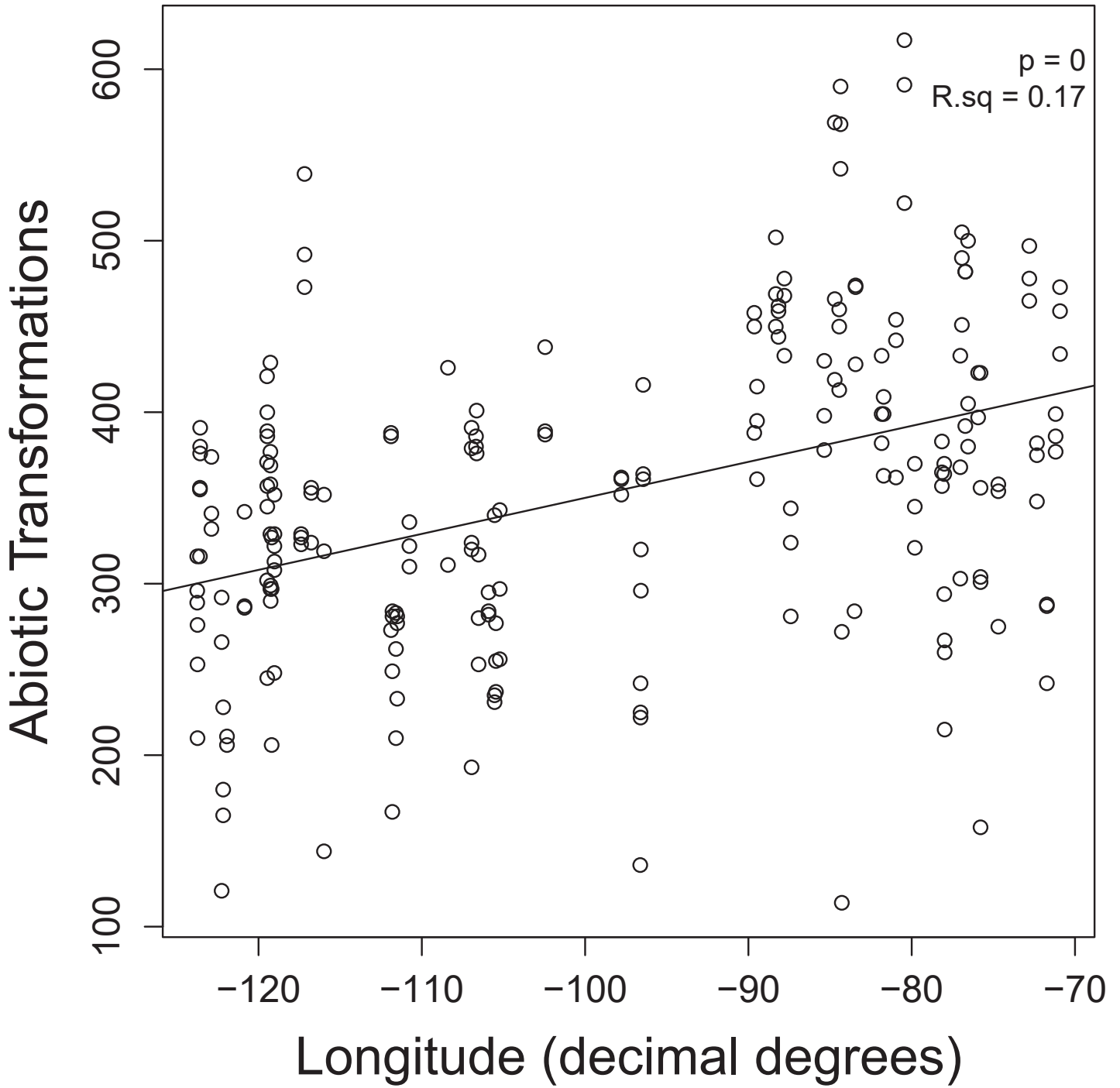




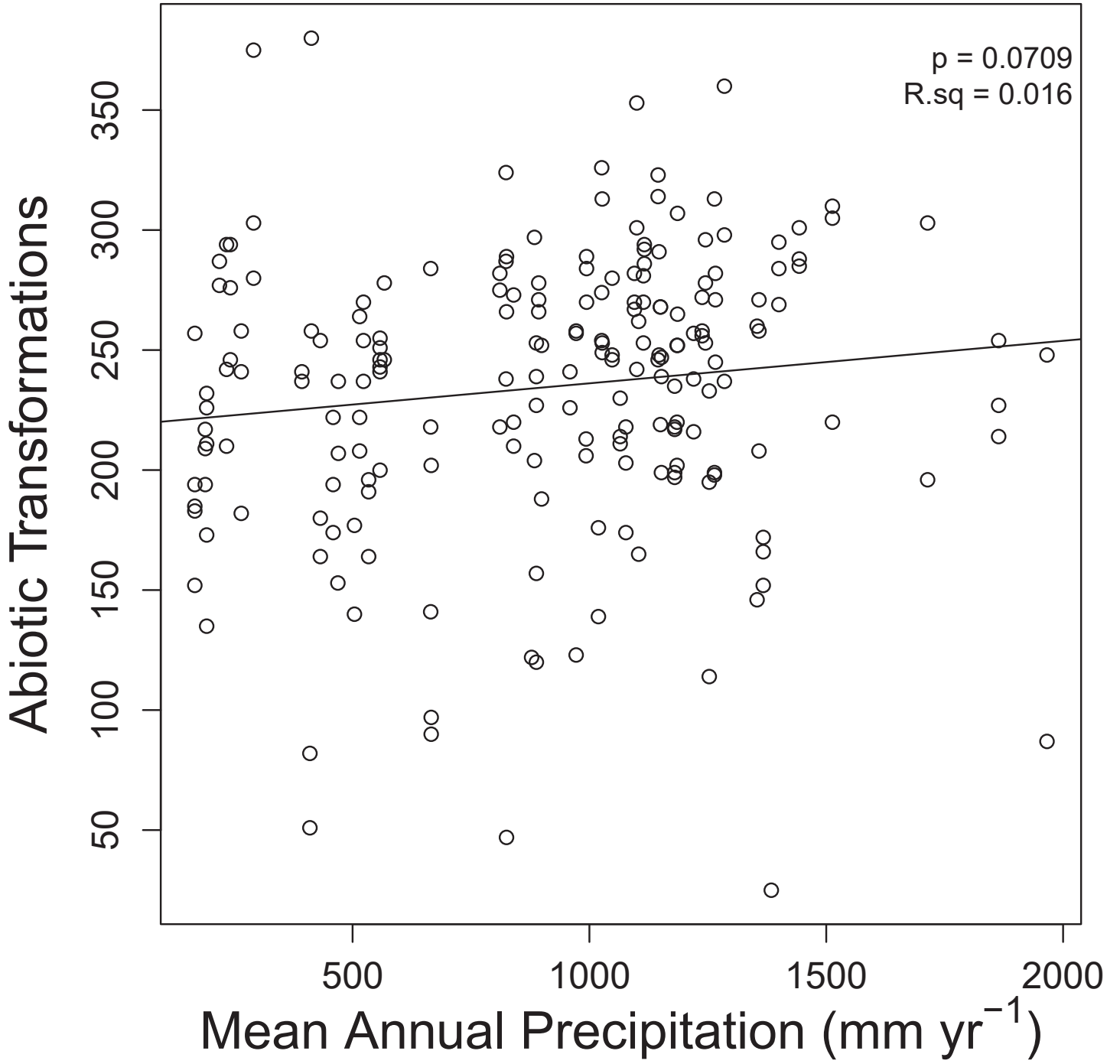
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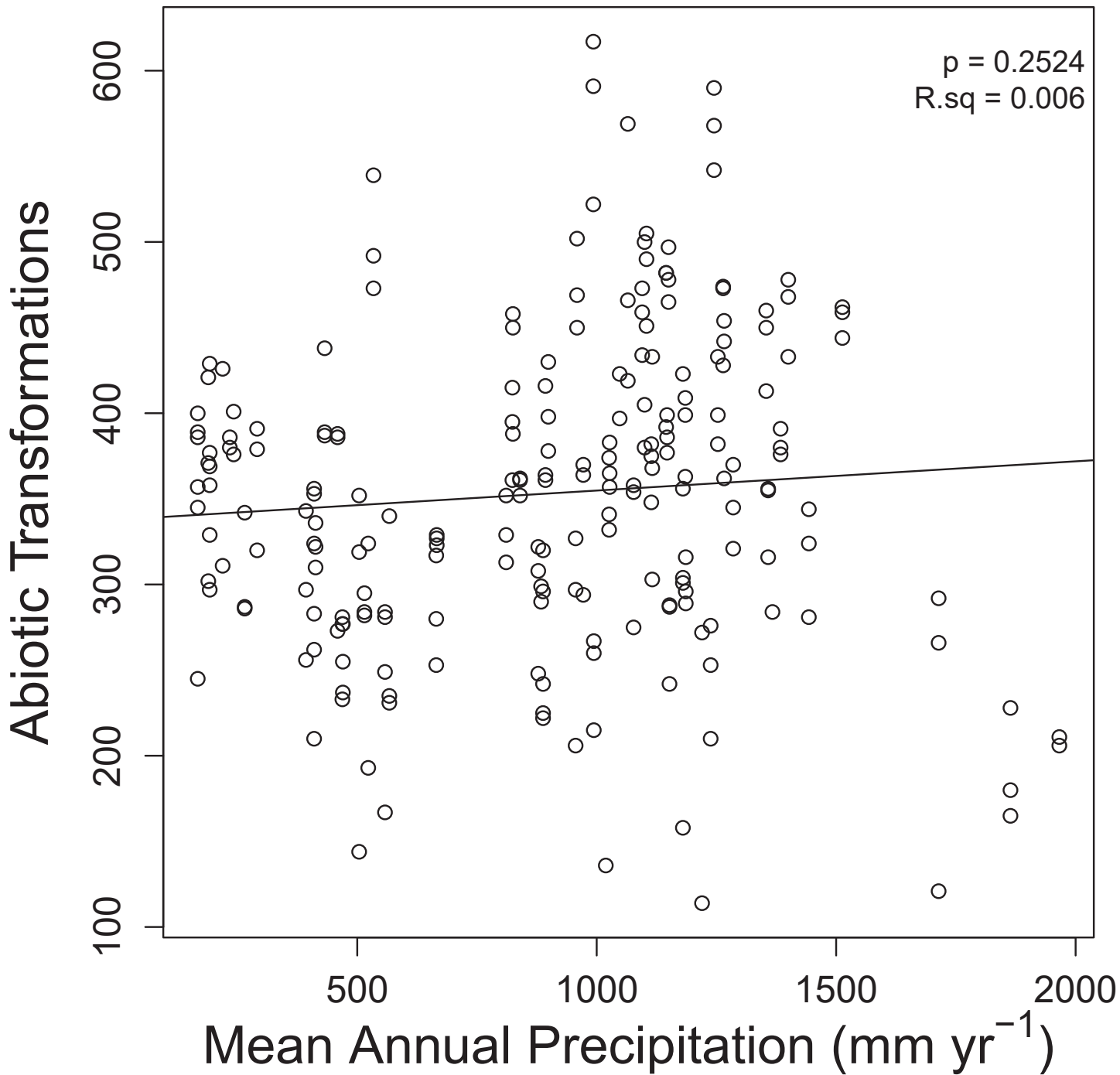
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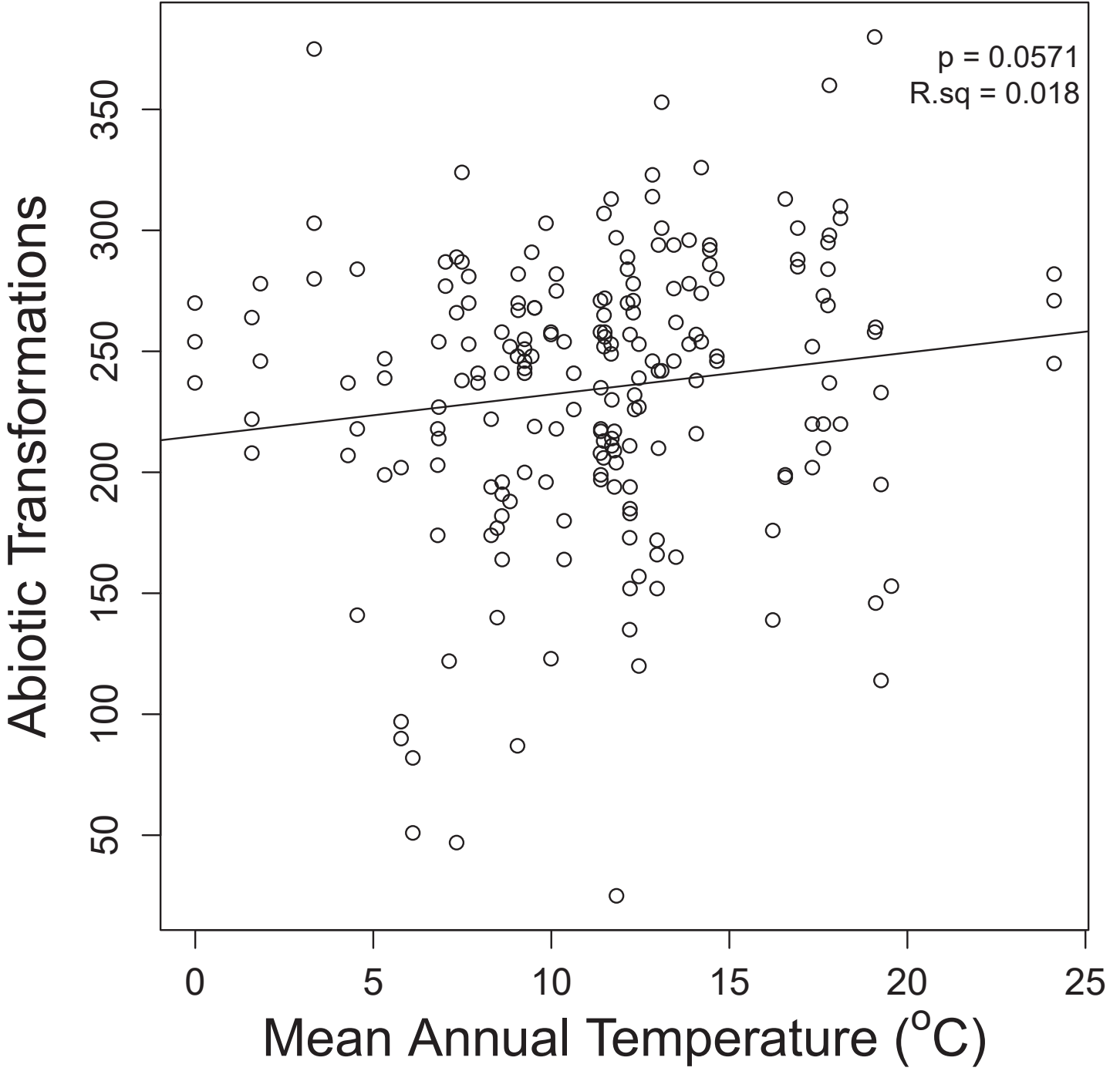
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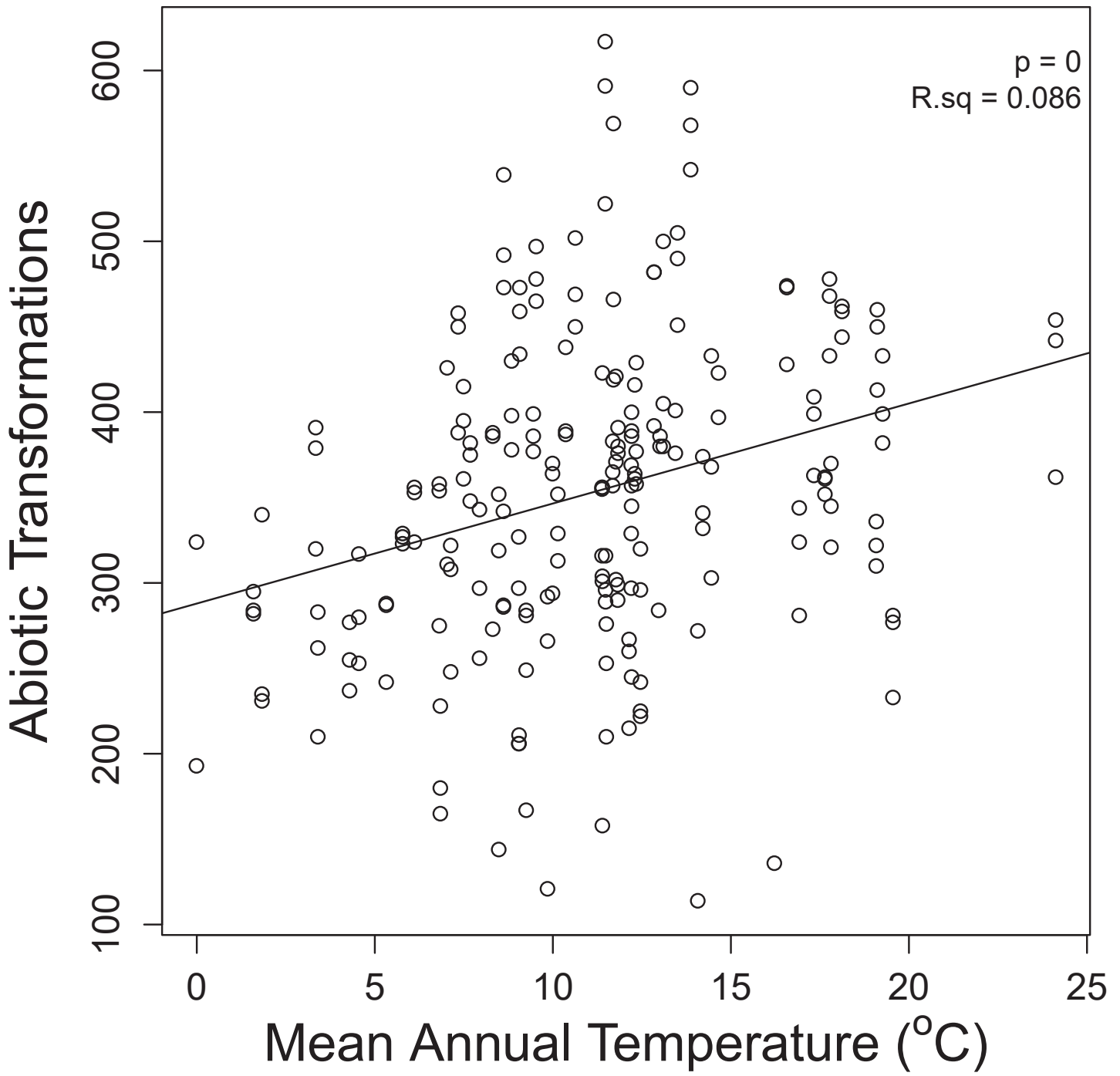
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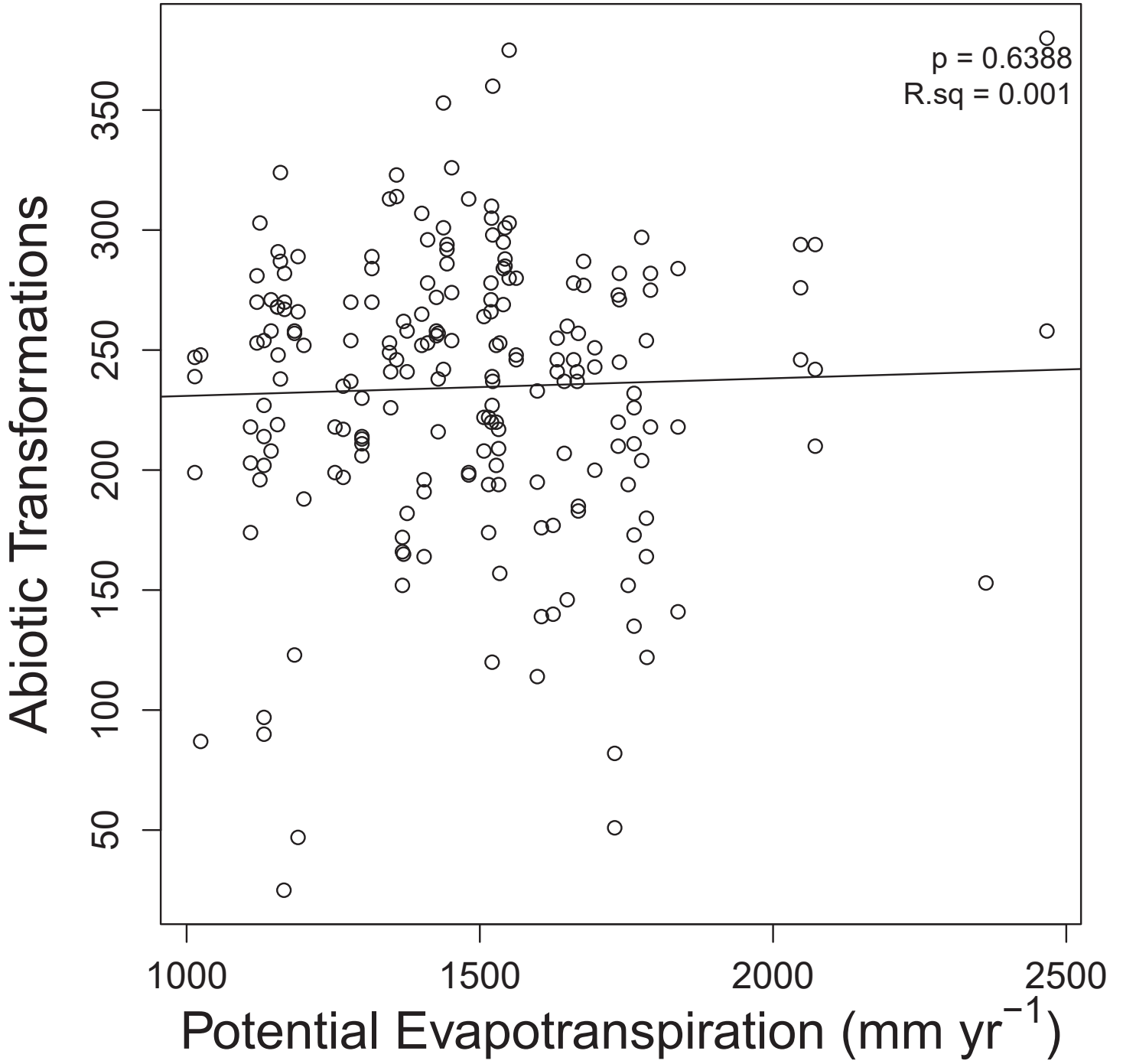
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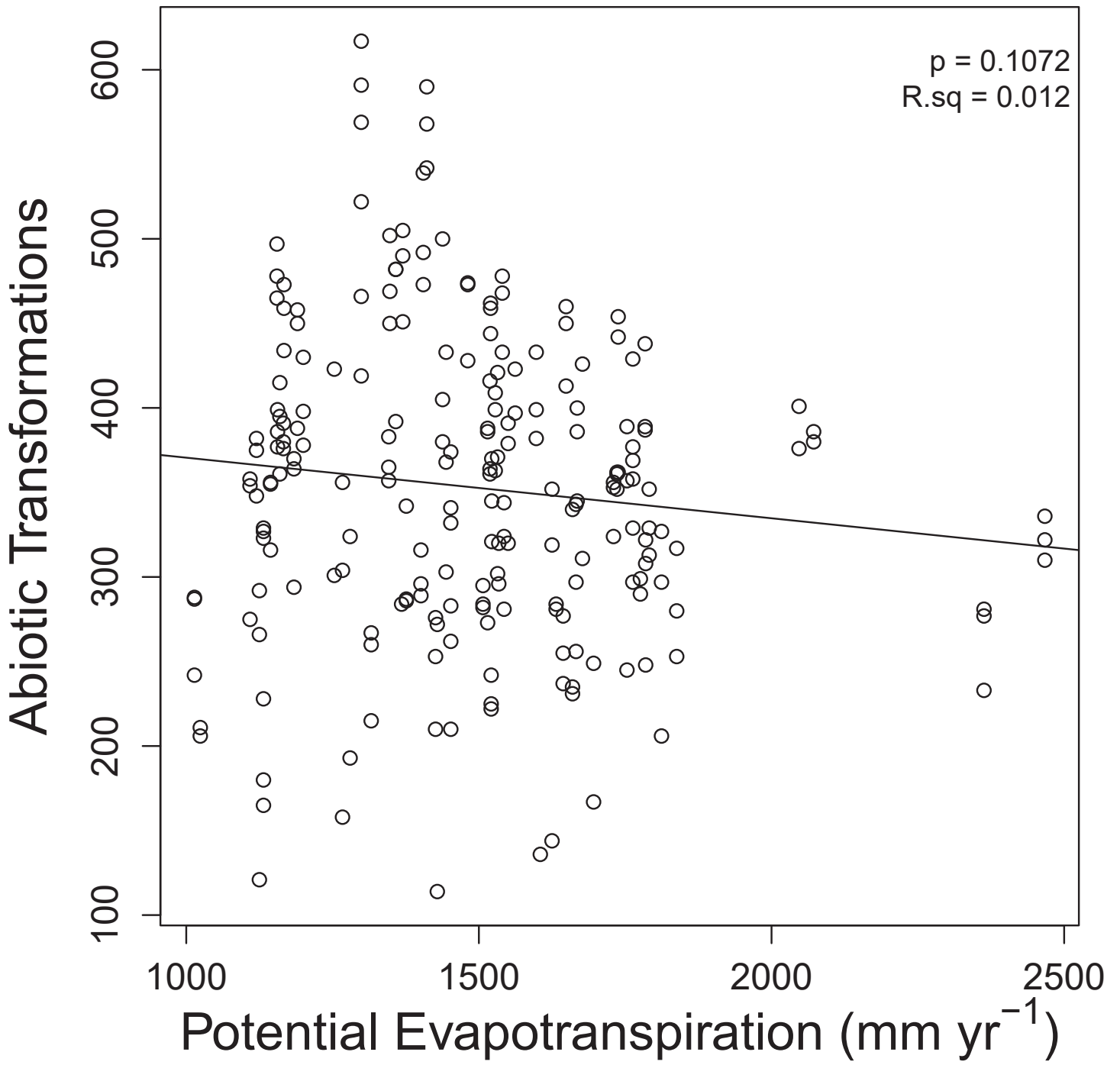
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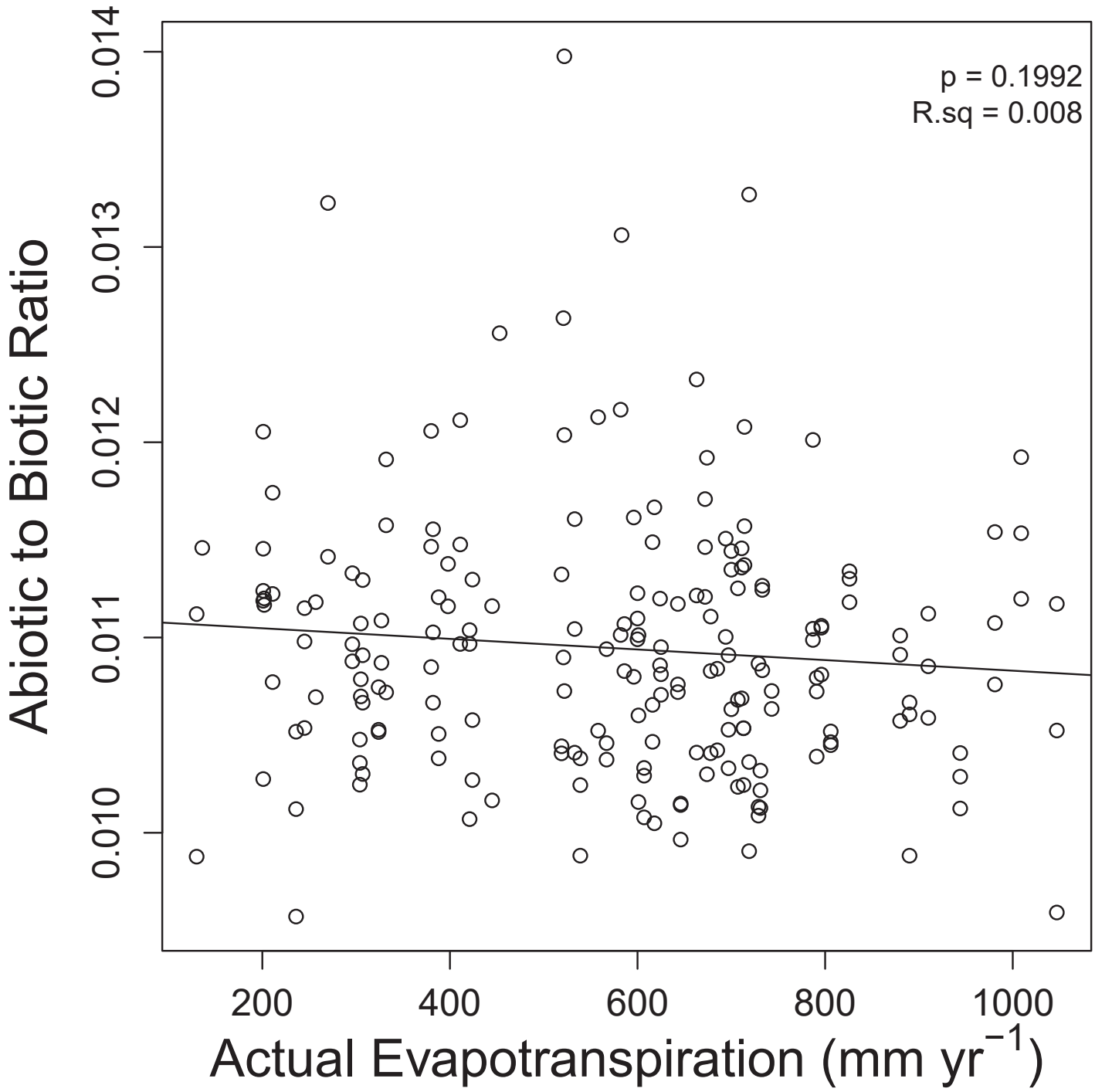


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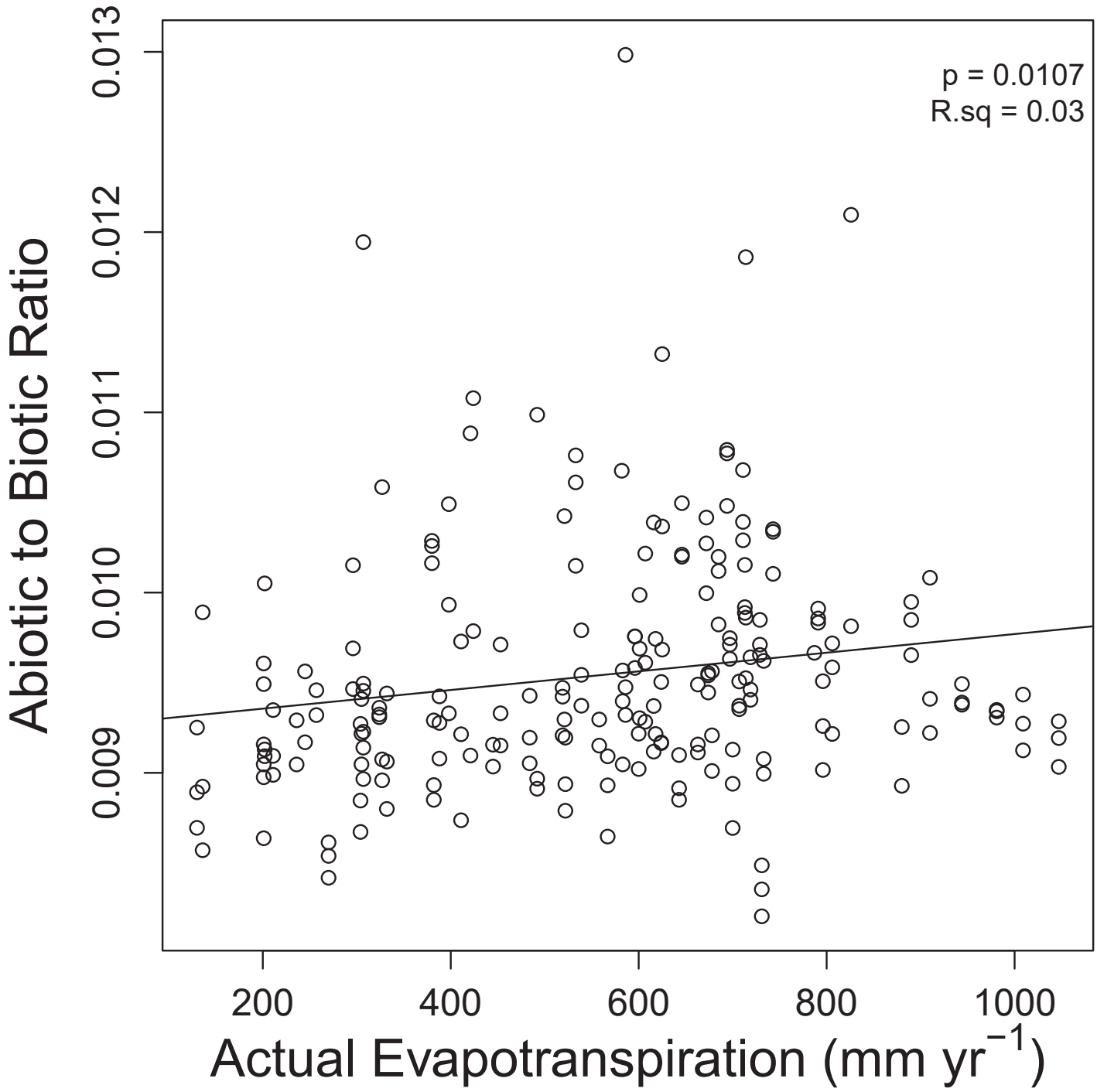




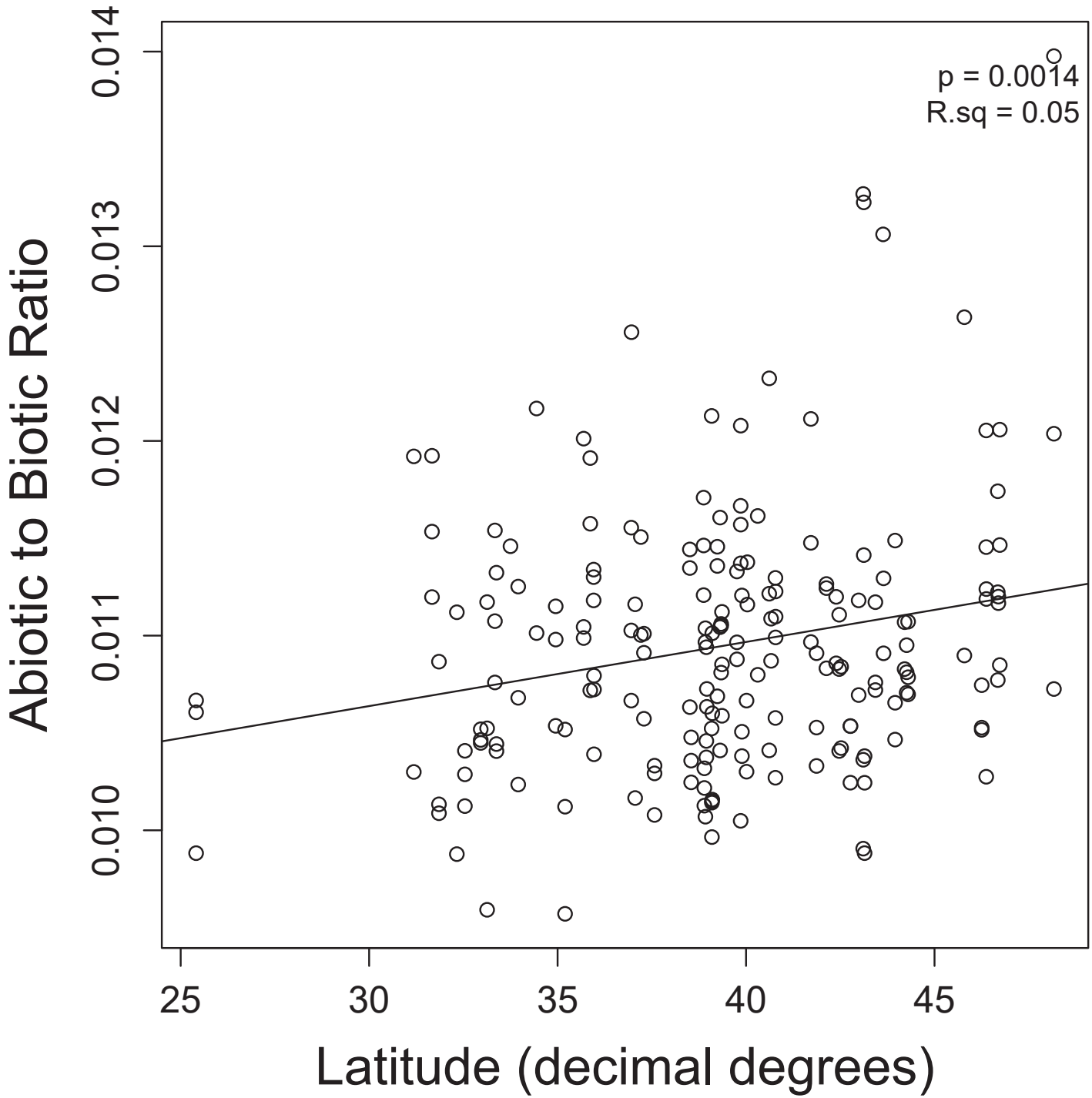
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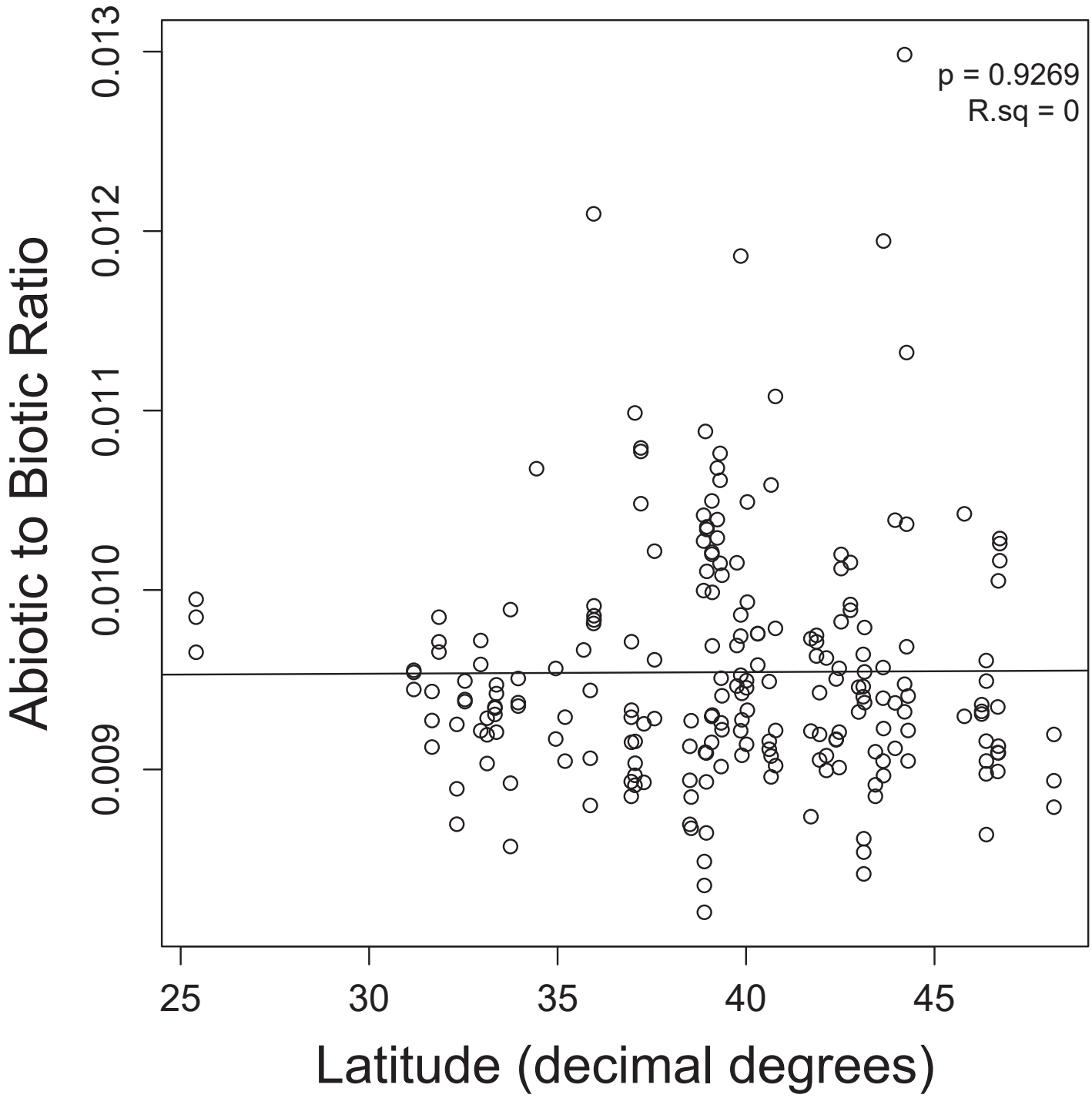
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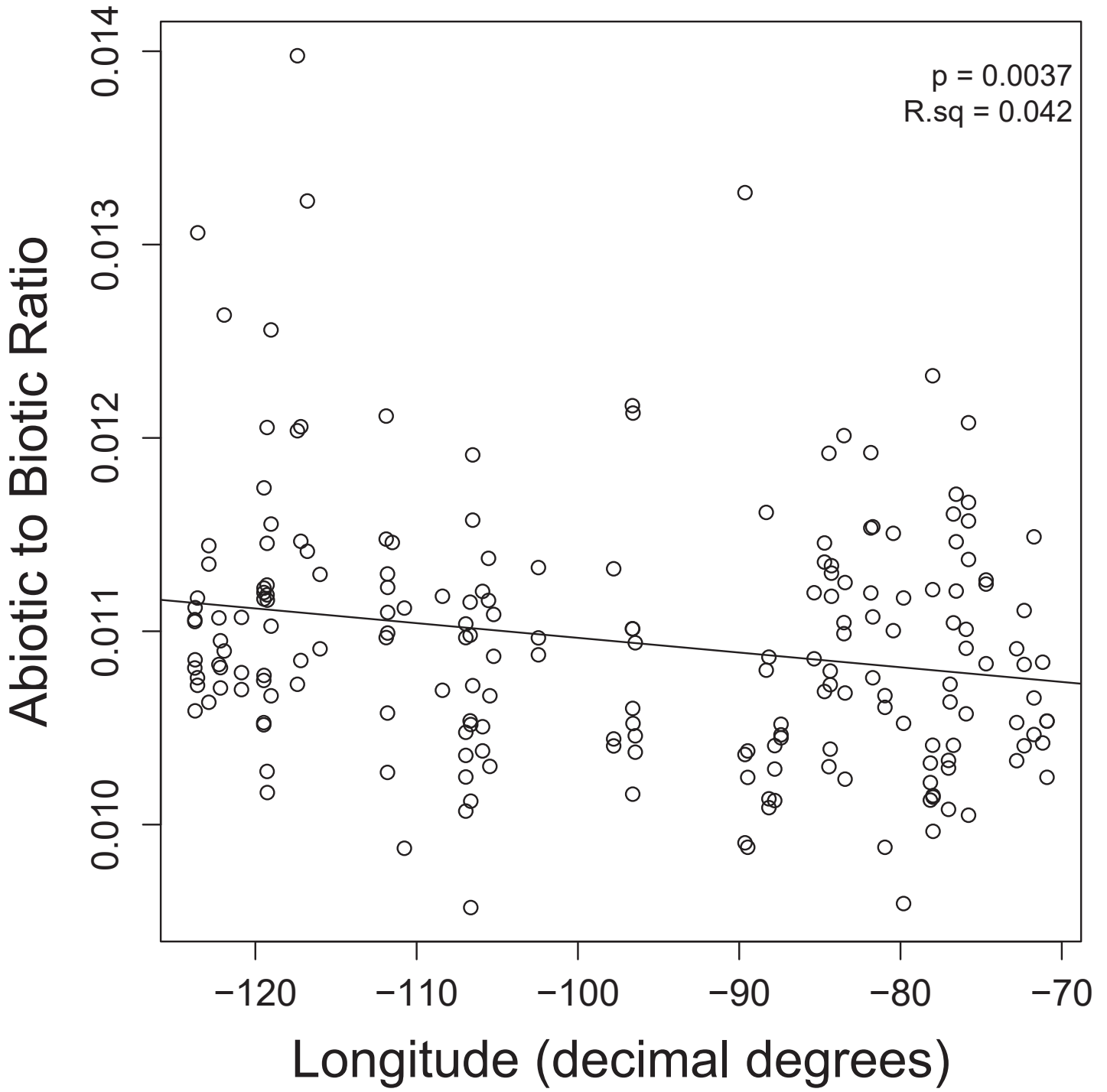
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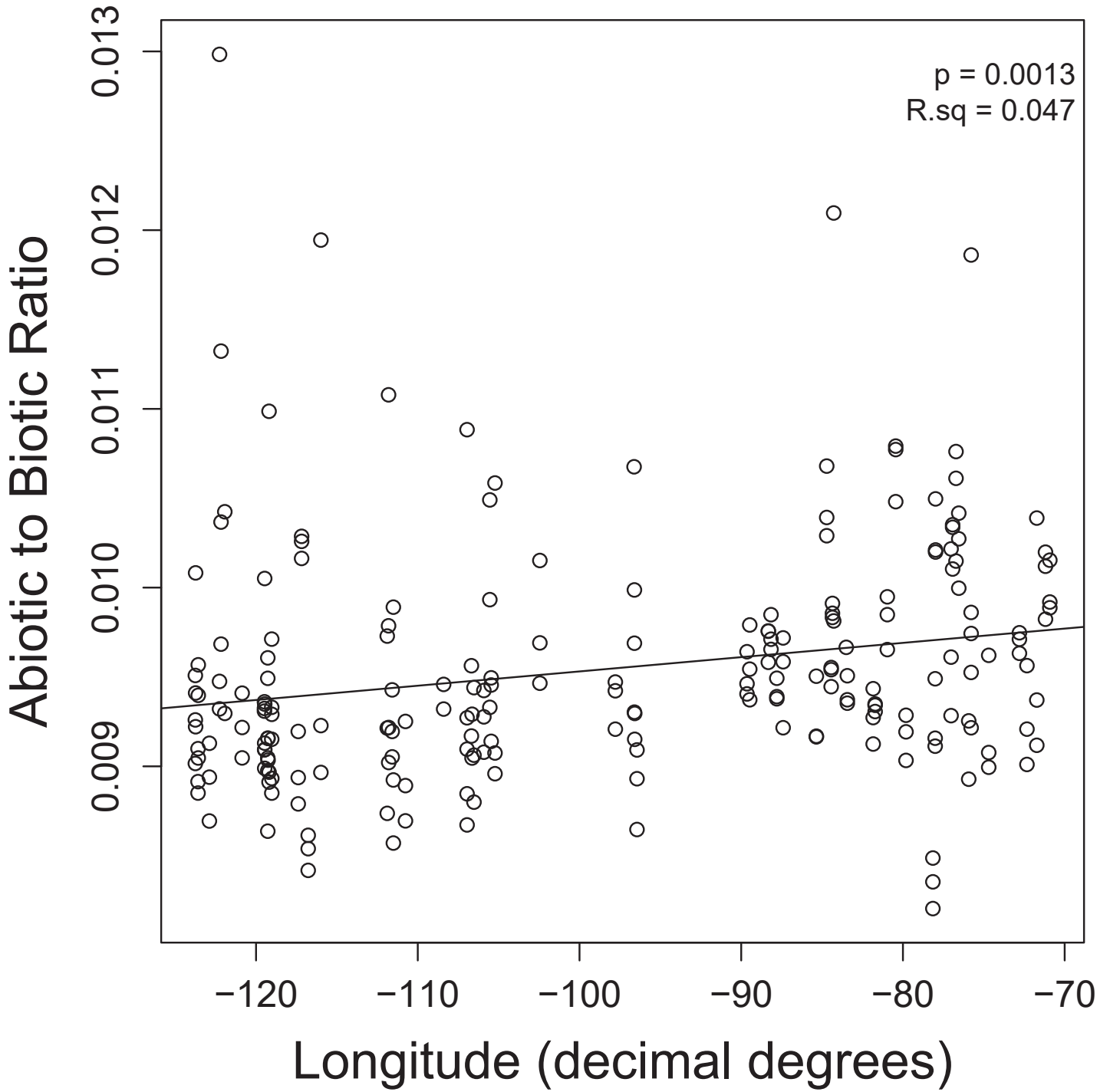
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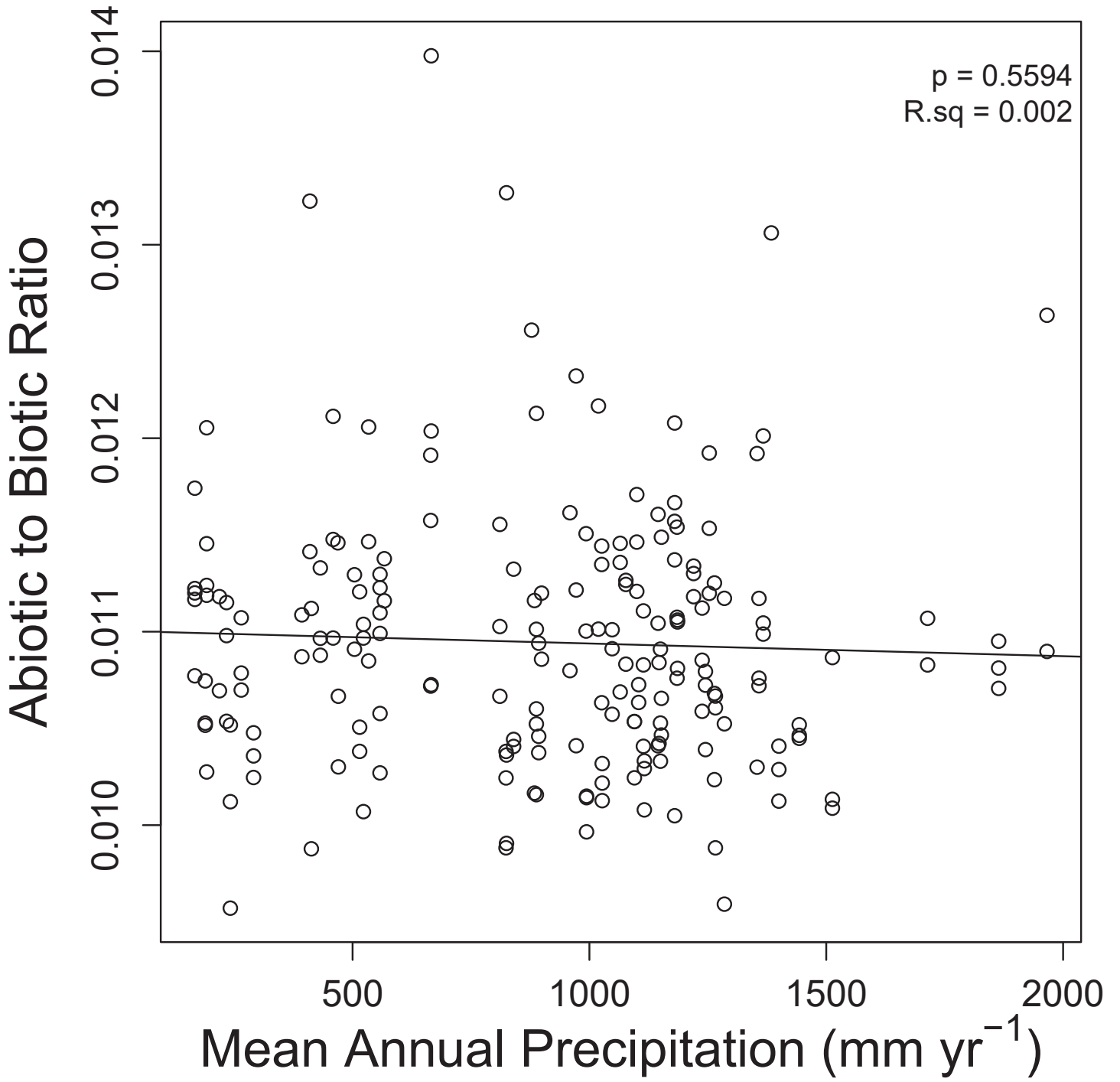
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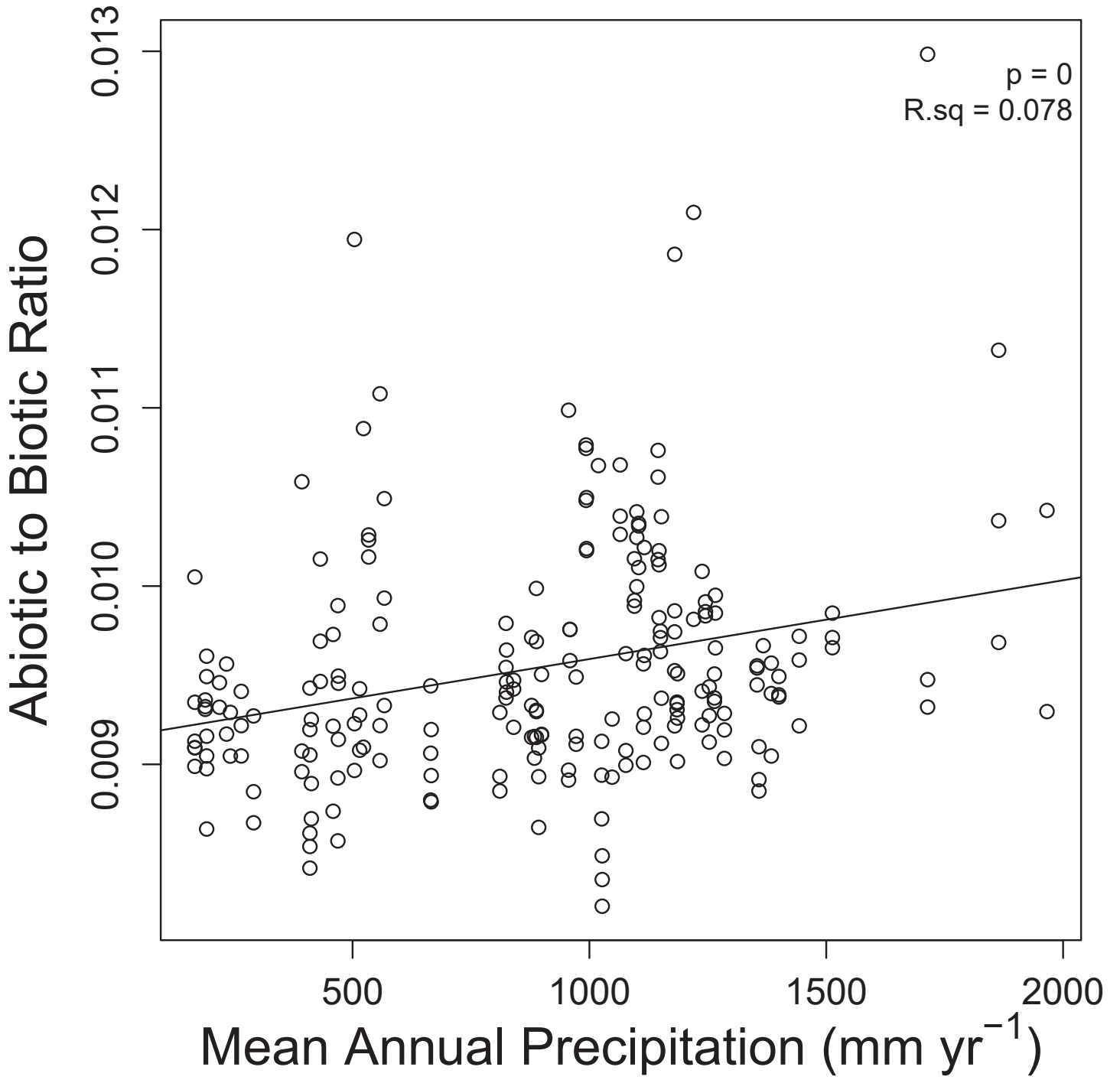
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# Sediment

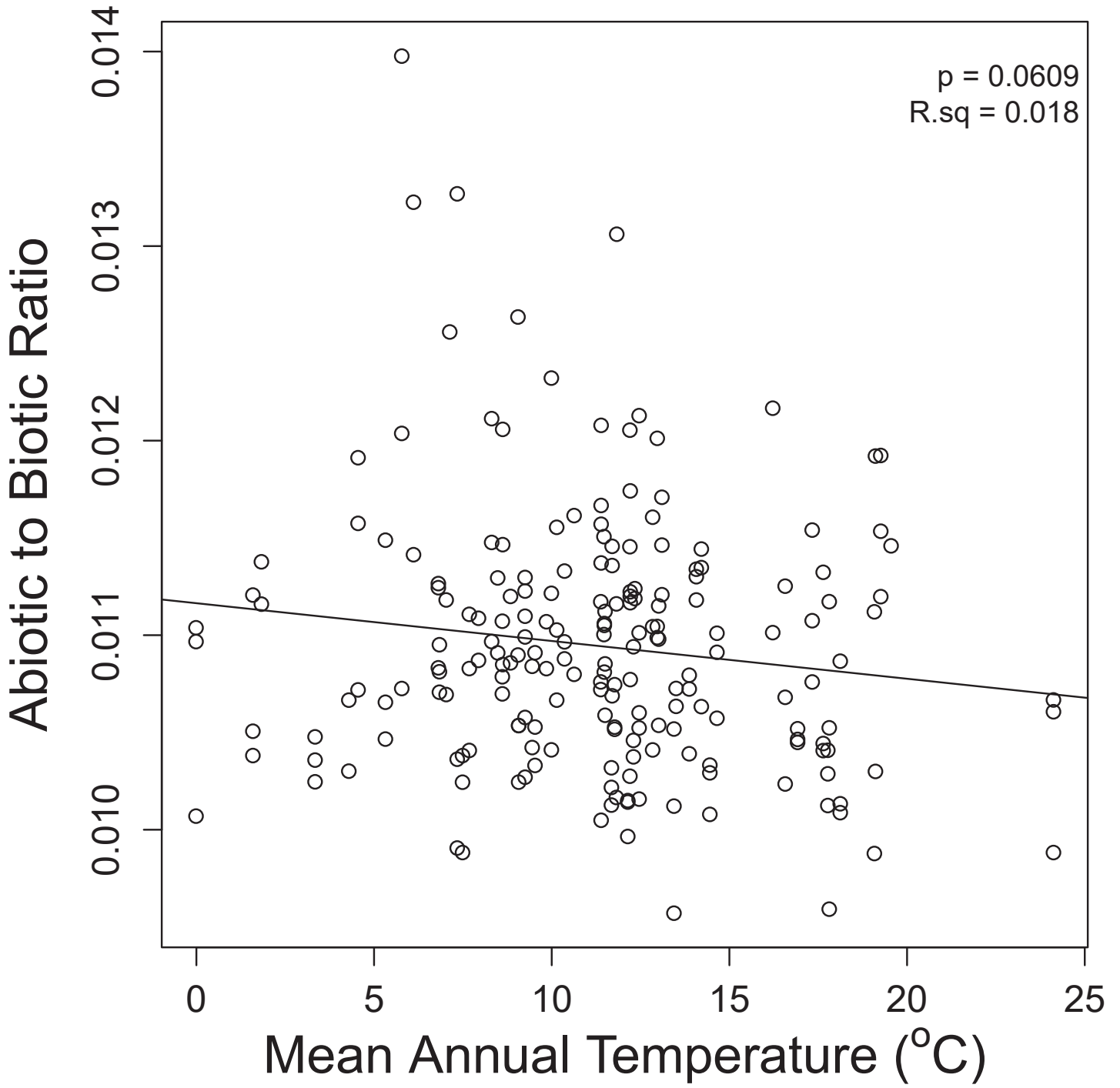


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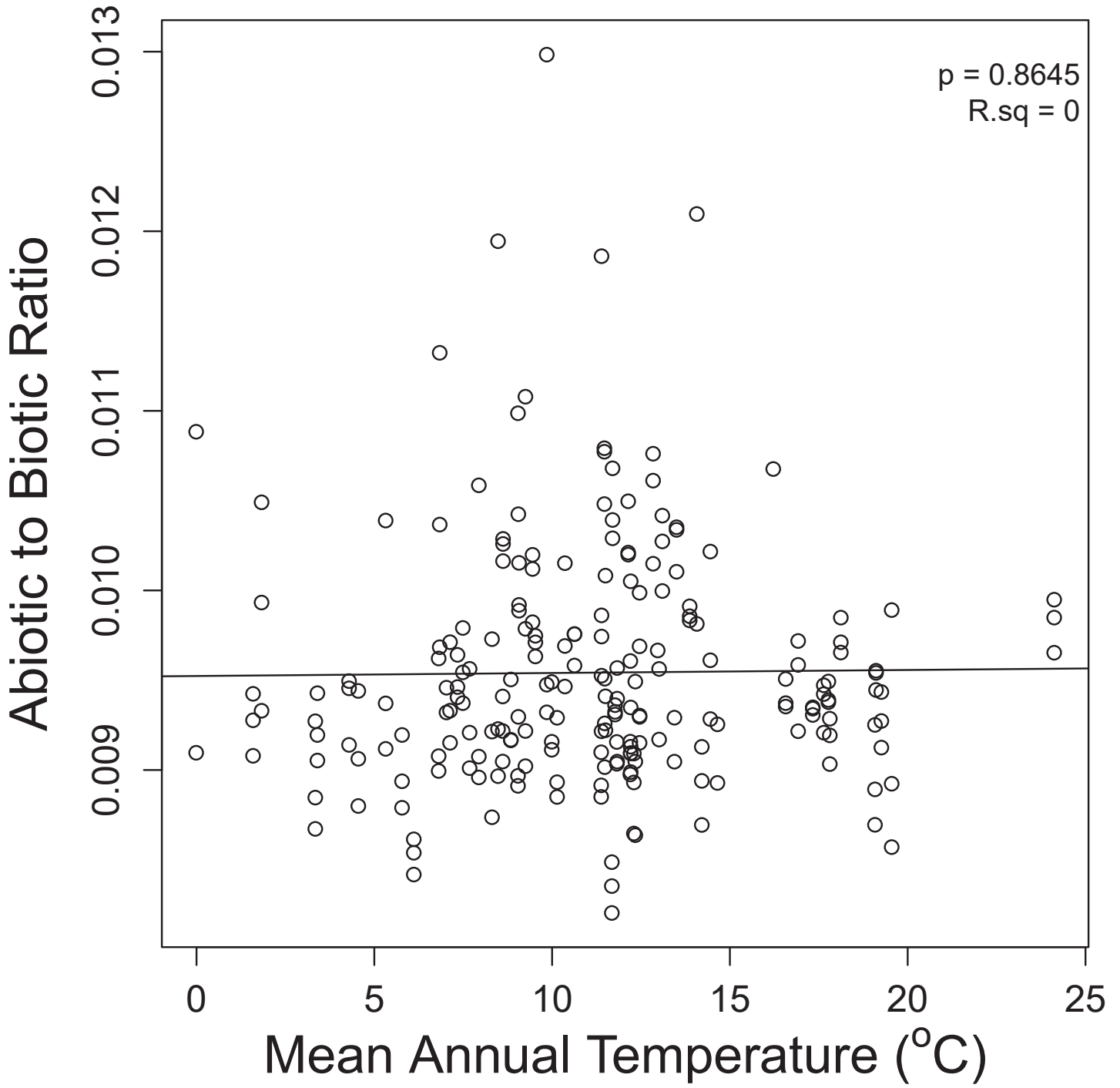




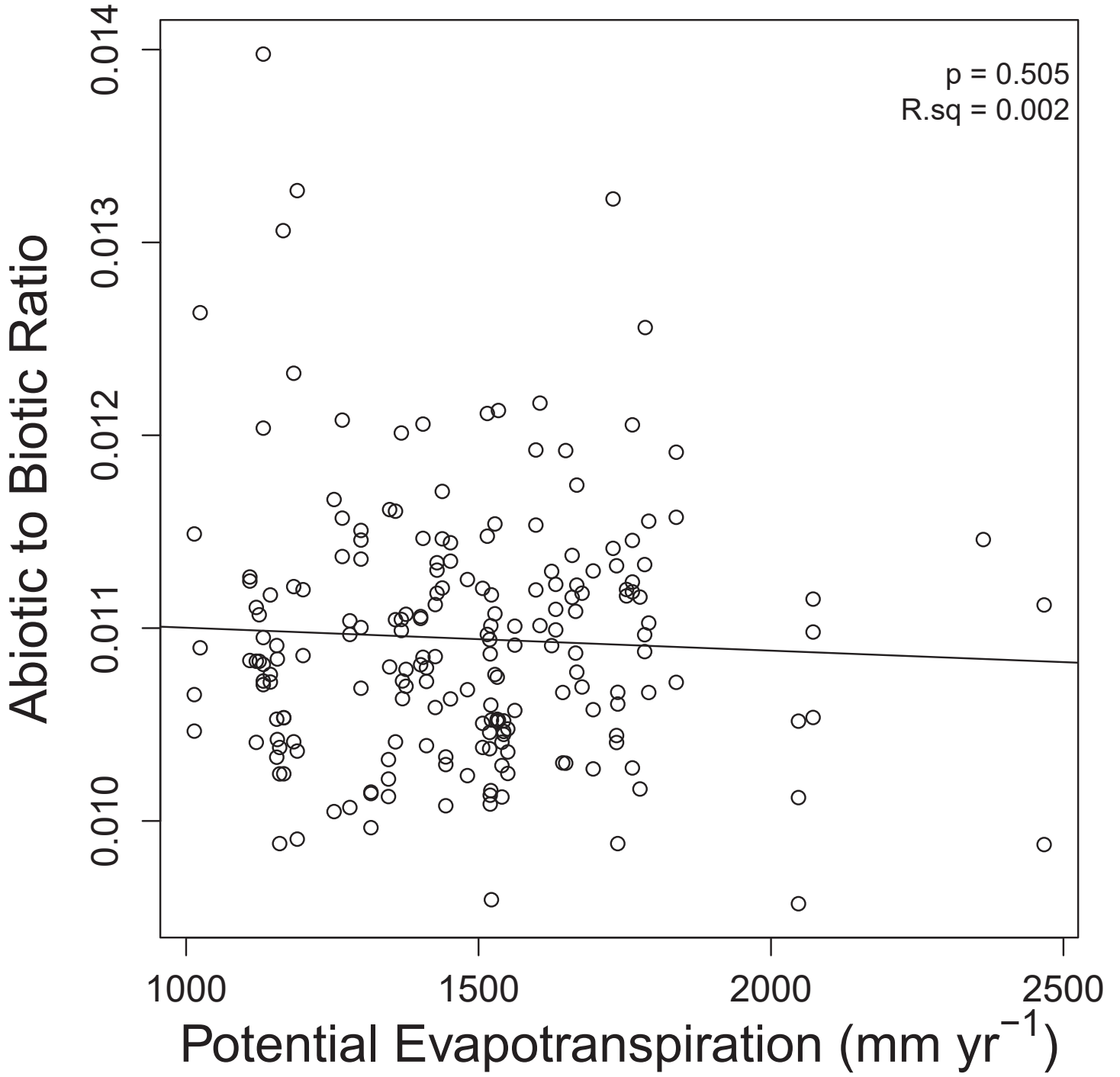
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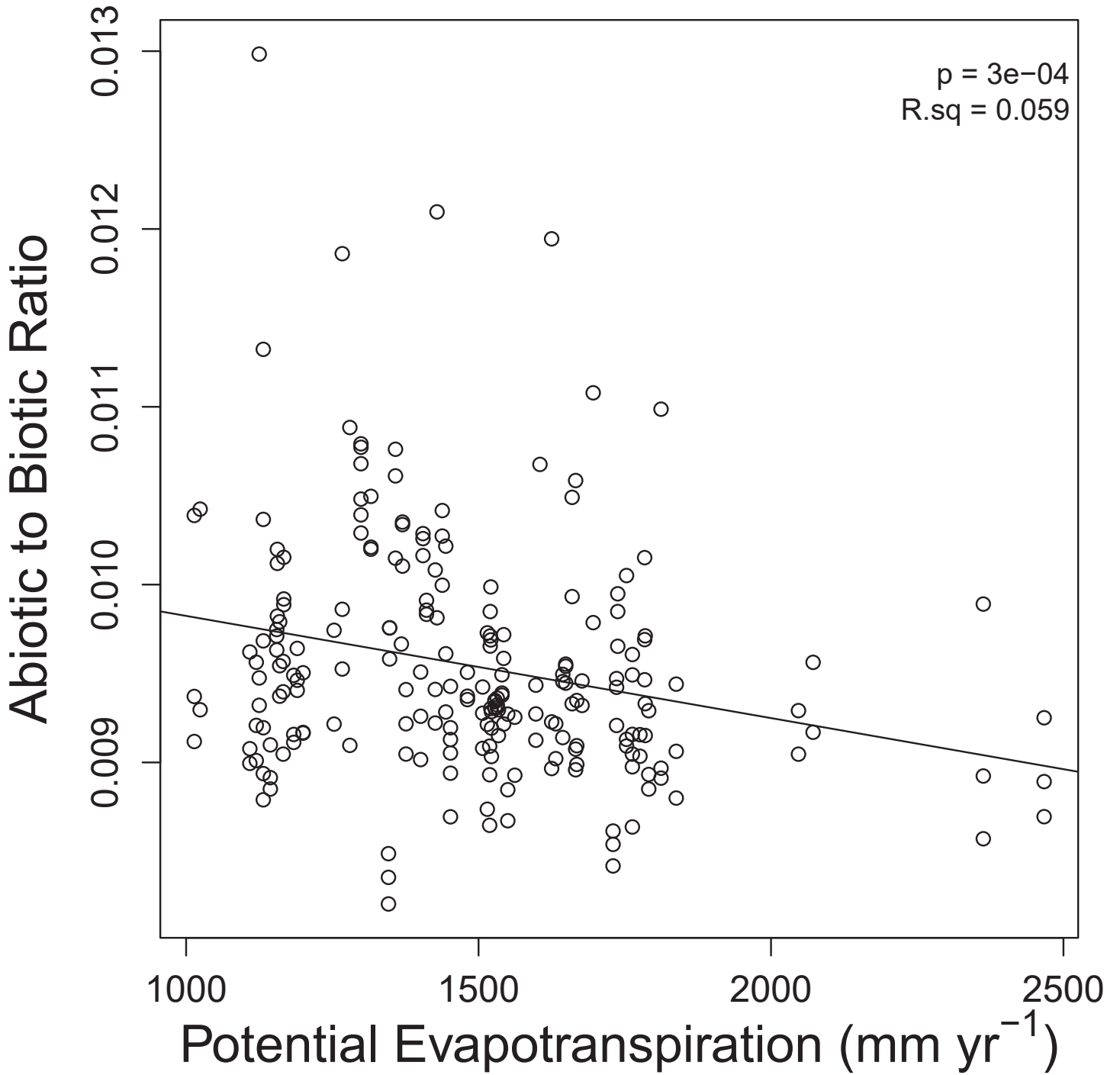
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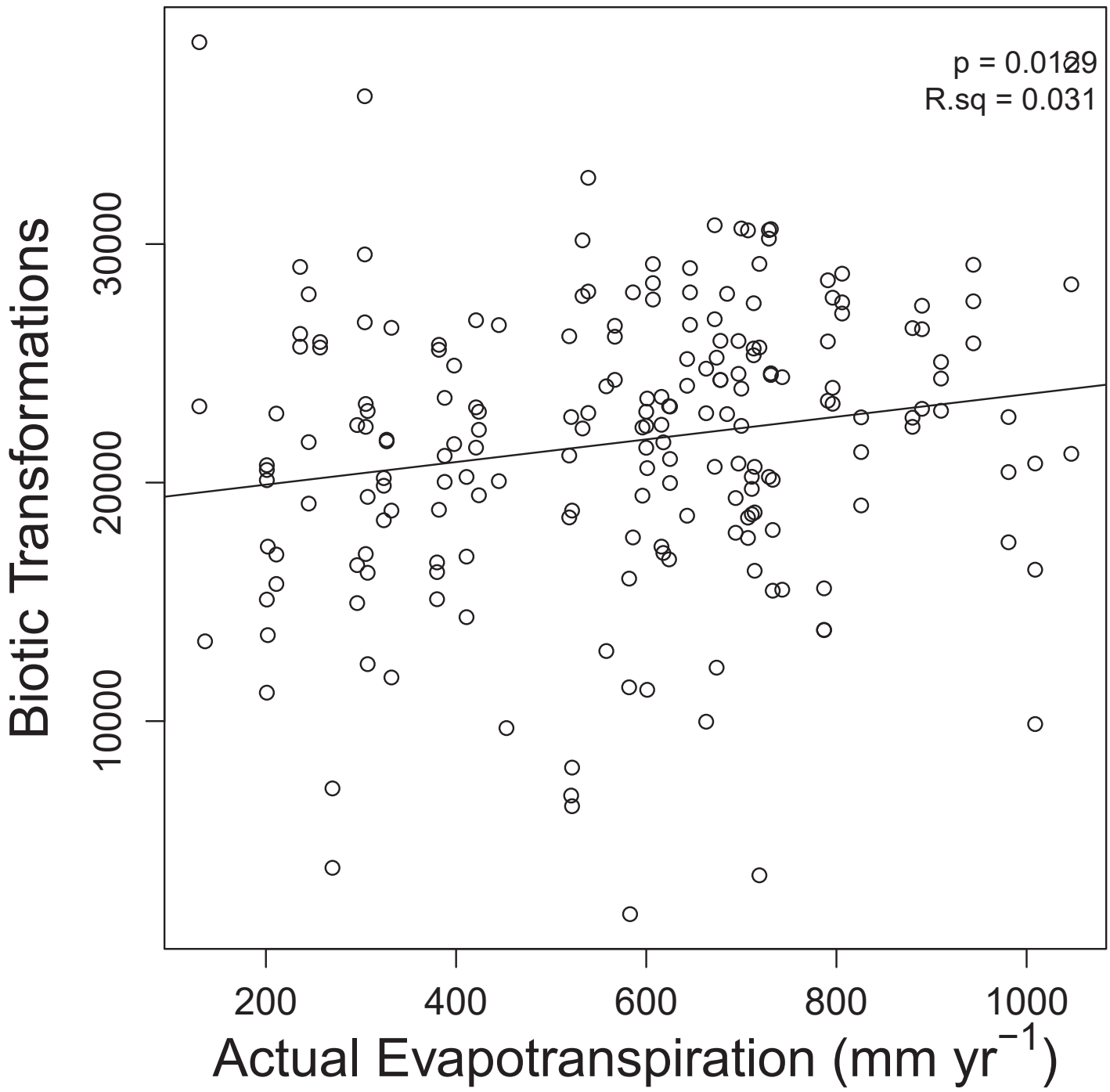
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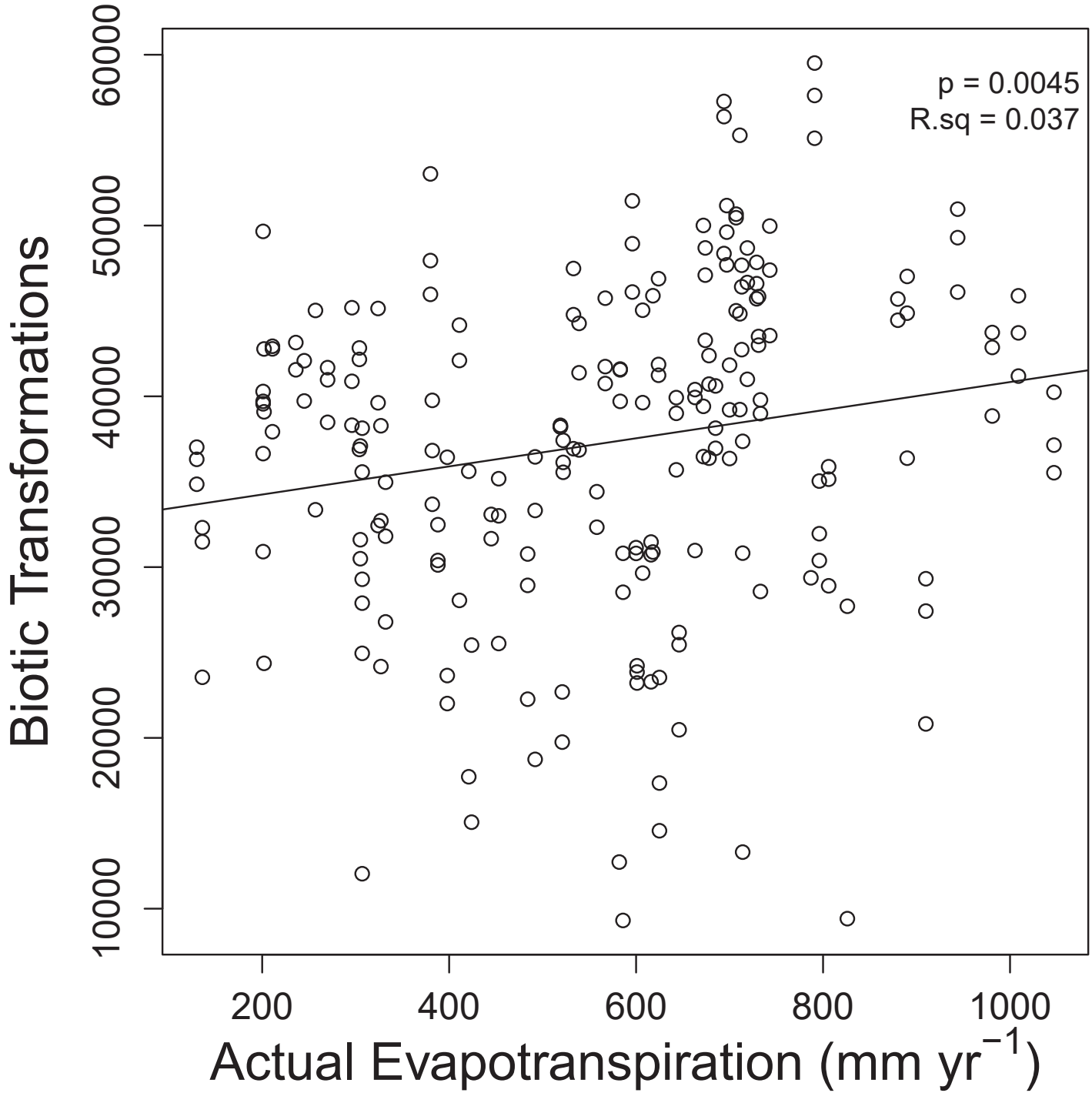
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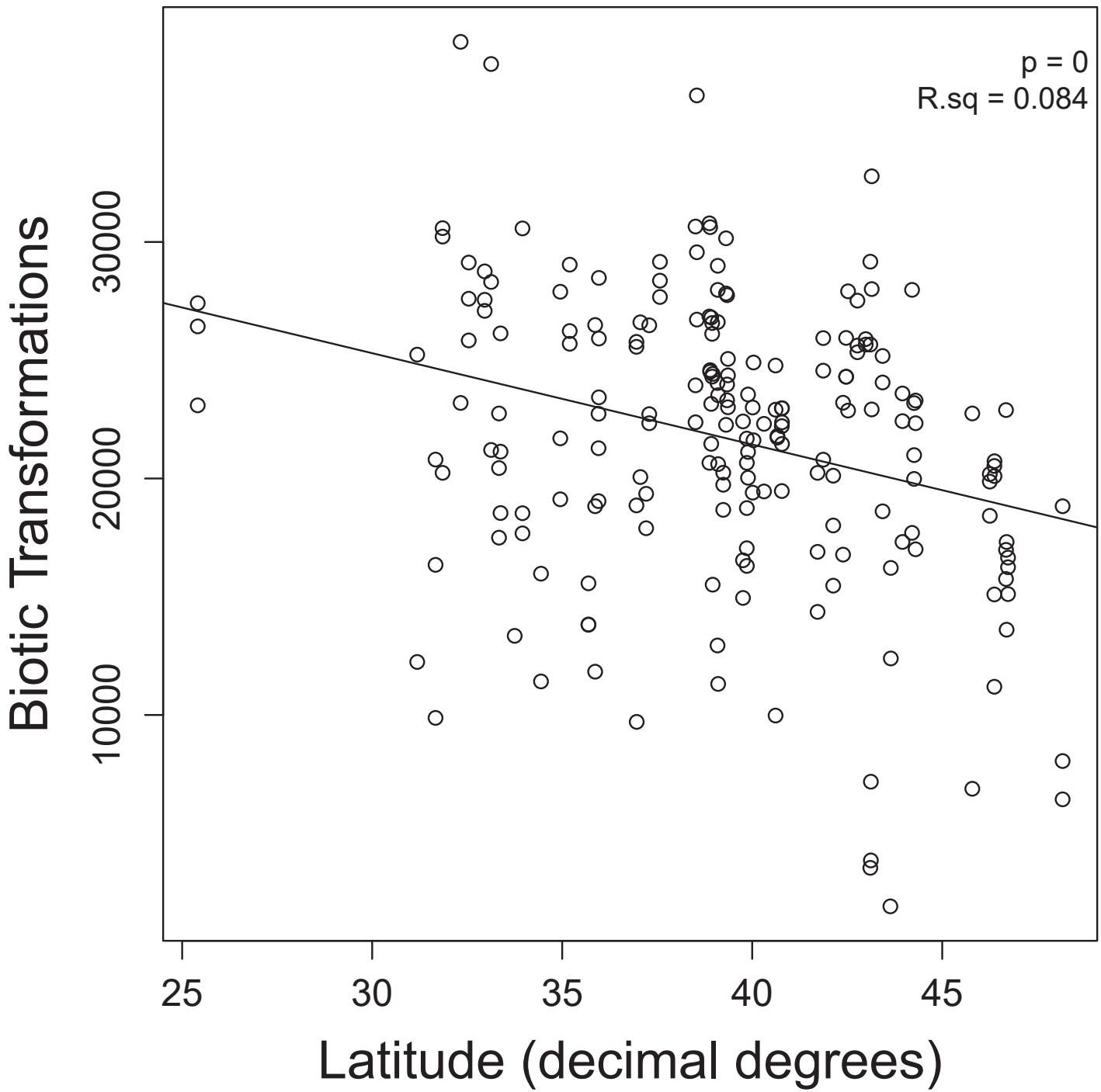
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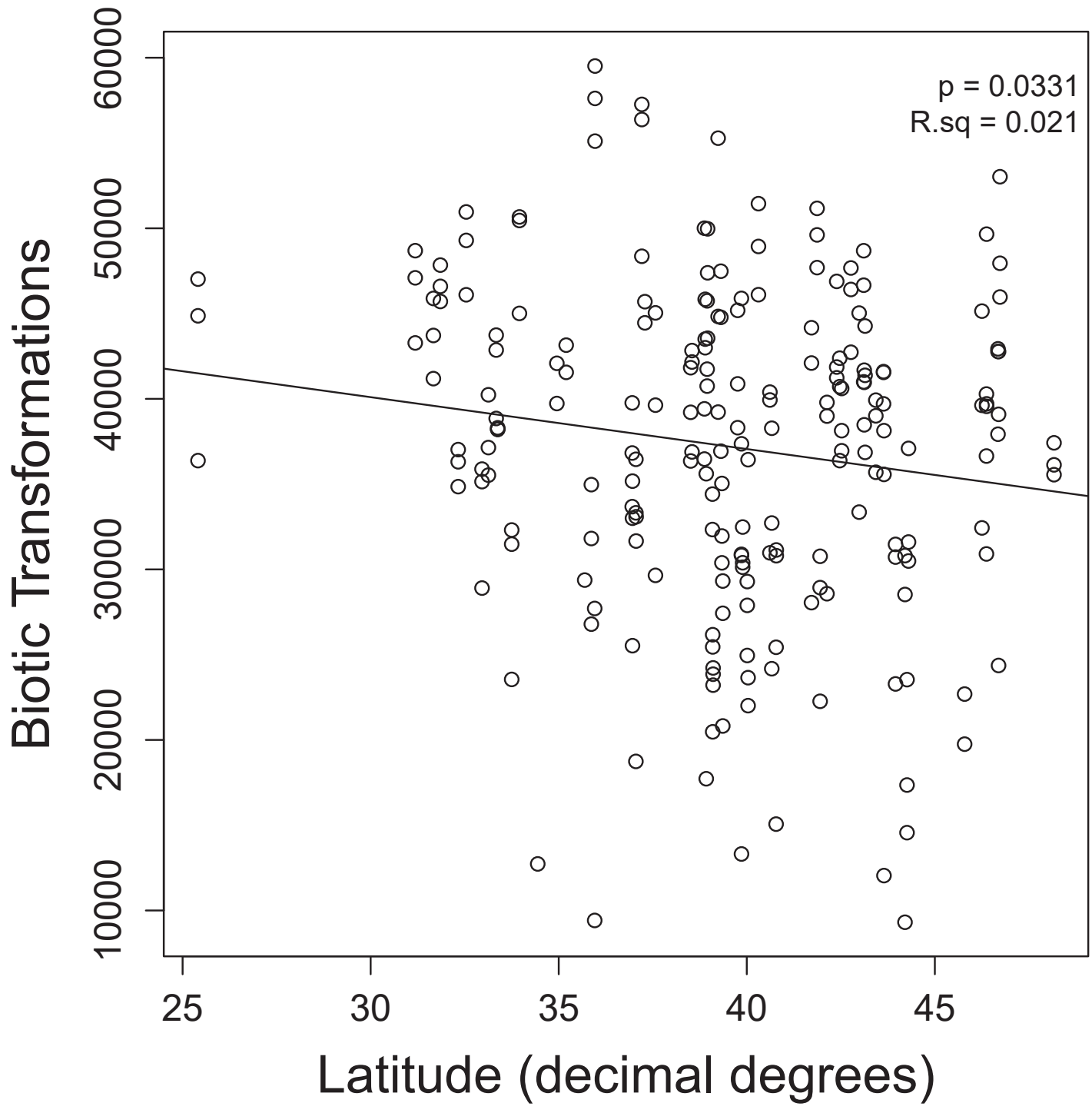
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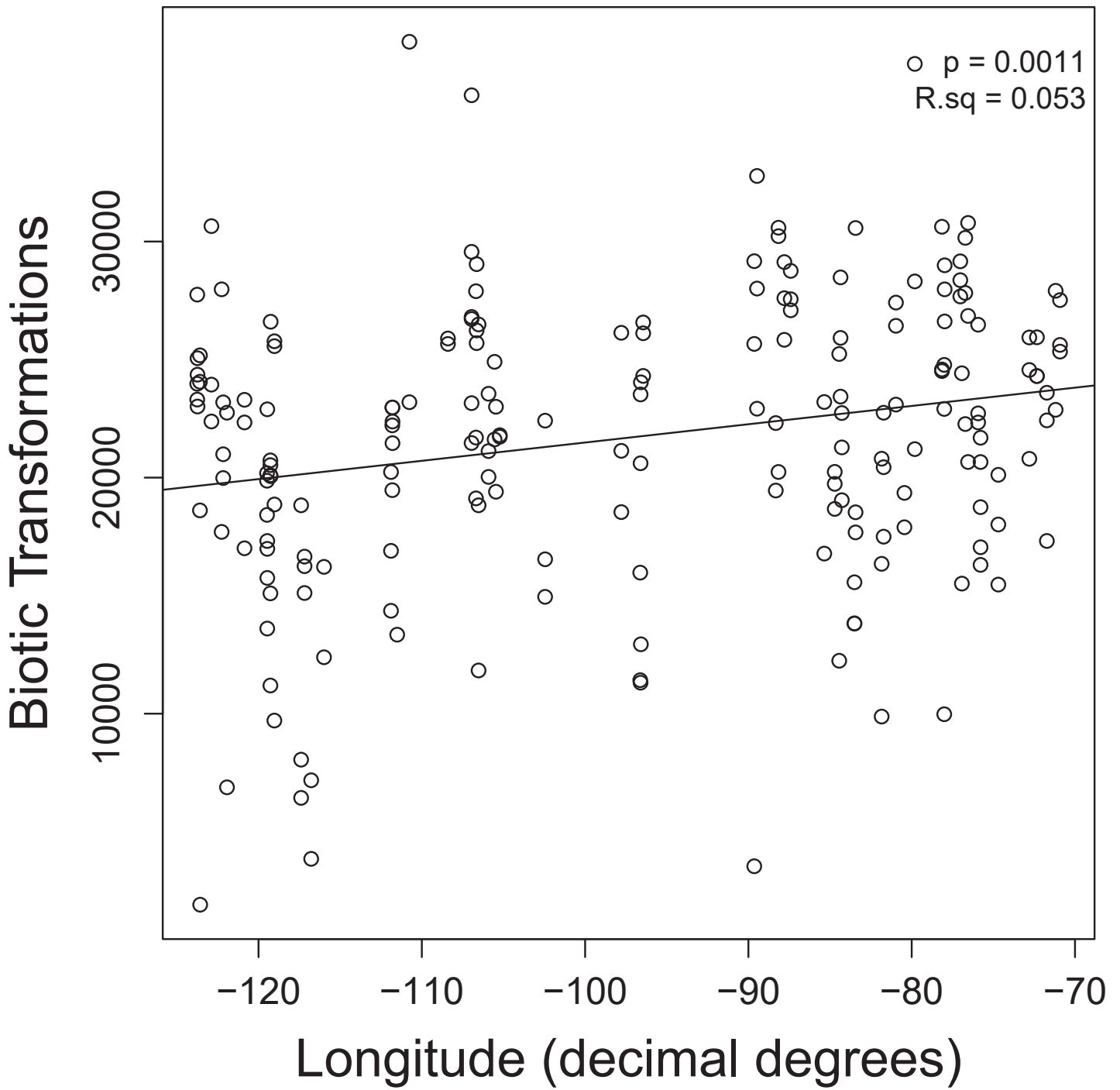


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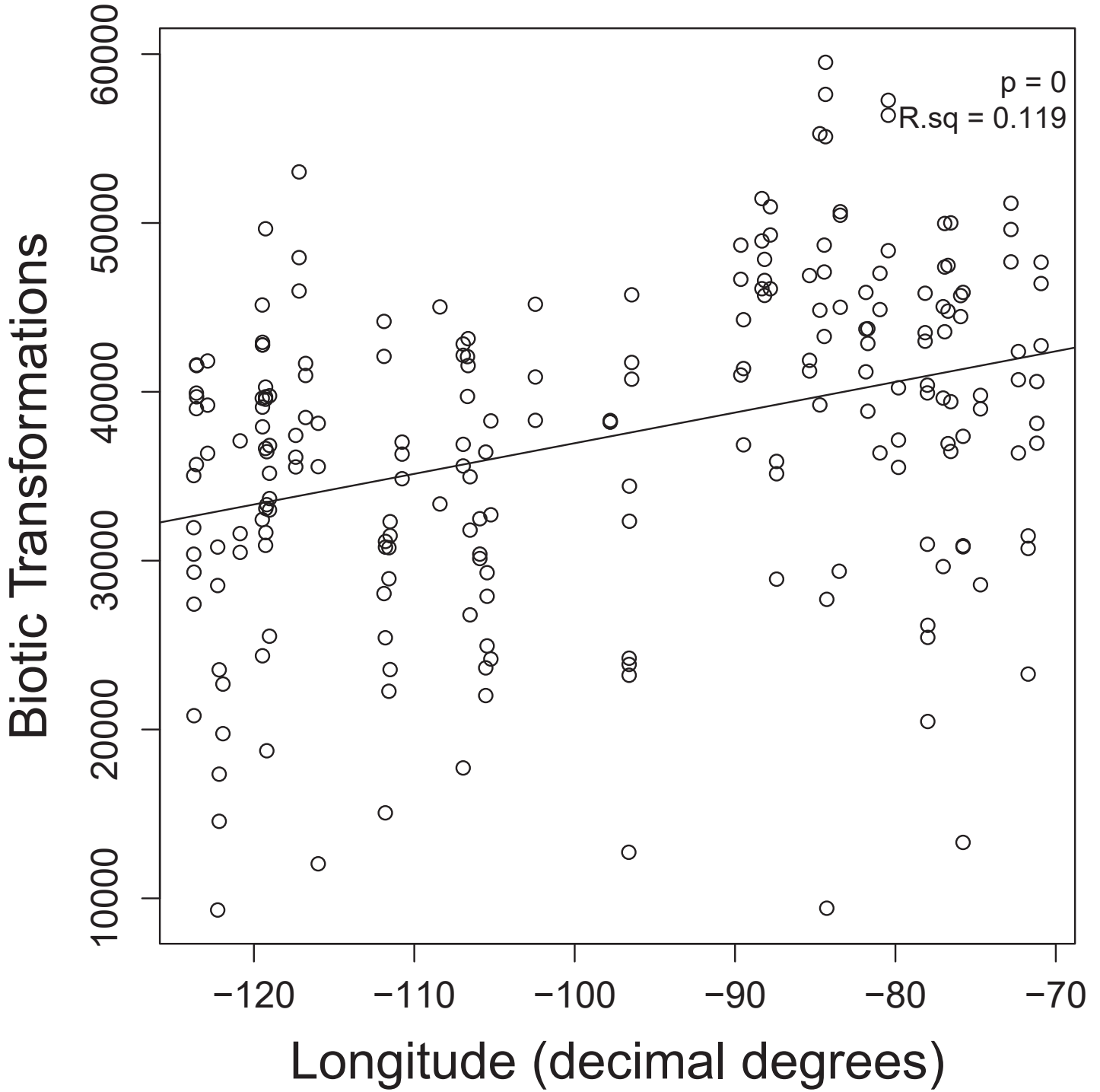




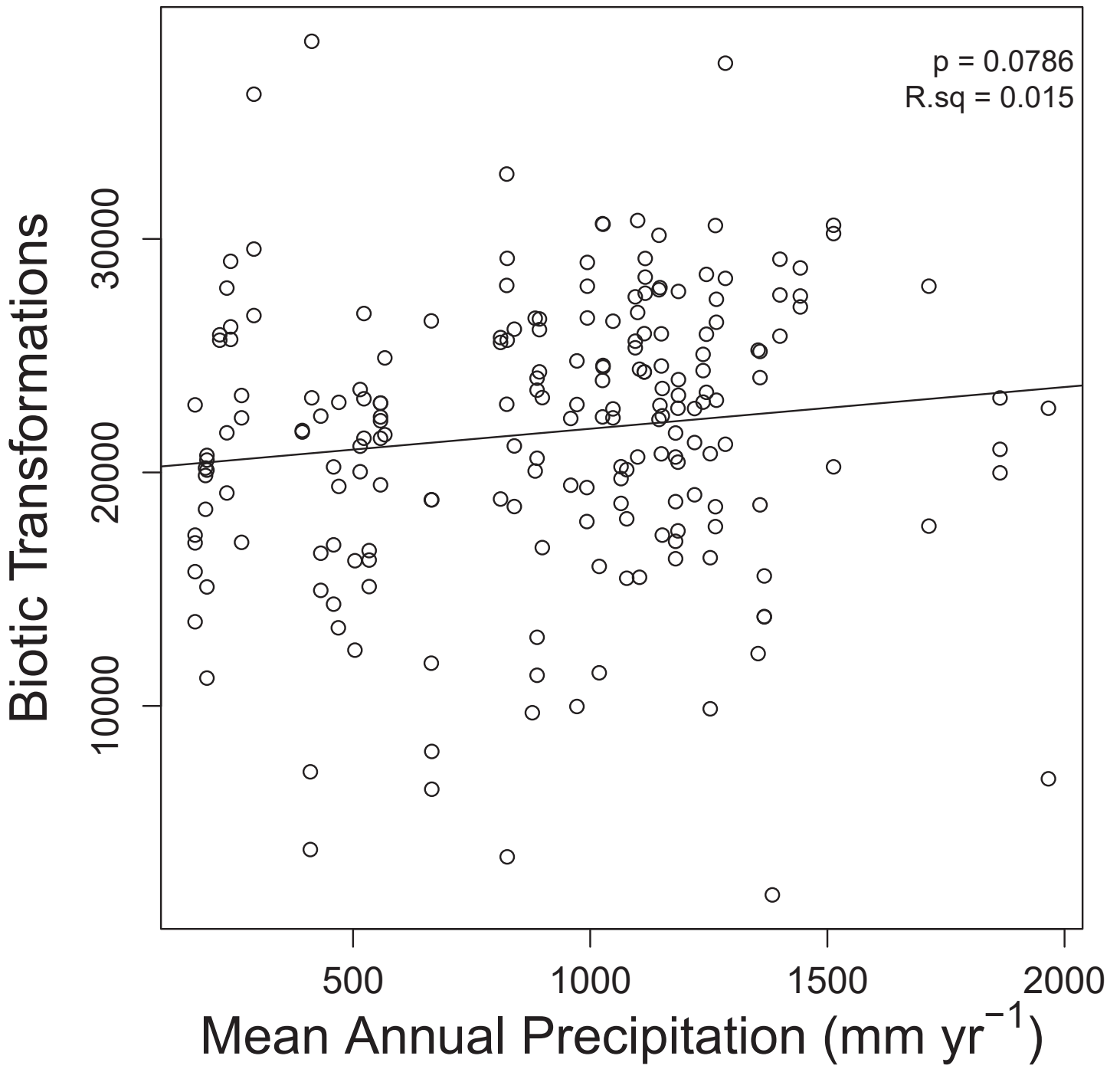
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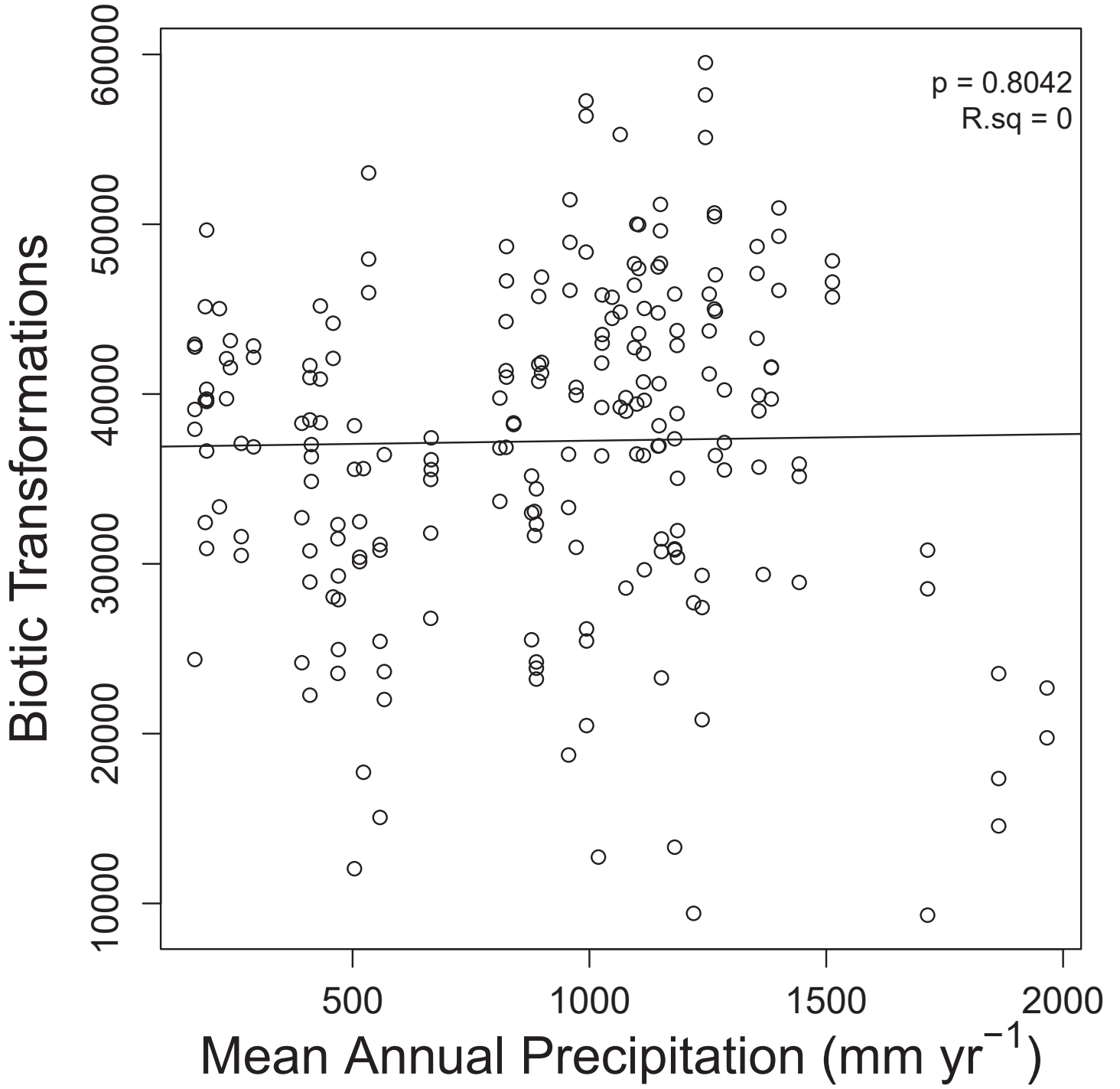
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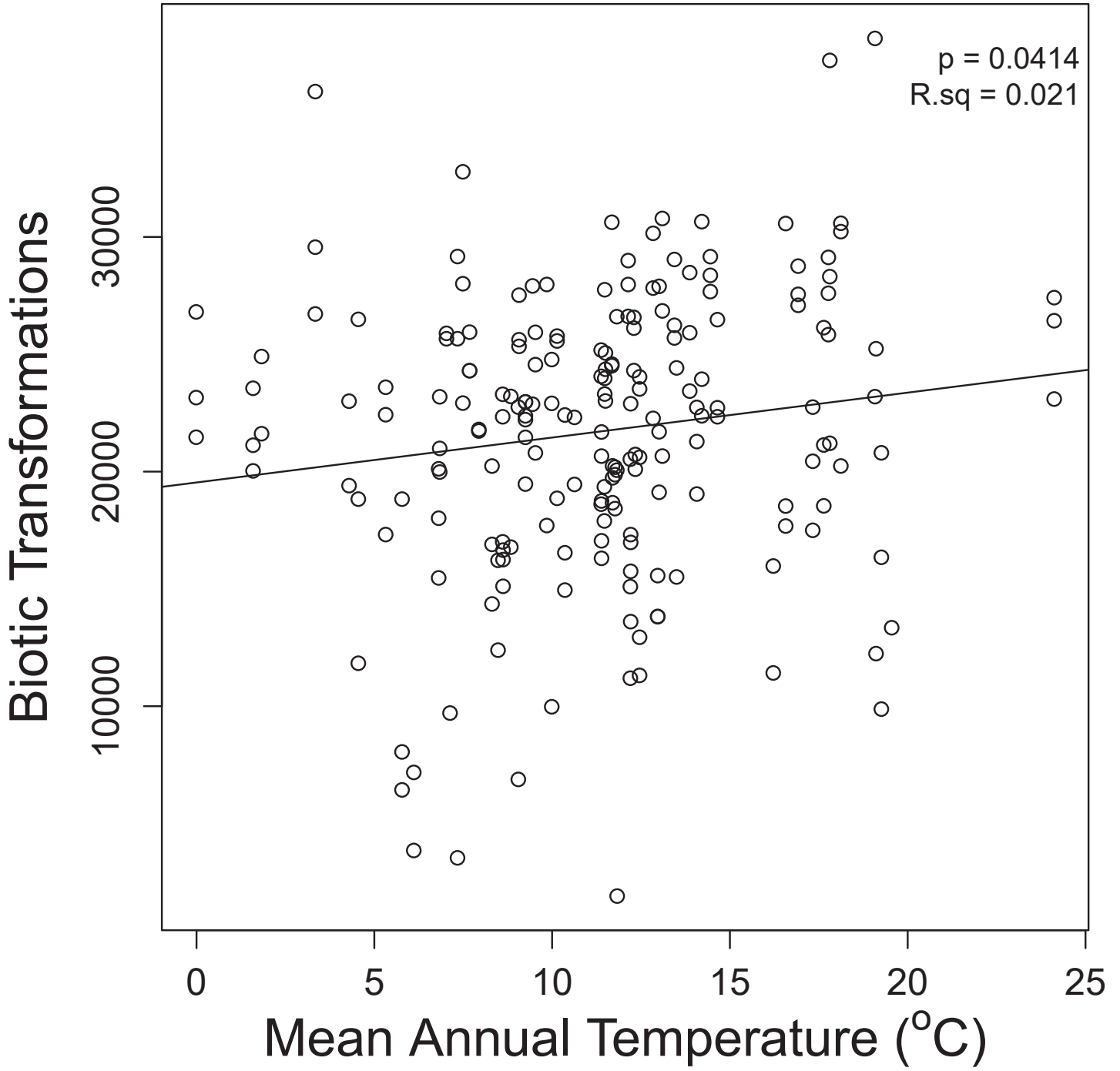
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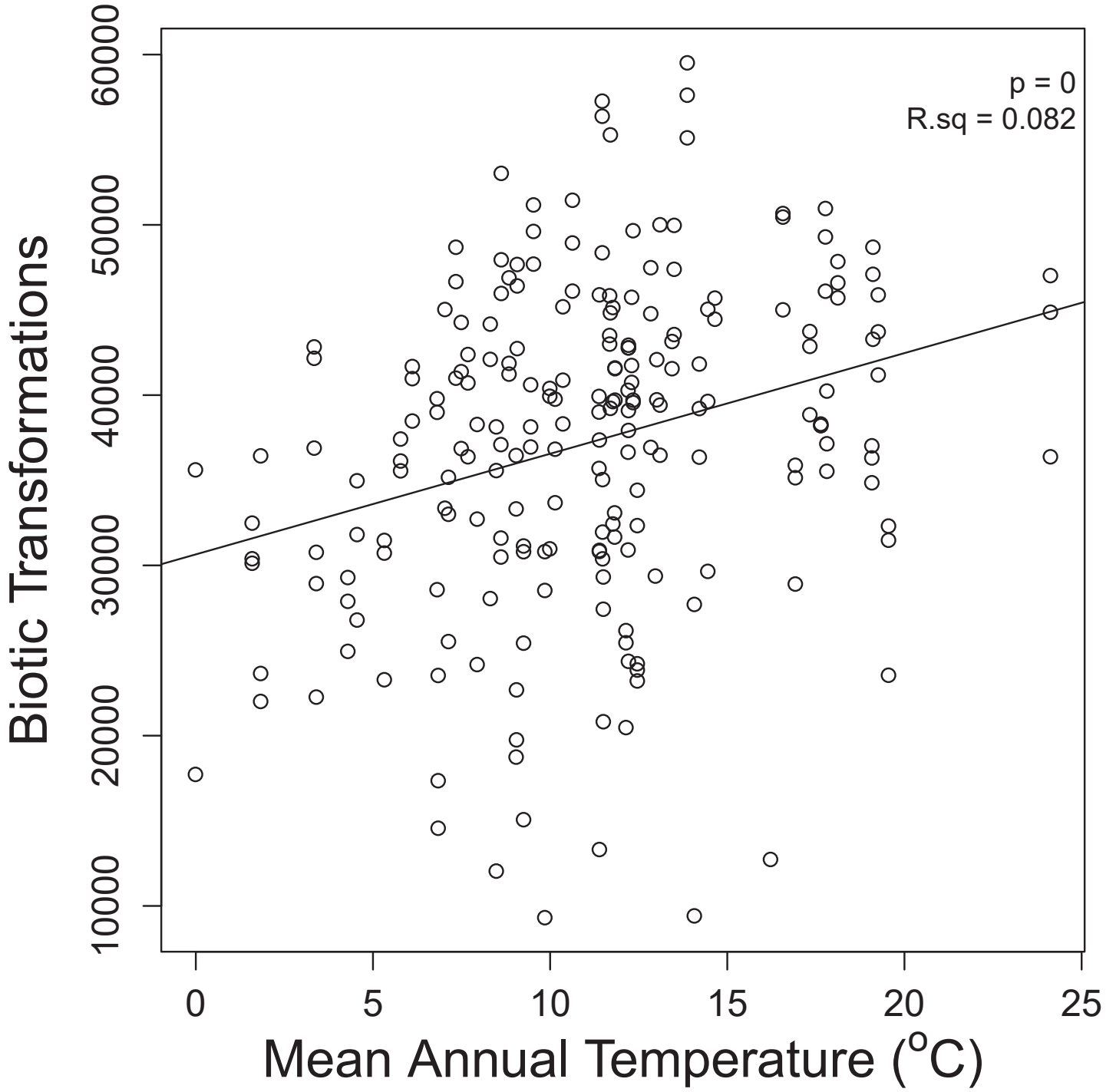
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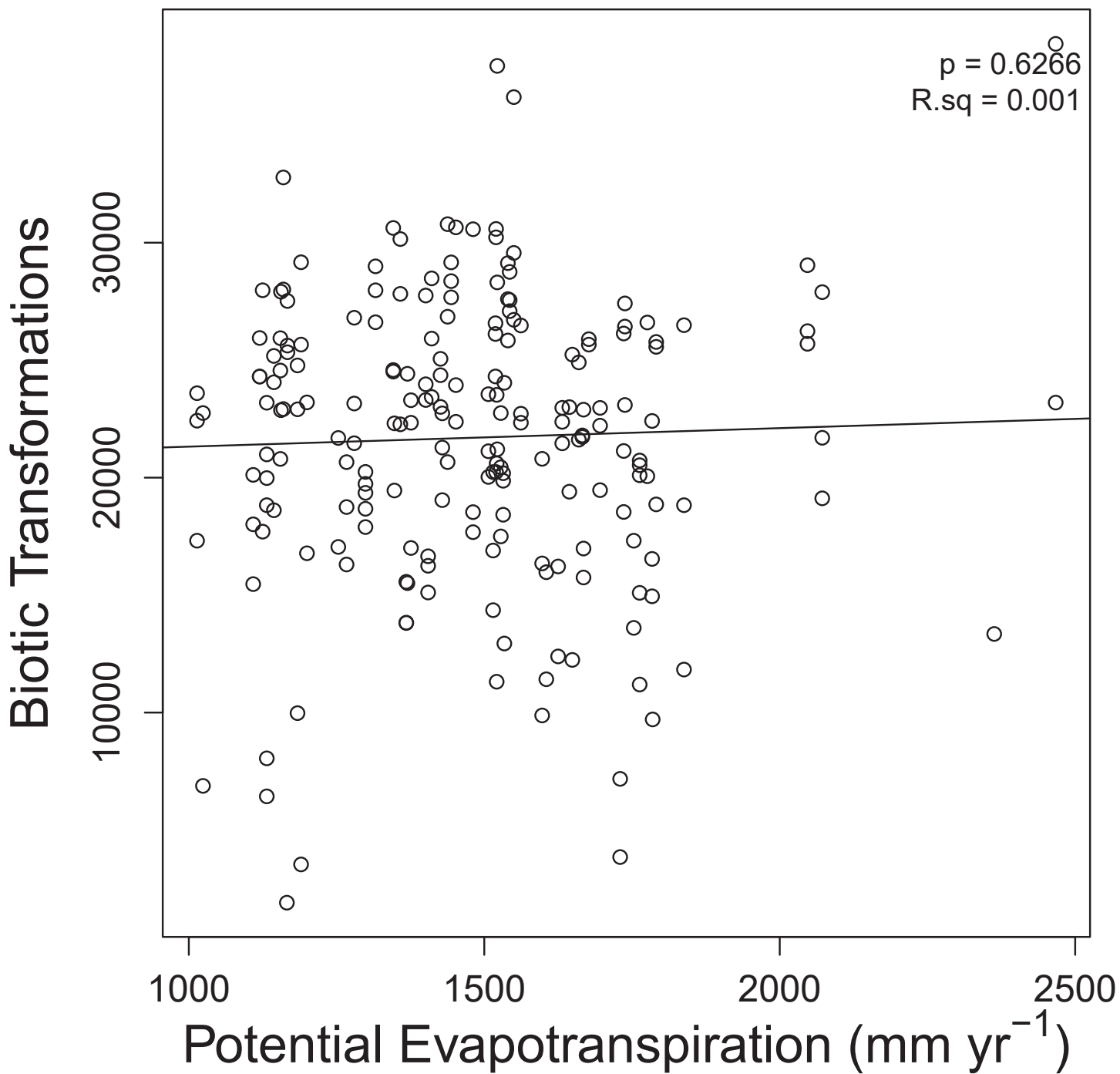
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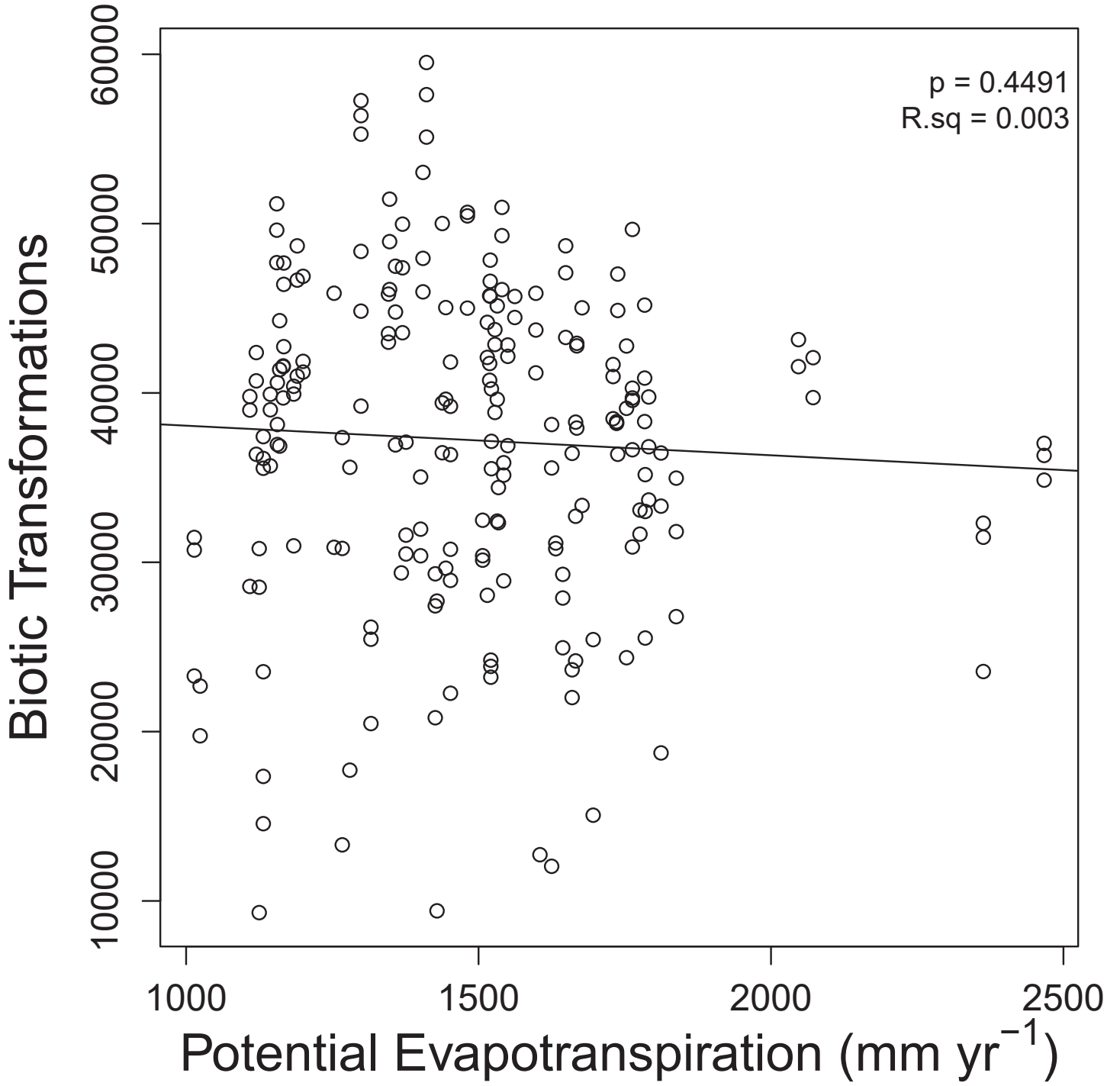
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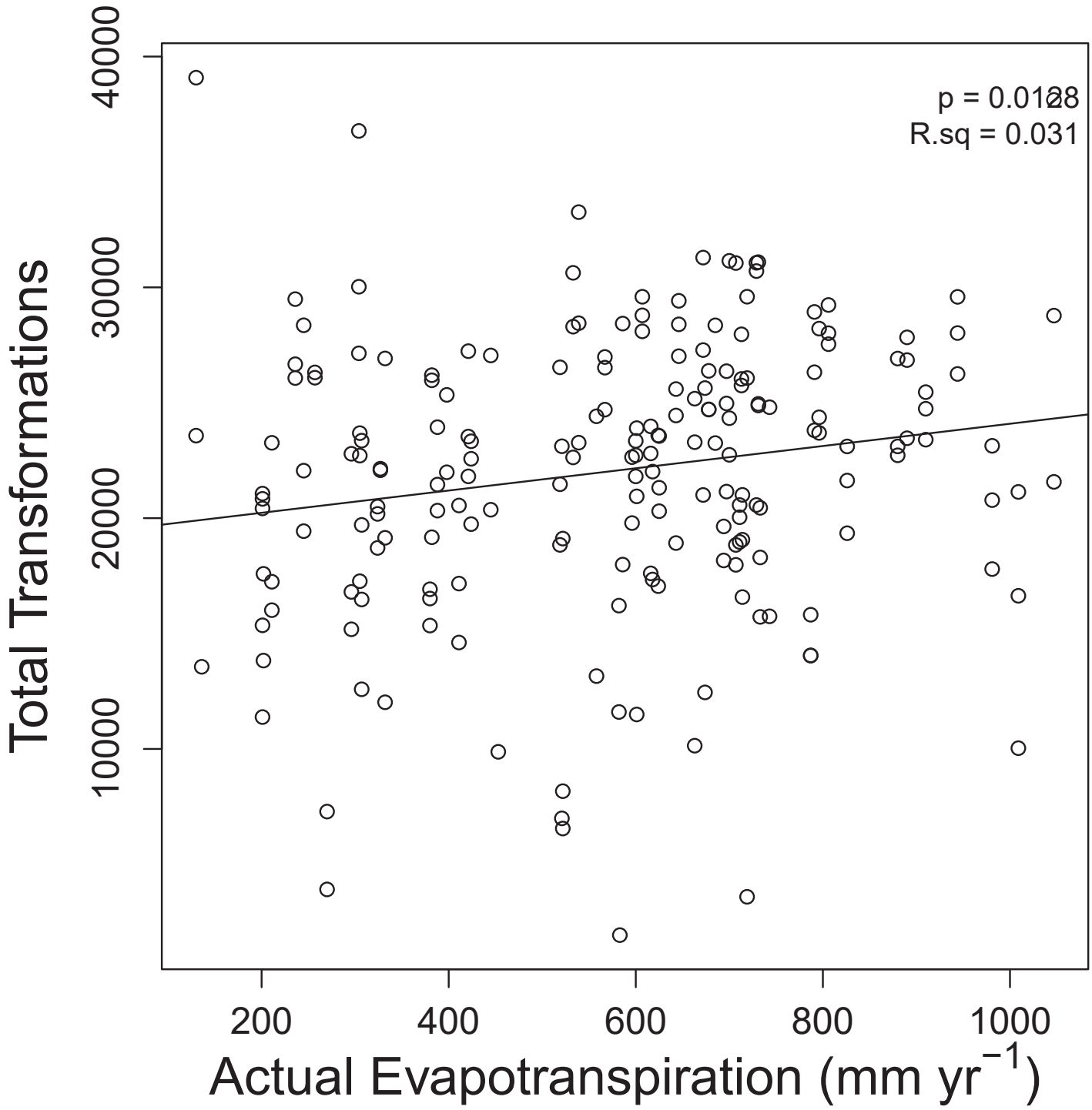


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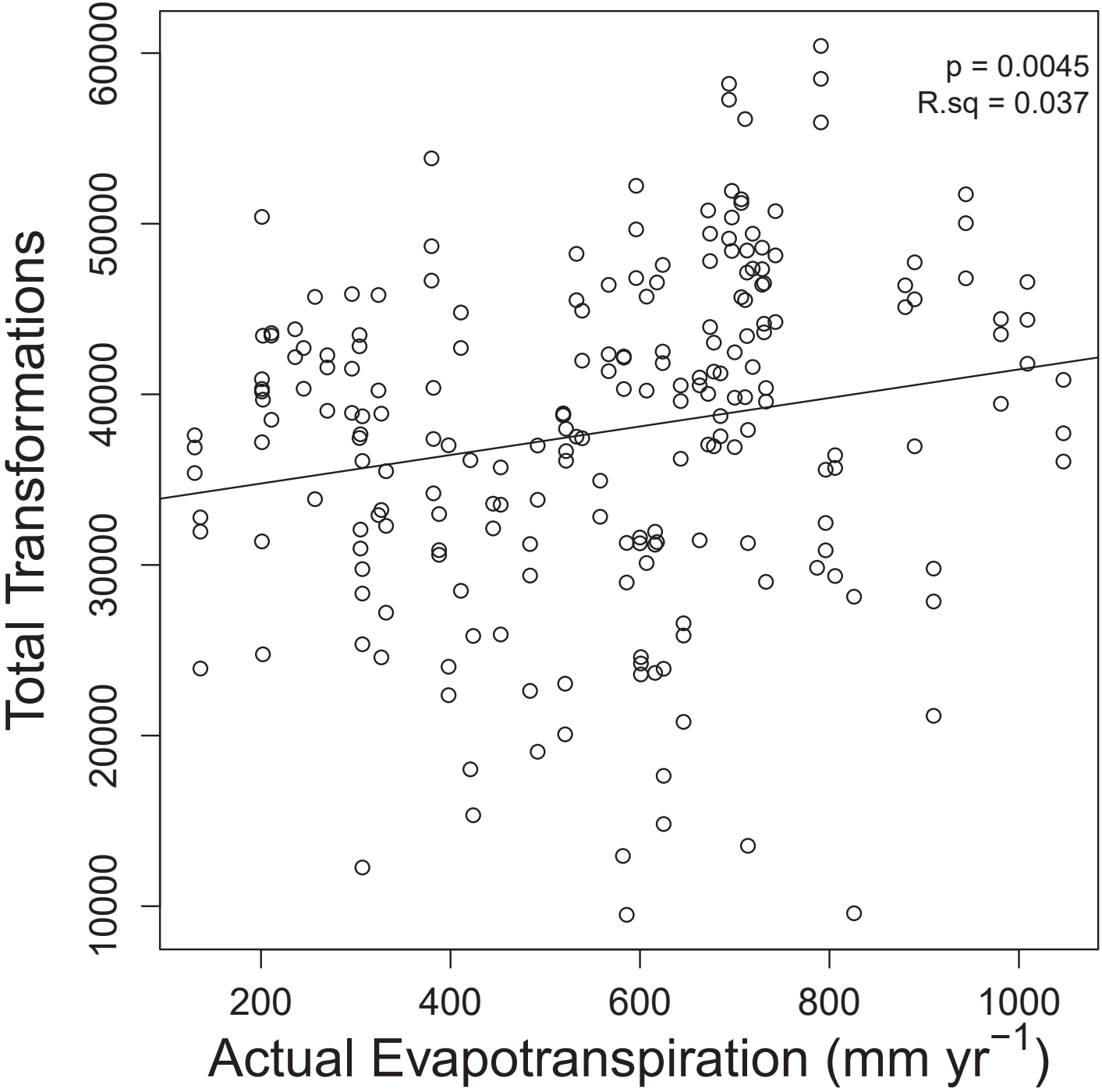




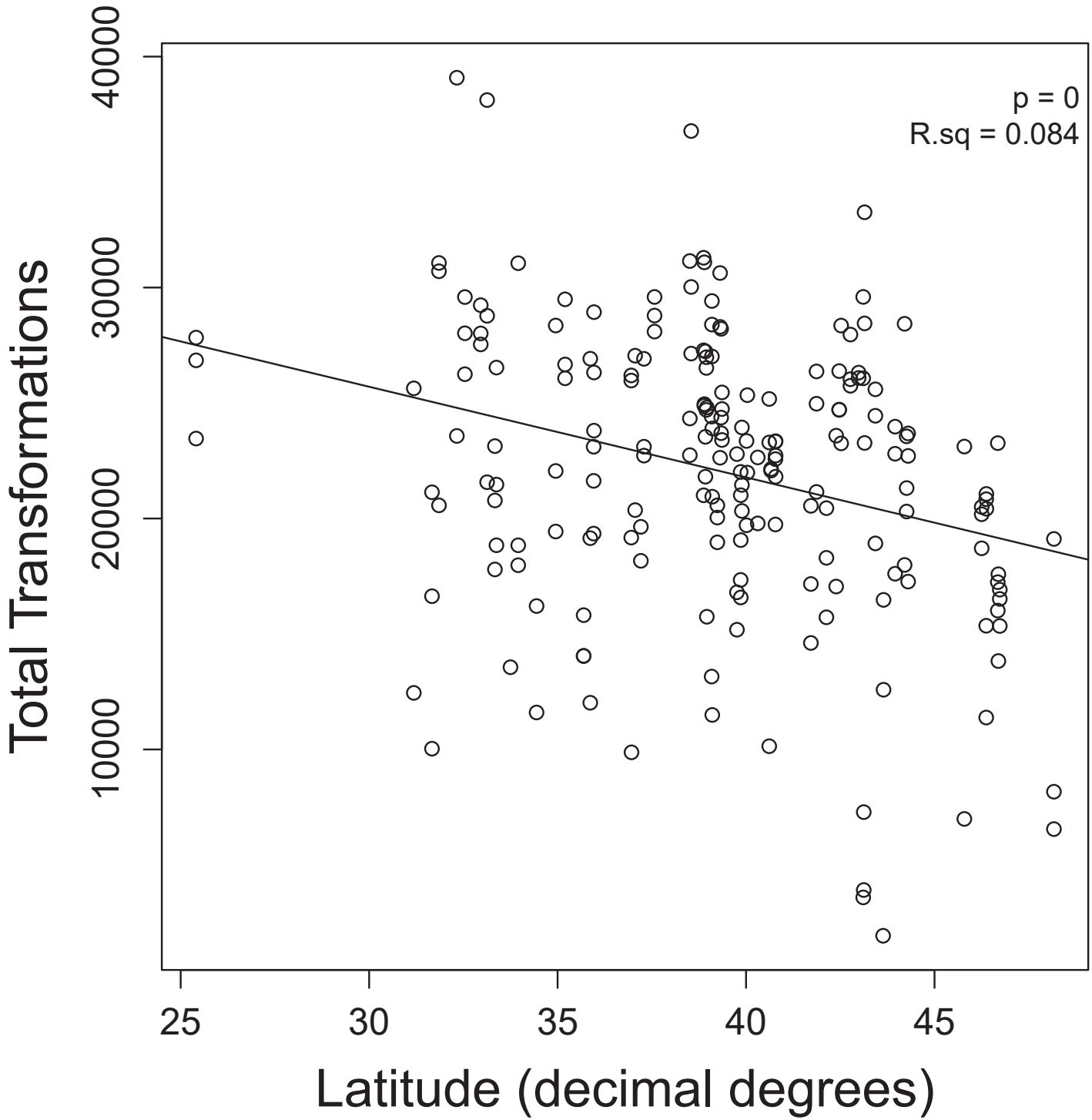
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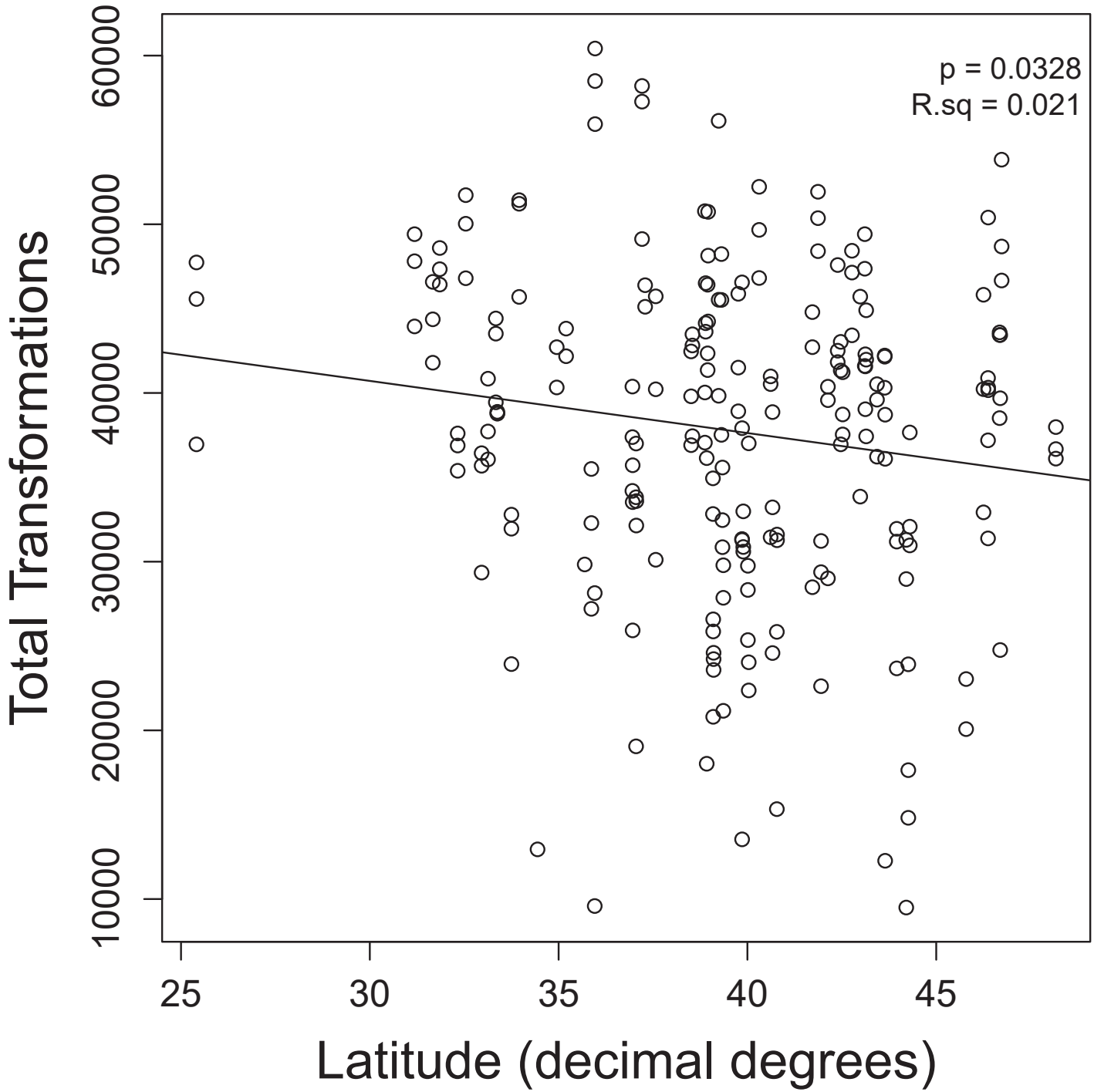
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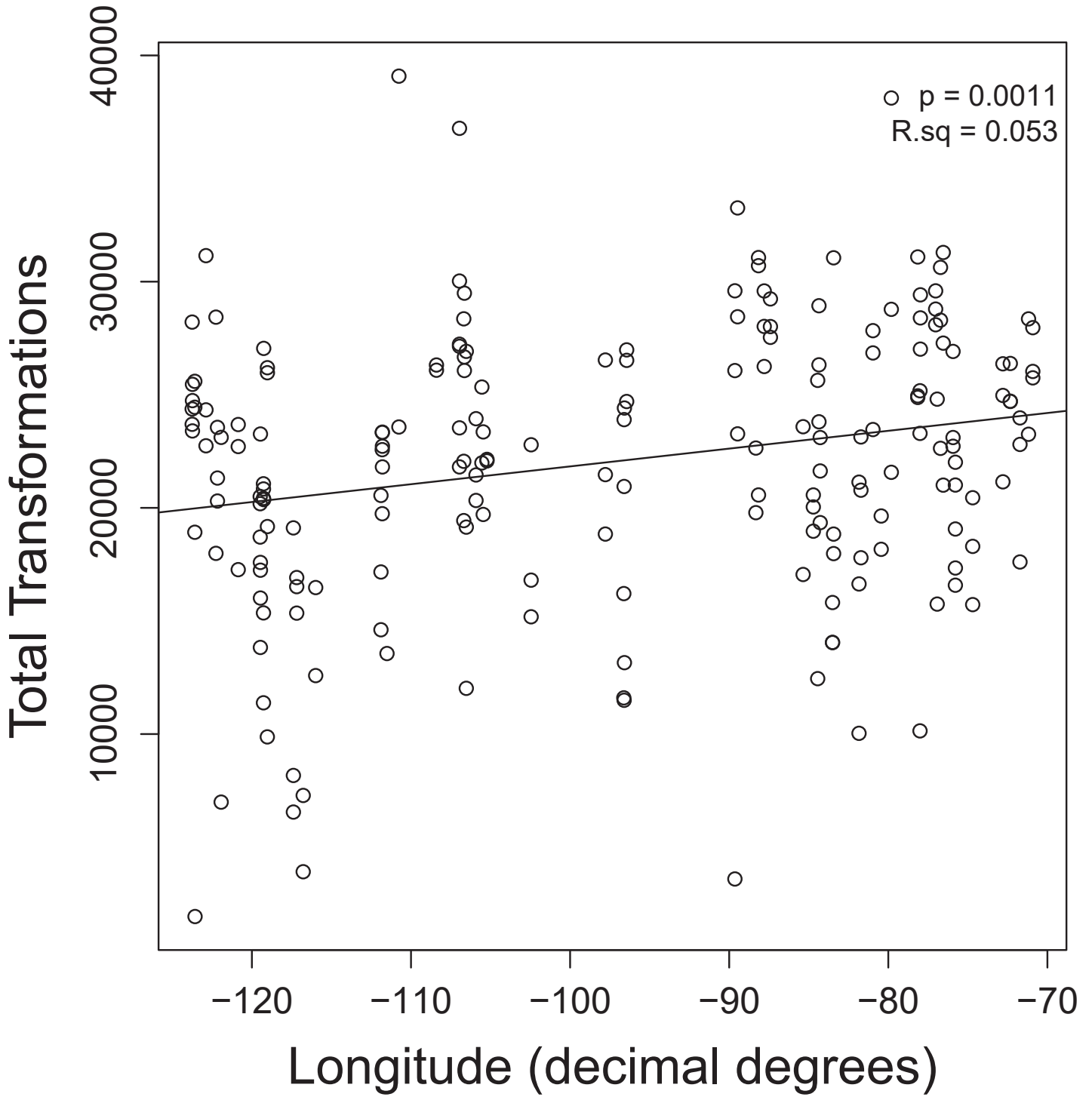
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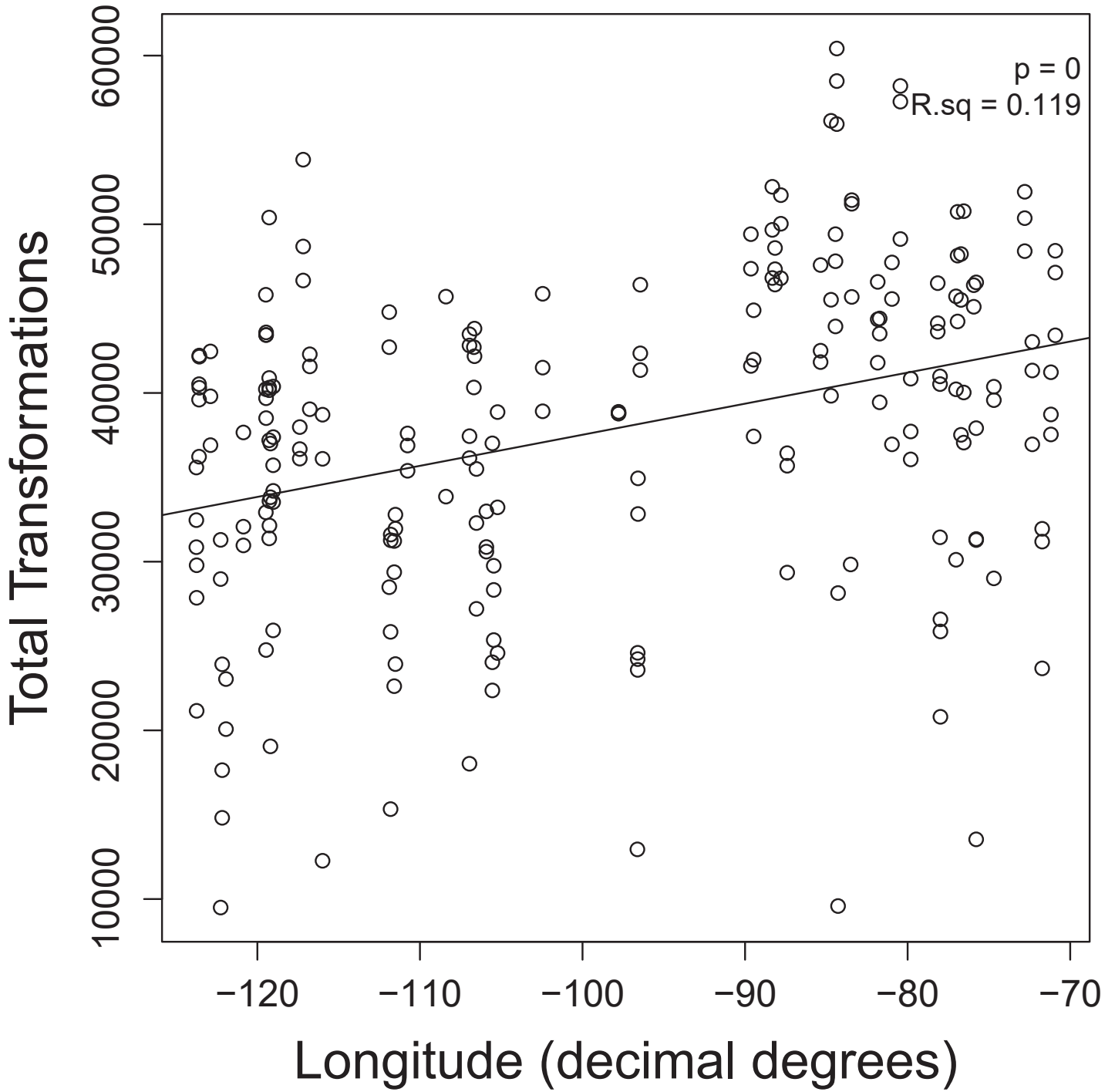
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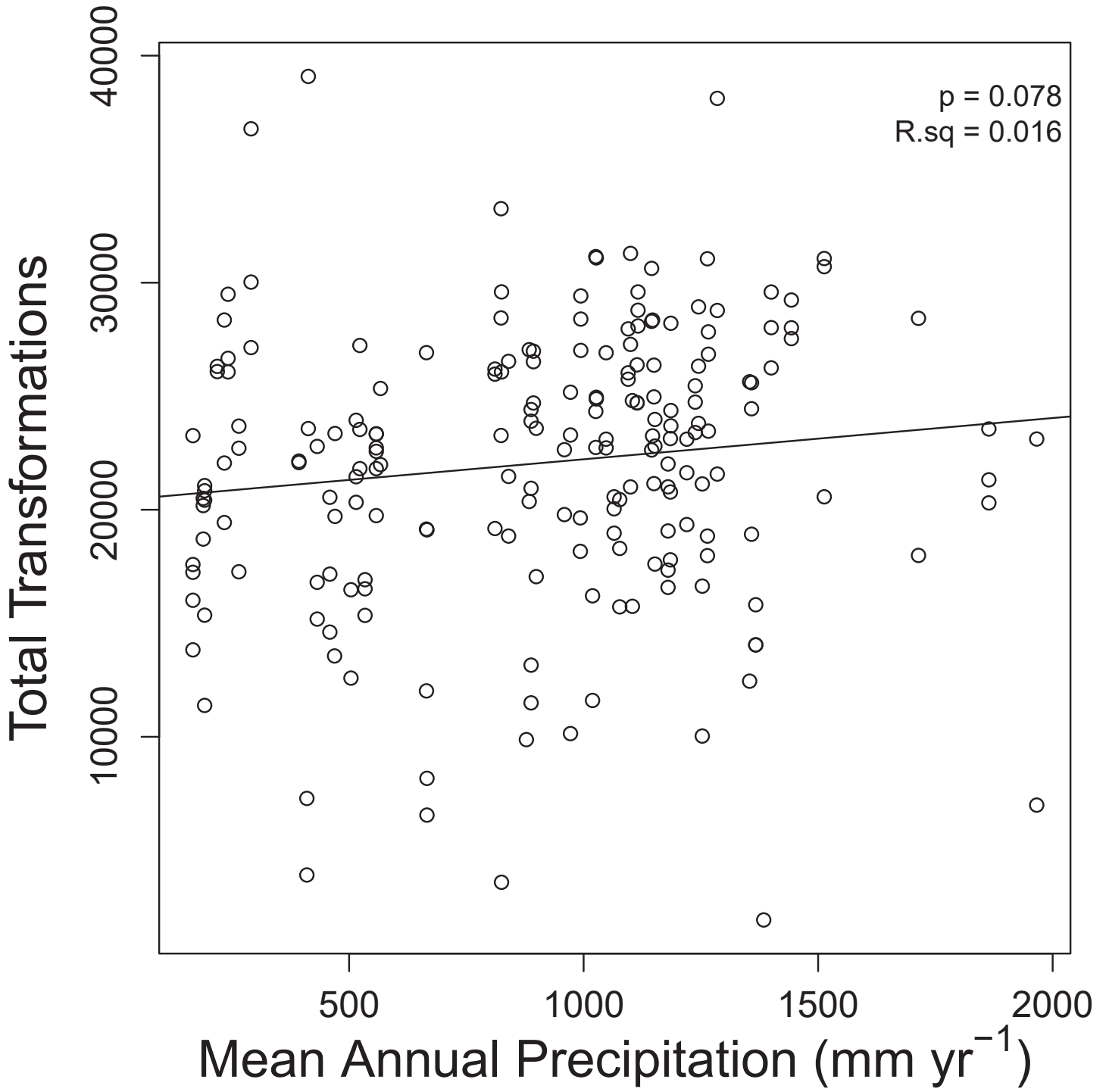
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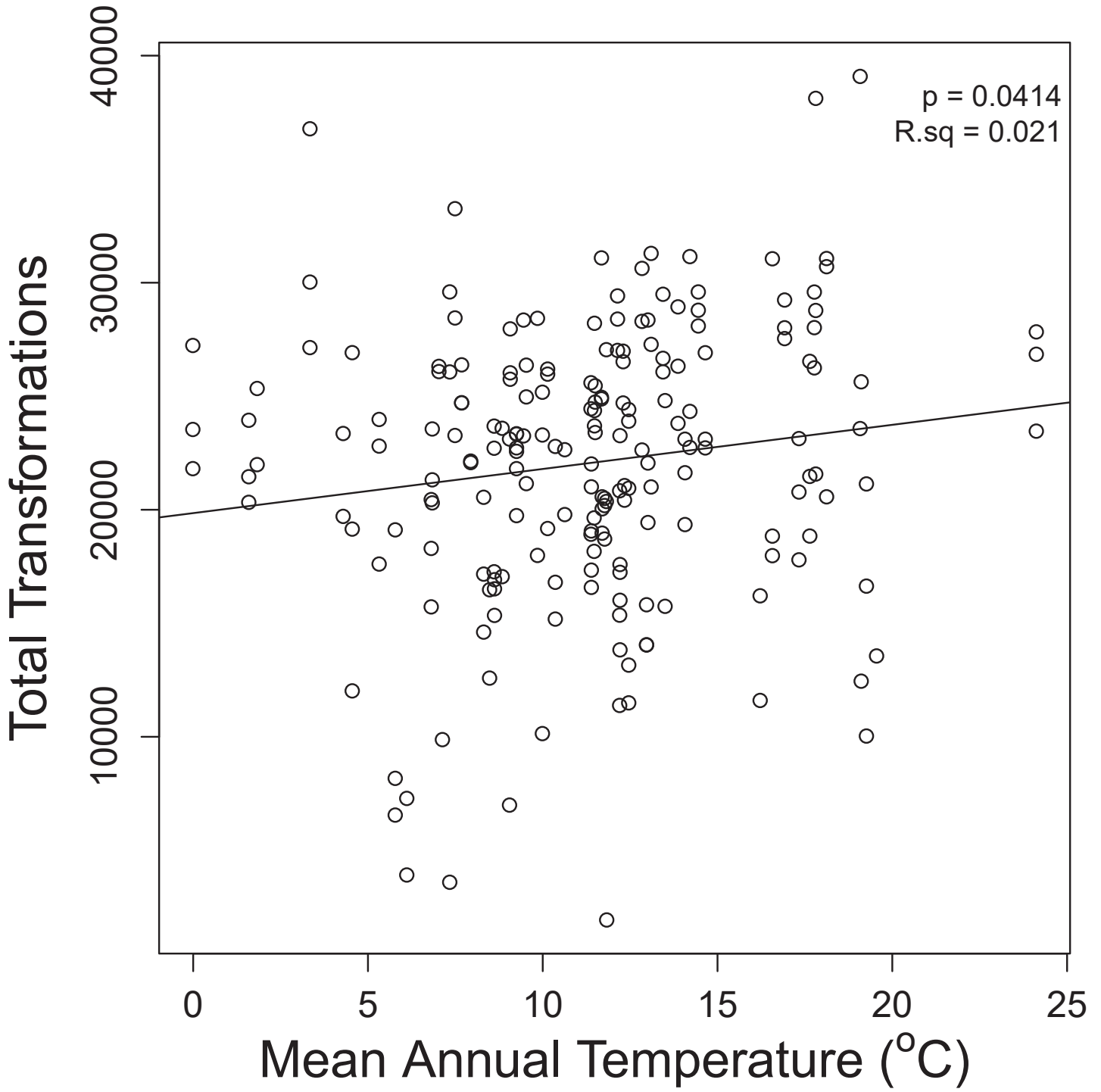
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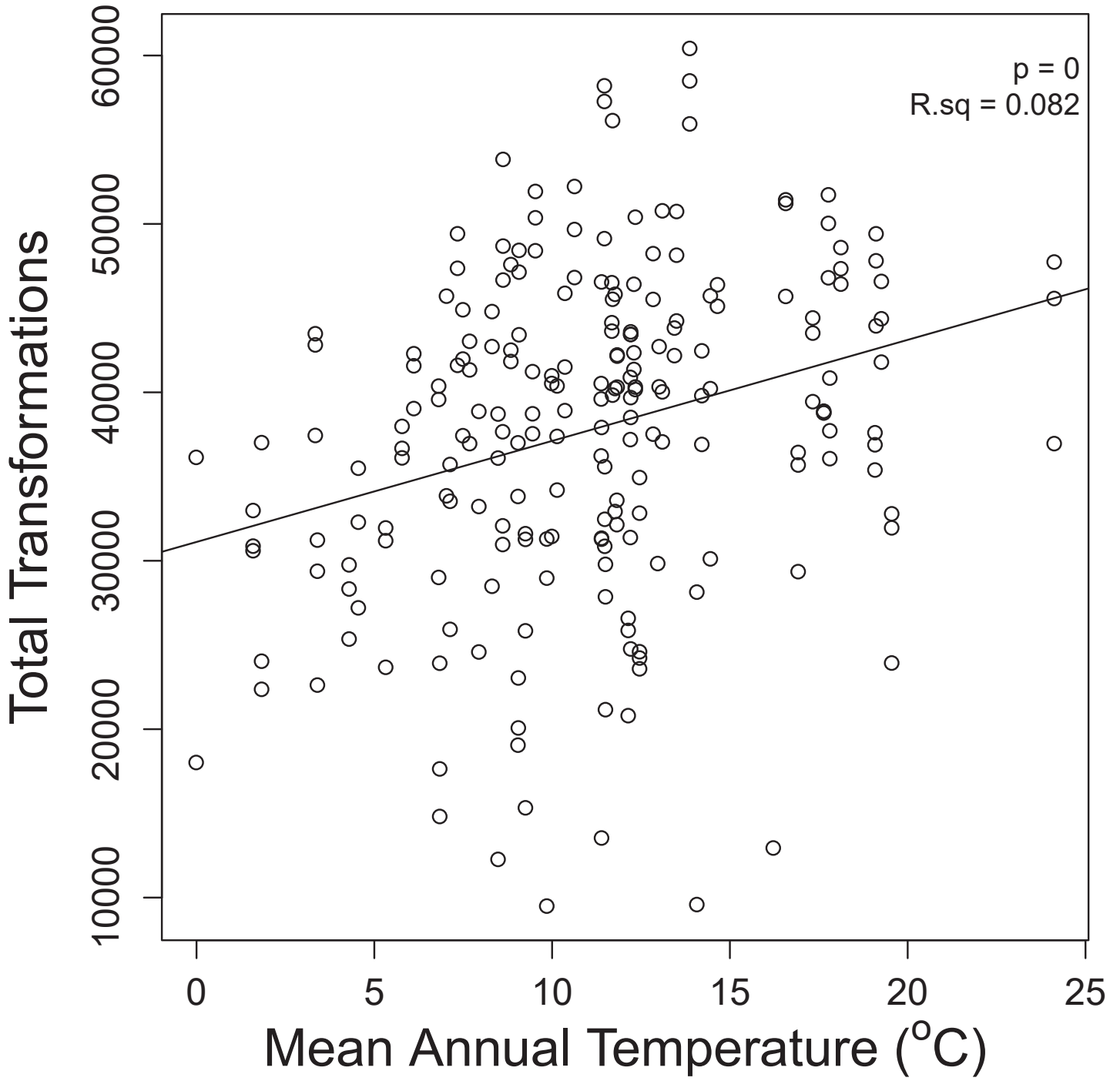




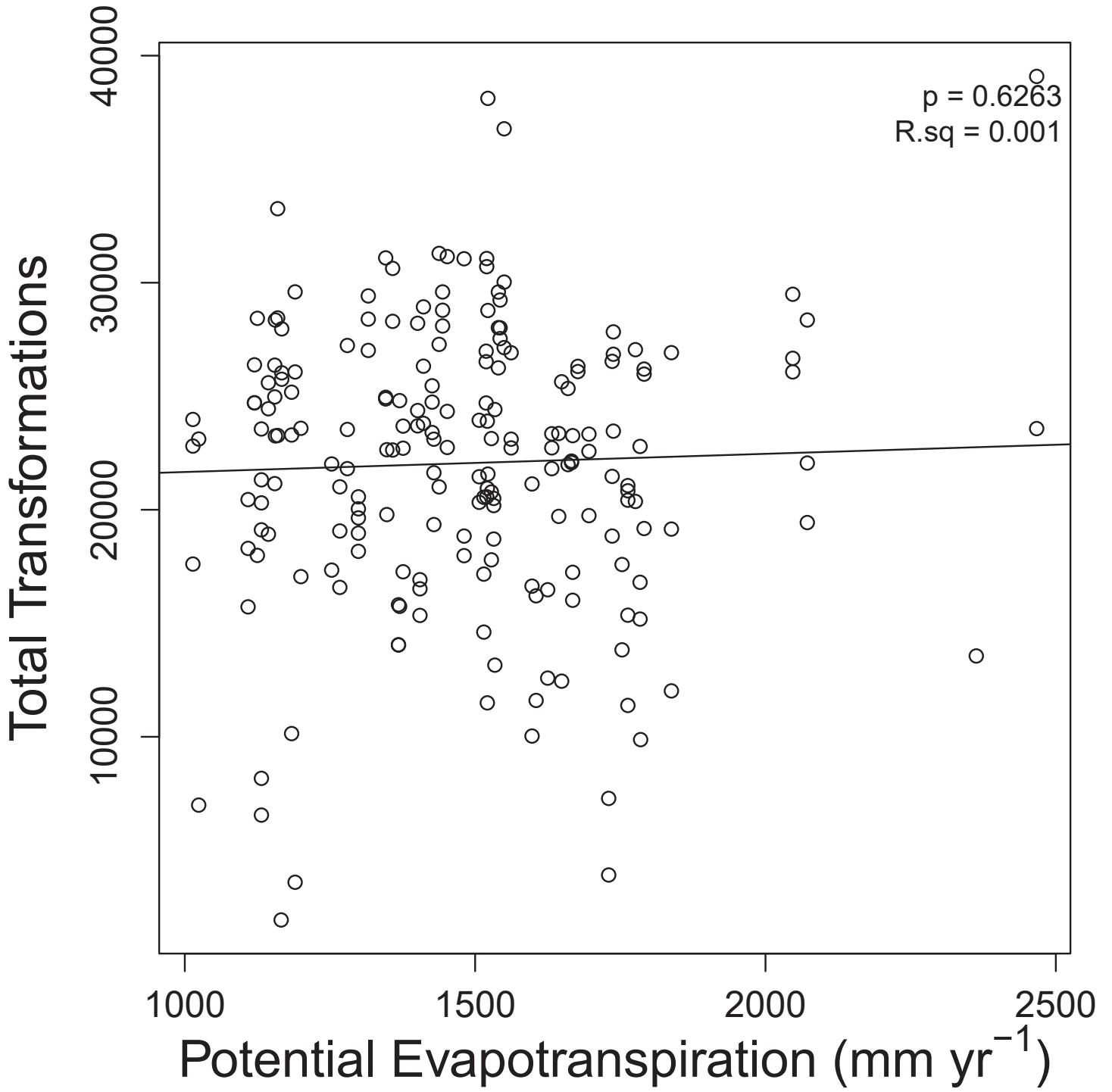
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