

Supplementary material

The importance of small fires for wildfire hazard in urbanized landscapes of the northeastern US

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Table S1: Datasets used to produce fire occurrence probability models. All datasets are 30-m resolution.

Variable class	Variable name	Description	Data Source
Land cover/ vegetation	high_med_dev_120m_window	Percent cover within 120 m-radius moving windows, for the following land cover categories: <ul style="list-style-type: none"> • Developed - High/medium intensity • Developed – Low intensity/open space • Agriculture – Crops/pasture • Herbaceous vegetation • Shrubland • Evergreen forest • Mixed forest • Deciduous forest • Wetland – Emergent/woody 	2016 National Land Cover Dataset (mrlc.gov)
	low_open_dev_120m_window		
	ag_120m_window		
	herb_120m_window		
	shrub_120m_window		
	evergreen_120m_window		
	mixed_120m_window		
	decid_120m_window		
wet_120m_window			
Soils	aws_150	Soil available water storage at 150 cm depth from national soil surveys	Gridded Soil Survey Geographic Database (gSSURGO) (https://datagateway.nrcs.usda.gov/)
Topography	elevation	Elevation above sea level	National Elevation Dataset (https://viewer.nationalmap.gov)
	TRI	Terrain roughness index; derived from elevation dataset (equation from Riley et al. [1999])	
Road density	road_dens	Linear density (km/km ²) of road features (all road classes combined)	National Transportation Dataset (https://viewer.nationalmap.gov)
Climate	Def_2005_2017	Average of monthly climatic water deficit for all months in the year range 2005-2017	Terraclim climate data (http://climateengine.org/)

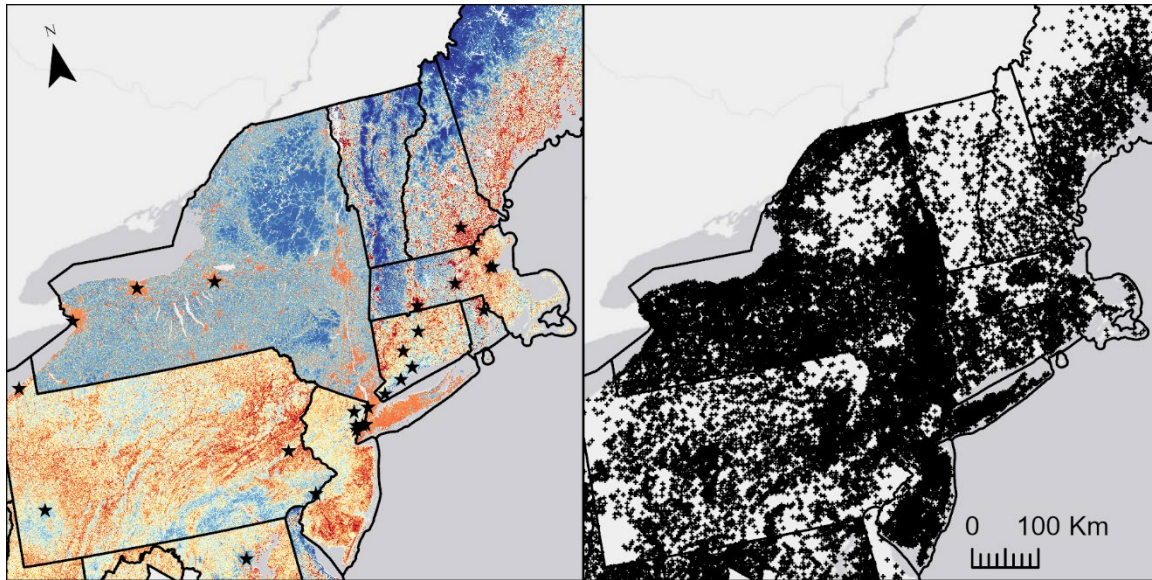
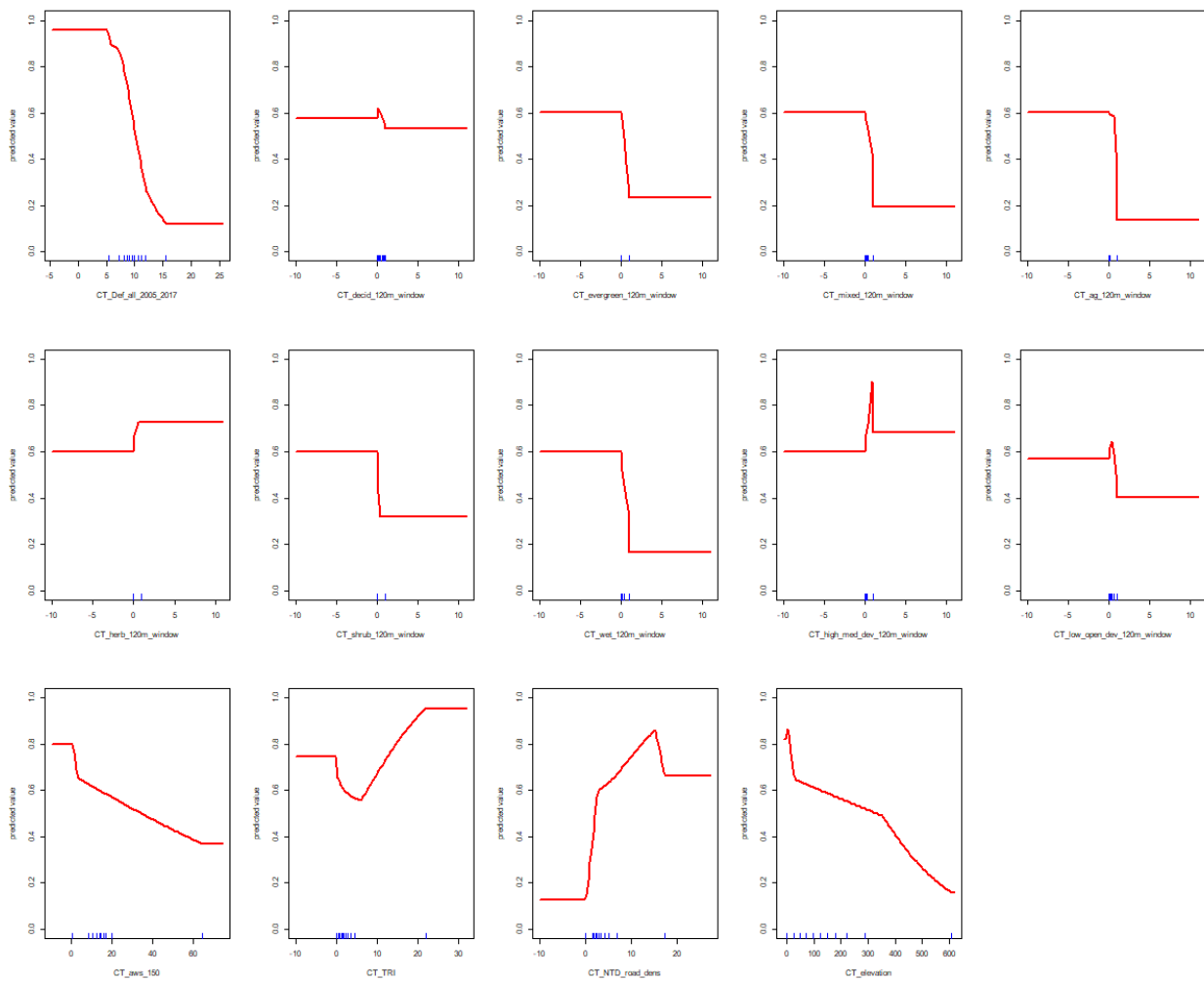


Figure S1: Comparison of state model outputs (left) for all fires with locations reported in the USFS fire occurrence database (right). Star symbols indicate cities with populations $\geq 100,000$. In the example area, there are clearly more occurrence locations reported for New York than for adjacent states. High occurrence probability around cities in New York indicates that results are affected by differences in reporting methods between New York and other states, in which New York reports all outdoor fires that were fought by municipal and local fire departments. In contrast, Pennsylvania and New Jersey only report fires where the state firefighting service provided either primary or secondary response.

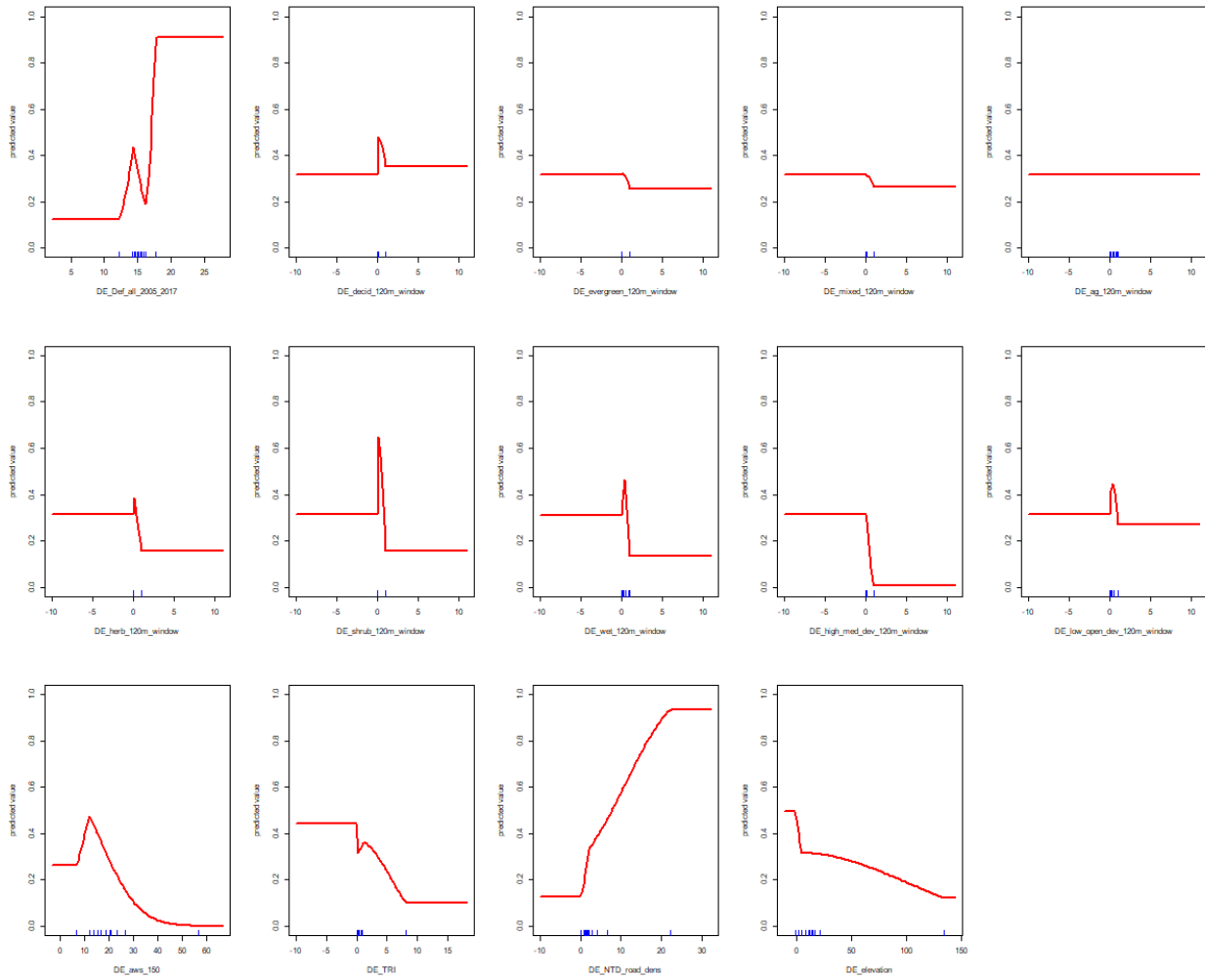
The following figures are response plots for all variables included in MaxEnt models. The first set of plots are for individual state models predicting all fires, the second set of plots are for individual state models predicting large fires only (>4 ha), and the final set of plots are for region-wide models predicting all fires, large fires only, spring fires, summer fires, and fall fires. Seasonal fire subsets include all fire sizes.

All fires:

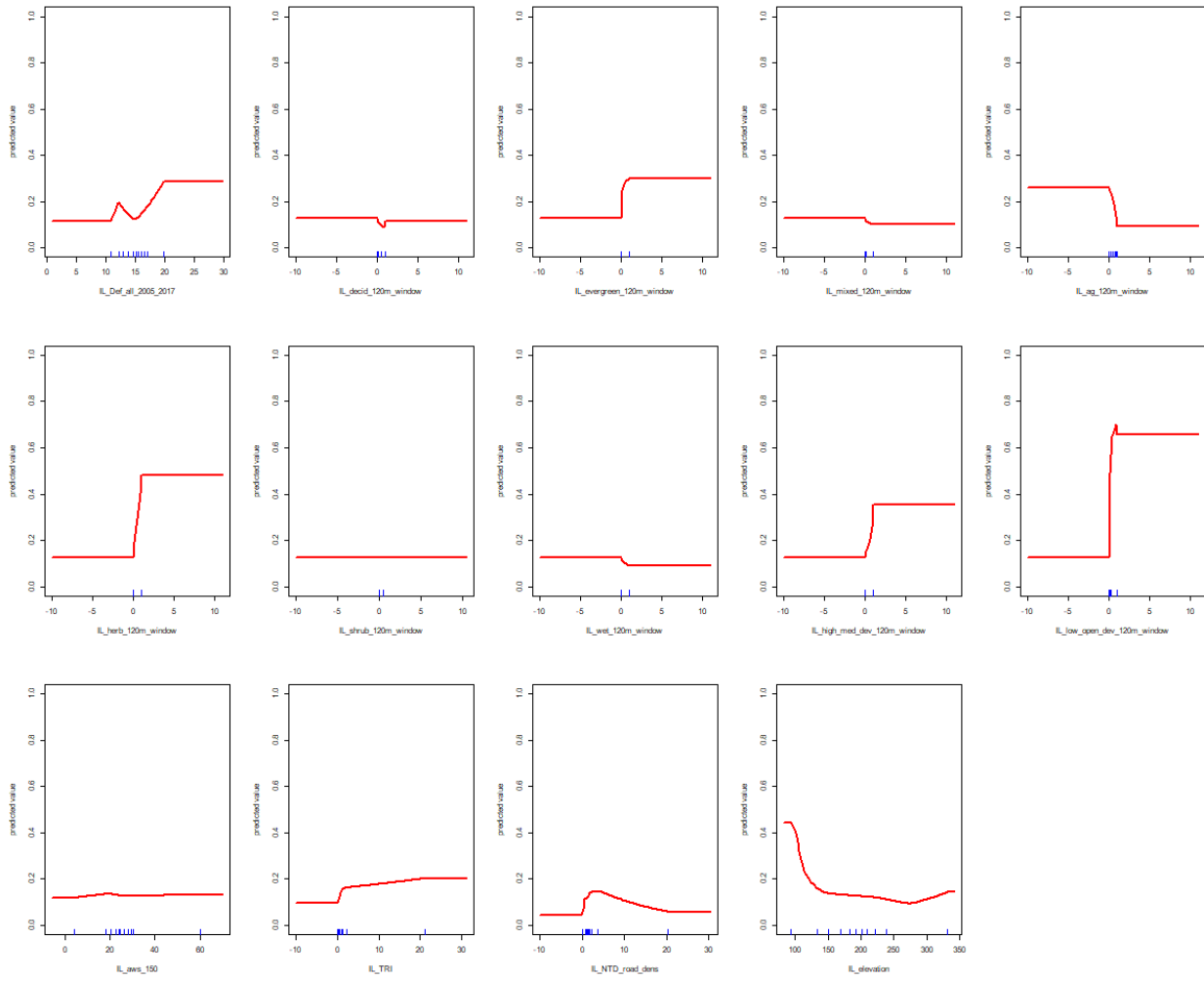
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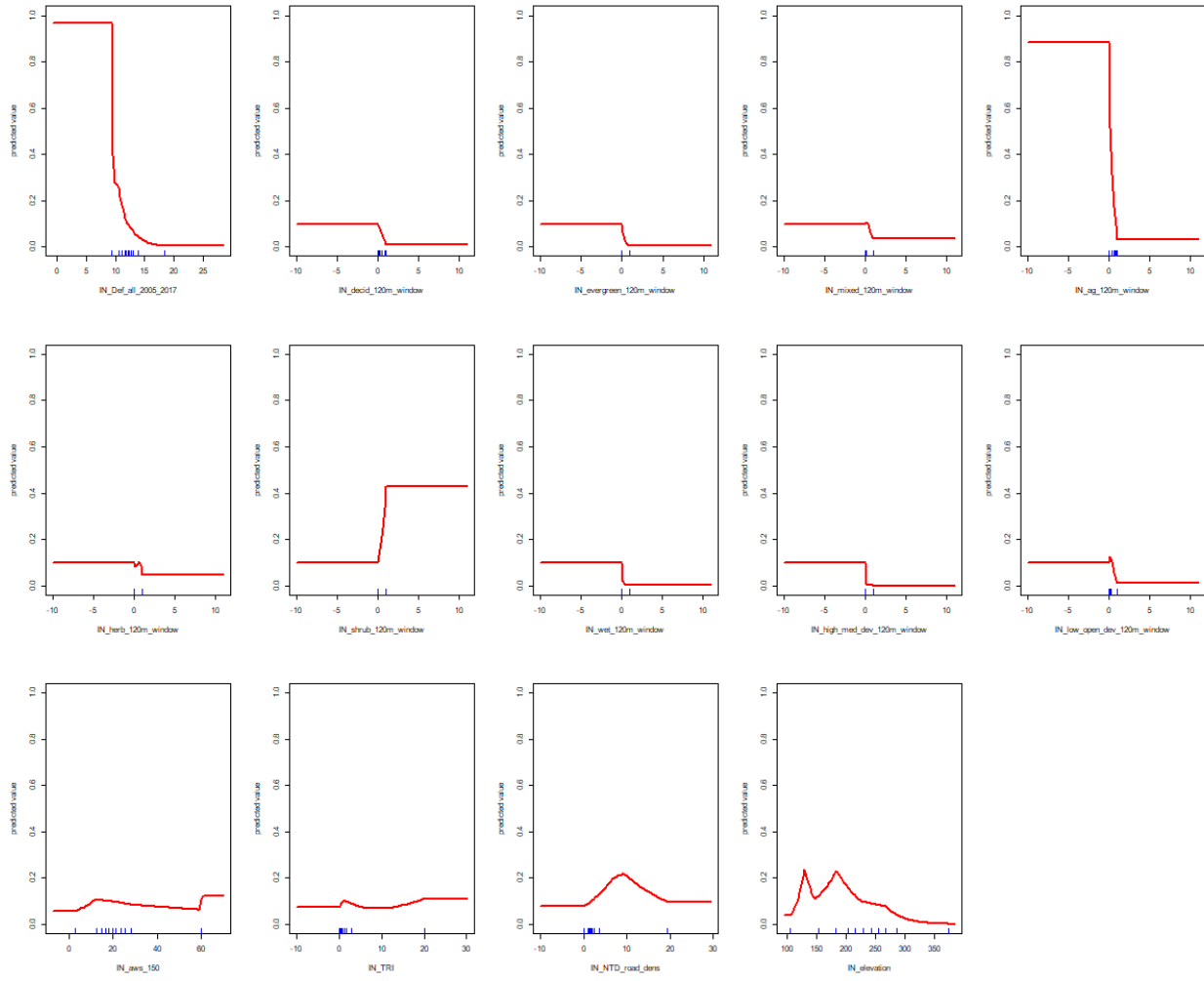
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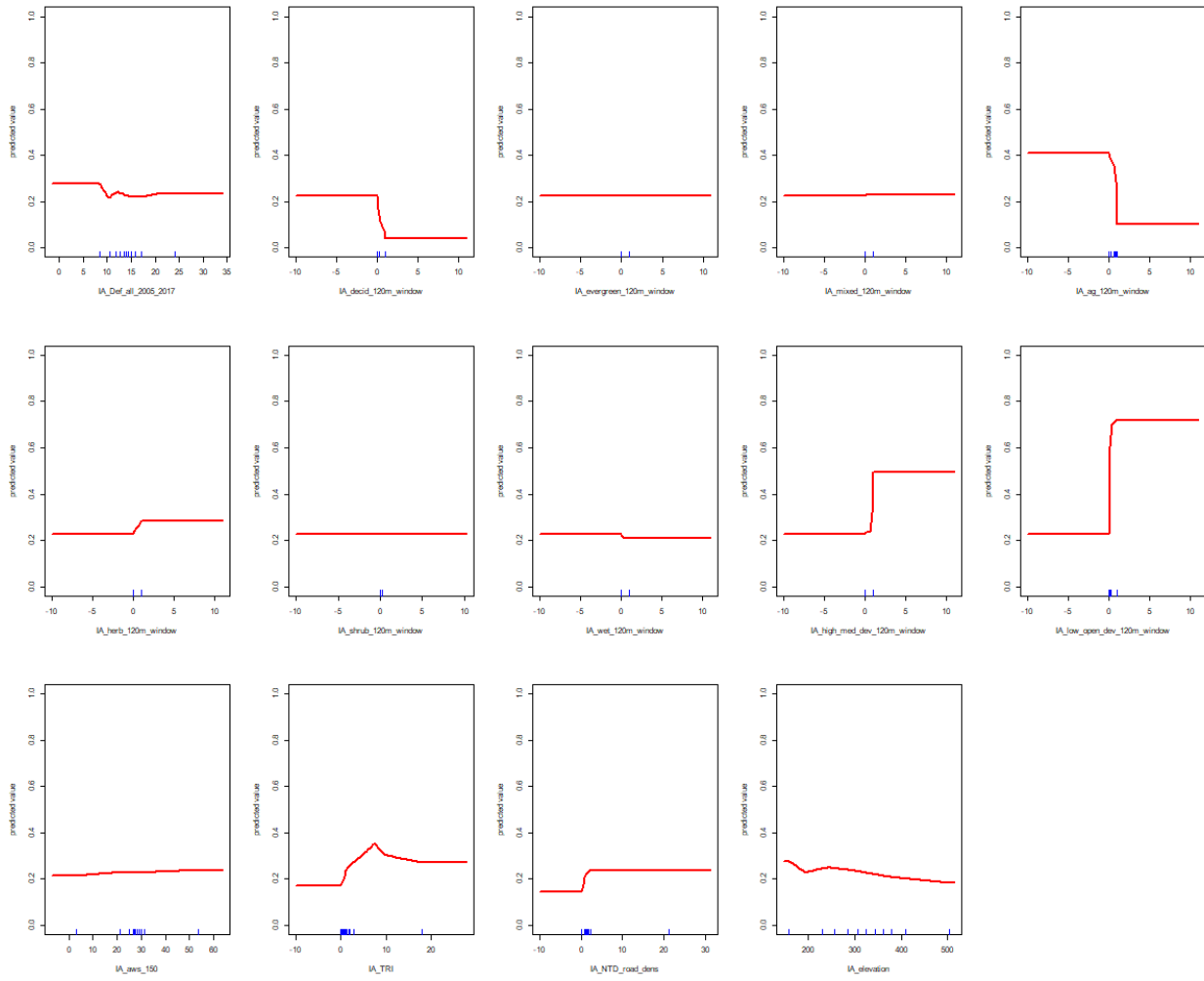
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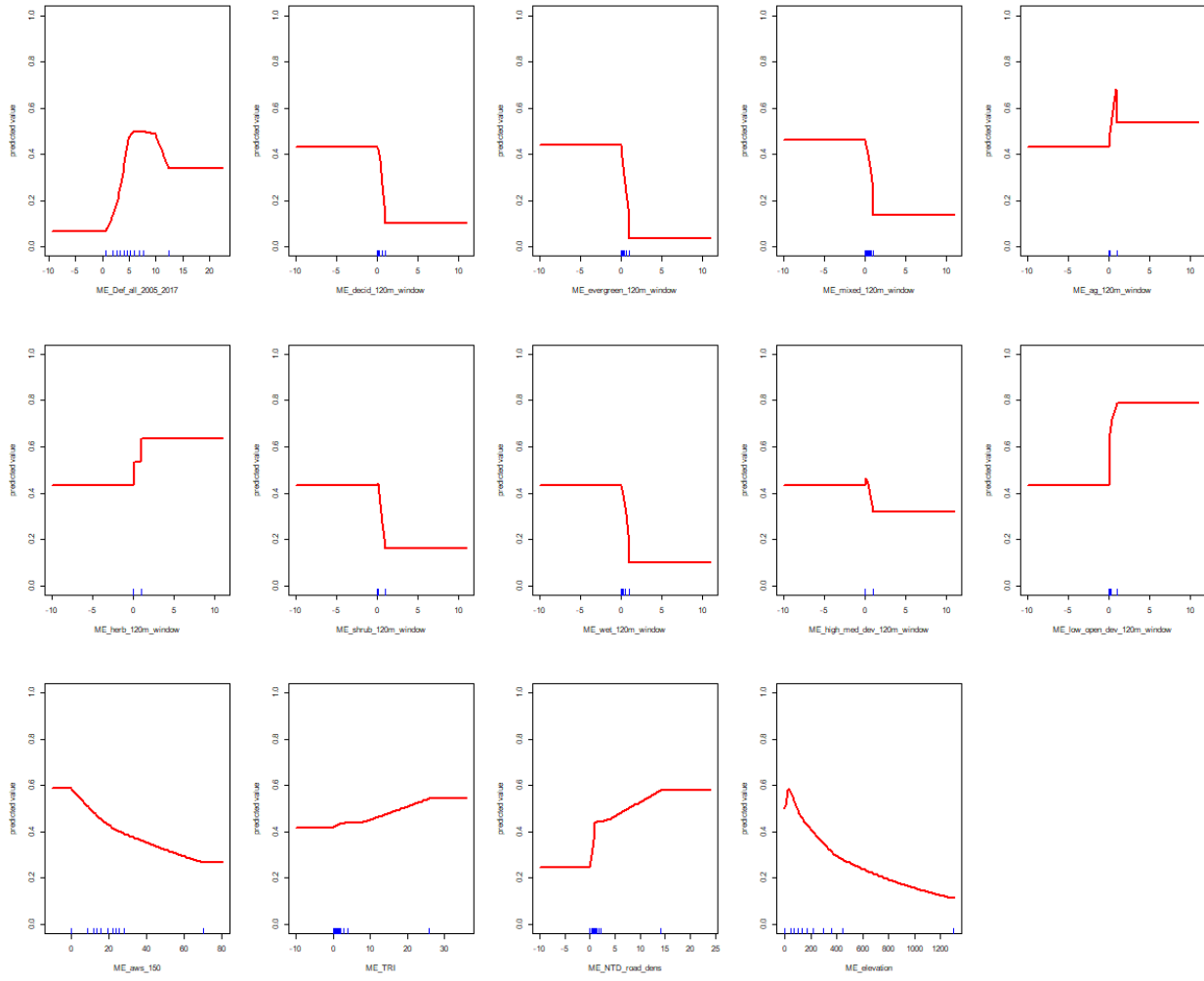
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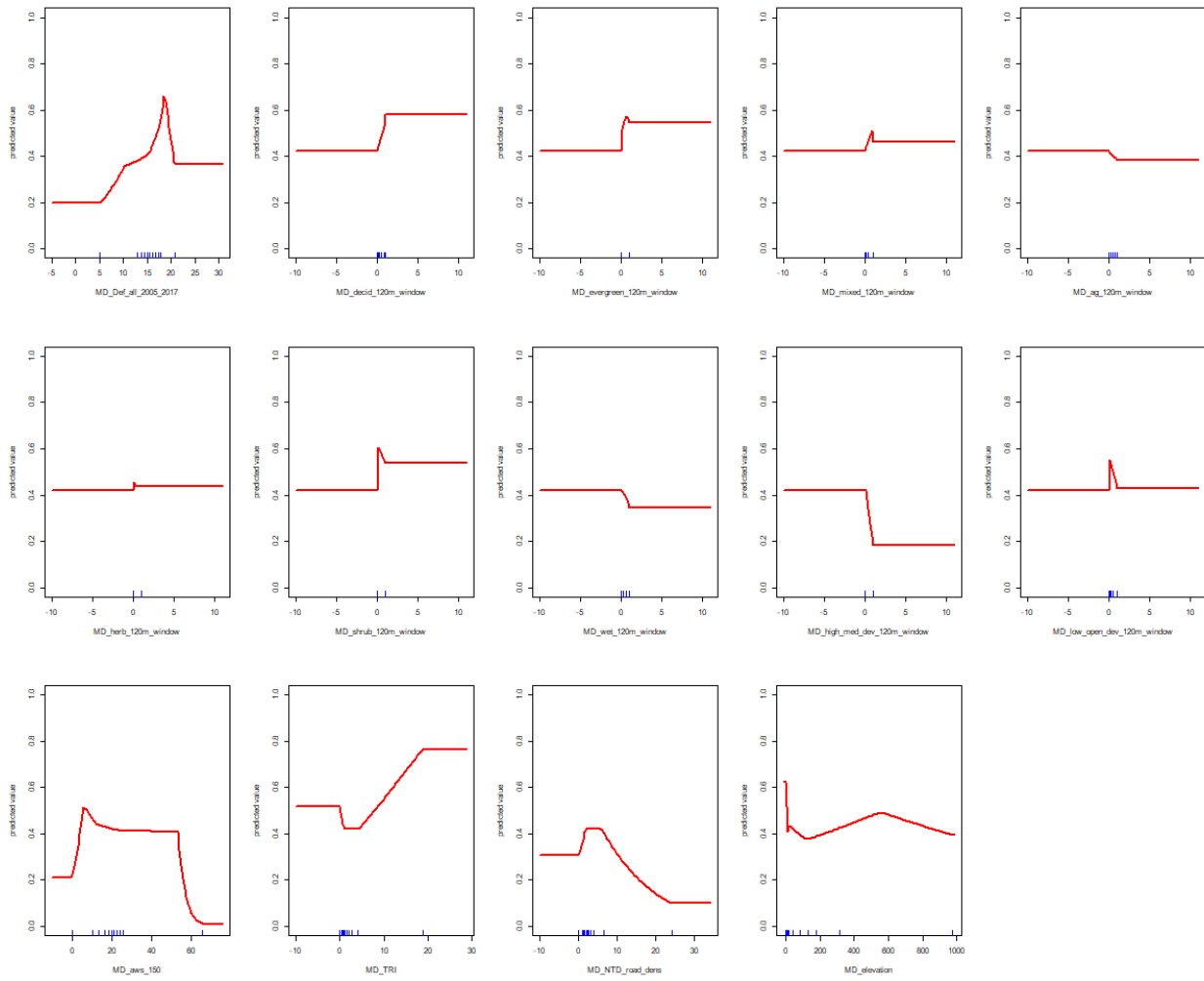
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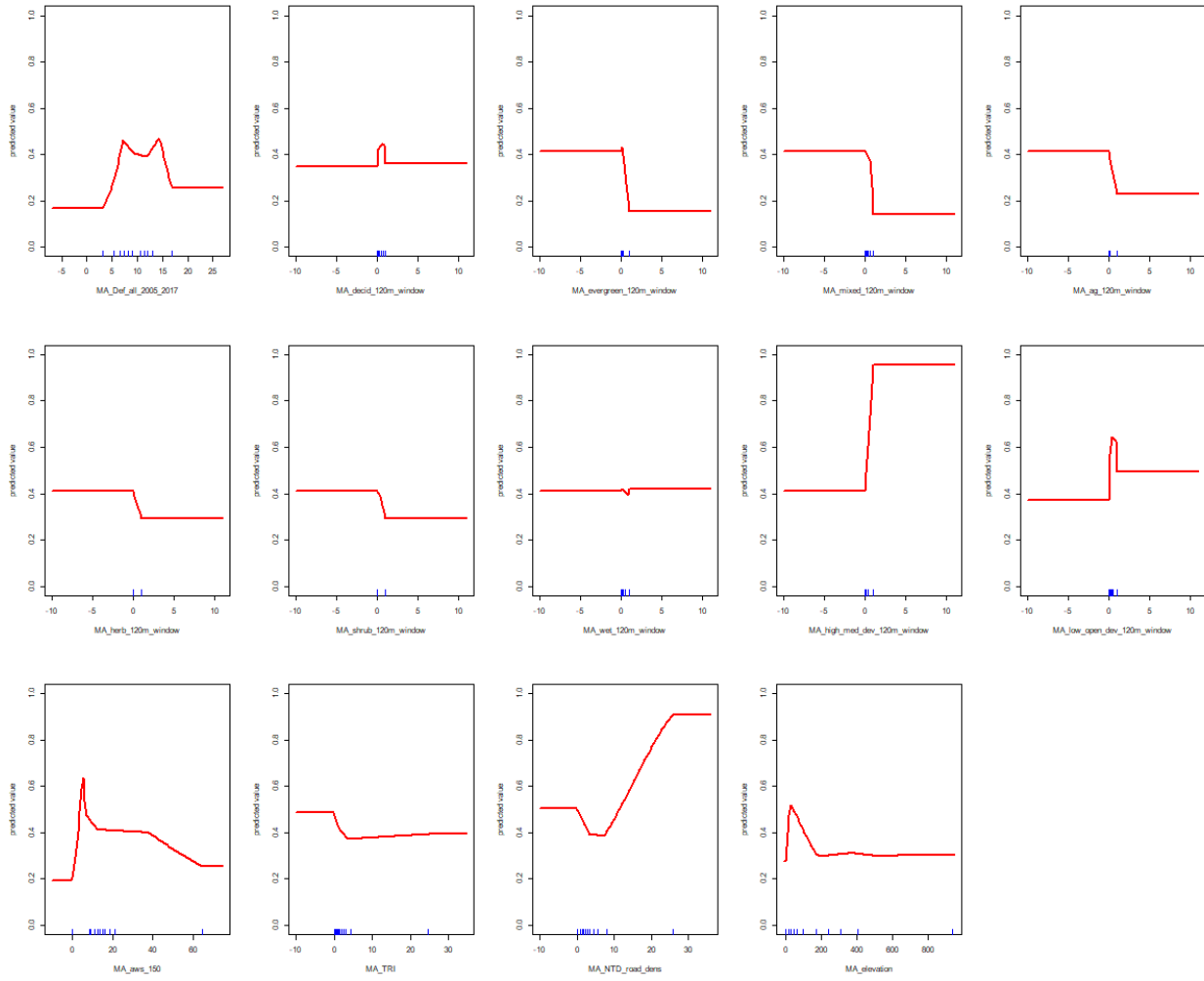
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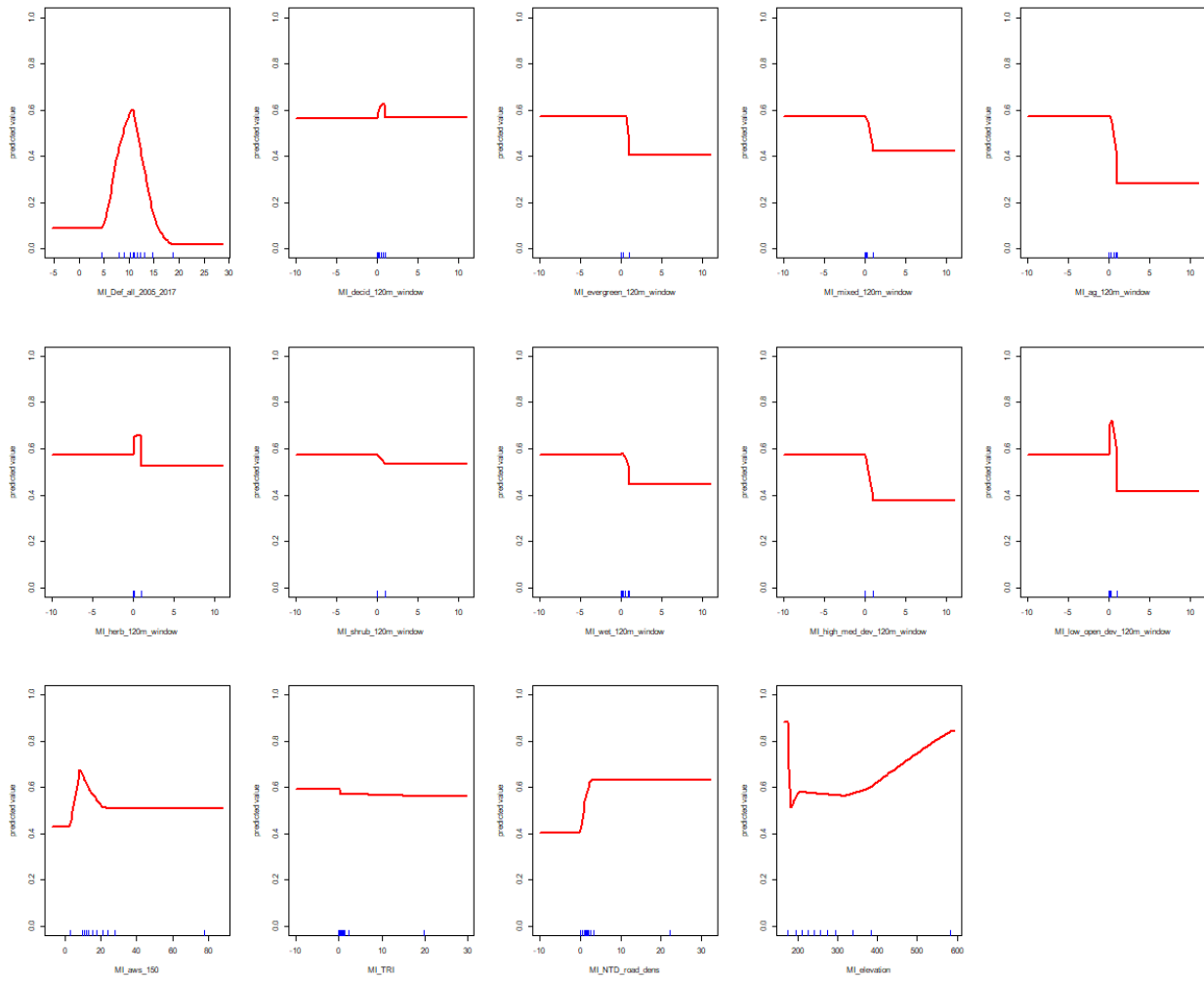
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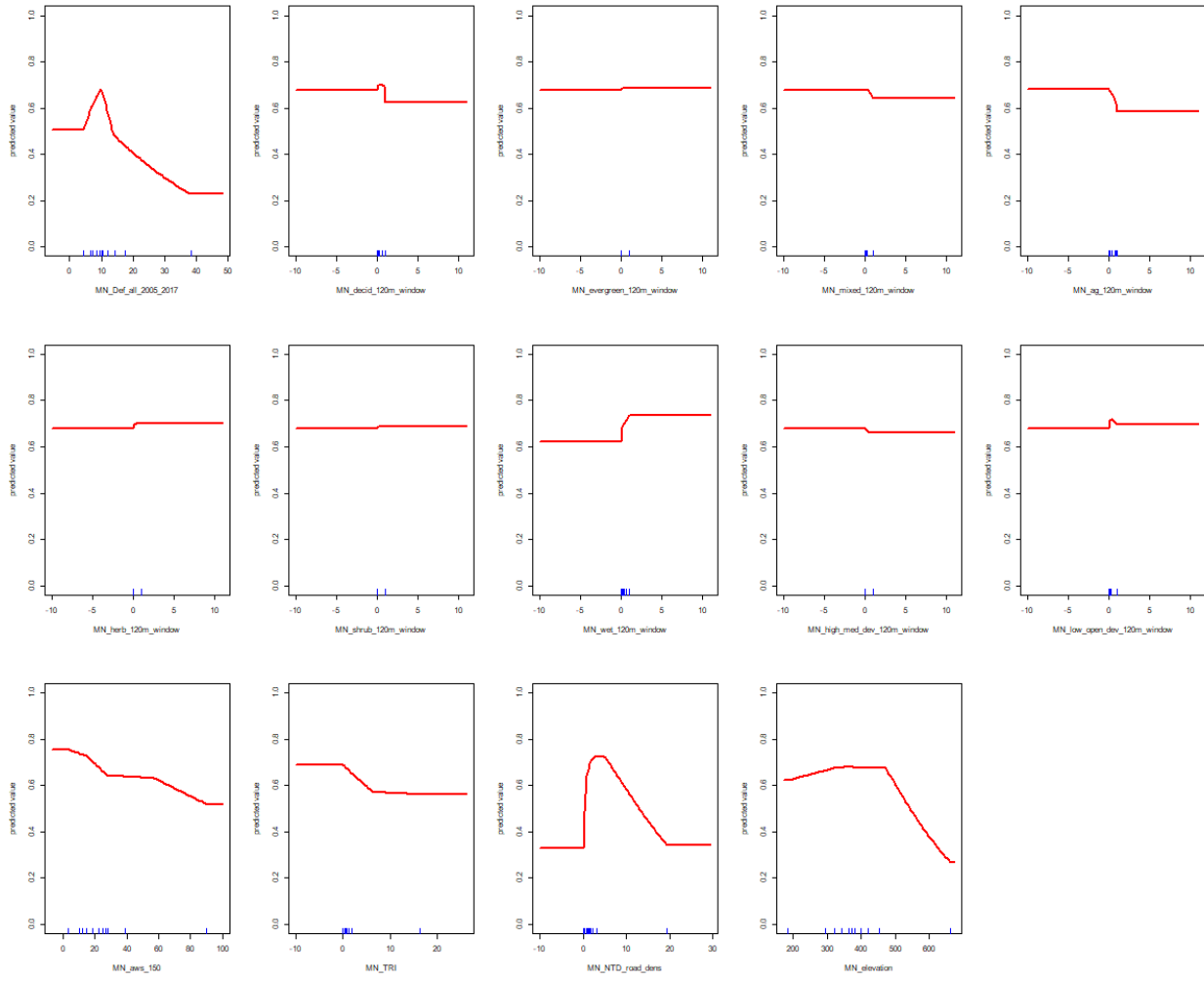
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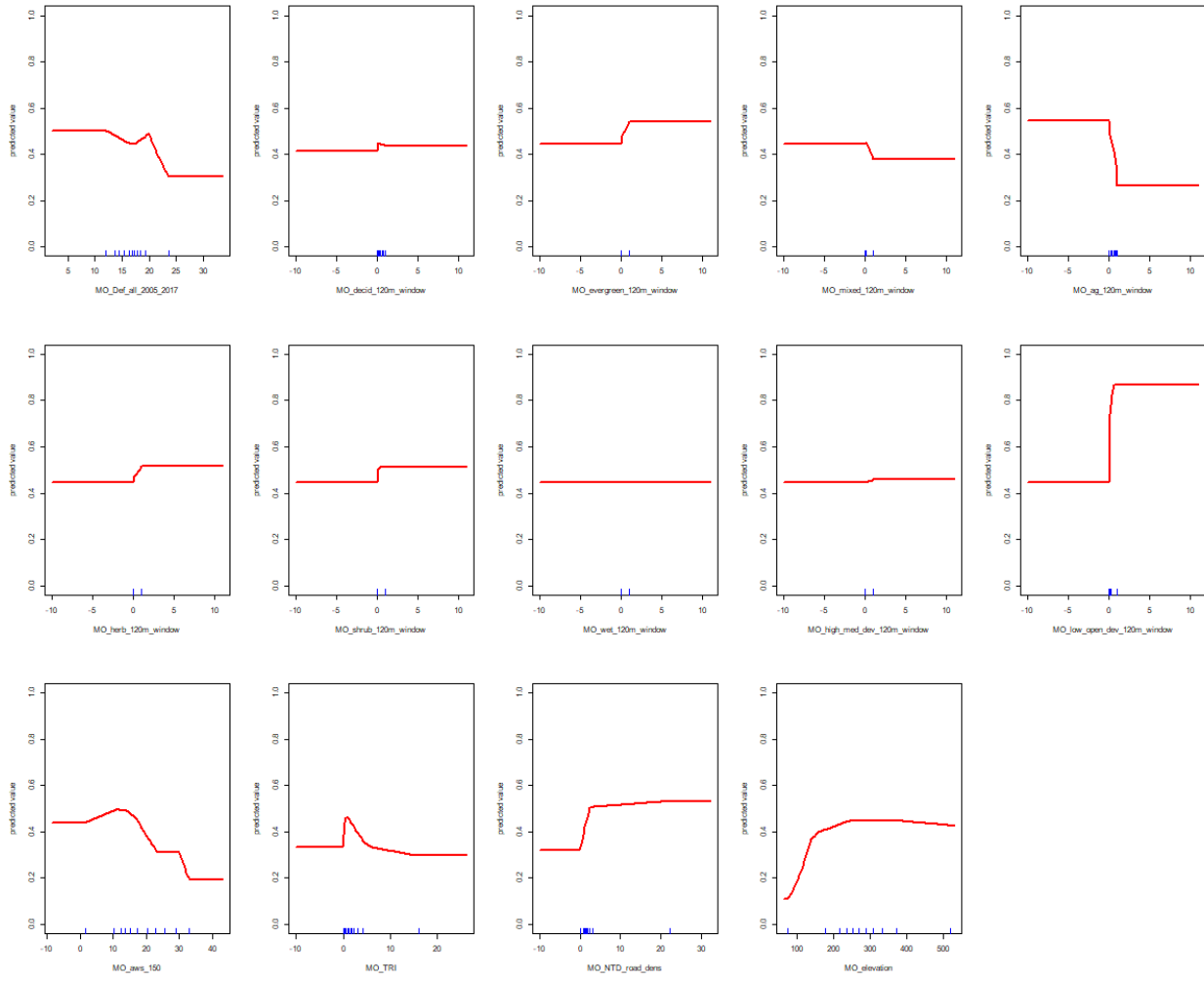
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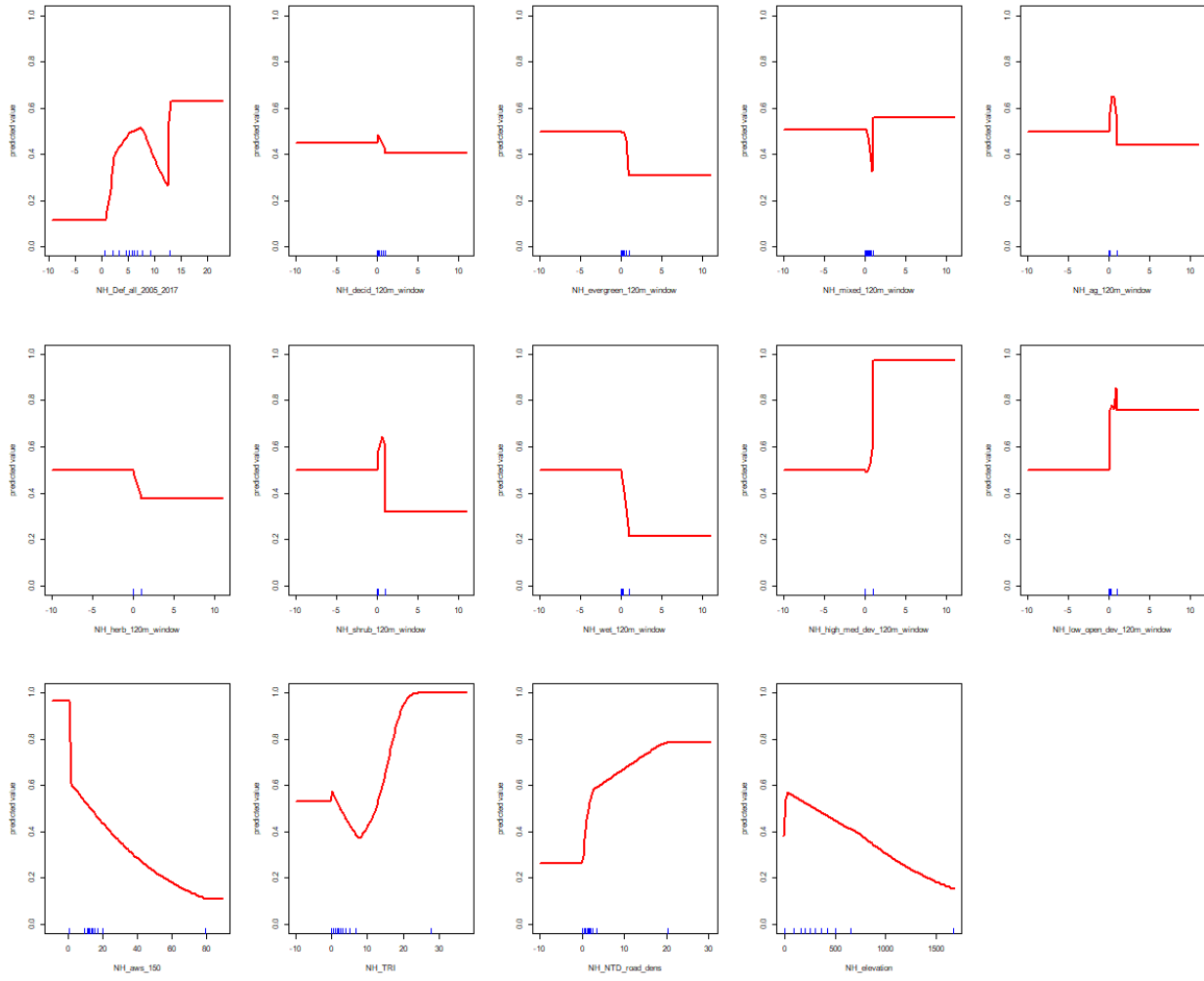
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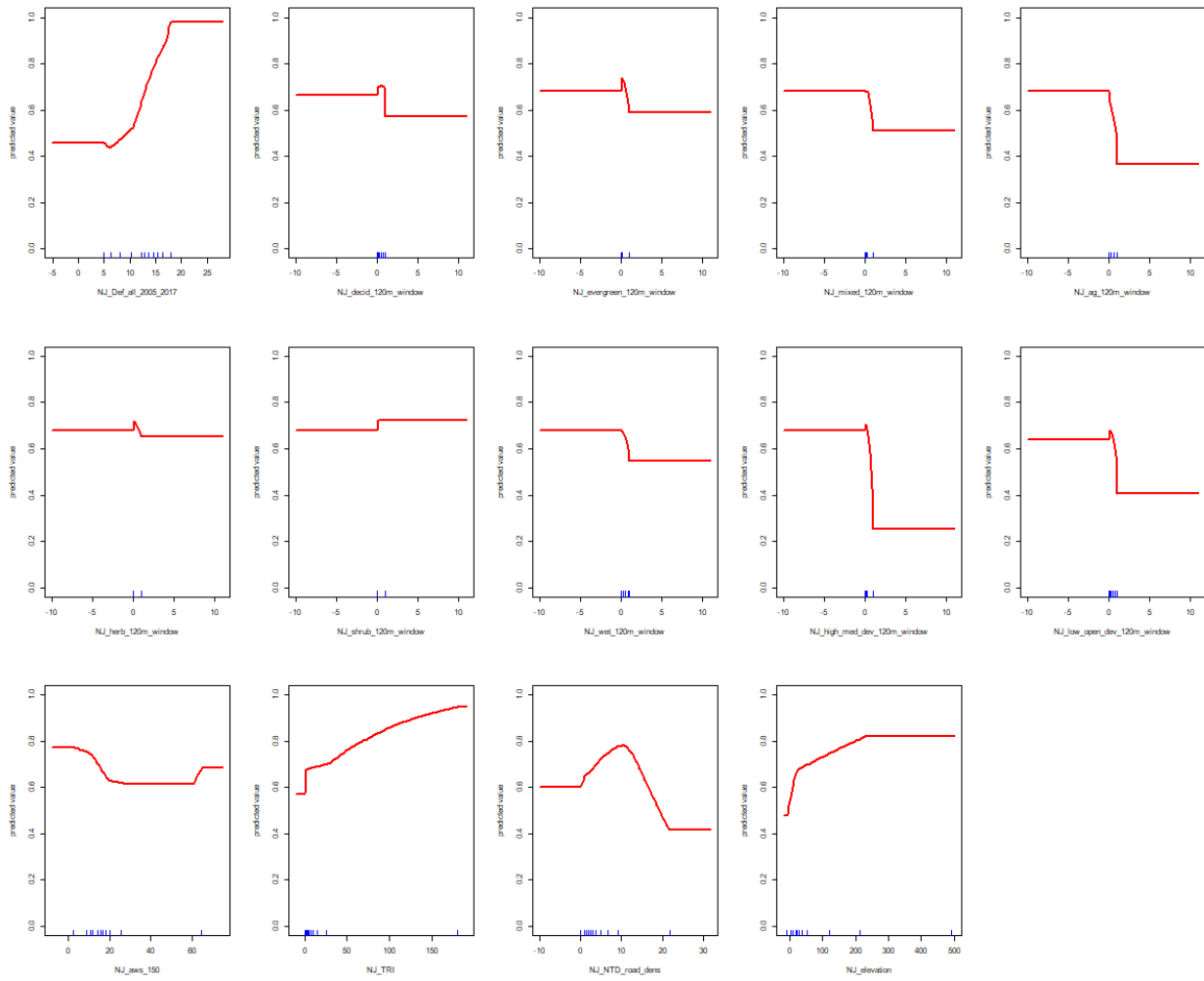
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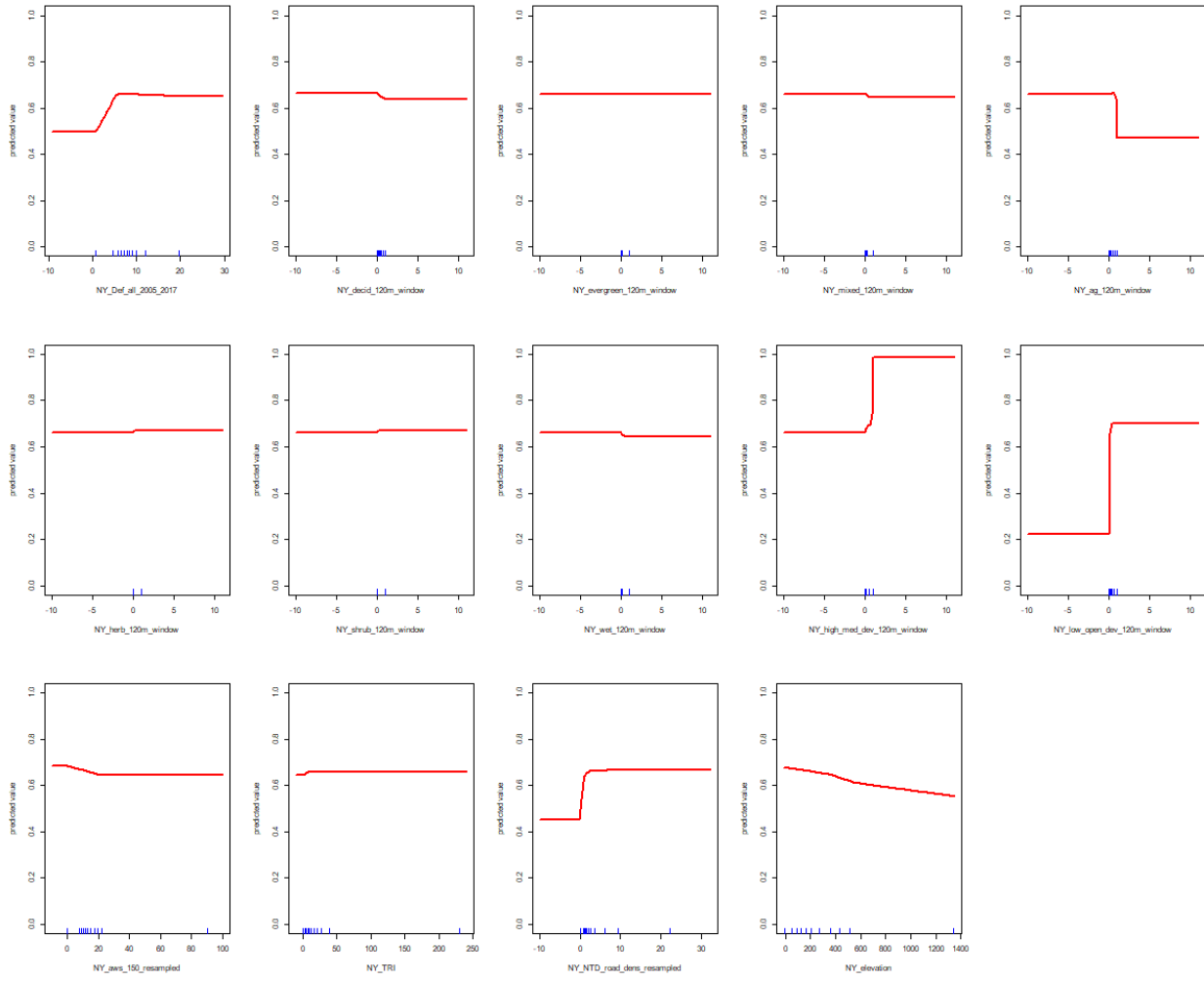
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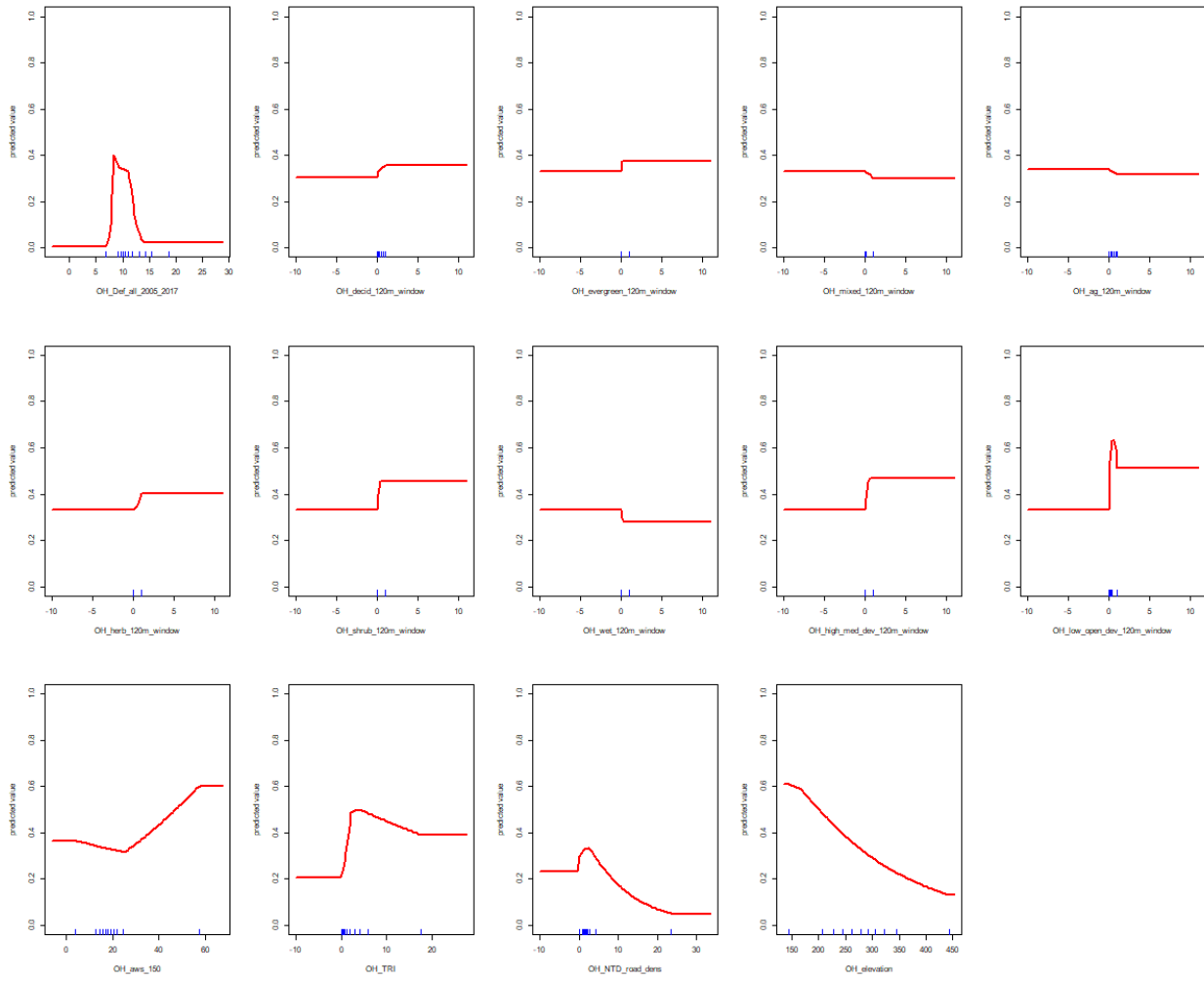
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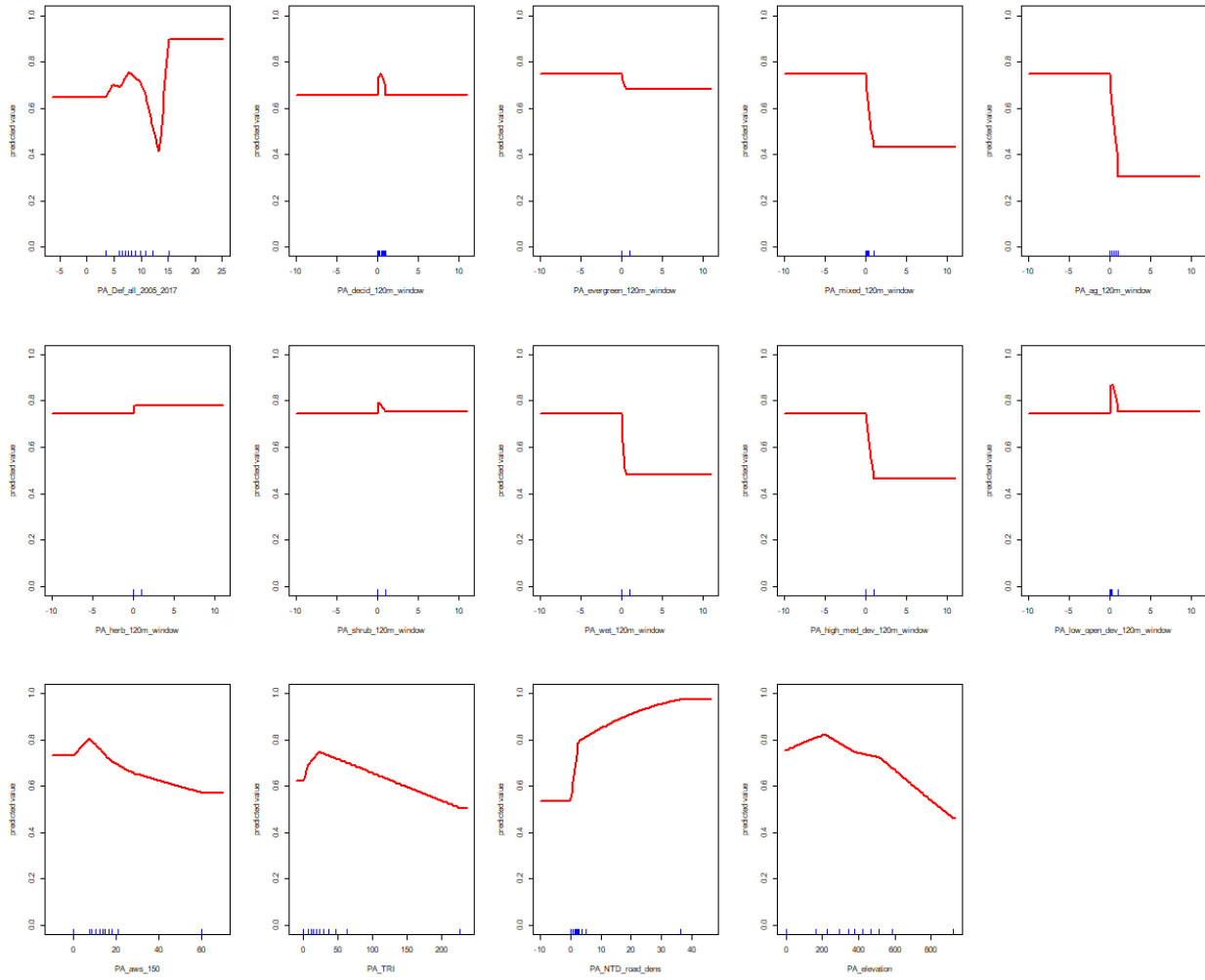
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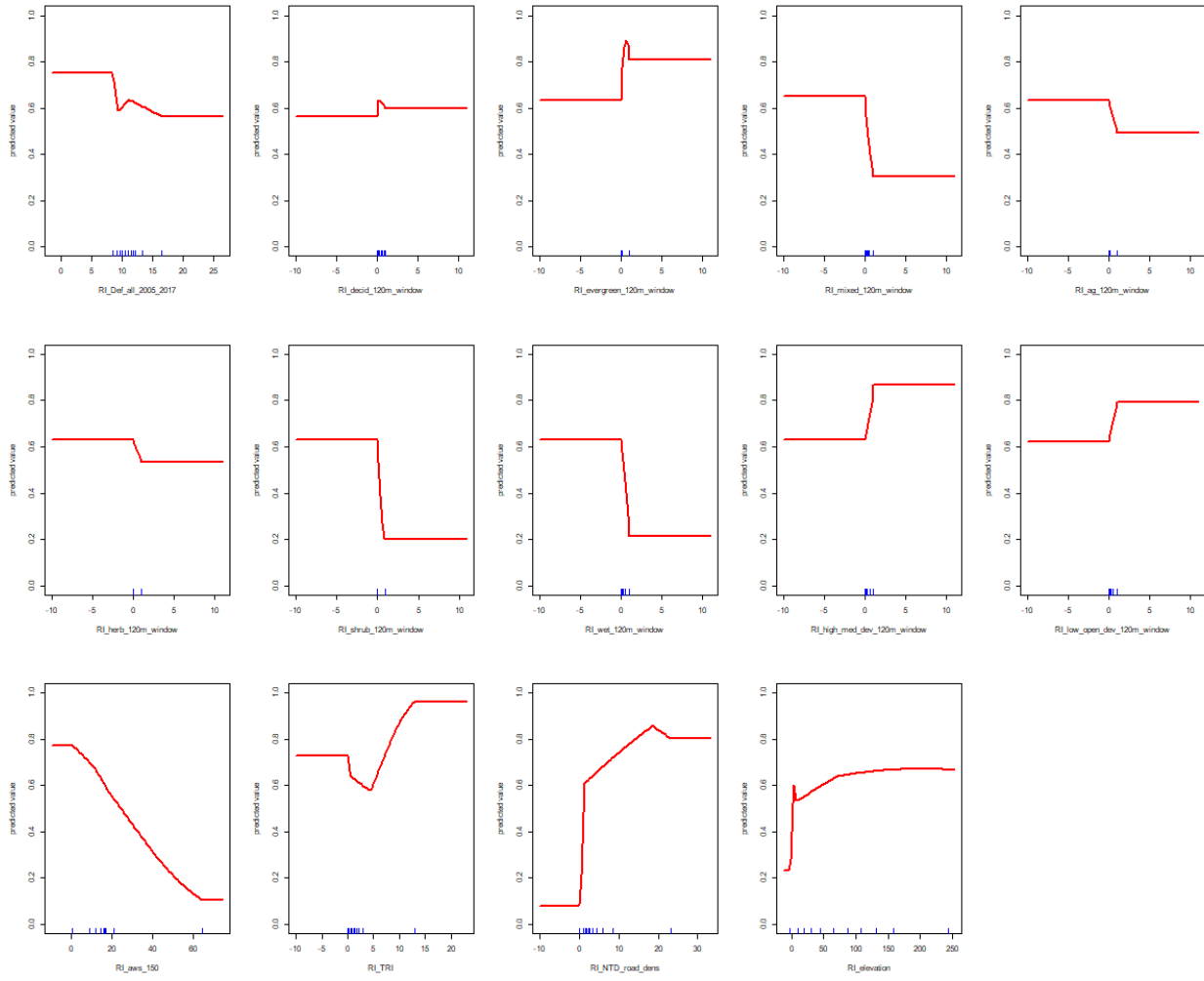
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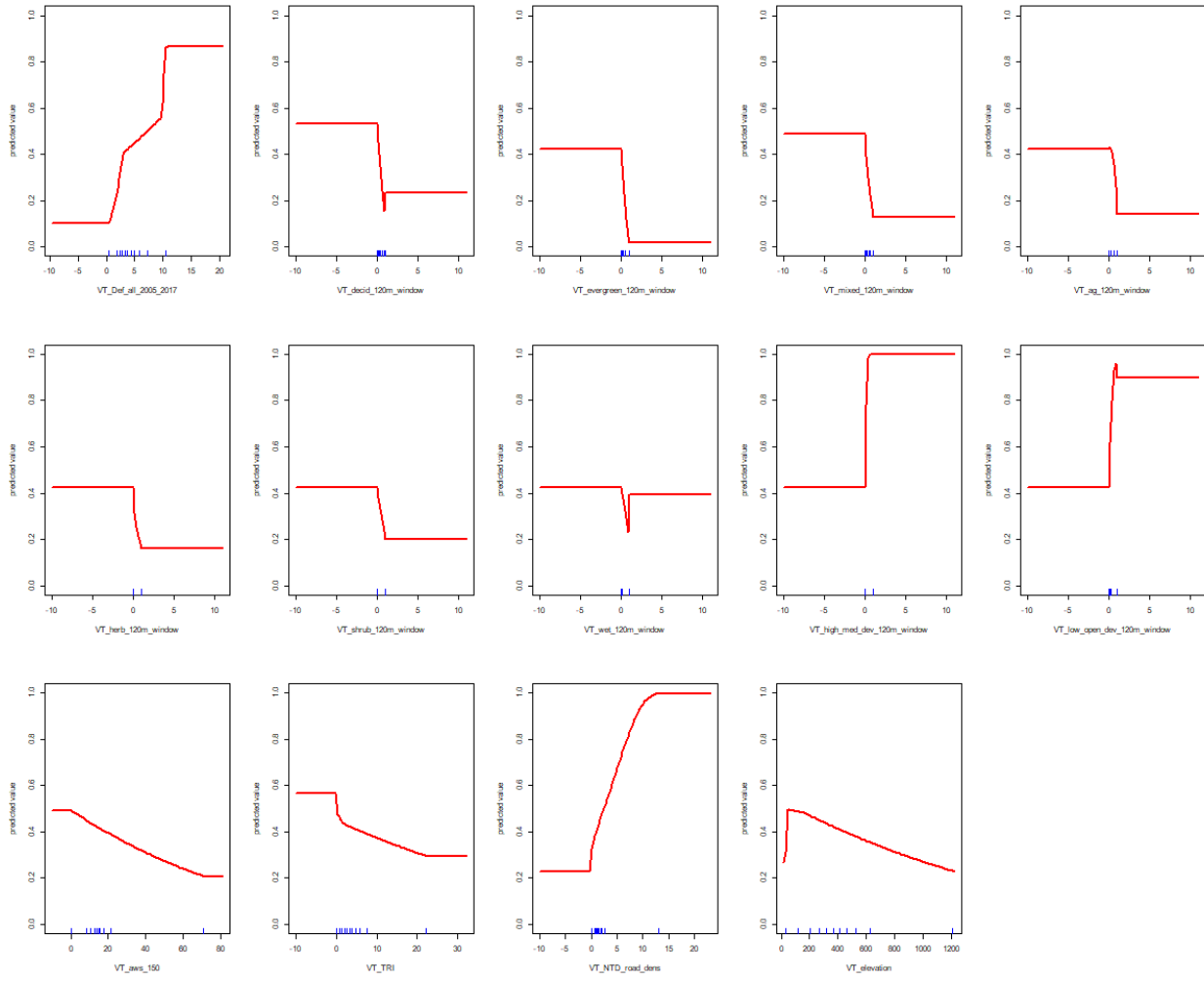
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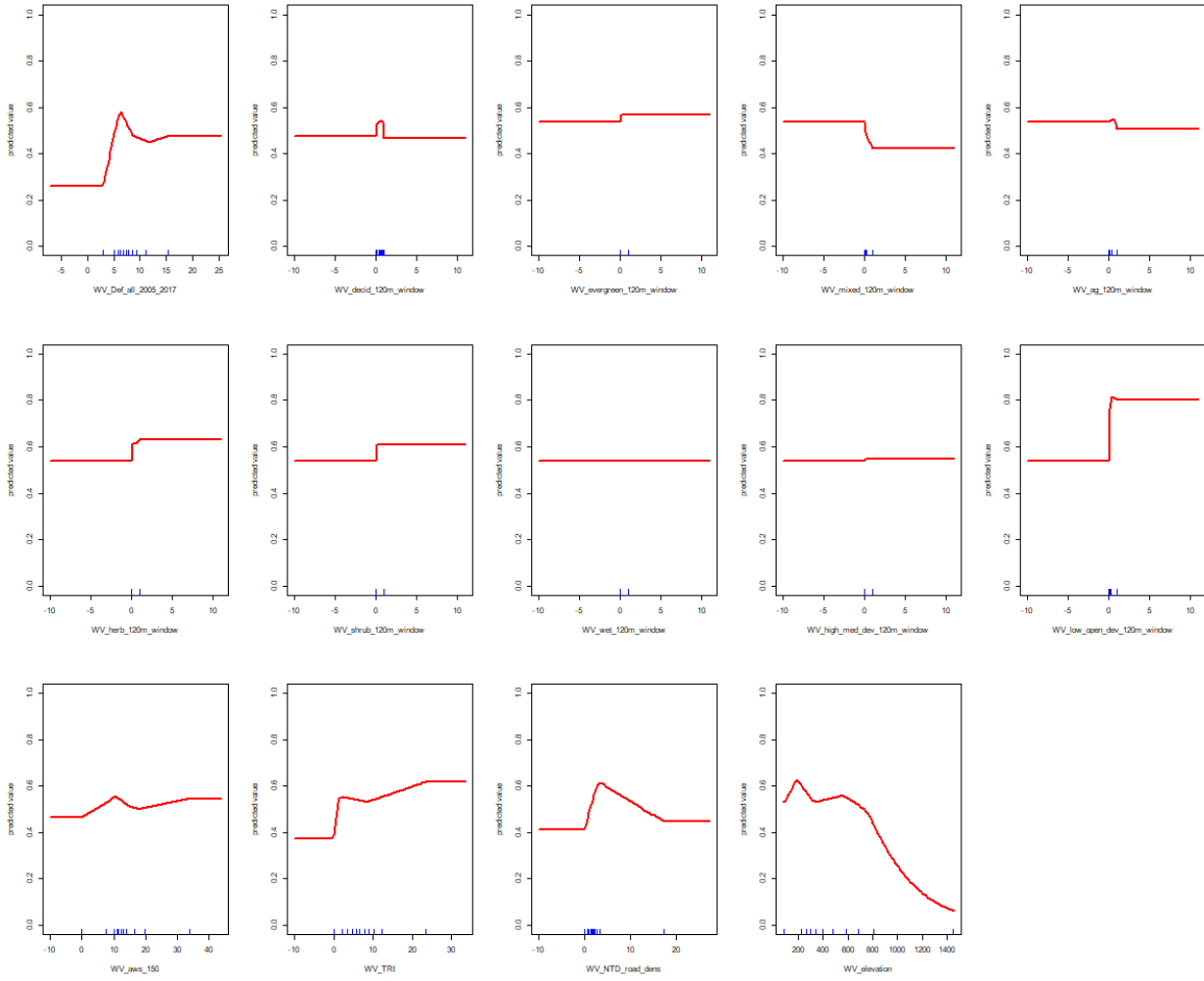
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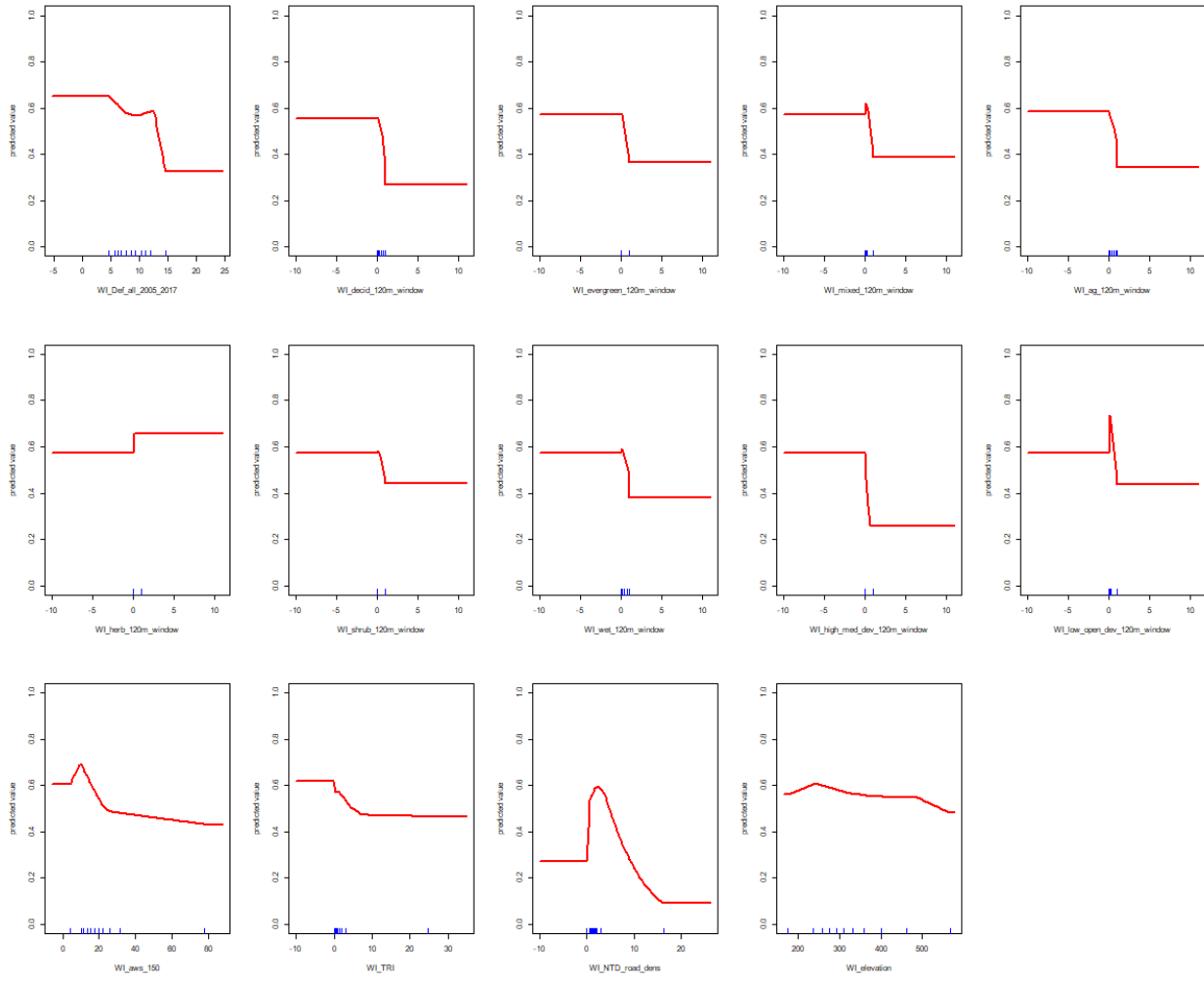
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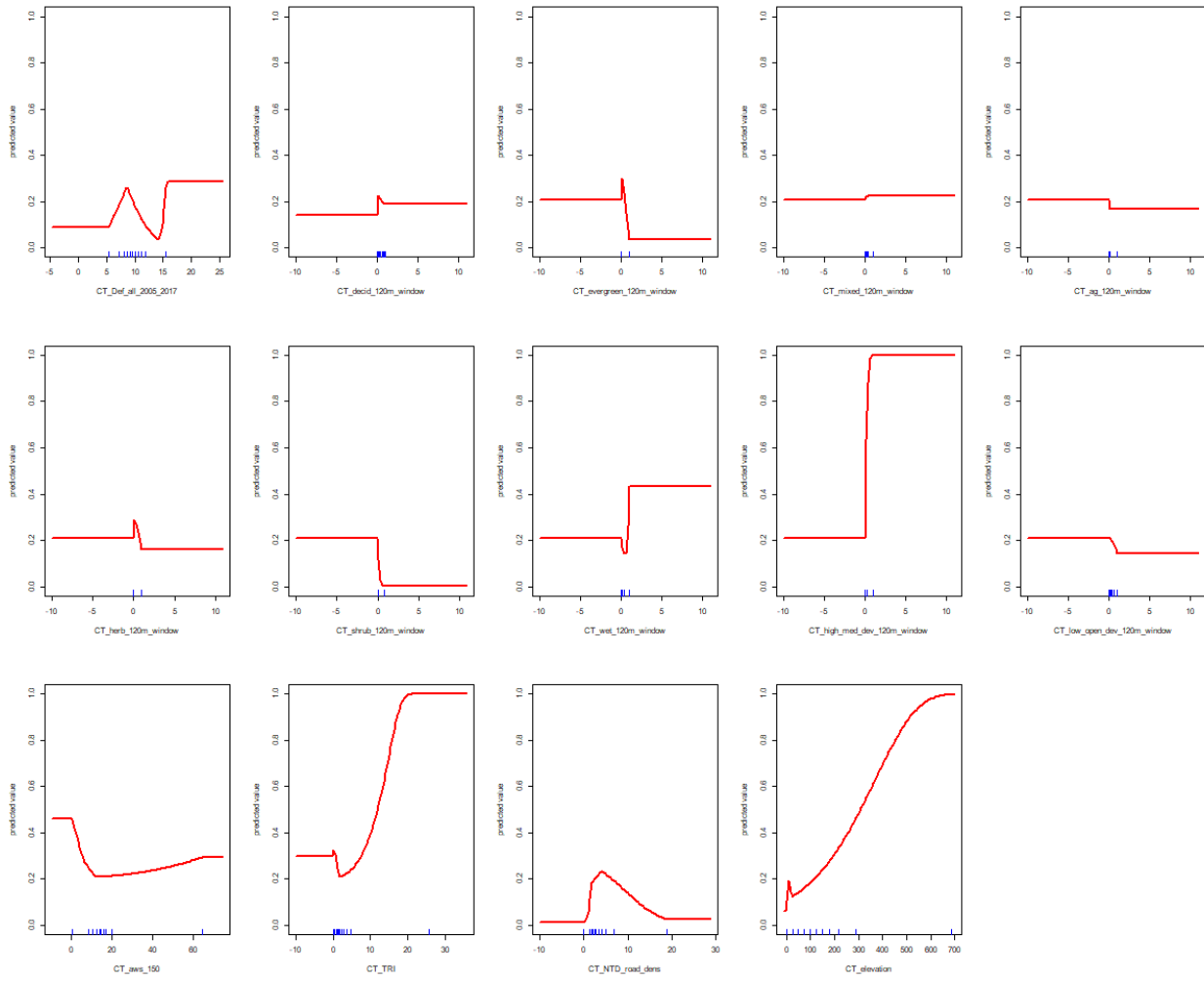


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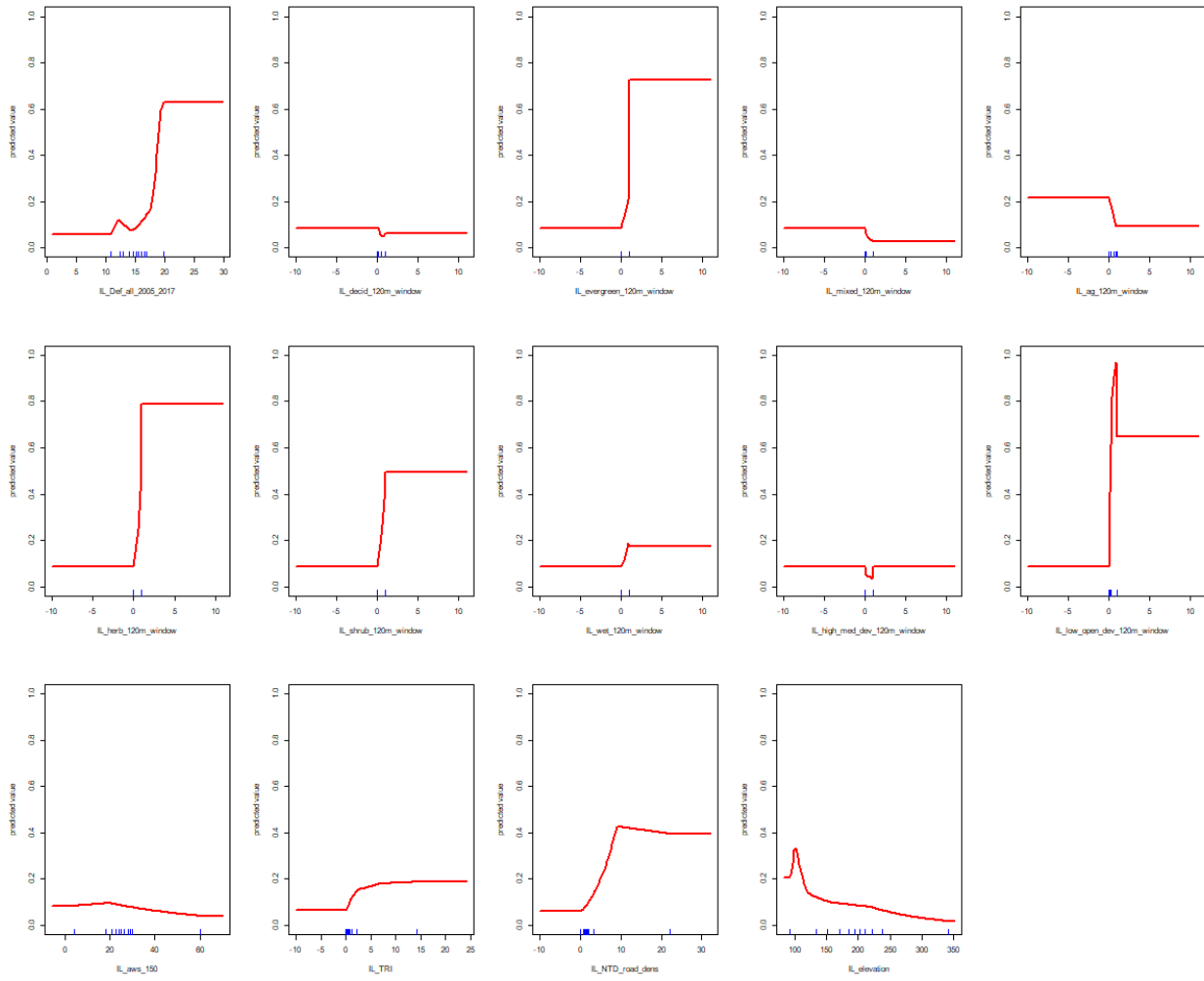


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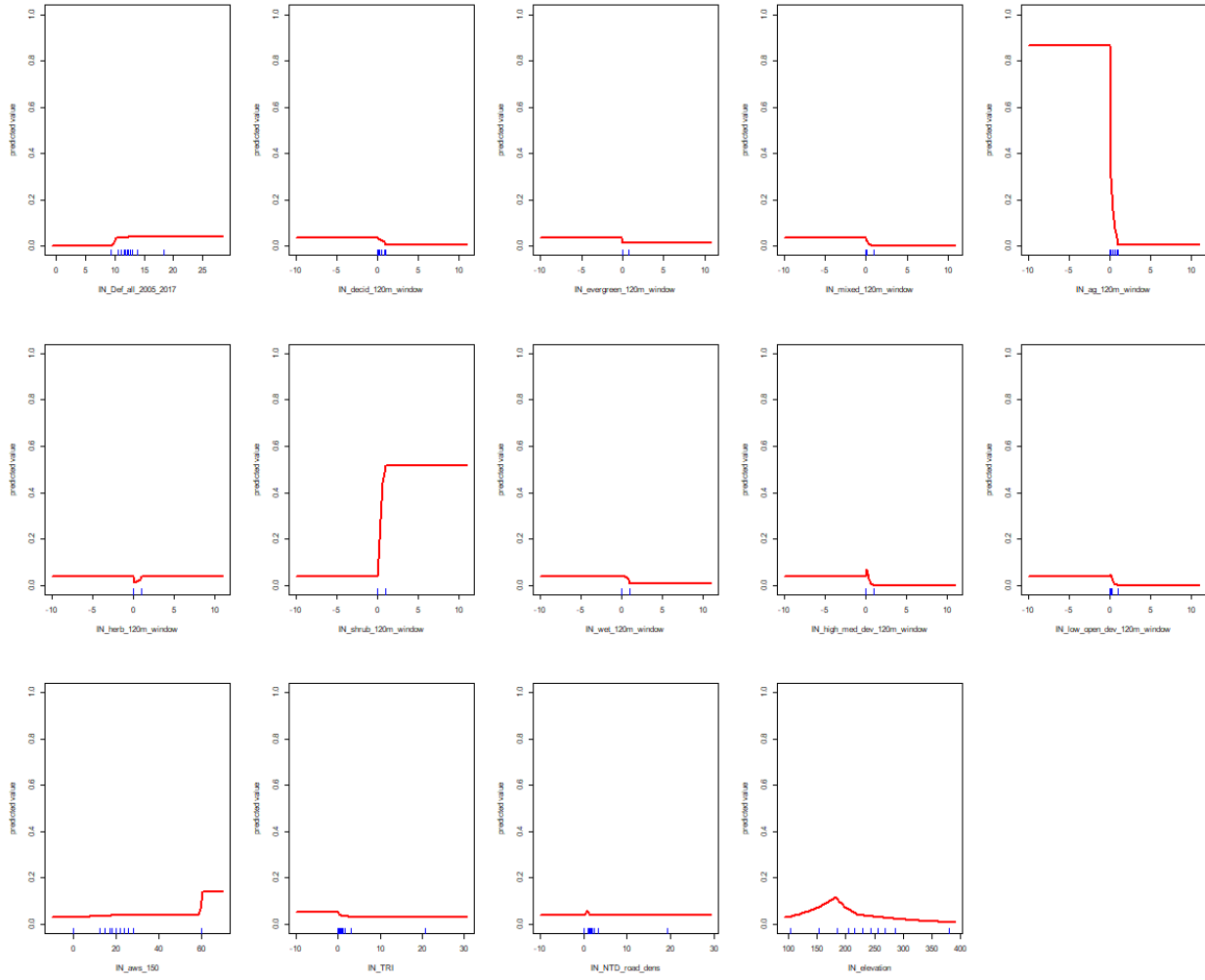
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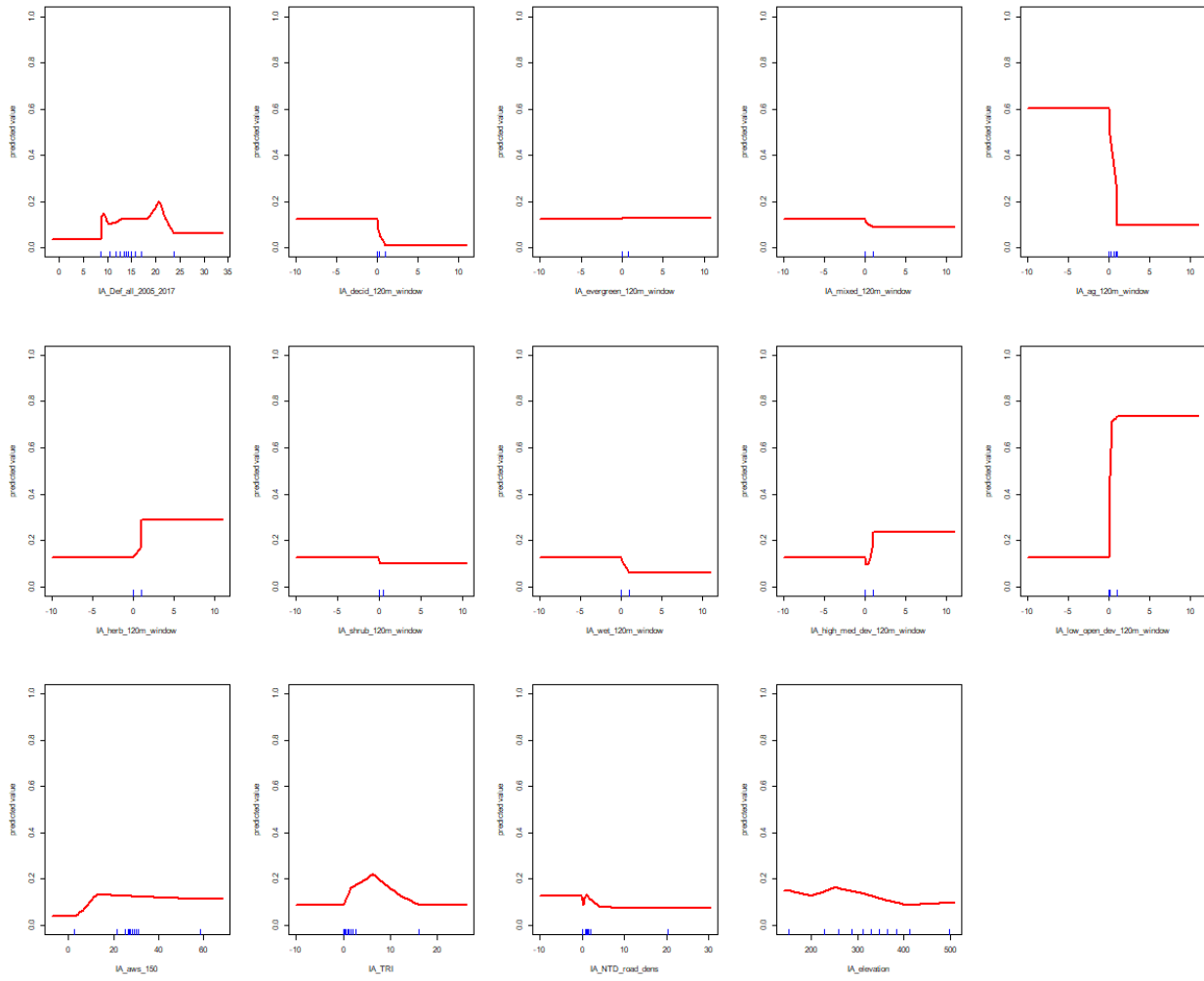
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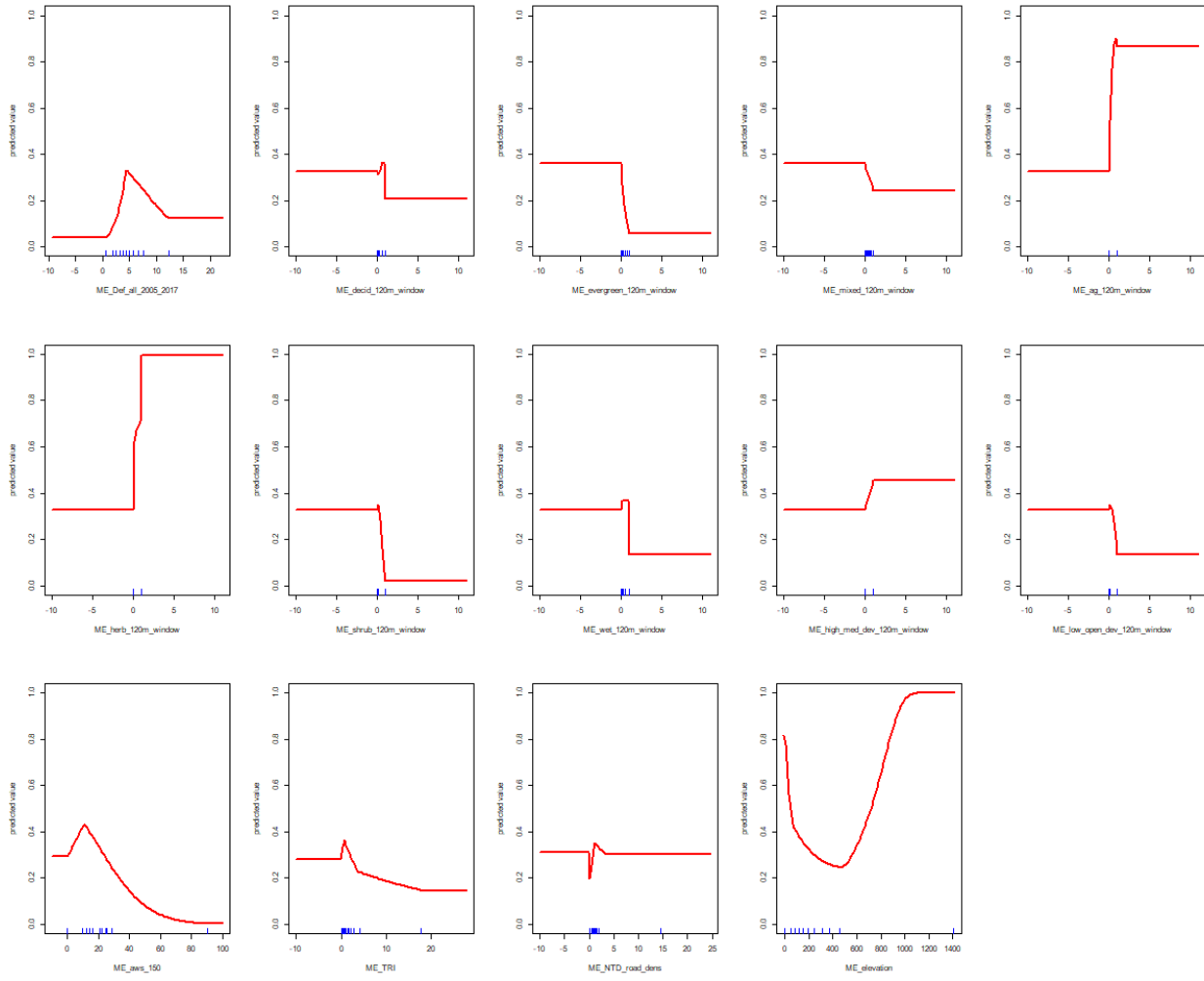
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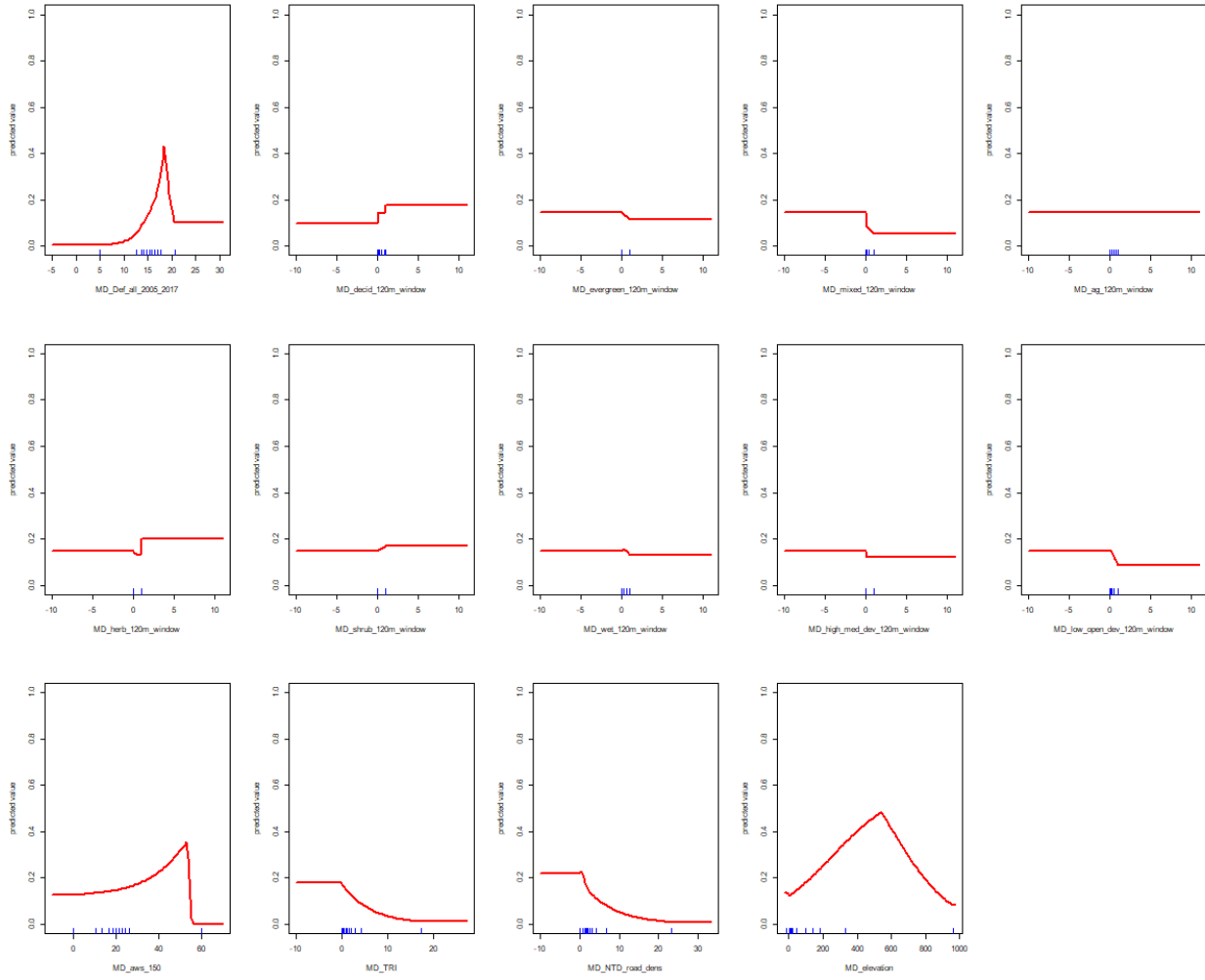
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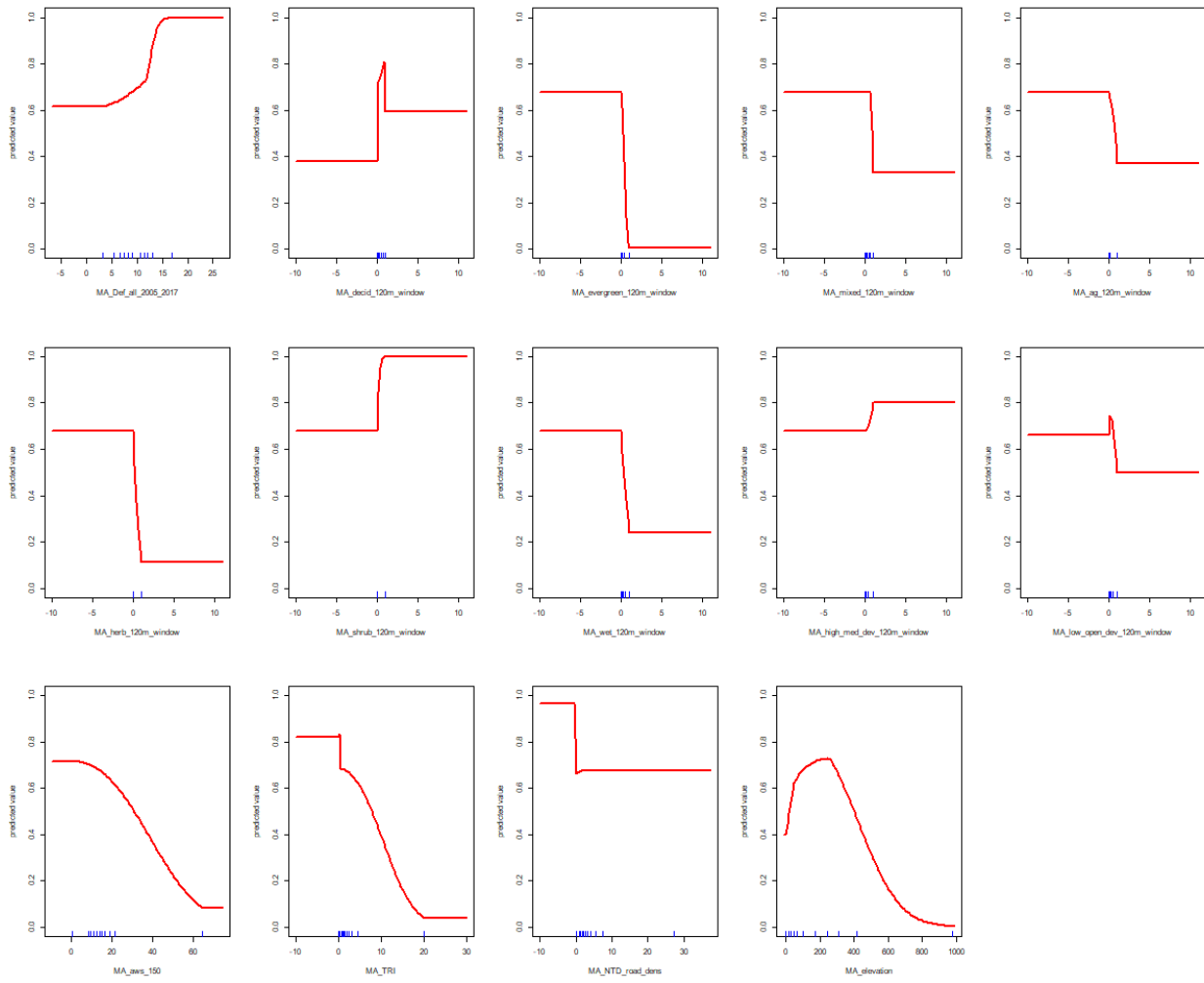
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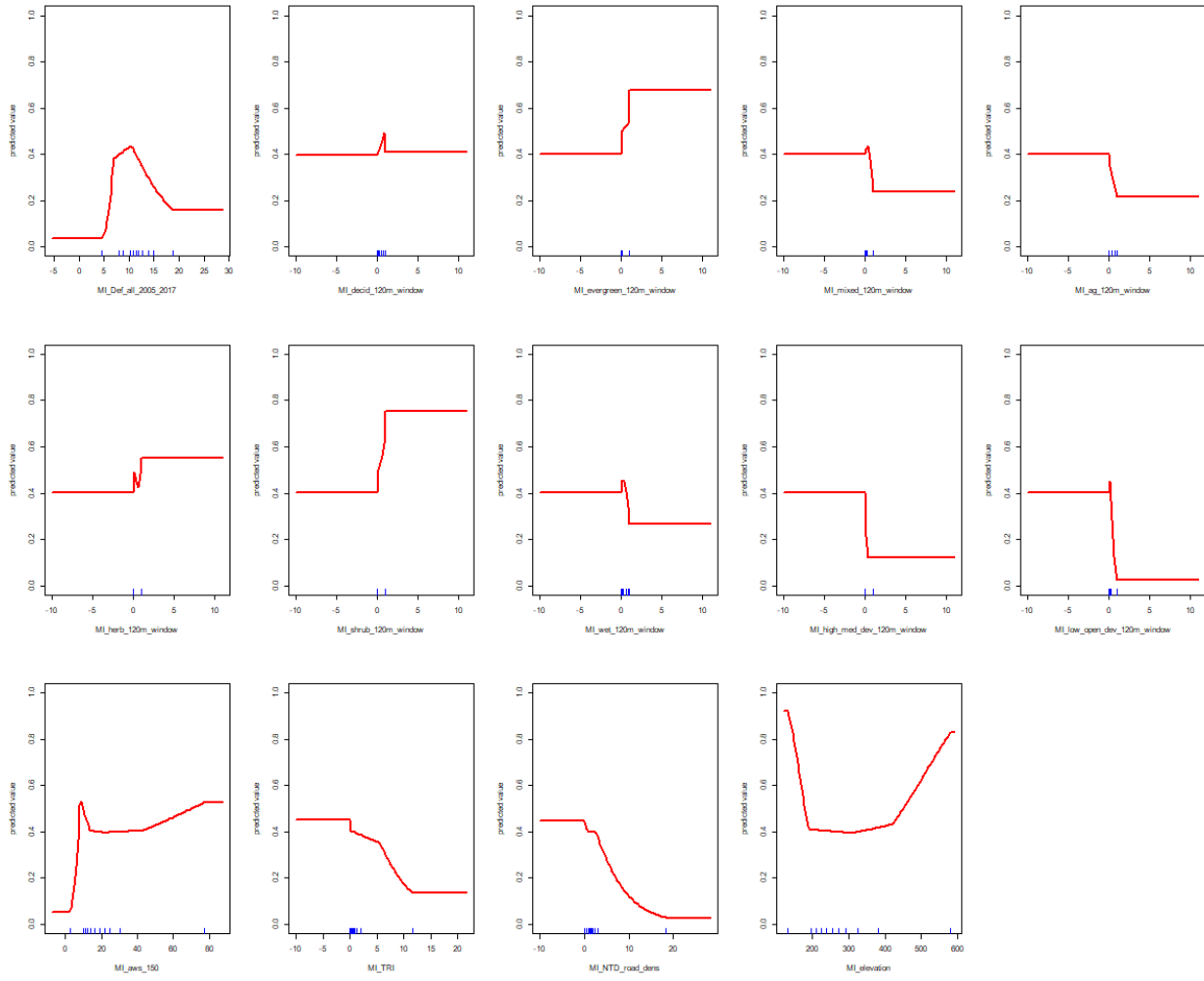
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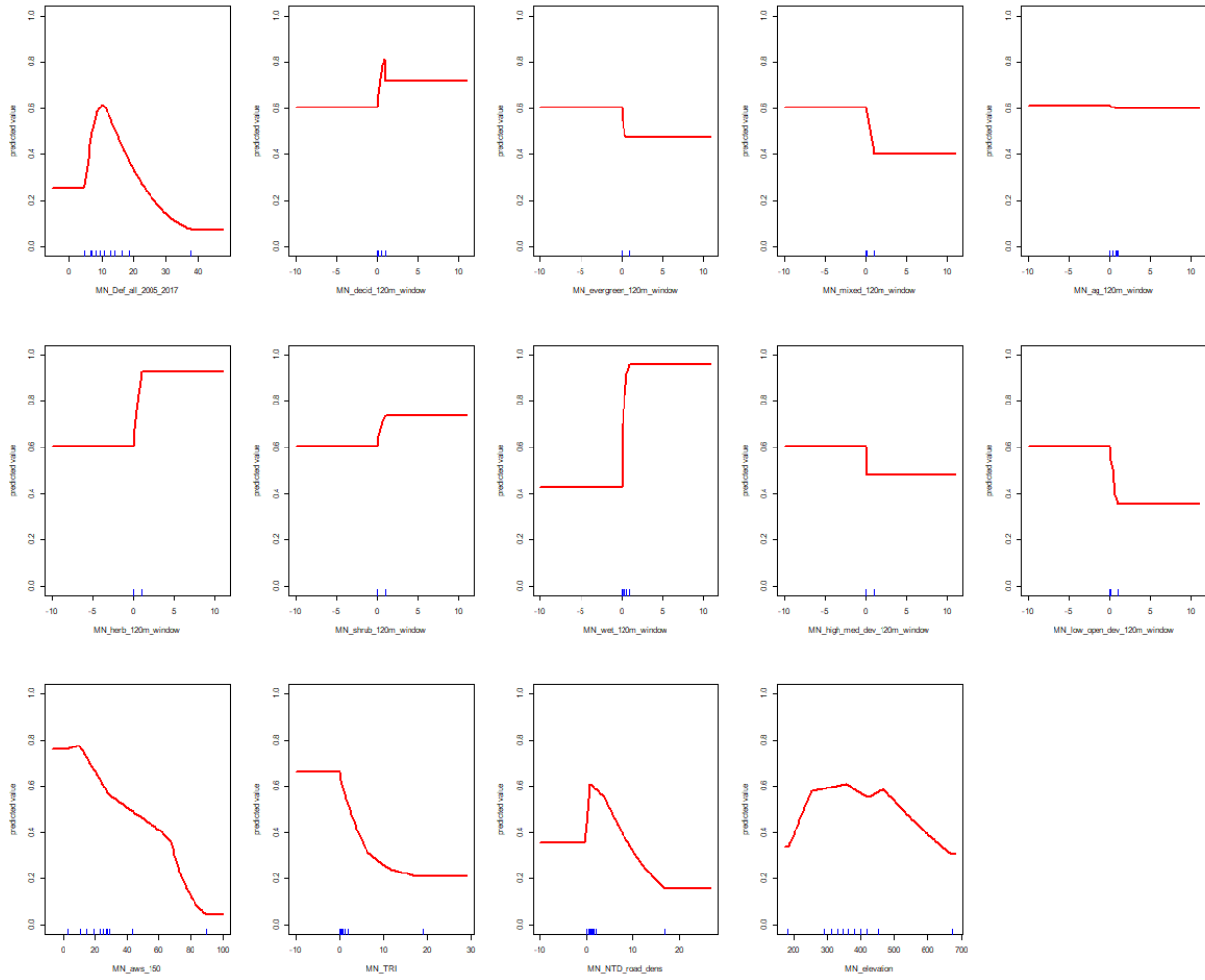
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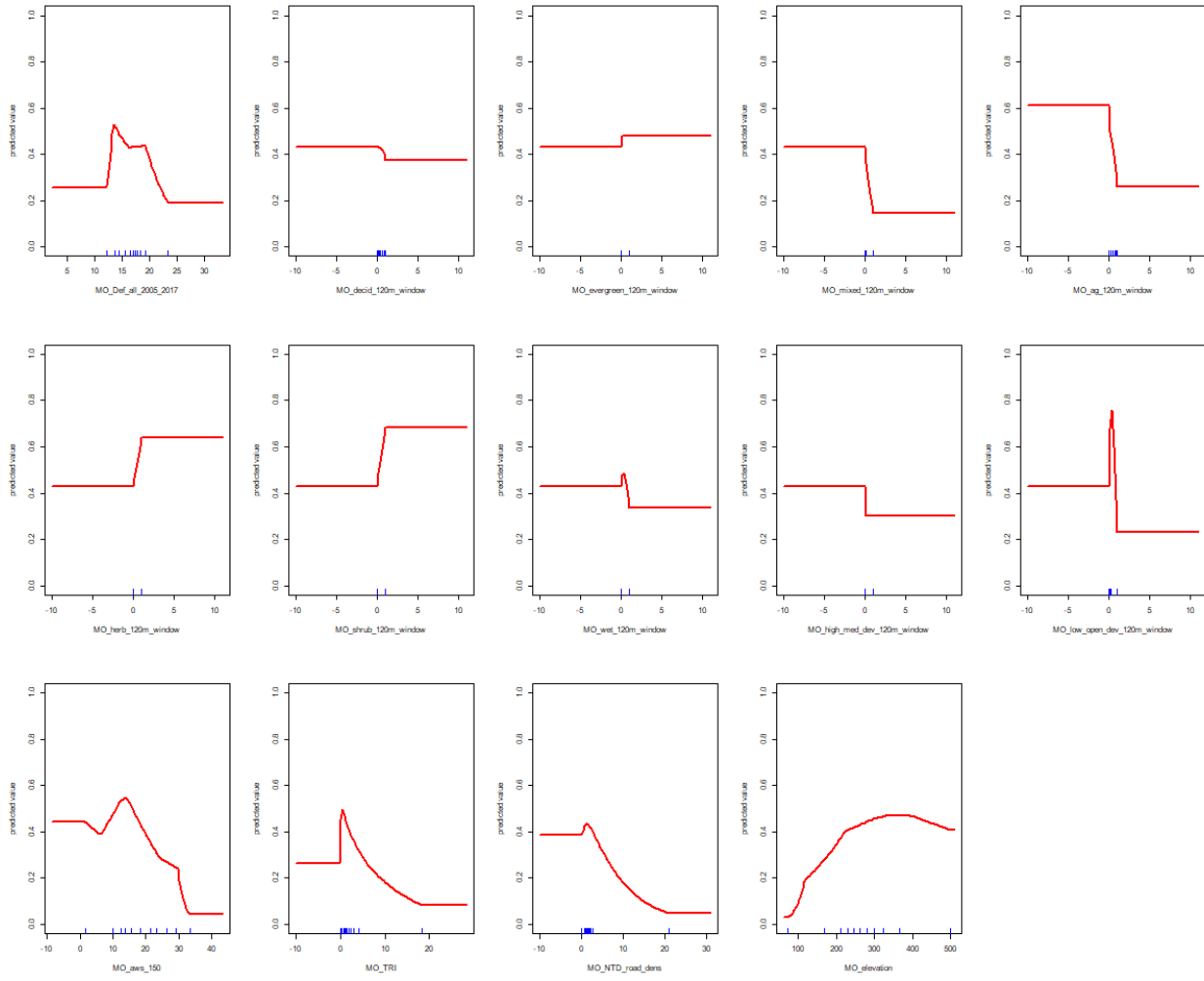
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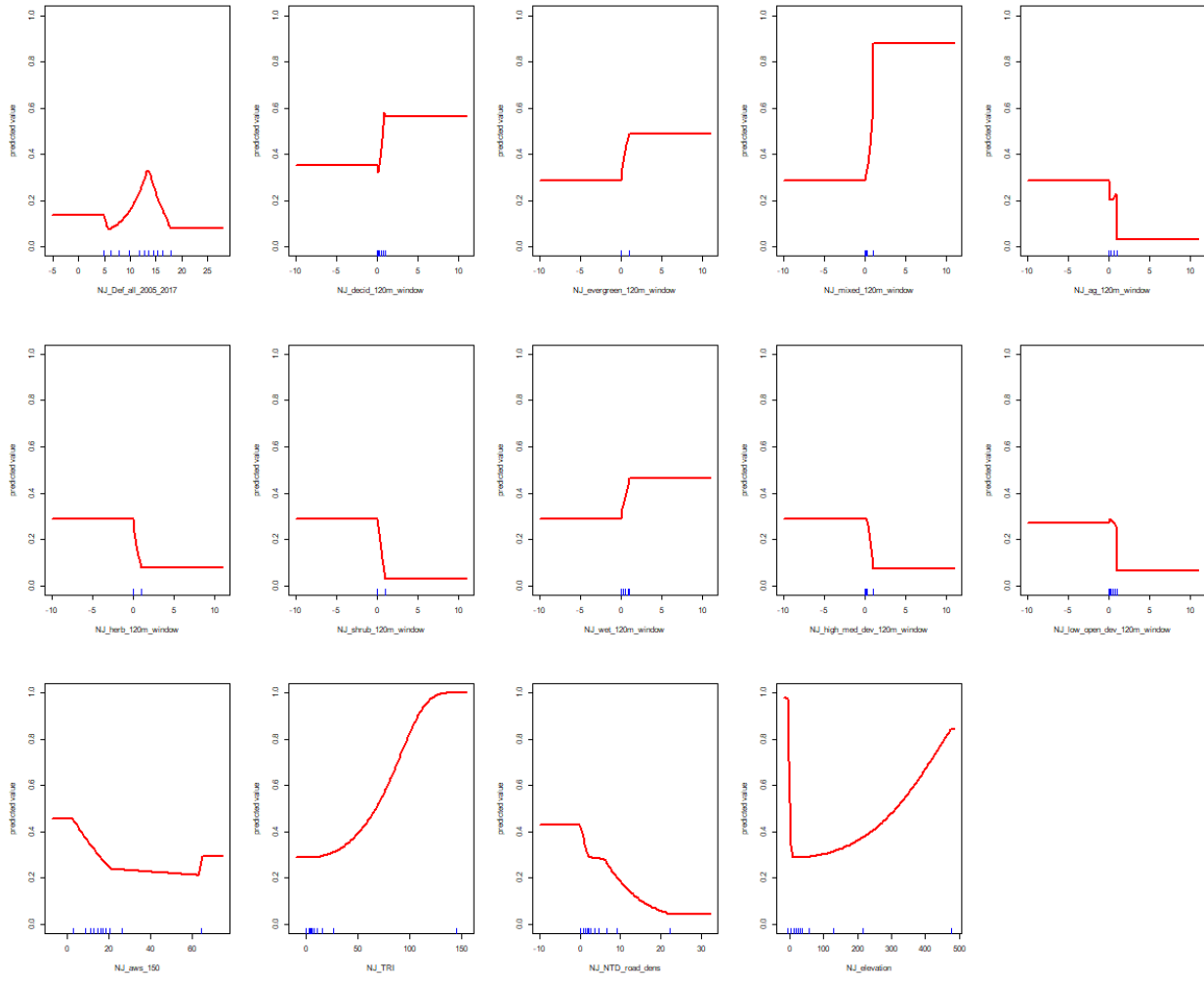
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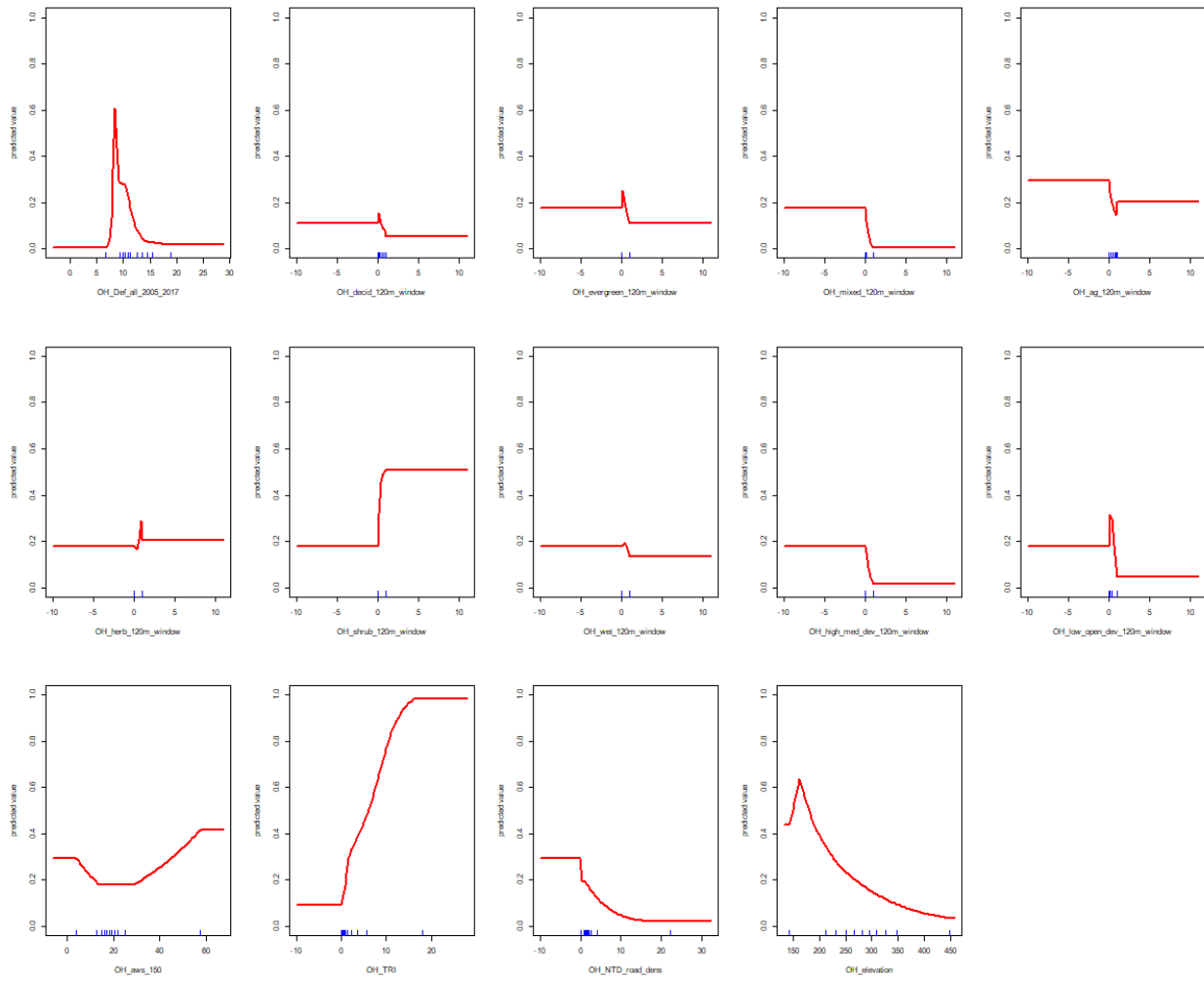
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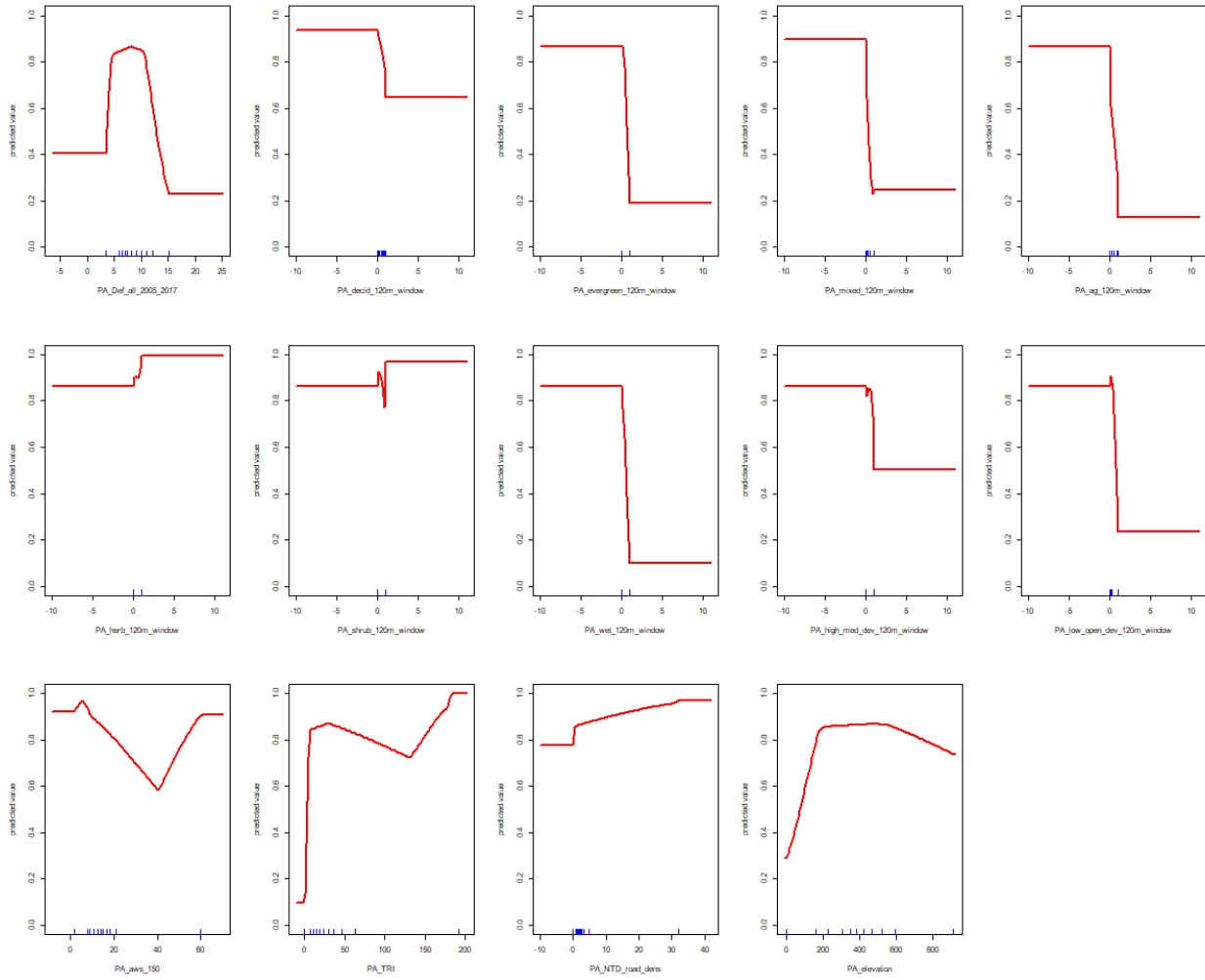
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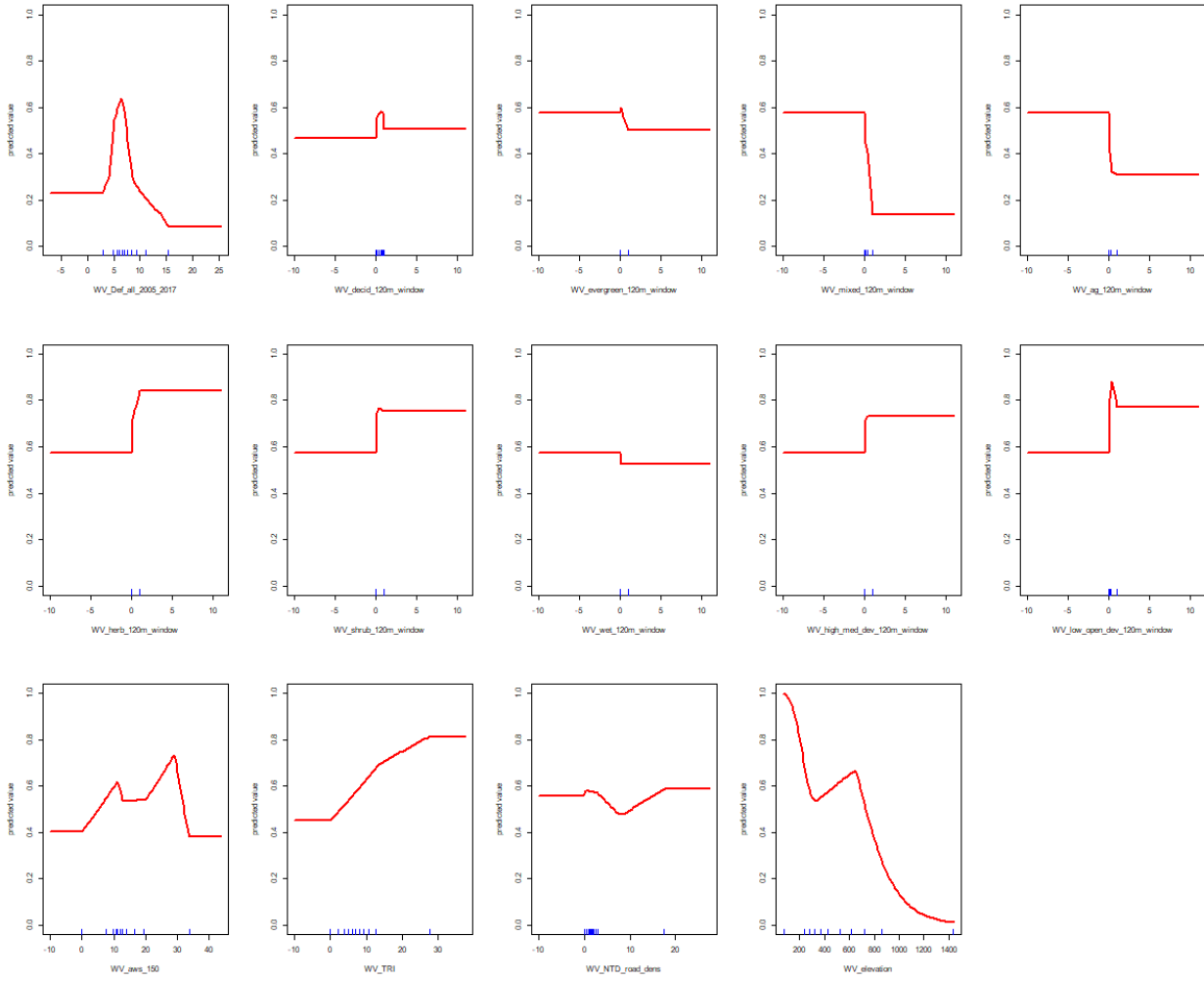
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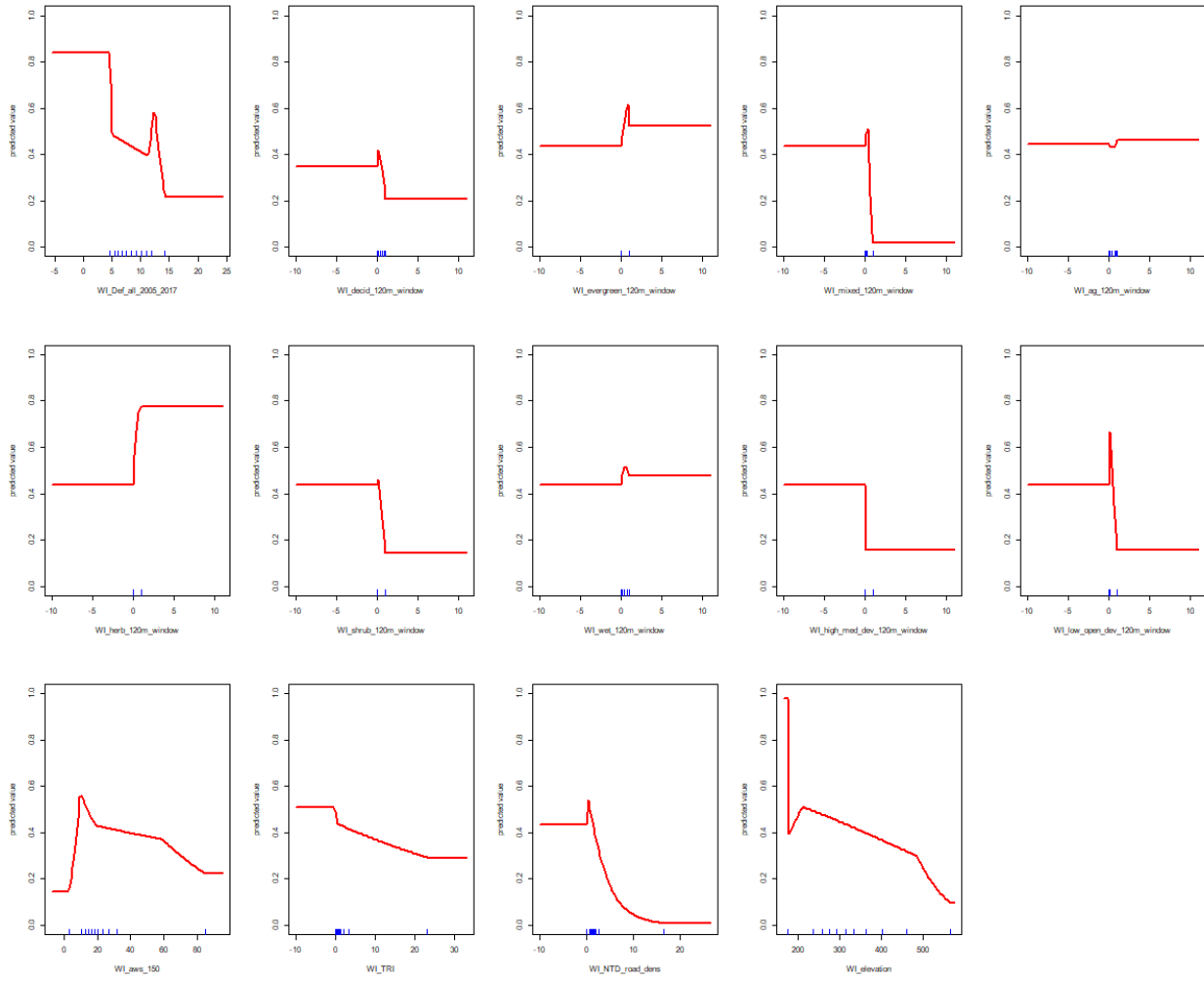
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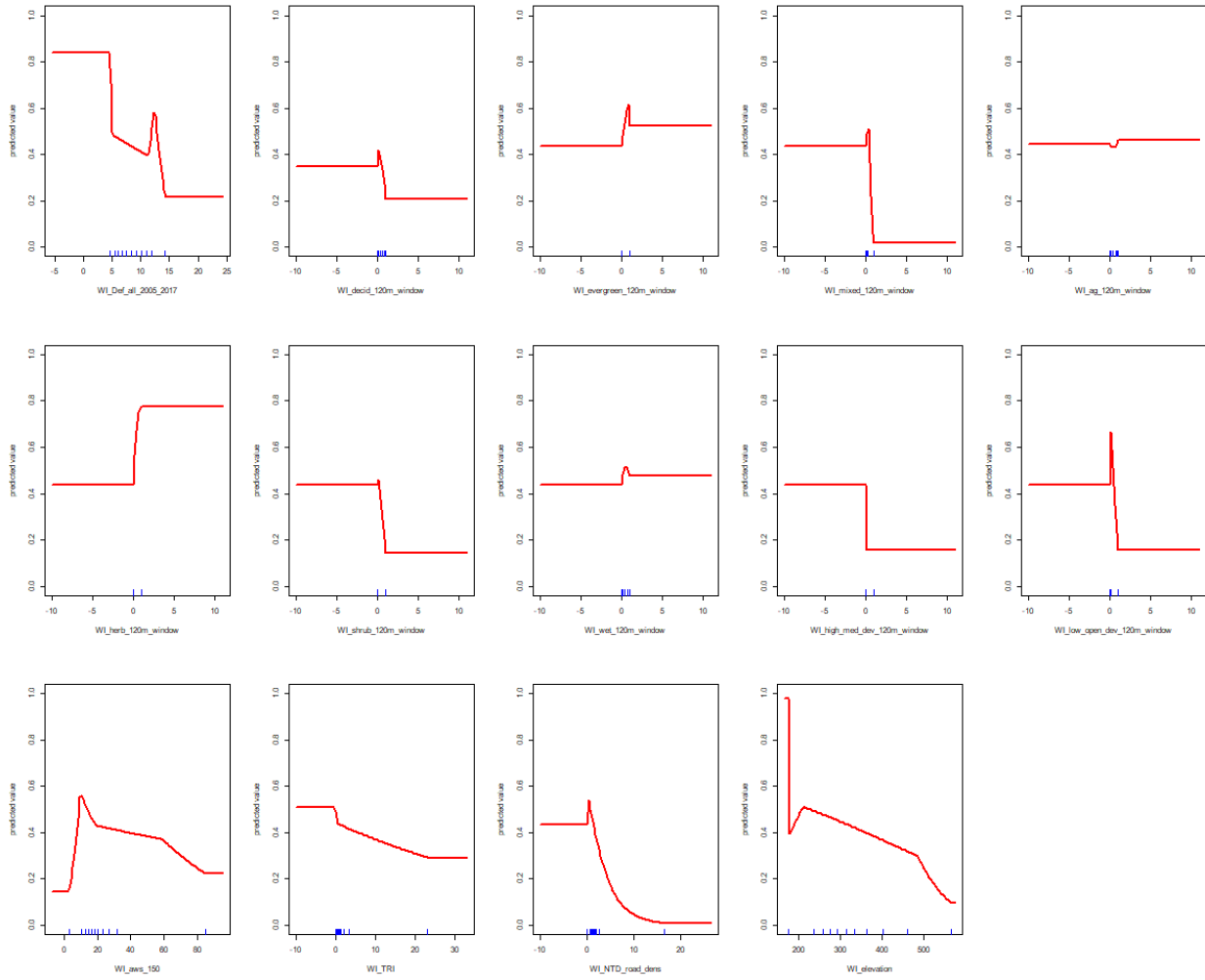
West Virginia:



Wisconsin:

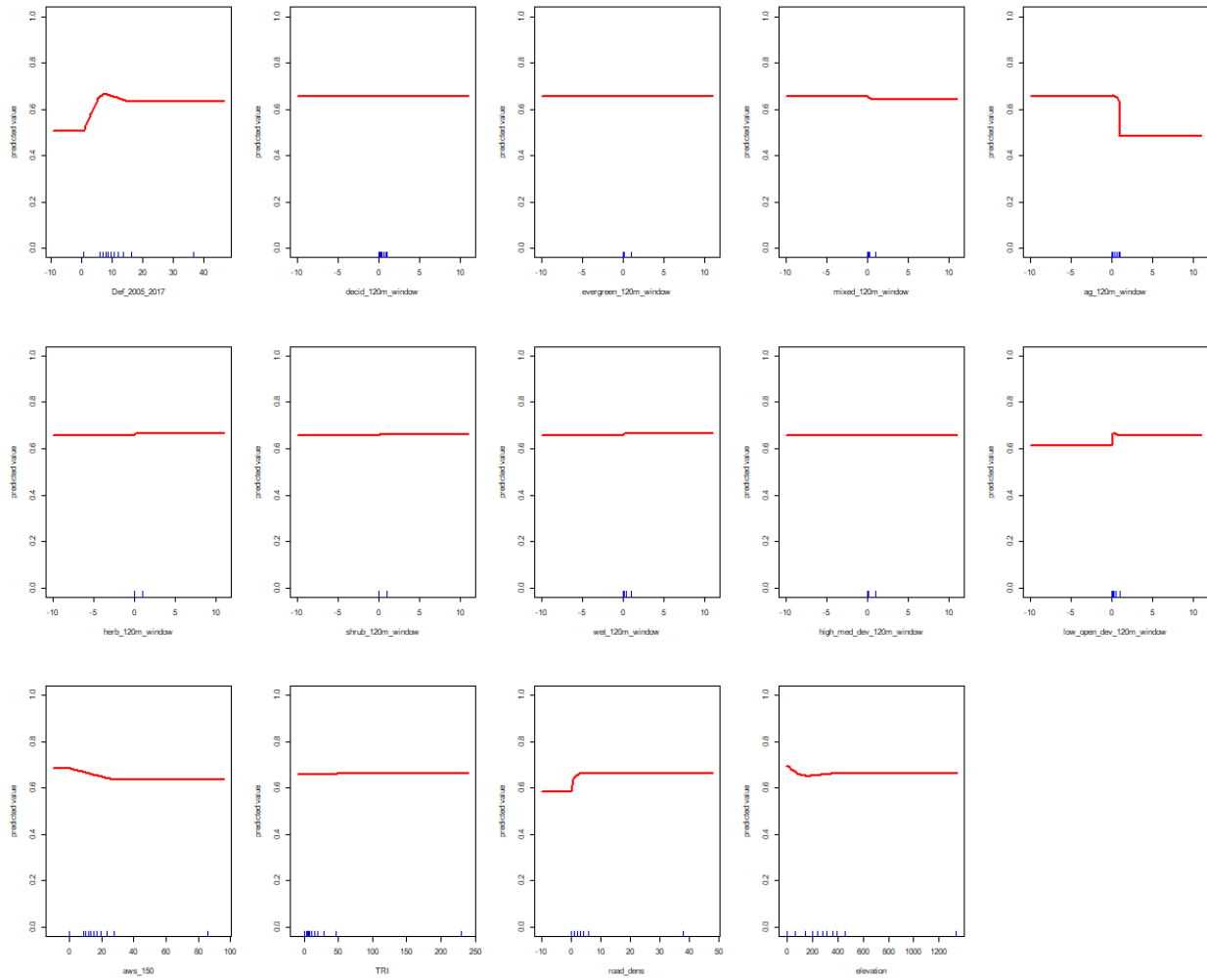


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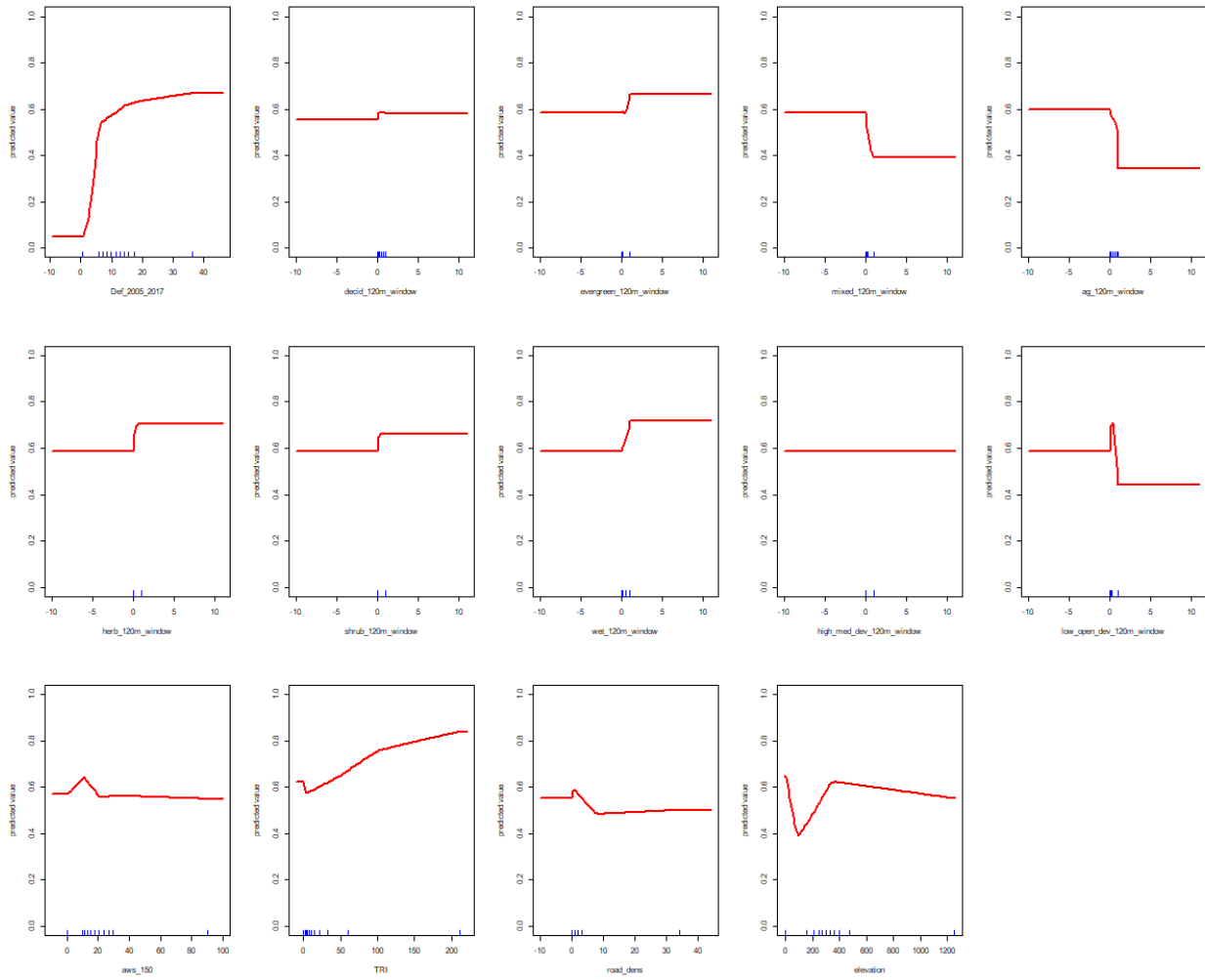


Region-wide models:

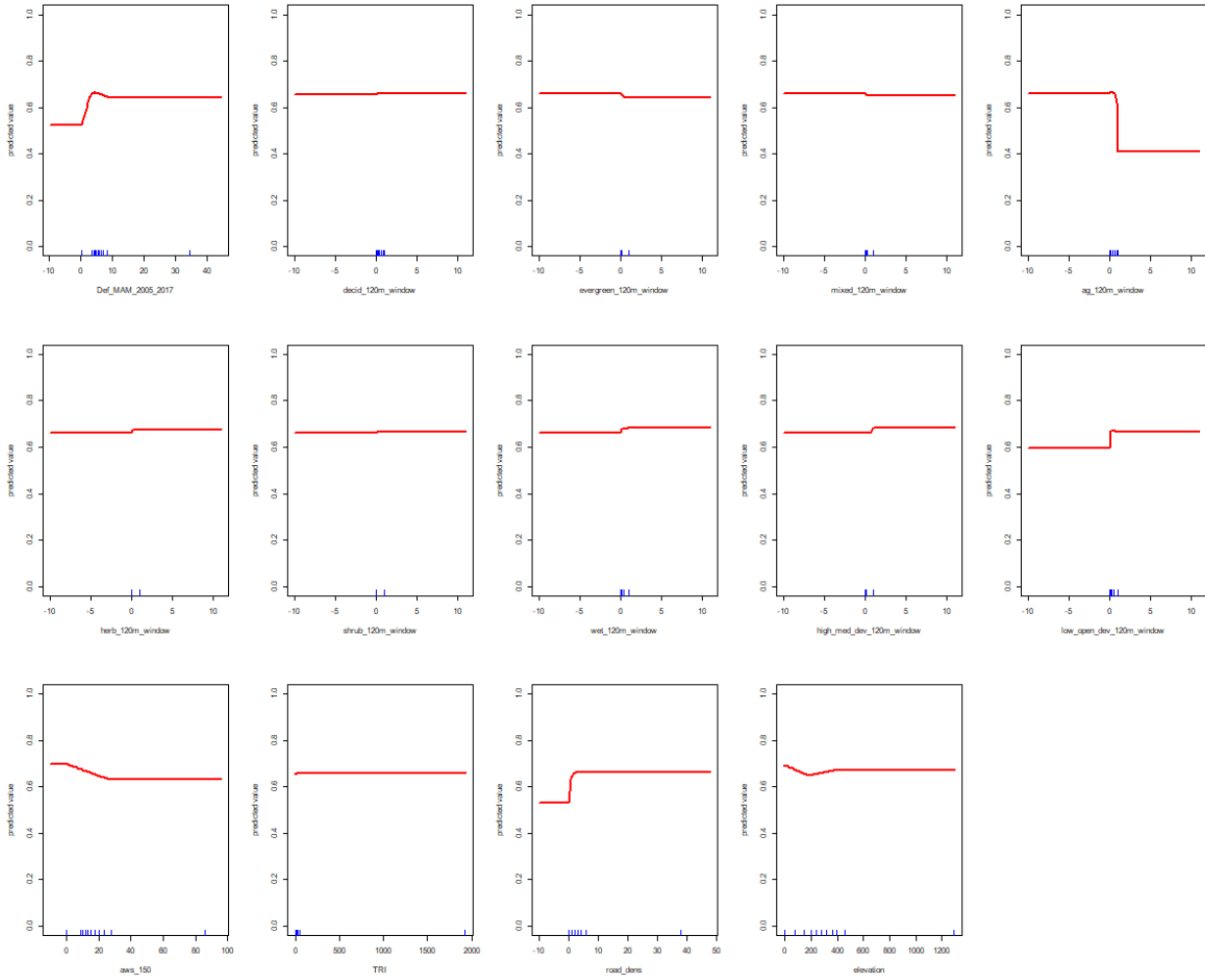
All fires:



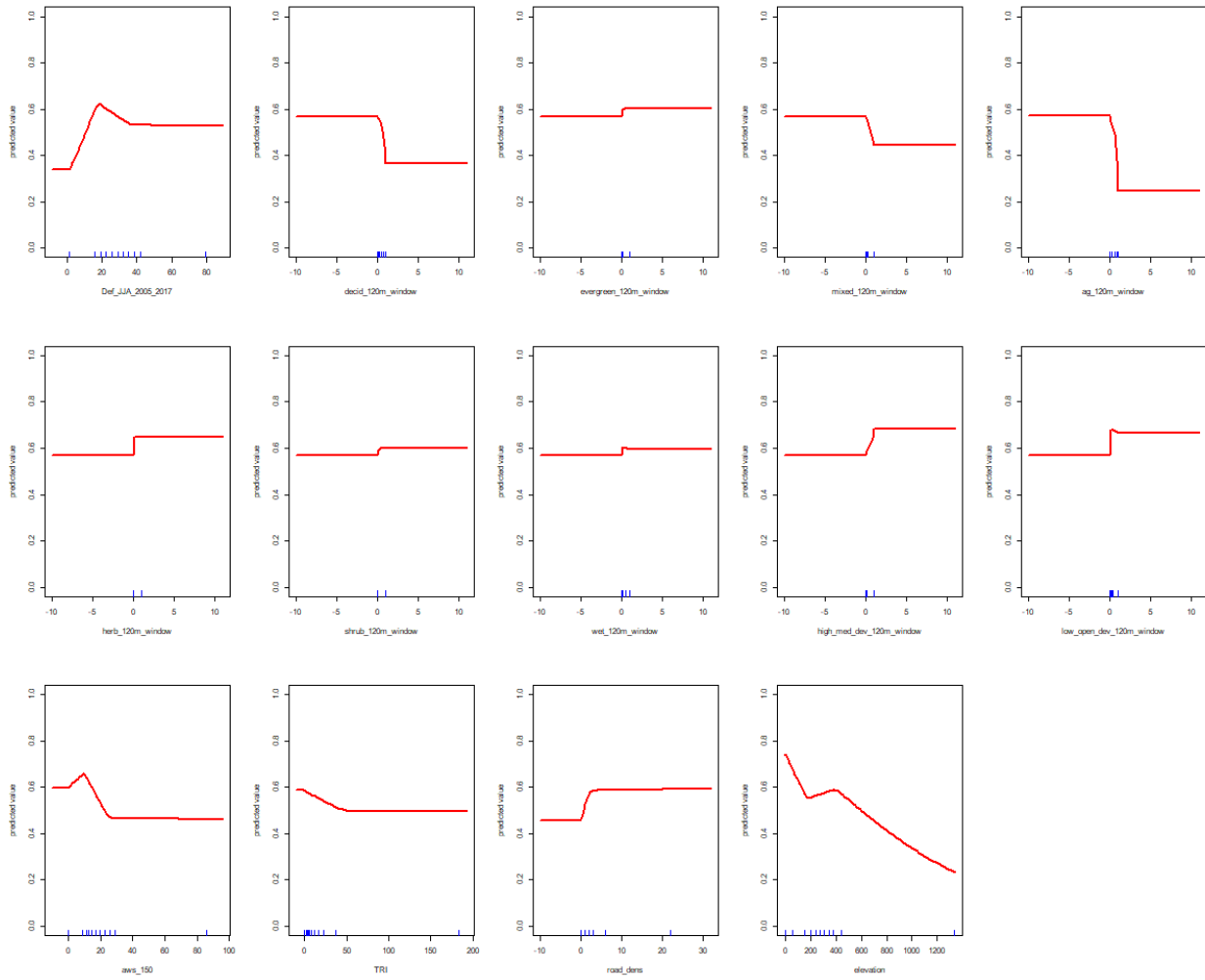
Large fires:



Spring fires:



Summer fires:



Fall fires:

