Demand for ecosystem services drive large-scale sifts in land use in tropical watersheds prone to landslides

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Supplementary Material: **Figure S1**, **Figure S2, Figure S3, Figure S4A, Figure S4B, Figure S4C, Figure S4D, Figure S5A, Figure S5B, Figure S5C, Figure S5D**

Figure S1. Historic and current forest cover (green) in the four studied watersheds. A) 1970s, B) 1980s, and C) 2018. The first two maps were derived from land use maps accompanying the watershed management plans of Nima, and Bolo-Fraile-Desbaratado. The third map, is one of 19 maps, created from the classification of GLAD Landsat ARD data.
Figure S2. Mean values of fractional forest cover (p_i) and index of aggregation (AI_i) as a function of elevation (EL: low, EM: medium, EH: high, and EVH: very high) and slope (SG: gentle, SS: steep, and SVS: very steep).
Figure S3. Mean values of fractional forest cover (p_i) and index of aggregation (AI_i) as a function of the combined effect of elevation and slope. SG: slope gentle, SS: slope steep, SVS: slope very steep.
Figure S4A. Rio Nima linear models for fractional forest cover. Vertical dotted line separates historic and current data
Figure S4B. Rio Bolo linear models for fractional forest cover. Vertical dotted line separates historic and current data
Figure S4C. Rio Fraile linear models for fractional forest cover. Vertical dotted line separates historic and current data
Figure S4D. Rio Desbaratado linear models for fractional forest cover. Vertical dotted line separates historic and current data
Figure S5A. Rio Nima linear models for aggregation index. Vertical dotted line separates historic and current data
Figure S5B. Rio Bolo linear models for aggregation index. Vertical dotted line separates historic and current data
Figure S5C. Rio Fraile linear models for aggregation index. Vertical dotted line separates historic and current data
Figure S5D. Rio Desbaratado linear models for aggregation index. Vertical dotted line separates historic and current data

Figure S1. Historic and current forest cover (green) in the four studied watersheds. A) 1970s, B) 1980s, and C) 2018. The first two maps were derived from land use maps accompanying the watershed management plans of Nima, and Bolo-Fraile-Desbaratado. The third map, is one of 19 maps, created from the classification of GLAD Landsat ARD data. The left and right, green circles represent the urban centers of Cali and Palmira, respectively

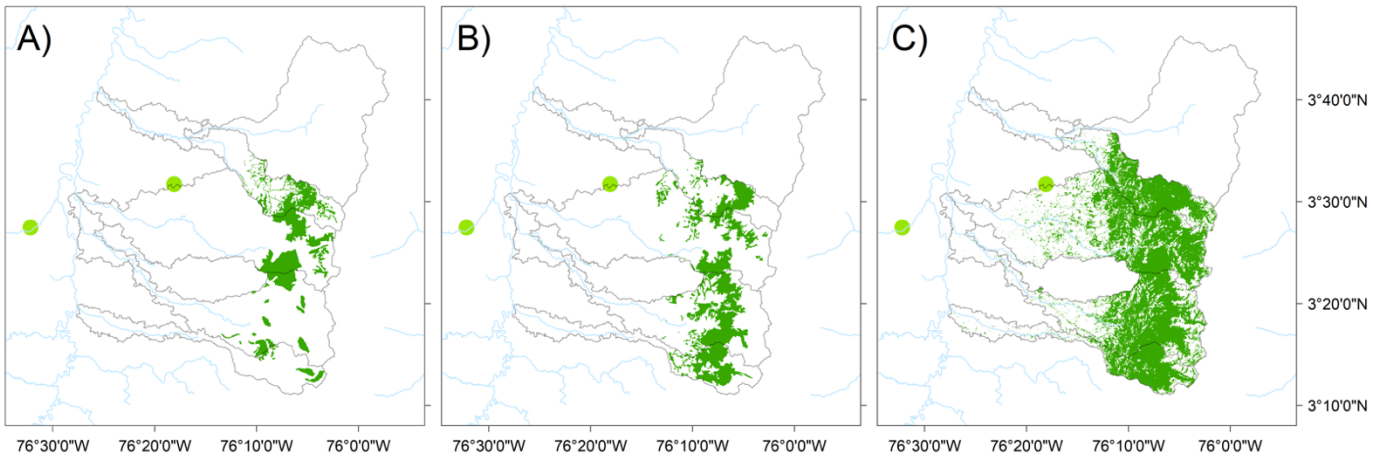


Figure S2. Mean values of Fractional forest cover (pi) and Index of forest aggregation (AIi) as a function of elevation and slope. a) Fractional forest cover vs. elevation, b) Fractional forest cover vs. slope, c) Index of forest aggregation vs. elevation, d) Index of forest aggregation vs. slope. Colors represent scale.

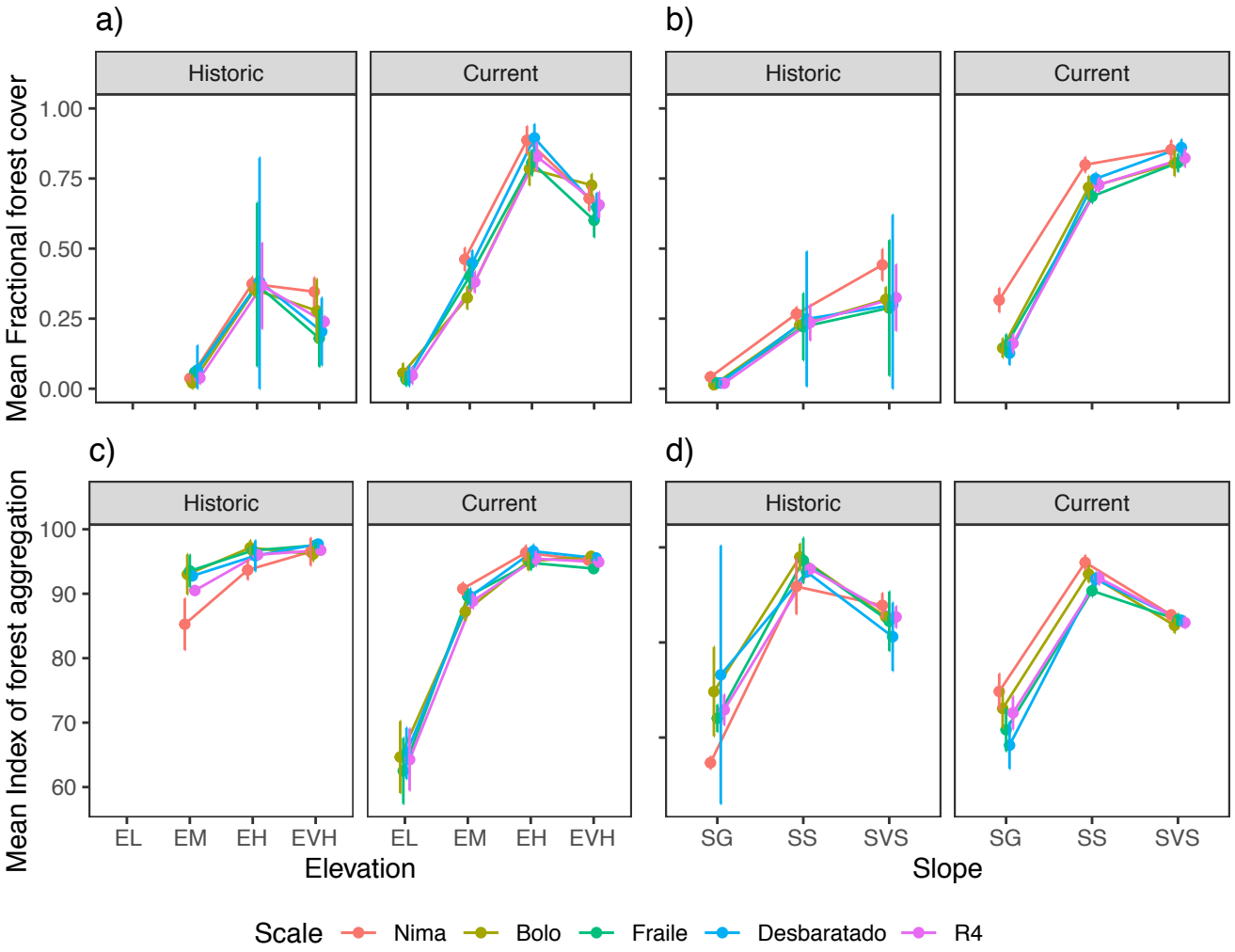


Figure S3. Mean values of Fractional forest cover (pi) and Index of forest aggregation (AIi) as a function of elevation for each watershed. a) Mean values of Fractional forest cover vs. elevation, b) Mean values of Index of forest aggregation vs. elevation. Colors represent slope.

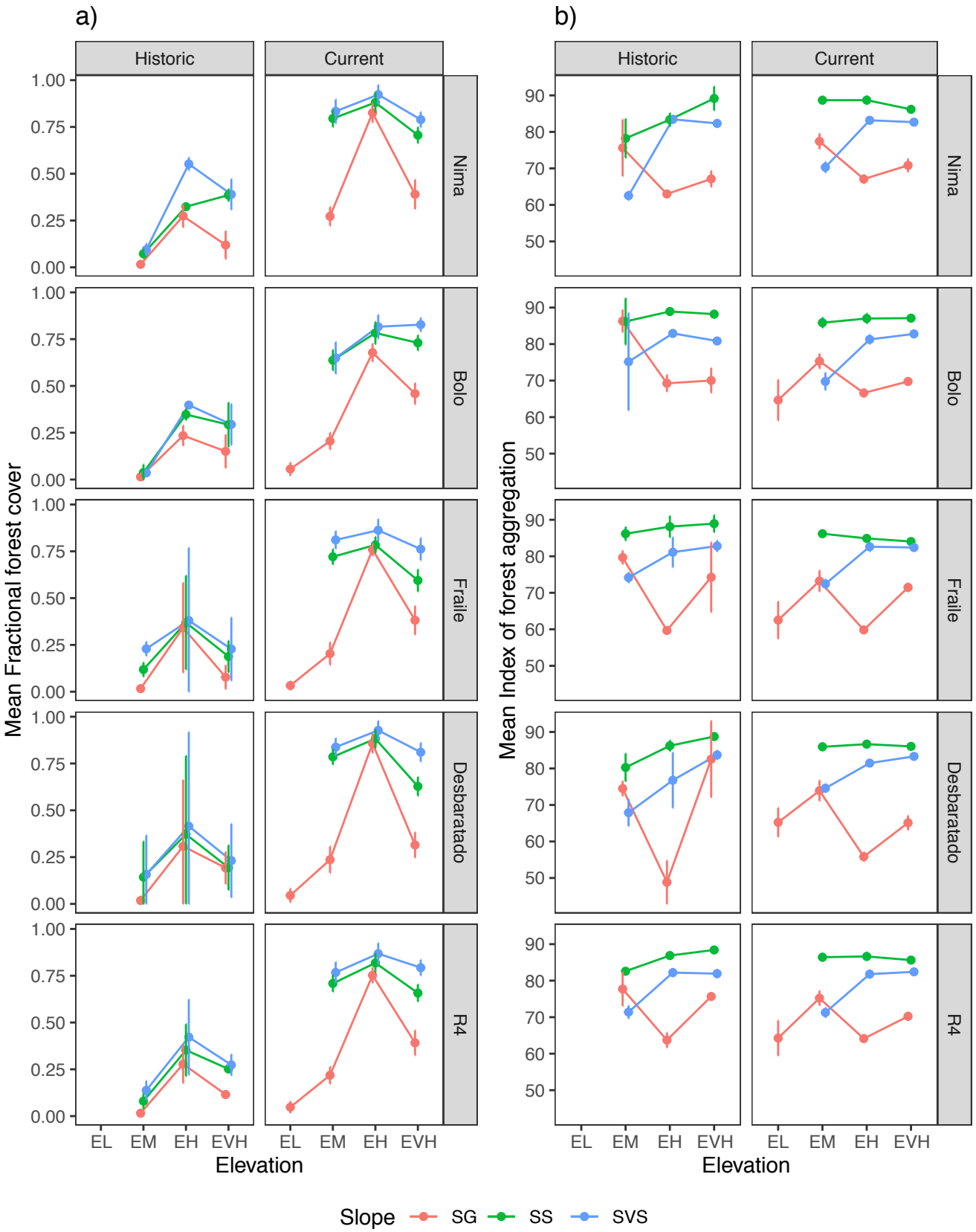


Figure S4A. Linear models between Fractional forest cover (pi) and year for the Nima watershed. Colors represent scale.

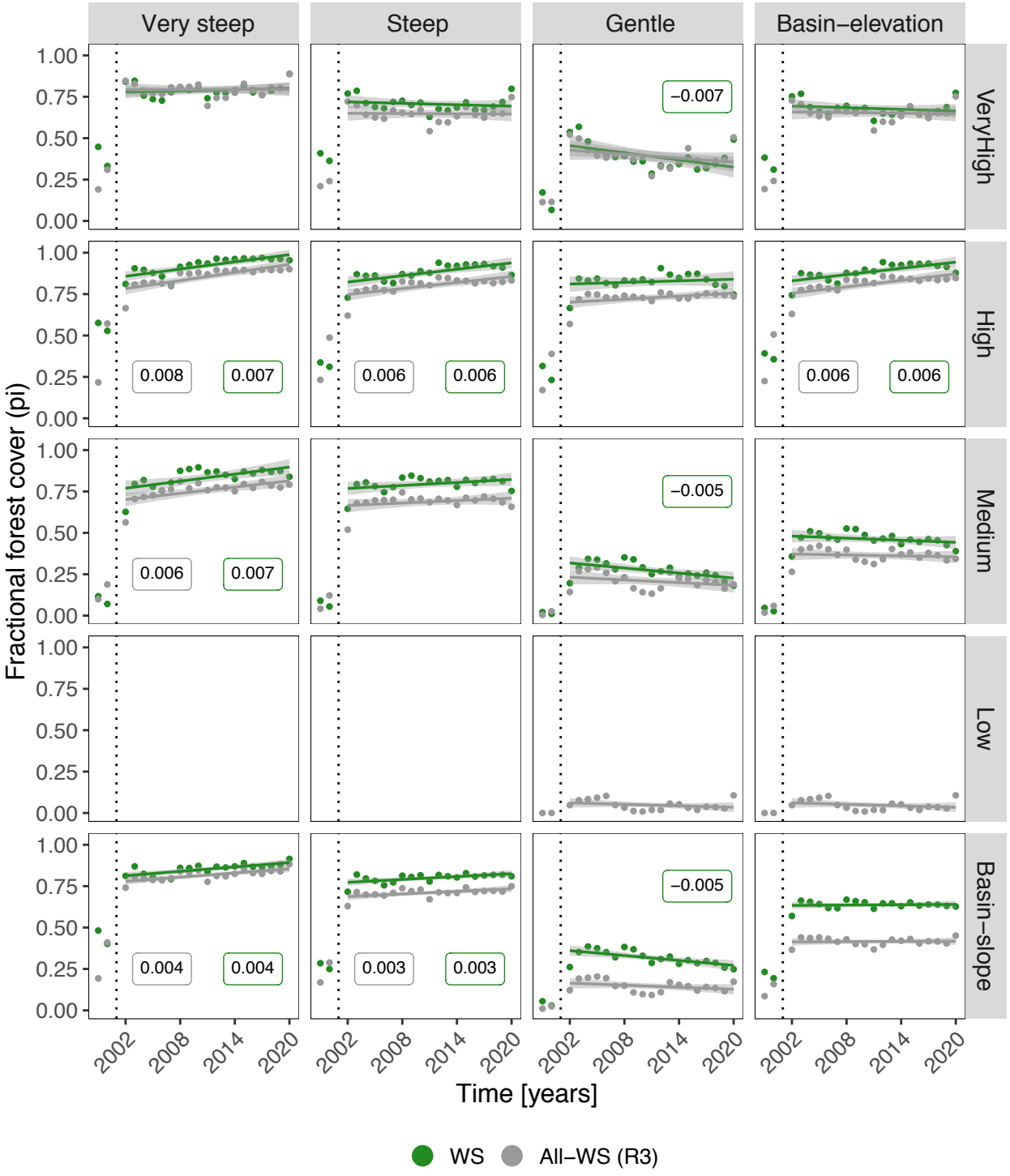


Figure S4B. Linear models between Fractional forest cover (pi) and year for the Bolo watershed. Colors represent scale.

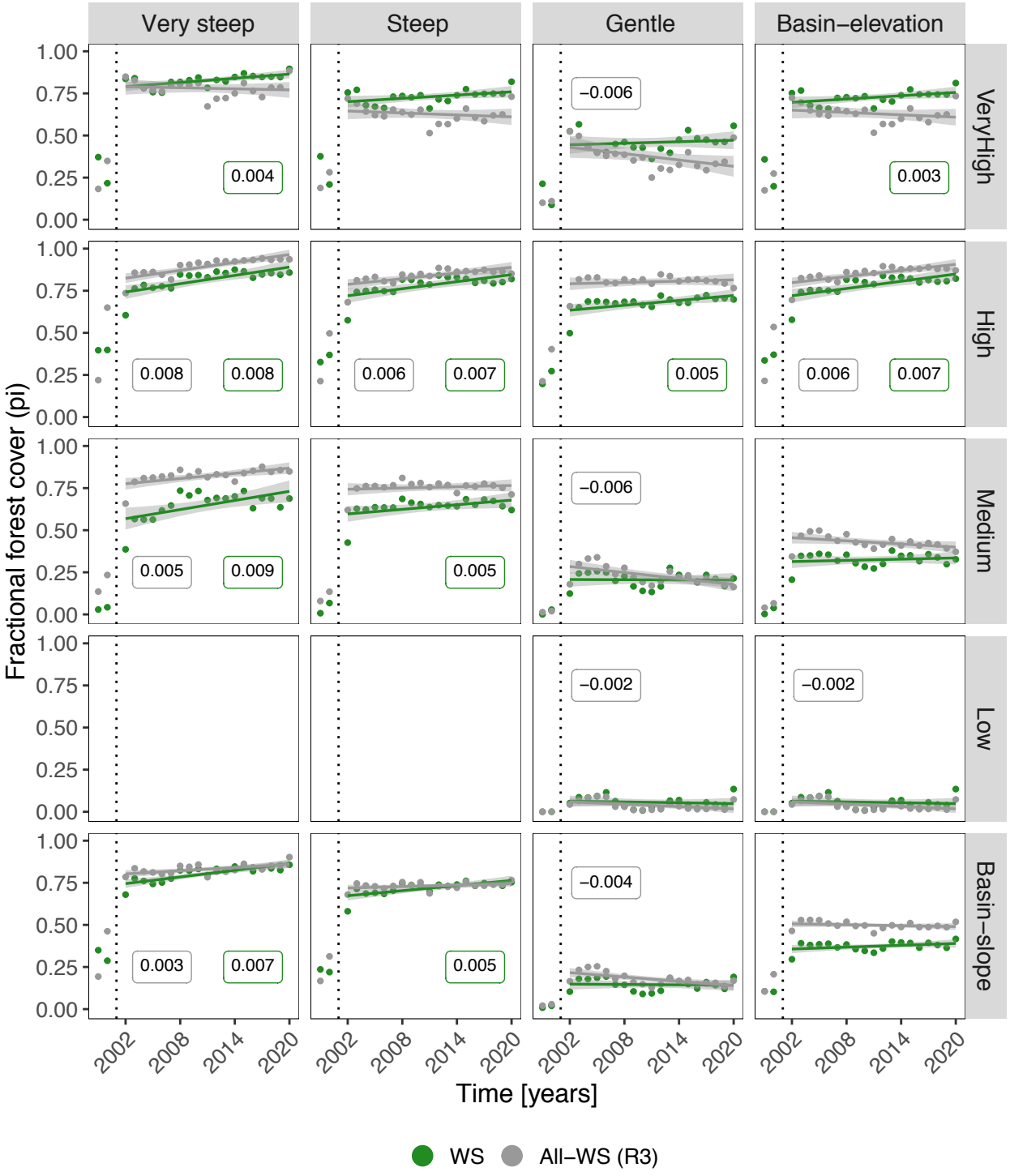


Figure S4C. Linear models between Fractional forest cover (pi) and year for the Fraile watershed. Colors represent scale.

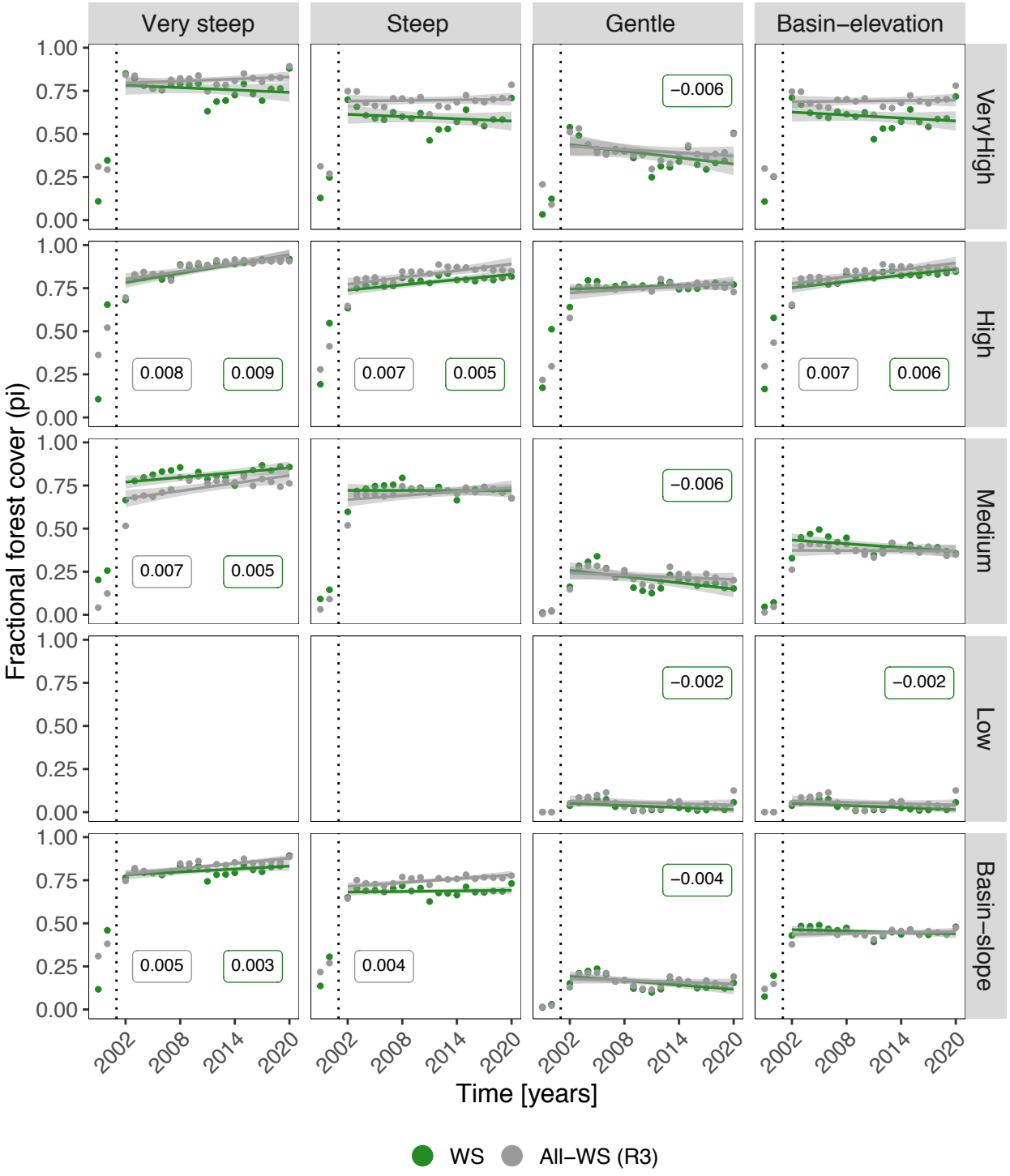


Figure S4D. Linear models between Fractional forest cover (pi) and year for the Desbaratado watershed. Colors represent scale.

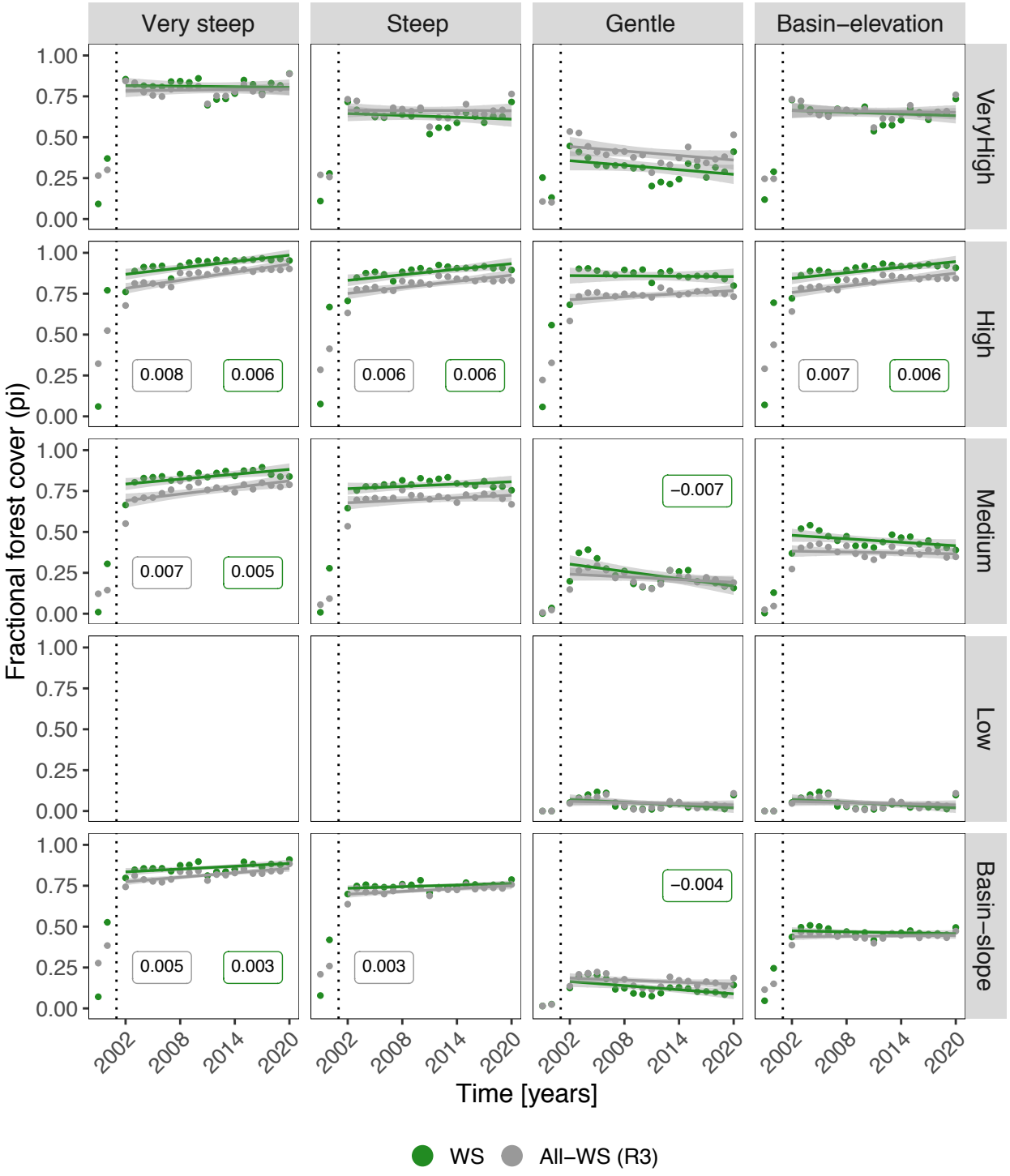


Figure S5A. Linear models between Index of forest aggregation (Ali) and year for the Nima watershed. Colors represent scale.

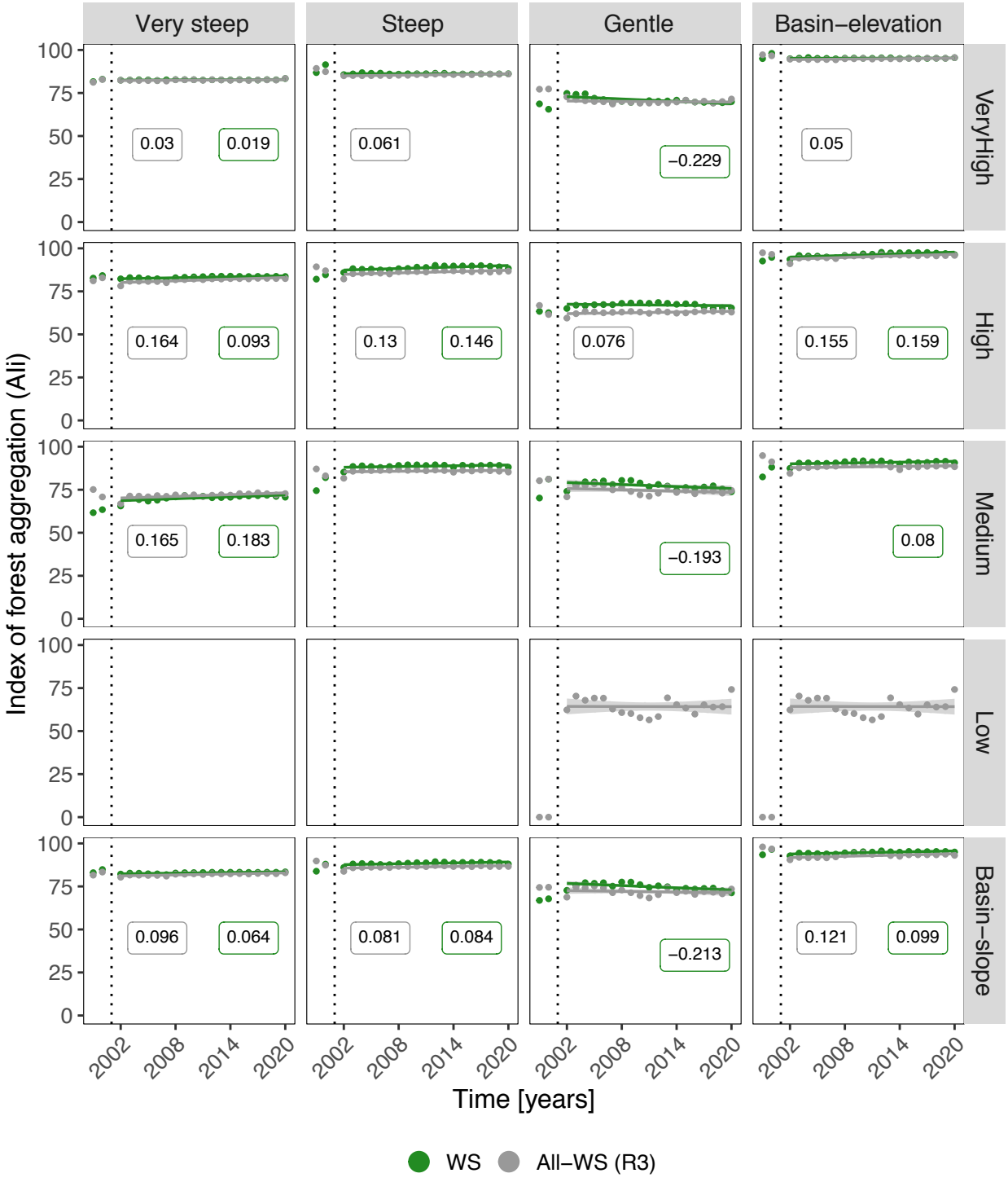


Figure S5B. Linear models between Index of forest aggregation (Ali) and year for the Bolo watershed. Colors represent scale.

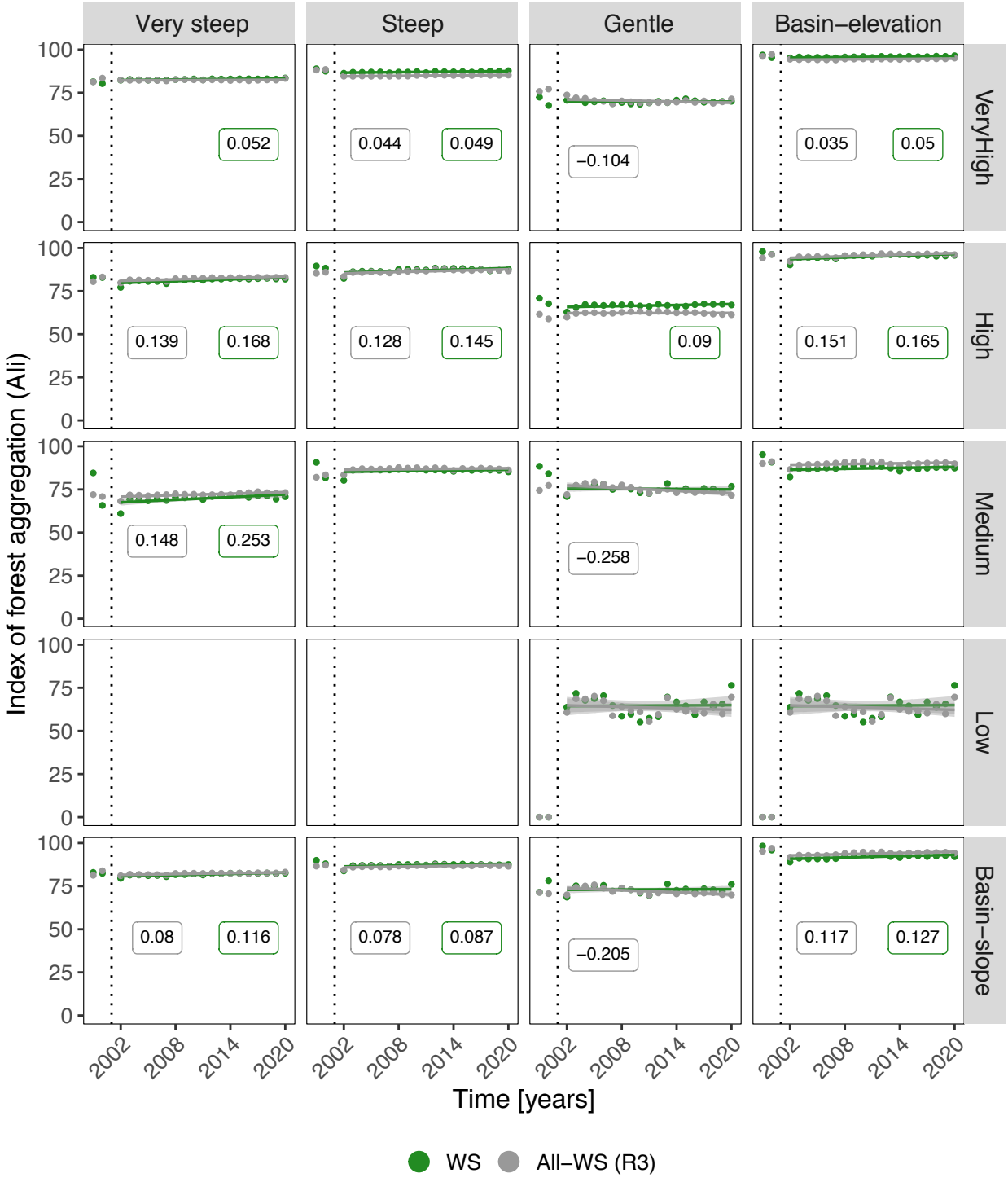


Figure S5C. Linear models between Index of forest aggregation (Ali) and year for the Fraile watershed. Colors represent scale.

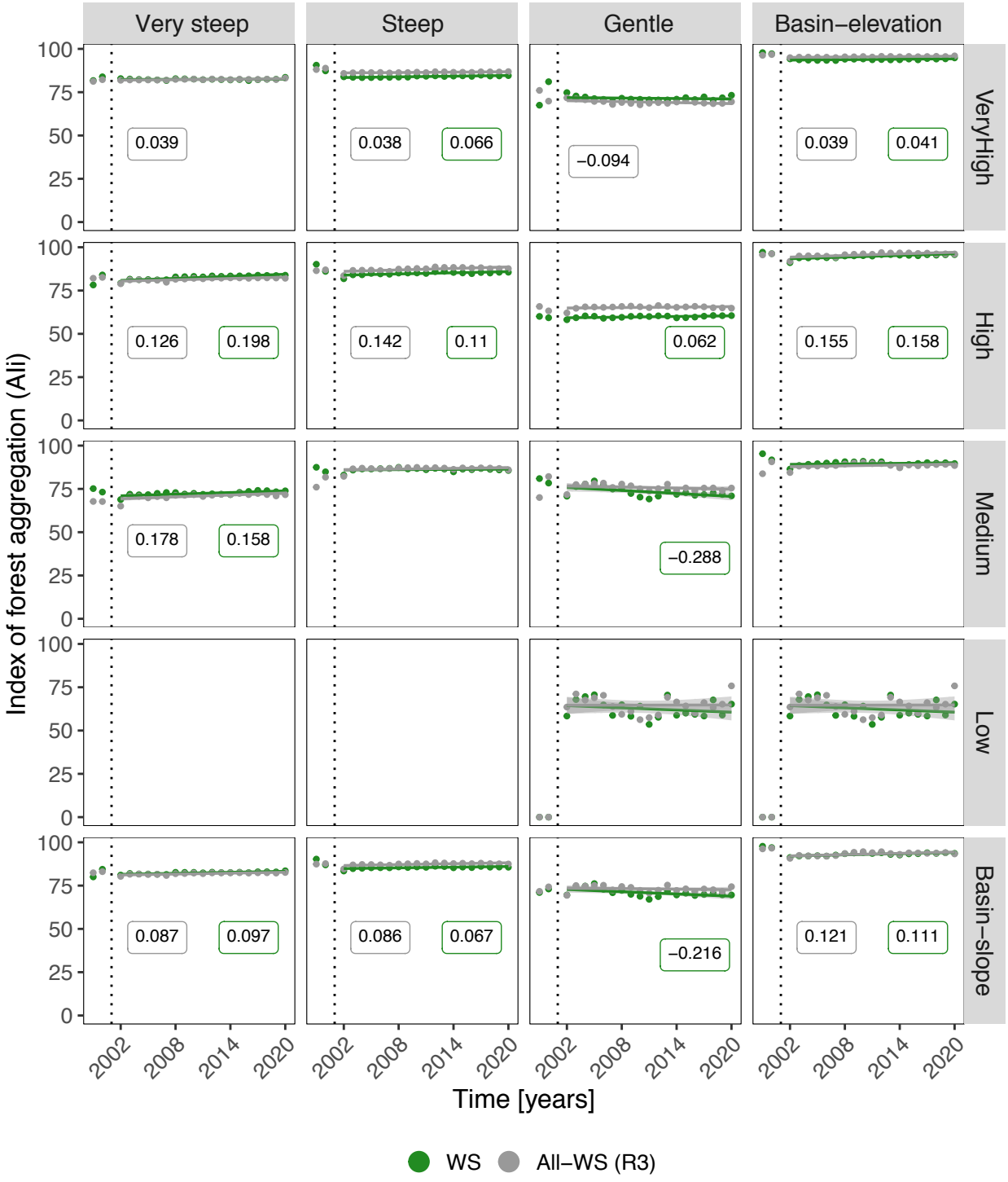


Figure S5D. Linear models between Index of forest aggregation (Ali) and year for the Desbaratado watershed. Colors represent scale.

