|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Mod.A | | | |
|  | Est. | Std. Err. | z | p |
|  | Regression Slopes | | | |
| Prod |  |  |  |  |
| VPD | -0.30 | 0.01 | -23.42 | .000 |
| CWMSeedMass | 0.10 | 0.01 | 7.41 | .000 |
| FDisSeedMass | 0.09 | 0.01 | 7.00 | .000 |
| CWMSeedMass |  |  |  |  |
| VPD | 0.30 | 0.01 | 25.43 | .000 |
| FDisSeedMass |  |  |  |  |
| VPD | 0.06 | 0.01 | 5.16 | .000 |
|  | Intercepts | | | |
| Prod | 0.00 | 0.01 | 0.06 | .954 |
| FDisSeedMass | 0.00 | 0.01 | 0.00 | .998 |
| CMWSeedMass | 0.00 | 0.01 | 0.27 | .787 |
| VPD | -0.00 | 0.01 | -0.00 | 1.000 |
|  | Residual Variances | | | |
| Prod | 0.91 | 0.02 | 57.42 | .000 |
| CWMSeedMass | 0.91 | 0.01 | 77.57 | .000 |
| FDisSeedMass | 1.00 | 0.01 | 84.96 | .000 |
| VPD | 1.00 | 0.01 | 72.07 | .000 |
|  | Constructed | | | |
| be | 0.01 | 0.00 | 4.23 | .000 |
| ad | 0.03 | 0.00 | 7.12 | .000 |
| total | -0.27 | 0.01 | -21.32 | .000 |
|  | Fit Indices | | | |
| TLI | 0.91 |  |  |  |
| chisq | 19.99 |  |  |  |
| RMSEA | 0.05 |  |  |  |
| Scaled χ2 | 22.12(1) |  |  | 0 |
|  | R-squared | | | |
| Prod | 0.087 |  |  |  |
| CWMSeedMass | 0.091 |  |  |  |
| FDisSeedMass | 0.004 |  |  |  |

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| --- | --- | --- | --- | --- |
|  | Mod.B | | | |
|  | Est. | Std. Err. | z | p |
|  | Regression Slopes | | | |
| Prod |  |  |  |  |
| VPD | -0.16 | 0.01 | -11.21 | .000 |
| CMWHeight | 0.20 | 0.01 | 13.92 | .000 |
| FDisHeight | 0.02 | 0.01 | 1.52 | .128 |
| CMWHeight |  |  |  |  |
| VPD | -0.51 | 0.01 | -45.10 | .000 |
| FDisHeight |  |  |  |  |
| VPD | 0.01 | 0.01 | 0.80 | .421 |
|  | Intercepts | | | |
| Prod | 0.00 | 0.01 | 0.07 | .943 |
| CMWHeight | -0.01 | 0.01 | -0.79 | .429 |
| FDisHeight | -0.00 | 0.01 | -0.00 | .999 |
| VPD | -0.00 | 0.01 | -0.00 | 1.000 |
|  | Residual Variances | | | |
| Prod | 0.90 | 0.02 | 58.28 | .000 |
| CMWHeight | 0.74 | 0.01 | 50.67 | .000 |
| FDisHeight | 1.00 | 0.02 | 58.27 | .000 |
| VPD | 1.00 | 0.01 | 72.07 | .000 |
|  | Constructed | | | |
| be | 0.00 | 0.00 | 0.71 | .478 |
| ad | -0.10 | 0.01 | -13.39 | .000 |
| total | -0.27 | 0.01 | -21.25 | .000 |
|  | Fit Indices | | | |
| TLI | 0.69 |  |  |  |
| chisq | 139.90 |  |  |  |
| RMSEA | 0.14 |  |  |  |
| Scaled χ2 | 130.93(1) |  |  | 0 |
|  | R-squared | | | |
| Prod | 0.100 |  |  |  |
| CMWHeight | 0.259 |  |  |  |
| FDisHeight | 0.001 |  |  |  |

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|  | Mod.C | | | | |
|  | Est. | | Std. Err. | z | p |
|  | Regression Slopes | | | | |
| Prod |  | |  |  |  |
| VPD | -0.27 | | 0.01 | -20.56 | 0 |
| CMWSLA | 0.04 | | 0.01 | 2.95 | 0.003 |
| FDisSLA | 0.04 | | 0.01 | 3.27 | 0.001 |
| CMWSLA |  | |  |  |  |
| VPD | 0.19 | | 0.01 | 13.29 | 0 |
| FDisSLA |  | |  |  |  |
| VPD | -0.19 | | 0.01 | -14.46 | 0 |
|  | Intercepts | | | | |
| Prod | 0 | | 0.01 | 0.04 | 0.97 |
| CMWSLA | 0 | | 0.01 | 0.15 | 0.884 |
| FDisSLA | 0 | | 0.01 | -0.22 | 0.824 |
| VPD | 0 | | 0.01 | 0 | 1 |
|  | Residual Variances | | | | |
| Prod | 0.93 | | 0.02 | 58.07 | 0 |
| CMWSLA | 0.96 | | 0.02 | 39.82 | 0 |
| FDisSLA | 0.96 | | 0.02 | 59.53 | 0 |
| VPD | 1 | | 0.01 | 72.07 | 0 |
|  | Constructed | | | | |
| be | -0.01 | | 0 | -3.19 | 0.001 |
| ad | 0.01 | | 0 | 2.89 | 0.004 |
| total | -0.27 | | 0.01 | -21.28 | 0 |
|  | Fit Indices | | | | |
| TLI | 0.55 | |  |  |  |
| chisq | 76.98 | |  |  |  |
| RMSEA | 0.11 | |  |  |  |
| Scaled χ2 | 56.89(1) | |  |  | 0 |
|  | | R-squared | | | |
| Prod | 0.074 | |  |  |  |
| CMWSLA | 0.037 | |  |  |  |
| FDisSLA | 0.036 | |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- |
|  | Mod.D | | | | | |
|  | Est. | | Std. Err. | z | p | |
|  | Regression Slopes | | | | | |
| Prod |  | |  |  |  | |
| VPD | -0.21 | | 0.01 | -15.27 | 0 | |
| CMWWD | -0.12 | | 0.01 | -8.85 | 0 | |
| FDisWD | 0.09 | | 0.01 | 7.36 | 0 | |
| CMWWD |  | |  |  |  | |
| VPD | 0.41 | | 0.01 | 36.18 | 0 | |
| FDisWD |  | |  |  |  | |
| VPD | -0.02 | | 0.01 | -1.28 | 0.2 | |
|  | Intercepts | | | | | |
| Prod | 0 | | 0.01 | 0.09 | 0.928 | |
| CMWWD | 0.01 | | 0.01 | 0.67 | 0.5 | |
| FDisWD | 0 | | 0.01 | -0.1 | 0.924 | |
| VPD | 0 | | 0.01 | 0 | 1 | |
|  | Residual Variances | | | | | |
| Prod | 0.91 | | 0.02 | 58.29 | 0 | |
| CMWWD | 0.84 | | 0.01 | 68.57 | 0 | |
| FDisWD | 1 | | 0.01 | 73.93 | 0 | |
| VPD | 1 | | 0.01 | 72.07 | 0 | |
|  | Constructed | | | | | |
| be | 0 | | 0 | -1.26 | 0.209 | |
| ad | -0.05 | | 0.01 | -8.47 | 0 | |
| total | -0.27 | | 0.01 | -21.31 | 0 | |
|  | Fit Indices | | | | | |
| TLI | 0.63 | |  |  |  | |
| chisq | 114 | |  |  |  | |
| RMSEA | 0.13 | |  |  |  | |
| Scaled χ2 | 129.79(1) | |  |  | 0 | |
|  | | R-squared | | | |
| Prod | 0.093 | |  |  |  | |
| CMWWD | 0.164 | |  |  |  | |
| FDisWD | 0.001 | |  |  |  | |

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| --- | --- | --- | --- | --- | --- | --- |
|  | Mod.E | | | | | |
|  | Est. | | Std. Err. | z | p | |
|  | Regression Slopes | | | | | |
| Prod |  | |  |  |  | |
| VPD | -0.28 | | 0.01 | -22.17 | 0 | |
| CMWXylem | 0.14 | | 0.02 | 9.12 | 0 | |
| FDisXylem | 0.06 | | 0.01 | 4.99 | 0 | |
| CMWXylem |  | |  |  |  | |
| VPD | 0.01 | | 0.01 | 0.92 | 0.357 | |
| FDisXylem |  | |  |  |  | |
| VPD | 0.16 | | 0.01 | 12.79 | 0 | |
|  | Intercepts | | | | | |
| Prod | 0 | | 0.01 | 0.11 | 0.914 | |
| CMWXylem | 0 | | 0.01 | -0.12 | 0.906 | |
| FDisXylem | 0 | | 0.01 | 0.19 | 0.846 | |
| VPD | 0 | | 0.01 | 0 | 1 | |
|  | Residual Variances | | | | | |
| Prod | 0.91 | | 0.02 | 58.09 | 0 | |
| CMWXylem | 1 | | 0.11 | 9.02 | 0 | |
| FDisXylem | 0.97 | | 0.03 | 32.55 | 0 | |
| VPD | 1 | | 0.01 | 72.07 | 0 | |
|  | Constructed | | | | | |
| be | 0.01 | | 0 | 4.74 | 0 | |
| ad | 0 | | 0 | 0.88 | 0.381 | |
| total | -0.27 | | 0.01 | -21.24 | 0 | |
|  | Fit Indices | | | | | |
| TLI | -0.23 | |  |  |  | |
| chisq | 192 | |  |  |  | |
| RMSEA | 0.17 | |  |  |  | |
| Scaled χ2 | 34.30(1) | |  |  | 0 | |
|  | | R-squared | | | |
| Prod | 0.093 | |  |  |  | |
| CMWXylem | 0 | |  |  |  | |
| FDisXylem | 0.026 | |  |  |  | |

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| --- | --- | --- | --- | --- | --- | --- |
|  | Mod.F | | | | | |
|  | Est. | | Std. Err. | z | p | |
|  | Regression Slopes | | | | | |
| Prod |  | |  |  |  | |
| VPD | -0.26 | | 0.01 | -20.29 | 0 | |
| CMWDim1 | -0.02 | | 0.01 | -1.86 | 0.063 | |
| FDisall | 0.06 | | 0.01 | 4.65 | 0 | |
| CMWDim1 |  | |  |  |  | |
| VPD | 0.24 | | 0.01 | 21.06 | 0 | |
| FDisall |  | |  |  |  | |
| VPD | 0.01 | | 0.01 | 0.48 | 0.628 | |
|  | Intercepts | | | | | |
| Prod | 0 | | 0.01 | 0.05 | 0.957 | |
| CMWDim1 | 0.01 | | 0.01 | 0.78 | 0.436 | |
| FDisall | 0 | | 0.01 | -0.03 | 0.973 | |
| VPD | 0 | | 0.01 | 0 | 1 | |
|  | Residual Variances | | | | | |
| Prod | 0.93 | | 0.02 | 58.06 | 0 | |
| CMWDim1 | 0.94 | | 0.02 | 53.37 | 0 | |
| FDisall | 1 | | 0.01 | 84.43 | 0 | |
| VPD | 1 | | 0.01 | 72.07 | 0 | |
|  | Constructed | | | | | |
| be | 0 | | 0 | 0.48 | 0.629 | |
| ad | -0.01 | | 0 | -1.84 | 0.066 | |
| total | -0.27 | | 0.01 | -21.29 | 0 | |
|  | Fit Indices | | | | | |
| TLI | 0.83 | |  |  |  | |
| chisq | 25.93 | |  |  |  | |
| RMSEA | 0.06 | |  |  |  | |
| Scaled χ2 | 25.49(1) | |  |  | 0 | |
|  | | R-squared | | | |
| Prod | 0.075 | |  |  |  | |
| CMWDim1 | 0.058 | |  |  |  | |
| FDisall | 0 | |  |  |  | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **lhs** | **op** | **rhs** | **block** | **group** | **label** | **est** | **se** | **z** | **pvalue** | **ci.lower** | **ci.upper** | **std.lv** | **std.all** |
| Prod | ~ | VPD | 1 | 1 | c0 | -0.26 | 0.02 | -16.72 | 0 | -0.29 | -0.23 | -0.26 | -0.25 |
| Prod | ~ | CWMSeedMass | 1 | 1 | d0 | 0.12 | 0.01 | 8 | 0 | 0.09 | 0.15 | 0.12 | 0.12 |
| Prod | ~ | FDisSeedMass | 1 | 1 | e0 | 0.06 | 0.01 | 4.18 | 0 | 0.03 | 0.09 | 0.06 | 0.06 |
| CWMSeedMass | ~ | VPD | 1 | 1 | a0 | 0.32 | 0.01 | 23.57 | 0 | 0.29 | 0.34 | 0.32 | 0.31 |
| FDisSeedMass | ~ | VPD | 1 | 1 | b0 | 0.18 | 0.01 | 12.97 | 0 | 0.15 | 0.21 | 0.18 | 0.17 |
| Capv | ~1 |  | 1 | 1 |  | 0.04 | 0.01 | 2.75 | 0.01 | 0.01 | 0.07 | 0.04 | 0.04 |
| FDisSeedMass | ~1 |  | 1 | 1 |  | 0.12 | 0.01 | 8.46 | 0 | 0.09 | 0.14 | 0.12 | 0.12 |
| CWMSeedMass | ~1 |  | 1 | 1 |  | -0.03 | 0.01 | -2.02 | 0.04 | -0.05 | 0 | -0.03 | -0.03 |
| VPD | ~1 |  | 1 | 1 |  | -0.23 | 0.01 | -17.36 | 0 | -0.26 | -0.2 | -0.23 | -0.24 |
| Prod | ~~ | Prod | 1 | 1 |  | 0.92 | 0.02 | 52.07 | 0 | 0.88 | 0.95 | 0.92 | 0.94 |
| CWMSeedMass | ~~ | CWMSeedMass | 1 | 1 |  | 0.9 | 0.01 | 70.2 | 0 | 0.87 | 0.92 | 0.9 | 0.91 |
| FDisSeedMass | ~~ | FDisSeedMass | 1 | 1 |  | 0.96 | 0.01 | 73.41 | 0 | 0.93 | 0.98 | 0.96 | 0.97 |
| VPD | ~~ | VPD | 1 | 1 |  | 0.91 | 0.01 | 64.61 | 0 | 0.89 | 0.94 | 0.91 | 1 |
| Prod | ~ | VPD | 2 | 2 | c1 | -0.43 | 0.05 | -9.52 | 0 | -0.52 | -0.34 | -0.43 | -0.28 |
| Prod | ~ | CWMSeedMass | 2 | 2 | d1 | 0.01 | 0.03 | 0.31 | 0.75 | -0.05 | 0.07 | 0.01 | 0.01 |
| Prod | ~ | FDisSeedMass | 2 | 2 | e1 | 0.13 | 0.03 | 4.59 | 0 | 0.07 | 0.18 | 0.13 | 0.13 |
| CWMSeedMass | ~ | VPD | 2 | 2 | a1 | -0.2 | 0.04 | -4.79 | 0 | -0.28 | -0.12 | -0.2 | -0.14 |
| FDisSeedMass | ~ | VPD | 2 | 2 | b1 | -0.02 | 0.04 | -0.38 | 0.7 | -0.1 | 0.07 | -0.02 | -0.01 |
| Prod | ~1 |  | 2 | 2 |  | 0.06 | 0.05 | 1.19 | 0.24 | -0.04 | 0.17 | 0.06 | 0.07 |
| FDisSeedMass | ~1 |  | 2 | 2 |  | -0.3 | 0.05 | -6.51 | 0 | -0.39 | -0.21 | -0.3 | -0.31 |
| CWMSeedMass | ~1 |  | 2 | 2 |  | 0.56 | 0.04 | 12.87 | 0 | 0.47 | 0.64 | 0.56 | 0.61 |
| VPD | ~1 |  | 2 | 2 |  | 0.85 | 0.02 | 50.63 | 0 | 0.82 | 0.89 | 0.85 | 1.35 |
| Prod | ~~ | Prod | 2 | 2 |  | 0.86 | 0.04 | 24.61 | 0 | 0.79 | 0.93 | 0.86 | 0.91 |
| CWMSeedMass | ~~ | CWMSeedMass | 2 | 2 |  | 0.84 | 0.03 | 27.97 | 0 | 0.78 | 0.89 | 0.84 | 0.98 |
| FDisSeedMass | ~~ | FDisSeedMass | 2 | 2 |  | 0.94 | 0.03 | 31.88 | 0 | 0.88 | 0.99 | 0.94 | 1 |
| VPD | ~~ | VPD | 2 | 2 |  | 0.4 | 0.02 | 26.17 | 0 | 0.37 | 0.43 | 0.4 | 1 |
| b0e0 | := | b0\*e0 | 0 | 0 | b0e0 | 0.01 | 0 | 4.01 | 0 | 0.01 | 0.02 | 0.01 | 0.01 |
| a0d0 | := | a0\*d0 | 0 | 0 | a0d0 | 0.04 | 0.01 | 7.55 | 0 | 0.03 | 0.05 | 0.04 | 0.04 |
| total0 | := | c0+(b0\*e0)+(a0\*d0) | 0 | 0 | total0 | -0.21 | 0.01 | -14.36 | 0 | -0.24 | -0.18 | -0.21 | -0.2 |
| b1e1 | := | b1\*e1 | 0 | 0 | b1e1 | 0 | 0.01 | -0.38 | 0.7 | -0.01 | 0.01 | 0 | 0 |
| a1d0 | := | a1\*d0 | 0 | 0 | a1d1 | 0 | 0.01 | -0.31 | 0.76 | -0.01 | 0.01 | 0 | 0 |
| total1 | := | c0+(b1\*e1)+(a1\*d0) | 0 | 0 | total1 | -0.43 | 0.04 | -9.74 | 0 | -0.52 | -0.35 | -0.43 | -0.28 |

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| **lhs** | **op** | **rhs** | **block** | **group** | **label** | **est** | **se** | **z** | **pvalue** | **ci.lower** | **ci.upper** | **std.lv** | **std.all** |
| Prod | ~ | VPD | 1 | 1 | c0 | -0.1 | 0.02 | -5.85 | 0 | -0.13 | -0.07 | -0.1 | -0.1 |
| Prod | ~ | CWMHeight | 1 | 1 | d0 | 0.24 | 0.02 | 13.7 | 0 | 0.21 | 0.28 | 0.24 | 0.22 |
| Prod | ~ | FDisHeight | 1 | 1 | e0 | 0 | 0.01 | -0.24 | 0.81 | -0.03 | 0.03 | 0 | 0 |
| CWMHeight | ~ | VPD | 1 | 1 | a0 | -0.46 | 0.01 | -38.27 | 0 | -0.48 | -0.43 | -0.46 | -0.49 |
| FDisHeight | ~ | VPD | 1 | 1 | b0 | 0.08 | 0.01 | 5.62 | 0 | 0.05 | 0.11 | 0.08 | 0.08 |
| Prod | ~1 |  | 1 | 1 |  | 0.03 | 0.01 | 1.96 | 0.05 | 0 | 0.06 | 0.03 | 0.03 |
| FDisHeight | ~1 |  | 1 | 1 |  | 0.08 | 0.01 | 5.7 | 0 | 0.05 | 0.11 | 0.08 | 0.08 |
| CWMHeight | ~1 |  | 1 | 1 |  | 0.06 | 0.01 | 5.23 | 0 | 0.04 | 0.08 | 0.06 | 0.06 |
| VPD | ~1 |  | 1 | 1 |  | -0.23 | 0.01 | -17.36 | 0 | -0.26 | -0.2 | -0.23 | -0.24 |
| Prod | ~~ | Prod | 1 | 1 |  | 0.9 | 0.02 | 52.21 | 0 | 0.86 | 0.93 | 0.9 | 0.92 |
| CWMHeight | ~~ | CWMHeight | 1 | 1 |  | 0.61 | 0.01 | 48.61 | 0 | 0.59 | 0.64 | 0.61 | 0.76 |
| FDisHeight | ~~ | FDisHeight | 1 | 1 |  | 0.93 | 0.02 | 54.82 | 0 | 0.9 | 0.96 | 0.93 | 0.99 |
| VPD | ~~ | VPD | 1 | 1 |  | 0.91 | 0.01 | 64.61 | 0 | 0.89 | 0.94 | 0.91 | 1 |
| Prod | ~ | VPD | 2 | 2 | c1 | -0.39 | 0.04 | -8.71 | 0 | -0.48 | -0.3 | -0.39 | -0.25 |
| Prod | ~ | CWMHeight | 2 | 2 | d1 | 0.09 | 0.02 | 3.81 | 0 | 0.04 | 0.14 | 0.09 | 0.11 |
| Prod | ~ | FDisHeight | 2 | 2 | e1 | 0.07 | 0.02 | 2.83 | 0 | 0.02 | 0.11 | 0.07 | 0.08 |
| CWMHeight | ~ | VPD | 2 | 2 | a1 | -0.43 | 0.04 | -10.02 | 0 | -0.52 | -0.35 | -0.43 | -0.24 |
| FDisHeight | ~ | VPD | 2 | 2 | b1 | 0.01 | 0.05 | 0.11 | 0.91 | -0.09 | 0.1 | 0.01 | 0 |
| Capv | ~1 |  | 2 | 2 |  | 0.07 | 0.05 | 1.38 | 0.17 | -0.03 | 0.17 | 0.07 | 0.07 |
| FDisHeight | ~1 |  | 2 | 2 |  | -0.24 | 0.05 | -4.98 | 0 | -0.34 | -0.15 | -0.24 | -0.22 |
| CWMHeight | ~1 |  | 2 | 2 |  | -0.28 | 0.04 | -6.38 | 0 | -0.37 | -0.2 | -0.28 | -0.25 |
| VPD | ~1 |  | 2 | 2 |  | 0.85 | 0.02 | 50.63 | 0 | 0.82 | 0.89 | 0.85 | 1.35 |
| Prod | ~~ | Prod | 2 | 2 |  | 0.86 | 0.03 | 25.19 | 0 | 0.8 | 0.93 | 0.86 | 0.91 |
| CWMHeight | ~~ | CWMHeight | 2 | 2 |  | 1.2 | 0.05 | 26.41 | 0 | 1.11 | 1.29 | 1.2 | 0.94 |
| FDisHeight | ~~ | FDisHeight | 2 | 2 |  | 1.18 | 0.06 | 20.57 | 0 | 1.07 | 1.29 | 1.18 | 1 |
| VPD | ~~ | VPD | 2 | 2 |  | 0.4 | 0.02 | 26.17 | 0 | 0.37 | 0.43 | 0.4 | 1 |
| b0e0 | := | b0\*e0 | 0 | 0 | b0e0 | 0 | 0 | -0.24 | 0.81 | 0 | 0 | 0 | 0 |
| a0d0 | := | a0\*d0 | 0 | 0 | a0d0 | -0.11 | 0.01 | -12.91 | 0 | -0.13 | -0.09 | -0.11 | -0.11 |
| total0 | := | c0+(b0\*e0)+(a0\*d0) | 0 | 0 | total0 | -0.21 | 0.01 | -14.29 | 0 | -0.24 | -0.18 | -0.21 | -0.2 |
| b1e1 | := | b1\*e1 | 0 | 0 | b1e1 | 0 | 0 | 0.11 | 0.91 | -0.01 | 0.01 | 0 | 0 |
| a1d1 | := | a1\*d1 | 0 | 0 | a1d1 | -0.04 | 0.01 | -3.57 | 0 | -0.06 | -0.02 | -0.04 | -0.03 |
| total1 | := | c1+(b1\*e1)+(a1\*d1) | 0 | 0 | total1 | -0.43 | 0.04 | -9.66 | 0 | -0.52 | -0.34 | -0.43 | -0.28 |

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| **lhs** | **op** | **rhs** | **block** | **group** | **label** | **est** | **se** | **z** | **pvalue** | **ci.lower** | **ci.upper** | **std.lv** | **std.all** |
| Prod | ~ | VPD | 1 | 1 | c0 | -0.22 | 0.02 | -13.93 | 0 | -0.25 | -0.19 | -0.22 | -0.21 |
| Prod | ~ | CWMSLA | 1 | 1 | d0 | 0.02 | 0.01 | 1.43 | 0.15 | -0.01 | 0.05 | 0.02 | 0.02 |
| Prod | ~ | FDisSLA | 1 | 1 | e0 | 0.02 | 0.01 | 1.5 | 0.13 | -0.01 | 0.05 | 0.02 | 0.02 |
| CWMSLA | ~ | VPD | 1 | 1 | a0 | 0.35 | 0.02 | 22.21 | 0 | 0.32 | 0.39 | 0.35 | 0.32 |
| FDisSLA | ~ | VPD | 1 | 1 | b0 | -0.12 | 0.02 | -7.85 | 0 | -0.15 | -0.09 | -0.12 | -0.11 |
| Prod | ~1 |  | 1 | 1 |  | 0.04 | 0.01 | 2.66 | 0.01 | 0.01 | 0.07 | 0.04 | 0.04 |
| FDisSLA | ~1 |  | 1 | 1 |  | 0.09 | 0.01 | 6.78 | 0 | 0.06 | 0.12 | 0.09 | 0.09 |
| CWMSLA | ~1 |  | 1 | 1 |  | 0.13 | 0.01 | 10.59 | 0 | 0.11 | 0.15 | 0.13 | 0.12 |
| VPD | ~1 |  | 1 | 1 |  | -0.23 | 0.01 | -17.36 | 0 | -0.26 | -0.2 | -0.23 | -0.24 |
| Prod | ~~ | Prod | 1 | 1 |  | 0.93 | 0.02 | 52.69 | 0 | 0.9 | 0.97 | 0.93 | 0.96 |
| CWMSLA | ~~ | CWMSLA | 1 | 1 |  | 0.98 | 0.03 | 34.9 | 0 | 0.93 | 1.04 | 0.98 | 0.9 |
| FDisSLA | ~~ | FDisSLA | 1 | 1 |  | 1.04 | 0.02 | 55.92 | 0 | 1 | 1.08 | 1.04 | 0.99 |
| VPD | ~~ | VPD | 1 | 1 |  | 0.91 | 0.01 | 64.61 | 0 | 0.89 | 0.94 | 0.91 | 1 |
| Prod | ~ | VPD | 2 | 2 | c1 | -0.43 | 0.04 | -9.54 | 0 | -0.51 | -0.34 | -0.43 | -0.28 |
| Prod | ~ | CWMSLA | 2 | 2 | d0 | 0.02 | 0.01 | 1.43 | 0.15 | -0.01 | 0.05 | 0.02 | 0.02 |
| Prod | ~ | FDisSLA | 2 | 2 | e1 | 0.14 | 0.04 | 3.56 | 0 | 0.06 | 0.21 | 0.14 | 0.1 |
| CWMSLA | ~ | VPD | 2 | 2 | a1 | -0.31 | 0.03 | -10.61 | 0 | -0.37 | -0.26 | -0.31 | -0.27 |
| FDisSLA | ~ | VPD | 2 | 2 | b1 | 0.01 | 0.03 | 0.29 | 0.77 | -0.06 | 0.08 | 0.01 | 0.01 |
| Capv | ~1 |  | 2 | 2 |  | 0.09 | 0.05 | 1.72 | 0.08 | -0.01 | 0.2 | 0.09 | 0.09 |
| FDisSLA | ~1 |  | 2 | 2 |  | -0.48 | 0.04 | -13.43 | 0 | -0.55 | -0.41 | -0.48 | -0.68 |
| CWMSLA | ~1 |  | 2 | 2 |  | 0.06 | 0.03 | 2.13 | 0.03 | 0 | 0.12 | 0.06 | 0.08 |
| VPD | ~1 |  | 2 | 2 |  | 0.85 | 0.02 | 50.63 | 0 | 0.82 | 0.89 | 0.85 | 1.35 |
| Prod | ~~ | Prod | 2 | 2 |  | 0.87 | 0.04 | 24.75 | 0 | 0.8 | 0.94 | 0.87 | 0.91 |
| CWMSLA | ~~ | CWMSLA | 2 | 2 |  | 0.52 | 0.02 | 26.65 | 0 | 0.48 | 0.56 | 0.52 | 0.93 |
| FDisSLA | ~~ | FDisSLA | 2 | 2 |  | 0.51 | 0.03 | 17.69 | 0 | 0.46 | 0.57 | 0.51 | 1 |
| VPD | ~~ | VPD | 2 | 2 |  | 0.4 | 0.02 | 26.17 | 0 | 0.37 | 0.43 | 0.4 | 1 |
| b0e0 | := | b0\*e0 | 0 | 0 | b0e0 | 0 | 0 | -1.48 | 0.14 | -0.01 | 0 | 0 | 0 |
| a0d0 | := | a0\*d0 | 0 | 0 | a0d0 | 0.01 | 0 | 1.43 | 0.15 | 0 | 0.02 | 0.01 | 0.01 |
| total0 | := | c0+(b0\*e0)+(a0\*d0) | 0 | 0 | total0 | -0.21 | 0.01 | -14.34 | 0 | -0.24 | -0.18 | -0.21 | -0.2 |
| b1e1 | := | b1\*e1 | 0 | 0 | b1e1 | 0 | 0 | 0.29 | 0.77 | -0.01 | 0.01 | 0 | 0 |
| a1d0 | := | a1\*d0 | 0 | 0 | a1d0 | -0.01 | 0 | -1.41 | 0.16 | -0.01 | 0 | -0.01 | -0.01 |
| total1 | := | c1+(b1\*e1)+(a1\*d0) | 0 | 0 | total1 | -0.43 | 0.04 | -9.67 | 0 | -0.52 | -0.34 | -0.43 | -0.28 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **lhs** | **op** | **rhs** | **block** | **group** | **label** | **est** | **se** | **z** | **pvalue** | **ci.lower** | **ci.upper** | **std.lv** | **std.all** |
| Prod | ~ | VPD | 1 | 1 | c0 | -0.16 | 0.02 | -9.6 | 0 | -0.19 | -0.13 | -0.16 | -0.15 |
| Prod | ~ | CWMWD | 1 | 1 | d0 | -0.13 | 0.01 | -9.2 | 0 | -0.16 | -0.1 | -0.13 | -0.13 |
| Prod | ~ | FDisWD | 1 | 1 | e0 | 0.06 | 0.01 | 4.25 | 0 | 0.03 | 0.09 | 0.06 | 0.06 |
| CWMWD | ~ | VPD | 1 | 1 | a0 | 0.45 | 0.01 | 36.36 | 0 | 0.43 | 0.48 | 0.45 | 0.43 |
| FDisWD | ~ | VPD | 1 | 1 | b0 | 0.1 | 0.01 | 6.97 | 0 | 0.07 | 0.12 | 0.1 | 0.09 |
| Prod | ~1 |  | 1 | 1 |  | 0.04 | 0.01 | 2.86 | 0 | 0.01 | 0.07 | 0.04 | 0.04 |
| FDisWD | ~1 |  | 1 | 1 |  | 0.11 | 0.01 | 7.98 | 0 | 0.08 | 0.14 | 0.11 | 0.11 |
| CWMWD | ~1 |  | 1 | 1 |  | 0.04 | 0.01 | 3.18 | 0 | 0.02 | 0.06 | 0.04 | 0.04 |
| VPD | ~1 |  | 1 | 1 |  | -0.23 | 0.01 | -17.36 | 0 | -0.26 | -0.2 | -0.23 | -0.24 |
| Prod | ~~ | Prod | 1 | 1 |  | 0.92 | 0.02 | 52.87 | 0 | 0.89 | 0.95 | 0.92 | 0.94 |
| CWMWD | ~~ | CWMWD | 1 | 1 |  | 0.81 | 0.01 | 59.38 | 0 | 0.79 | 0.84 | 0.81 | 0.81 |
| FDisWD | ~~ | FDisWD | 1 | 1 |  | 0.99 | 0.01 | 66.93 | 0 | 0.96 | 1.02 | 0.99 | 0.99 |
| VPD | ~~ | VPD | 1 | 1 |  | 0.91 | 0.01 | 64.61 | 0 | 0.89 | 0.94 | 0.91 | 1 |
| Prod | ~ | VPD | 2 | 2 | c1 | -0.39 | 0.04 | -8.85 | 0 | -0.48 | -0.3 | -0.39 | -0.25 |
| Prod | ~ | CWMWD | 2 | 2 | d0 | -0.13 | 0.01 | -9.2 | 0 | -0.16 | -0.1 | -0.13 | -0.13 |
| Prod | ~ | FDisWD | 2 | 2 | e1 | 0.17 | 0.03 | 6.36 | 0 | 0.12 | 0.23 | 0.17 | 0.17 |
| CWMWD | ~ | VPD | 2 | 2 | a1 | 0.19 | 0.04 | 4.17 | 0 | 0.1 | 0.28 | 0.19 | 0.12 |
| FDisWD | ~ | VPD | 2 | 2 | b1 | -0.09 | 0.04 | -2.16 | 0.03 | -0.18 | -0.01 | -0.09 | -0.06 |
| Capv | ~1 |  | 2 | 2 |  | 0.09 | 0.05 | 1.84 | 0.07 | -0.01 | 0.19 | 0.09 | 0.09 |
| FDisWD | ~1 |  | 2 | 2 |  | -0.29 | 0.05 | -6.16 | 0 | -0.38 | -0.19 | -0.29 | -0.31 |
| CWMWD | ~1 |  | 2 | 2 |  | 0.1 | 0.05 | 2.17 | 0.03 | 0.01 | 0.2 | 0.1 | 0.11 |
| VPD | ~1 |  | 2 | 2 |  | 0.85 | 0.02 | 50.63 | 0 | 0.82 | 0.89 | 0.85 | 1.35 |
| Prod | ~~ | Prod | 2 | 2 |  | 0.83 | 0.03 | 24.65 | 0 | 0.77 | 0.9 | 0.83 | 0.88 |
| CWMWD | ~~ | CWMWD | 2 | 2 |  | 0.9 | 0.03 | 34.7 | 0 | 0.85 | 0.95 | 0.9 | 0.98 |
| FDisWD | ~~ | FDisWD | 2 | 2 |  | 0.86 | 0.03 | 26.03 | 0 | 0.79 | 0.92 | 0.86 | 1 |
| VPD | ~~ | VPD | 2 | 2 |  | 0.4 | 0.02 | 26.17 | 0 | 0.37 | 0.43 | 0.4 | 1 |
| b0e0 | := | b0\*e0 | 0 | 0 | b0e0 | 0.01 | 0 | 3.67 | 0 | 0 | 0.01 | 0.01 | 0.01 |
| a0d0 | := | a0\*d0 | 0 | 0 | a0d0 | -0.06 | 0.01 | -8.8 | 0 | -0.07 | -0.05 | -0.06 | -0.06 |
| total0 | := | c0+(b0\*e0)+(a0\*d0) | 0 | 0 | total0 | -0.21 | 0.01 | -14.36 | 0 | -0.24 | -0.18 | -0.21 | -0.2 |
| b1e1 | := | b1\*e1 | 0 | 0 | b1e1 | -0.02 | 0.01 | -2.05 | 0.04 | -0.03 | 0 | -0.02 | -0.01 |
| a1d1 | := | a1\*d1 | 0 | 0 | a1d0 | -0.02 | 0.01 | -3.78 | 0 | -0.04 | -0.01 | -0.02 | -0.02 |
| total1 | := | c1+(b1\*e1)+(a1\*d1) | 0 | 0 | total1 | -0.43 | 0.04 | -9.7 | 0 | -0.52 | -0.34 | -0.43 | -0.28 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **lhs** | **op** | **rhs** | **block** | **group** | **label** | **est** | **se** | **z** | **pvalue** | **ci.lower** | **ci.upper** | **std.lv** | **std.all** |
| Prod | ~ | VPD | 1 | 1 | c0 | -0.24 | 0.02 | -16.23 | 0 | -0.27 | -0.21 | -0.24 | -0.24 |
| Prod | ~ | CWMXylem | 1 | 1 | d0 | 0.16 | 0.02 | 7.12 | 0 | 0.11 | 0.2 | 0.16 | 0.12 |
| Prod | ~ | FDisXylem | 1 | 1 | e0 | 0.05 | 0.01 | 4.53 | 0 | 0.03 | 0.08 | 0.05 | 0.05 |
| CWMXylem | ~ | VPD | 1 | 1 | a0 | 0.14 | 0.01 | 11.74 | 0 | 0.12 | 0.17 | 0.14 | 0.17 |
| FDisXylem | ~ | VPD | 1 | 1 | b0 | 0.2 | 0.01 | 15.24 | 0 | 0.17 | 0.22 | 0.2 | 0.21 |
| Prod | ~1 |  | 1 | 1 |  | 0.03 | 0.01 | 1.88 | 0.06 | 0 | 0.05 | 0.03 | 0.03 |
| FDisXylem | ~1 |  | 1 | 1 |  | 0.05 | 0.01 | 3.35 | 0 | 0.02 | 0.07 | 0.05 | 0.05 |
| CWMXylem | ~1 |  | 1 | 1 |  | 0.1 | 0.01 | 7.7 | 0 | 0.07 | 0.12 | 0.1 | 0.12 |
| VPD | ~1 |  | 1 | 1 |  | -0.23 | 0.01 | -17.36 | 0 | -0.26 | -0.2 | -0.23 | -0.24 |
| Prod | ~~ | Prod | 1 | 1 |  | 0.92 | 0.02 | 52.65 | 0 | 0.88 | 0.95 | 0.92 | 0.94 |
| CWMXylem | ~~ | CWMXylem | 1 | 1 |  | 0.61 | 0.08 | 7.33 | 0 | 0.45 | 0.77 | 0.61 | 0.97 |
| FDisXylem | ~~ | FDisXylem | 1 | 1 |  | 0.79 | 0.03 | 29.74 | 0 | 0.74 | 0.84 | 0.79 | 0.96 |
| VPD | ~~ | VPD | 1 | 1 |  | 0.91 | 0.01 | 64.61 | 0 | 0.89 | 0.94 | 0.91 | 1 |
| Prod | ~ | VPD | 2 | 2 | c1 | -0.4 | 0.05 | -8.69 | 0 | -0.49 | -0.31 | -0.4 | -0.26 |
| Prod | ~ | CWMXylem | 2 | 2 | d1 | 0.1 | 0.02 | 5.15 | 0 | 0.06 | 0.13 | 0.1 | 0.15 |
| Prod | ~ | FDisXylem | 2 | 2 | e0 | 0.05 | 0.01 | 4.53 | 0 | 0.03 | 0.08 | 0.05 | 0.07 |
| CWMXylem | ~ | VPD | 2 | 2 | a1 | -0.47 | 0.06 | -7.47 | 0 | -0.6 | -0.35 | -0.47 | -0.19 |
| FDisXylem | ~ | VPD | 2 | 2 | b0 | 0.2 | 0.01 | 15.24 | 0 | 0.17 | 0.22 | 0.2 | 0.1 |
| Capv | ~1 |  | 2 | 2 |  | 0.03 | 0.05 | 0.54 | 0.59 | -0.07 | 0.13 | 0.03 | 0.03 |
| FDisXylem | ~1 |  | 2 | 2 |  | -0.17 | 0.04 | -4.62 | 0 | -0.25 | -0.1 | -0.17 | -0.13 |
| CWMXylem | ~1 |  | 2 | 2 |  | 0.13 | 0.05 | 2.79 | 0.01 | 0.04 | 0.22 | 0.13 | 0.08 |
| VPD | ~1 |  | 2 | 2 |  | 0.85 | 0.02 | 50.63 | 0 | 0.82 | 0.89 | 0.85 | 1.35 |
| Prod | ~~ | Prod | 2 | 2 |  | 0.86 | 0.03 | 24.7 | 0 | 0.79 | 0.93 | 0.86 | 0.89 |
| CWMXylem | ~~ | CWMXylem | 2 | 2 |  | 2.35 | 0.42 | 5.59 | 0 | 1.52 | 3.17 | 2.35 | 0.96 |
| FDisXylem | ~~ | FDisXylem | 2 | 2 |  | 1.69 | 0.11 | 15.65 | 0 | 1.48 | 1.9 | 1.69 | 0.99 |
| VPD | ~~ | VPD | 2 | 2 |  | 0.4 | 0.02 | 26.17 | 0 | 0.37 | 0.43 | 0.4 | 1 |
| b0e0 | := | b0\*e0 | 0 | 0 | b0e0 | 0.01 | 0 | 4.33 | 0 | 0.01 | 0.02 | 0.01 | 0.01 |
| a0d0 | := | a0\*d0 | 0 | 0 | a0d0 | 0.02 | 0 | 5.24 | 0 | 0.01 | 0.03 | 0.02 | 0.02 |
| total0 | := | c0+(b0\*e0)+(a0\*d0) | 0 | 0 | total0 | -0.21 | 0.01 | -14.27 | 0 | -0.24 | -0.18 | -0.21 | -0.2 |
| b1e1 | := | b0\*e1 | 0 | 0 | b0e0 | 0.01 | 0 | 4.33 | 0 | 0.01 | 0.02 | 0.01 | 0.01 |
| a1d0 | := | a1\*d1 | 0 | 0 | a1d1 | -0.05 | 0.01 | -5.35 | 0 | -0.06 | -0.03 | -0.05 | -0.03 |
| total1 | := | c0+(b0\*e1)+(a1\*d1) | 0 | 0 | total1 | -0.43 | 0.04 | -9.66 | 0 | -0.52 | -0.34 | -0.43 | -0.28 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **lhs** | **op** | **rhs** | **block** | **group** | **label** | **est** | **se** | **z** | **pvalue** | **ci.lower** | **ci.upper** | **std.lv** | **std.all** |
| Prod | ~ | VPD | 1 | 1 | c0 | -0.21 | 0.02 | -13.89 | 0 | -0.24 | -0.18 | -0.21 | -0.2 |
| Prod | ~ | CWMDim1 | 1 | 1 | d0 | -0.02 | 0.01 | -1.79 | 0.07 | -0.05 | 0 | -0.02 | -0.02 |
| Prod | ~ | FDisAll | 1 | 1 | e0 | 0.03 | 0.01 | 2.21 | 0.03 | 0 | 0.06 | 0.03 | 0.03 |
| CWMDim1 | ~ | VPD | 1 | 1 | a0 | 0.22 | 0.01 | 18.31 | 0 | 0.2 | 0.25 | 0.22 | 0.23 |
| FDisAll | ~ | VPD | 1 | 1 | b0 | 0.11 | 0.01 | 8.19 | 0 | 0.09 | 0.14 | 0.11 | 0.11 |
| Prod | ~1 |  | 1 | 1 |  | 0.04 | 0.01 | 2.68 | 0.01 | 0.01 | 0.07 | 0.04 | 0.04 |
| FDisAll | ~1 |  | 1 | 1 |  | 0.12 | 0.01 | 8.52 | 0 | 0.09 | 0.14 | 0.12 | 0.12 |
| CWMDim1 | ~1 |  | 1 | 1 |  | -0.02 | 0.01 | -1.49 | 0.14 | -0.05 | 0.01 | -0.02 | -0.02 |
| VPD | ~1 |  | 1 | 1 |  | -0.23 | 0.01 | -17.36 | 0 | -0.26 | -0.2 | -0.23 | -0.24 |
| Prod | ~~ | Prod | 1 | 1 |  | 0.93 | 0.02 | 52.71 | 0 | 0.9 | 0.97 | 0.93 | 0.96 |
| CWMDim1 | ~~ | CWMDim1 | 1 | 1 |  | 0.85 | 0.02 | 47.46 | 0 | 0.82 | 0.89 | 0.85 | 0.95 |
| FDisAll | ~~ | FDisAll | 1 | 1 |  | 0.95 | 0.01 | 72.57 | 0 | 0.93 | 0.98 | 0.95 | 0.99 |
| VPD | ~~ | VPD | 1 | 1 |  | 0.91 | 0.01 | 64.61 | 0 | 0.89 | 0.94 | 0.91 | 1 |
| Prod | ~ | VPD | 2 | 2 | c1 | -0.43 | 0.04 | -9.65 | 0 | -0.52 | -0.34 | -0.43 | -0.28 |
| Prod | ~ | CWMDim1 | 2 | 2 | d0 | -0.02 | 0.01 | -1.79 | 0.07 | -0.05 | 0 | -0.02 | -0.03 |
| Prod | ~ | FDisAll | 2 | 2 | e1 | 0.11 | 0.03 | 4.15 | 0 | 0.06 | 0.16 | 0.11 | 0.11 |
| CWMDim1 | ~ | VPD | 2 | 2 | a1 | 0.05 | 0.06 | 0.81 | 0.42 | -0.07 | 0.17 | 0.05 | 0.03 |
| FDisAll | ~ | VPD | 2 | 2 | b1 | 0 | 0.05 | -0.03 | 0.98 | -0.09 | 0.09 | 0 | 0 |
| Prod | ~1 |  | 2 | 2 |  | 0.08 | 0.05 | 1.48 | 0.14 | -0.02 | 0.17 | 0.08 | 0.08 |
| FDisAll | ~1 |  | 2 | 2 |  | -0.36 | 0.05 | -7.69 | 0 | -0.46 | -0.27 | -0.36 | -0.37 |
| CWMDim1 | ~1 |  | 2 | 2 |  | 0.29 | 0.06 | 4.51 | 0 | 0.16 | 0.41 | 0.29 | 0.25 |
| VPD | ~1 |  | 2 | 2 |  | 0.85 | 0.02 | 50.63 | 0 | 0.82 | 0.89 | 0.85 | 1.35 |
| Prod | ~~ | Prod | 2 | 2 |  | 0.86 | 0.03 | 24.72 | 0 | 0.8 | 0.93 | 0.86 | 0.91 |
| CWMDim1 | ~~ | CWMDim1 | 2 | 2 |  | 1.33 | 0.05 | 25.17 | 0 | 1.23 | 1.43 | 1.33 | 1 |
| FDisAll | ~~ | FDisAll | 2 | 2 |  | 0.97 | 0.03 | 30.32 | 0 | 0.91 | 1.04 | 0.97 | 1 |
| VPD | ~~ | VPD | 2 | 2 |  | 0.4 | 0.02 | 26.17 | 0 | 0.37 | 0.43 | 0.4 | 1 |
| b0e0 | := | b0\*e0 | 0 | 0 | b0e0 | 0 | 0 | 2.14 | 0.03 | 0 | 0.01 | 0 | 0 |
| a0d0 | := | a0\*d0 | 0 | 0 | a0d0 | -0.01 | 0 | -1.77 | 0.08 | -0.01 | 0 | -0.01 | -0.01 |
| total0 | := | c0+(b0\*e0)+(a0\*d0) | 0 | 0 | total0 | -0.21 | 0.01 | -14.35 | 0 | -0.24 | -0.18 | -0.21 | -0.21 |
| b1e1 | := | b1\*e1 | 0 | 0 | b1e1 | 0 | 0.01 | -0.03 | 0.98 | -0.01 | 0.01 | 0 | 0 |
| a1d0 | := | a1\*d0 | 0 | 0 | a1d0 | 0 | 0 | -0.73 | 0.46 | 0 | 0 | 0 | 0 |
| total1 | := | c0+(b1\*e1)+(a1\*d0) | 0 | 0 | total1 | -0.43 | 0.04 | -9.67 | 0 | -0.52 | -0.34 | -0.43 | -0.28 |