S9 Table. Changes in montane TMCF cloud immersion by ecoregion, and forest cover and protection of the least affected change category, South America. Most South American ecoregions suffer cloud immersion declines. Shown here are changes in TMCF cloud immersion by ecoregion, and status of forest cover and protection of the least affected change category, for average year ~2070 (years 2061-2080) under RCP-4.5. The class least affected by climate change in South American ecoregions is RHd ≥ 0%. Proportions for this class are then broken down by forest cover and protection status.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ecoregion** | **Type** | **RHd****(%)** | **Area (km2)** | **Projected percent of TMCF Zone Area** | **Land cover and Protection of Least Affected Class** **(% of TMCF Zone Area)****(Sums to Total % for** **RHd ≥ 0%)** |
| **Below CFmin** | **RH­d ≤** **-3% or < Rhmin** | **-3%<****RHd****<0%**  | **RHd ≥ 0%**  | **New > CFmin**  | **New RH≥ Rhmin**  |
| **NFor UPR** | **NFor PR** | **For UPR** | **For PR**  |
| **Eastern Cordillera real montane forests** | S1 | -0.04 | 37,180 | 4.7 | 0.01 | 45 | 50 | 1.1 | 1.9 | 11 | 0.15 | 26 | 13 |
| **Eastern Cordillera real montane forests foothills** | N | -0.99 | 4,059 | 22 | 0 | 78 | 0.04 | 0 | 0 | 0.00 | 0 | 0.03 | 0.00 |
| **Cauca Valley montane forests** | S1 | -0.11 | 19,520 | 6.3 | 0.11 | 48 | 46 | 0 | 0 | 4.1 | 0.46 | 32 | 8.9 |
| **Cordillera Oriental montane forests** | S1 | -0.48 | 10,800 | 6.1 | 0 | 80 | 14 | 0 | 0 | 5 | 0.13 | 7.7 | 1.6 |
| **Cordillera Oriental montane forests north** | S1 | -0.38 | 13,570 | 6.4 | 0 | 55 | 38 | 0 | 0 | 9.5 | 0.58 | 24 | 4.3 |
| **Magdalena Valley montane forests** | S1 | -0.03 | 47,380 | 4.8 | 0 | 47 | 48 | 0 | 0.04 | 19 | 0.75 | 25 | 3.9 |
| **Northwestern Andean montane forests** | S1 | -0.31 | 33,880 | 1.7 | 0.59 | 70 | 28 | 0.8 | 0.76 | 9.3 | 0.098 | 15 | 3.4 |
| **Santa Marta montane forests** | S1 | -2.4 | 1,483 | 4 | 0.14 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Venezuelan Andes montane forests** | S1 | -0.93 | 8,297 | 5.3 | 10 | 77 | 7.7 | 0 | 0 | 1.3 | 0.25 | 5 | 1.1 |
| **Cordillera de la Costa montane forests** | N | -2.2 | 1,676 | 13 | 5.4 | 81 | 0 | 8.2 | 0 | 0 | 0 | 0 | 0 |
| **Guajira-Barranquilla xeric scrubd** | N | 0.03 | 10 | 0 | 0 | 29 | 71 | 14 | 0 | 32 | 6.4 | 0 | 32 |
| **Guiana Highlands moist forests** | MX | -2.9 | 7,433 | 27 | 48 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Isla Margarita** | N | -0.82 | 10 | 0 | 28 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Lara-Falcon dry forests** | N | -0.99 | 73 | 8.8 | 0 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Paraguana xeric scrubd** | N | -1.1 | 1.5 | 29 | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Ecuadorian dry forestsd** | N | 0.15 | 381 | 0 | 0 | 14 | 86 | 17 | 0.15 | 2.9 | 1.2 | 69 | 13 |
| **Galapagos islandsd** | N | 2.2 | 921 | 0 | 0 | 0 | 100 | 9 | 8.1 | 0 | 56 | 0 | 44 |
| **Alto Parana forests and Campos Rupestresd**  | MX | -0.49 | 48 | 42 | 53 | 4.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Araucaria moist forestsd** | MX | 1.4 | 1,675 | 0.06 | 0.16 | 2.9 | 97 | 16 | 80 | 36 | 2.7 | 51 | 7.3 |
| **Serra do Mar coastal forests** | N | -0.71 | 236 | 2.4 | 43 | 45 | 9.6 | 0.42 | 0.13 | 0.82 | 0.08 | 8 | 0.69 |
| **Bolivian Yungas** | S2 | -1.6 | 17,390 | 18 | 2.5 | 79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peruvian Yungas** | S2 | 0.25 | 35,680 | 5.5 | 0.14 | 20 | 74 | 0.26 | 1.1 | 5.3 | 0.19 | 54 | 15 |
| **Peruvian Yungas foothills** | S2 | -1.2 | 27,810 | 13 | 0.00 | 85 | 2.4 | 0 | 0.00 | 0.01 | 0.01 | 1.5 | 0.85 |
| **Southern Andean Yungasd** | MX | 0.09 | 28,040 | 24 | 0.73 | 39 | 37 | 0.95 | 1 | 7.4 | 0.95 | 20 | 8.5 |

S2 Table defines RHd and CFmin. Forest cover and protection status include: NFor = Nonforest, For = Forest, UPR = Unprotected, PR = Protected. S4 Table defines TMCF upper limit Types. Superscript **d** indicates nonforest class includes significant deciduous forest, dry scrub, savanna, or fumarole vegetation, and not all forest absence equates to deforestation.