

**Table S1.** Mean value and standard deviation of AGB and the number of total, tree, shrub and herb species in primary UFUs in Haikou in 2015 and 2021.

Primary UFU type	AGB		Number of tree species		Number of shrub species		Number of herb species		Number of total species	
	2015	2021	2015	2021	2015	2021	2015	2021	2015	2021
Public affairs service districts	$2.07 \times 10^7 \pm 1.61 \times 10^7$	$4.78 \times 10^7 \pm 4.61 \times 10^7$	$3.91 \pm 1.95$	$5.90 \pm 2.84$	$1.43 \pm 0.58$	$5.64 \pm 2.36$	$2.48 \pm 1.79$	$7.92 \pm 4.98$	$7.27 \pm 2.48$	$19.20 \pm 8.01$
Industry and business districts	$2.83 \times 10^7 \pm 2.68 \times 10^7$	$4.12 \times 10^7 \pm 3.50 \times 10^7$	$3.59 \pm 1.73$	$5.65 \pm 2.46$	$1.34 \pm 0.57$	$5.73 \pm 2.03$	$1.58 \pm 0.83$	$7.35 \pm 3.87$	$6.52 \pm 2.23$	$18.73 \pm 5.93$
Residential districts	$1.77 \times 10^7 \pm 1.52 \times 10^7$	$2.78 \times 10^7 \pm 2.17 \times 10^7$	$4.38 \pm 2.62$	$5.28 \pm 2.17$	$1.48 \pm 0.55$	$5.61 \pm 2.83$	$2.02 \pm 1.16$	$6.50 \pm 4.07$	$7.87 \pm 3.10$	$17.38 \pm 7.39$
Recreation and leisure districts	$1.01 \times 10^8 \pm 7.80 \times 10^7$	$4.86 \times 10^7 \pm 4.88 \times 10^7$	$3.61 \pm 1.52$	$5.5 \pm 2.51$	$2.12 \pm 1.46$	$4.9 \pm 3.11$	$4.48 \pm 2.96$	$3.44 \pm 1.46$	$10.21 \pm 4.02$	$19.30 \pm 7.55$
Transportation	$2.12 \times 10^7 \pm 1.60 \times 10^7$	$4.43 \times 10^7 \pm 6.05 \times 10^7$	$3.33 \pm 3.82$	$6.13 \pm 2.80$	$1.12 \pm 0.63$	$6.08 \pm 2.90$	$1.14 \pm 0.87$	$8.04 \pm 4.80$	$5.58 \pm 2.93$	$20.25 \pm 7.91$
Undeveloped land	$0 \pm 0$	$1.88 \times 10^7 \pm 1.44 \times 10^7$	$3.28 \pm 0$	$5 \pm 1.41$	$0 \pm 0$	$5.5 \pm 0.70$	$0 \pm 0$	$3.44 \pm 1.46$	$0 \pm 0$	$22.5 \pm 4.5$

**Table S2.** Mean value and standard deviation of the AGB and the number of trees, shrubs and herbs in secondary UFUs in Haikou

Secondary UFU type	AGB		Number of trees		Number of shrubs		Number of herbs	
	2015	2021	2015	2021	2015	2021	2015	2021
Governmental agencies	$1.86 \times 10^6 \pm 7.51 \times 10^5$	$4.37 \times 10^6 \pm 6.21 \times 10^6$	$3.42 \pm 2.02$	$5.33 \pm 2.46$	$1.35 \pm 0.45$	$6.07 \pm 2.40$	$1.53 \pm 1.08$	$10.25 \pm 4.90$
Colleges or universities	$2.91 \times 10^6 \pm 2.51 \times 10^5$	$3.20 \times 10^6 \pm 3.03 \times 10^6$	$4.60 \pm 1.52$	$4.00 \pm 1.58$	$1.39 \pm 0.38$	$4.20 \pm 2.59$	$1.93 \pm 0.61$	$5.00 \pm 2.91$
Primary and middle schools	$2.06 \times 10^6 \pm 1.76 \times 10^6$	$6.14 \times 10^6 \pm 4.88 \times 10^6$	$3.22 \pm 1.39$	$7.44 \pm 2.65$	$1.22 \pm 0.35$	$6.30 \pm 2.71$	$2.18 \pm 0.86$	$8.44 \pm 4.75$
Research institutes	$3.71 \times 10^6 \pm 0$	$6.80 \times 10^6 \pm 0$	$2.50 \pm 3.54$	$3 \pm 4.24$	$0.60 \pm 0.85$	$4.00 \pm 5.66$	$1.67 \pm 2.35$	$5.50 \pm 7.78$
Hospitals	$1.70 \times 10^6 \pm 1.37 \times 10^6$	$2.72 \times 10^6 \pm 1.97 \times 10^6$	$4.78 \pm 2.39$	$5.78 \pm 3.73$	$1.80 \pm 0.87$	$4.78 \pm 1.39$	$2.04 \pm 0.70$	$4.44 \pm 4.67$
Industry	$4.27 \times 10^6 \pm 4.03 \times 10^6$	$3.32 \times 10^6 \pm 2.24 \times 10^6$	$2.79 \pm 2.04$	$6.00 \pm 3.11$	$0.96 \pm 0.47$	$6.43 \pm 1.13$	$1.27 \pm 0.68$	$9.00 \pm 4.58$
Hotels	$2.28 \times 10^6 \pm 1.67 \times 10^6$	$2.06 \times 10^6 \pm 1.76 \times 10^6$	$4.00 \pm 2.12$	$4.78 \pm 2.54$	$1.41 \pm 0.48$	$5.44 \pm 2.70$	$1.64 \pm 0.82$	$6.89 \pm 4.78$
Industrial offices	$1.81 \times 10^6 \pm 1.47 \times 10^6$	$4.53 \times 10^6 \pm 4.35 \times 10^6$	$3.88 \pm 0.99$	$6.38 \pm 1.92$	$1.37 \pm 0.41$	$5.38 \pm 2.13$	$1.94 \pm 0.83$	$6.25 \pm 3.06$
Supermarkets	$4.28 \times 10^6 \pm 6.53 \times 10^5$	$6.32 \times 10^6 \pm 4.81 \times 10^6$	$3.5 \pm 0.71$	$5.00 \pm 2.53$	$2.25 \pm 1.06$	$6.00 \pm 0$	$1.00 \pm 1.41$	$8.00 \pm 4.24$
Low-density residential areas	$7.35 \times 10^5 \pm 2.53 \times 10^5$	$2.34 \times 10^6 \pm 5.69 \times 10^5$	$3.00 \pm 2.65$	$4.00 \pm 1.00$	$1.89 \pm 1.54$	$4.33 \pm 2.08$	$2.00 \pm 1.33$	$7.67 \pm 6.56$
High-density residential areas	$1.88 \times 10^6 \pm 1.56 \times 10$	$2.83 \times 10^6 \pm 2.27 \times 10^6$	$4.52 \pm 2.63$	$5.17 \pm 2.07$	$1.44 \pm 0.38$	$5.73 \pm 2.89$	$2.02 \pm 1.67$	$6.40 \pm 4.00$
Parks	$2.87 \times 10^7 \pm 2.17 \times 10^7$	$7.01 \times 10^6 \pm 5.28 \times 10^6$	$3.58 \pm 0.81$	$5.50 \pm 2.12$	$2.11 \pm 0.43$	$5.00 \pm 3.10$	$5.00 \pm 1.60$	$9.67 \pm 5.16$
Museums	$7.51 \times 10^6 \pm 5.99 \times 10^6$	$2.59 \times 10^6 \pm 2.21 \times 10^6$	$3.65 \pm 2.42$	$6.25 \pm 2.63$	$2.15 \pm 2.51$	$4.75 \pm 3.59$	$3.70 \pm 4.01$	$7.75 \pm 6.29$
Bus parking	$2.92 \times 10^6 \pm 1.36 \times 10^6$	$6.97 \times 10^6 \pm 7.07 \times 10^6$	$8.00 \pm 5.29$	$5.00 \pm 4.36$	$0.83 \pm 0.76$	$5.25 \pm 3.20$	$0.89 \pm 1.02$	$4.66 \pm 2.88$
Main roads and secondary roads	$2.01 \times 10^6 \pm 1.61 \times 10^6$	$4.02 \times 10^6 \pm 5.76 \times 10^6$	$2.63 \pm 1.51$	$6.40 \pm 2.64$	$1.14 \pm 0.62$	$6.25 \pm 2.90$	$1.17 \pm 0.87$	$8.8 \pm 4.82$
Wetland	$0 \pm 0$	$1.88 \times 10^6 \pm 1.45 \times 10^6$	$0 \pm 0$	$5.14 \pm 2.12$	$0 \pm 0$	$4.00 \pm 5.66$	$0 \pm 0$	$12.00 \pm 4.24$

**Figure S1.** Boxplots of AGB and the number of total, tree, shrub and herb plant species in secondary UFUs in 2015 and 2021.

