

N pools and fluxes	<i>LPJmL5</i>	Literature estimates LU	<i>LPJmL5-PNV</i>	Literature estimates PNV	<i>LPJmL5-nL</i>	<i>LPJmL5-nF</i>
Vegetation (Pg N)	1.78	–	2.69	3.6 ¹ , 3.8 ² , 5.3 ³ , 16 ⁴	5.10	1.77
Soil organic matter (Pg N)	106.0	–	118.6	120 ¹ , 101 ² , 61.4 ³ , 280 ⁴ , 95 ⁵	192.1	105.5
Soil NH ₄ ⁺ (Tg N)	163.7	–	162.1	361 ³	–	159.7
Soil NO ₃ ⁻ (Tg N)	2778	–	2948	580 ³	–	2629
Plant uptake (Tg N yr ⁻¹)	618	–	634	970 ¹ , 1130 ² , 1080 ³ , 620 ⁴	1790	583
Mineralization (Tg N yr ⁻¹)	1679	–	2043	980 ¹ , 1030 ² , 6300 ⁴	2423	1658
Immobilization (Tg N yr ⁻¹)	1177	–	1480	–	1263	1172
Leaching (Tg N yr ⁻¹)	62.83	93 ⁶ , 95 ⁷	32.44	13 ¹ , 87 ² , 5 ⁴	–	38.10
Volatilization (Tg N yr ⁻¹)	20.46	–	15.39	–	-	15.39
Denitrification N ₂ O emissions (Tg N yr ⁻¹)	5.47	–	3.84	–	-	4.73
Denitrification N ₂ emissions (Tg N yr ⁻¹)	44.24	68 ⁶	31.09	–	-	38.23
Denitrification total (Tg N yr ⁻¹)	49.71	72–85 ⁶ , 25 ⁷ , 67 ⁹	34.93	–	-	42.96
Nitrification N ₂ O (Tg N yr ⁻¹)	9.10	–	9.35	–	-	8.36
Total N ₂ O emissions (Tg N yr ⁻¹)	14.57	11 ⁸ , 15 ⁹	13.19	–	-	13.09
Biological N fixation (Tg N yr ⁻¹)	128.9	92 ⁶ , 118 ⁷ , 104–108 ⁸ , 107 ⁹	88.6	34 ¹ , 108 ² , 211 ⁴ , 58 ¹⁰	136.3	128.8