

Table S9. The results of CO₂ concentration in soil gas based on measurements series from 21.11. to 26.11.2022

No. of piezometer	CO ₂ concentration in soil gas [ppm]						average value
	21.11.2022	22.11.2022	23.11.2022	24.11.2022	25.11.2022	26.11.2022	
1	9,190.0	12,241.0	647.5	788.0	1,012.8	13,430.0	6,218.2
2	-	-	-	-	-	-	-
3	3,574.4	2,801.0	17,982.0	13,408.0	12,022.0	16,035.0	10,970.4
4	12,290.0	5,818.2	890.0	3,611.5	22,460.0	16,841.0	10,318.5
5	18,340.0	3,822.7	717.6	648.3	475.3	724.4	4,121.4
6	6,106.6	8,053.0	23,579.0	22,688.0	24,882.0	1,099.1	14,401.3
2201	13,636.0	10,109.0	5,322.1	3,647.4	4,133.6	8,832.0	7,613.4
2202	6,019.7	8,811.9	16,194.0	22,876.0	17,137.0	13,708.0	14,124.4
2203	9,820.0	13,333.0	8,272.6	8,769.6	7,827.3	5,713.1	8,955.9
2204	4,504.3	18,436.0	13,267.0	18,689.0	14,796.0	1,318.4	11,835.1
2205	7,251.3	11,141.0	12,738.0	15,122.0	13,500.0	13,916.0	12,278.1
2206	15,181.0	14,435.0	11,806.0	8,072.5	9,232.0	8,342.6	11,178.2
2207	16,770.0	16,660.0	19,536.0	10,508.0	12,303.0	15,592.0	15,228.2
2208	11,129.0	12,599.0	22,305.0	21,552.0	26,504.0	23,386.0	19,579.2
2209	4,207.5	9,698.0	17,940.0	18,049.0	18,931.0	22,134.0	15,159.9
2210	6,579.1	7,329.0	1,594.4	11,036.0	20,802.0	16,921.0	10,710.3
2211	8,566.0	19,679.0	39,219.0	41,132.0	49,377.0	380.8	26,392.3
2212	17,310.0	1,466.8	20,573.0	21,495.0	24,594.0	19,502.0	17,490.1
2213	11,234.0	13,223.0	12,158.0	17,074.0	17,968.0	15,691.0	14,558.0
2214	12,775.0	12,414.0	9,513.0	9,946.0	10,433.0	10,641.0	10,953.7
2215	12,650.0	12,043.0	4,065.3	6,883.7	4,758.7	10,992.0	8,565.5
2216	11,234.0	291.1	1,071.6	527.2	626.5	876.1	2,437.8
2217	10,121.0	15,631.0	13,318.0	13,416.0	13,229.0	13,479.0	13,199.0
2218	8,321.2	12,861.0	17,071.0	13,258.0	13,733.0	15,336.0	13,430.0
2219	8,307.7	12,826.0	19,542.0	20,353.0	20,889.0	20,421.0	17,056.5
2220	11,175.0	2,021.7	13,163.0	10,410.0	15,373.0	7,089.9	9,872.1
2221	2,776.7	1,052.4	17,723.0	19,211.0	26,416.0	15,389.0	13,761.4
2222	6,266.3	15,458.0	743.8	1,231.4	15,583.0	3,369.5	7,108.7
2223	9,081.7	8,046.1	5,877.5	8,314.5	12,829.0	24,934.0	11,513.8
2224	16,770.0	993.5	16,154.0	19,278.0	21,140.0	13,626.0	14,660.3
2225	10,741.0	2,225.0	18,398.0	19,251.0	36,718.0	32,021.0	19,892.3
2226	5,728.3	7,497.7	14,404.0	16,753.0	17,540.0	14,716.0	12,773.2
2227	6,336.3	9,115.0	4,248.6	5,224.4	9,462.0	9,571.0	7,326.2
2228	11,162.0	11,527.0	6,416.4	6,708.1	10,198.0	10,641.0	9,442.1
2229	3,283.6	3,384.8	26,652.0	2,696.8	40,023.0	23,929.0	16,661.5
2230	527.1	19,478.0	1,054.8	15,320.0	6,852.2	9,645.0	8,812.9
2231	12,438.0	13,917.0	2,377.2	2,661.7	11,327.0	16,098.0	9,803.2
2232	13,098.0	15,030.0	10,865.0	12,061.0	12,717.0	11,798.0	12,594.8
2233	13,756.0	13,927.0	5,205.0	33,971.0	6,128.5	8,732.5	13,620.0
2234	7,838.9	15,047.0	10,869.0	9,094.0	9,222.0	1,095.1	8,861.0
2235	1,981.8	18,101.0	13,140.0	13,015.0	15,875.0	7,582.9	11,616.0
2236	15,941.0	19,191.0	15,493.0	13,743.0	15,989.0	17,084.0	16,240.2
2237	9,633.0	13,690.0	18,207.0	8,094.3	10,421.0	8,599.1	11,440.7

Table S10. The results of CO₂ concentration in soil gas based on measurements series performed from 28.11.2022 to 02.12.2022

No. of piezometer	CO ₂ concentration in soil gas [ppm]					average value
	28.11.2022	29.11.2022	30.11.2022	01.12.2022	02.12.2022	
1	13,430.0	3,152.9	532.8	679.8	3,780.9	4,315.3
2	-	-	-	-	-	-
3	16,035.0	9,496.0	9,923.0	9,125.0	9,324.0	10,780.6
4	16,841.0	6,639.8	9,609.0	17,092.0	7,783.6	11,593.1
5	724.4	8,320.1	526.4	771.7	498.8	2,168.3
6	1,099.1	29,092.0	26,081.0	25,004.0	18,575.0	19,970.2
2201	8,832.0	2,261.3	3,494.7	3,041.2	3,461.9	4,218.2
2202	13,708.0	14,846.0	14,039.0	17,789.0	13,807.0	14,837.8
2203	5,713.1	2,611.9	6,716.0	7,460.7	5,324.0	5,565.1
2204	1,318.4	12,239.0	9,556.0	16,553.0	14,439.0	10,821.1
2205	13,916.0	12,064.0	10,105.0	10,452.0	9,953.0	11,298.0
2206	8,342.6	8,210.9	6,796.4	5,728.3	8,020.1	7,419.7
2207	15,592.0	8,063.3	9,739.0	9,520.0	10,625.0	10,707.9
2208	23,386.0	20,354.0	9,773.0	14,716.0	18,096.0	17,265.0
2209	22,134.0	16,977.0	5,574.8	15,864.0	14,326.0	14,975.2
2210	16,921.0	13,028.0	6,885.9	11,844.0	8,800.7	11,495.9
2211	380.8	3,511.1	789.9	347.8	358.8	1,077.7
2212	19,502.0	19,961.0	11,142.0	17,621.0	16,729.0	16,991.0
2213	15,691.0	10,593.0	13,660.0	10,215.0	11,224.0	12,276.6
2214	10,641.0	4,601.9	4,614.4	7,718.7	5,012.4	6,517.7
2215	10,992.0	4,066.7	1,880.0	2,647.5	1,749.4	4,267.1
2216	876.1	4,534.2	415.3	478.2	465.3	1,353.8
2217	13,479.0	8,846.9	7,016.4	10,644.0	6,070.4	9,211.3
2218	15,336.0	14,217.0	7,061.2	10,628.0	15,385.0	12,525.4
2219	20,421.0	11,423.0	9,066.0	18,555.0	13,822.0	14,657.4
2220	7,089.9	6,986.5	6,033.5	12,446.0	9,328.0	8,376.8
2221	15,389.0	18,813.0	20,355.0	22,782.0	16,996.0	18,867.0
2222	3,369.5	1,177.4	672.7	866.6	14,736.0	4,164.4
2223	24,934.0	3,375.6	4,872.5	6,336.9	3,359.0	8,575.6
2224	13,626.0	9,863.0	9,286.0	20,235.0	18,253.0	14,252.6
2225	32,021.0	22,302.0	17,451.0	21,445.0	16,739.0	21,991.6
2226	14,716.0	17,779.0	7,879.3	12,486.0	8,537.1	12,279.5
2227	9,571.0	12,190.0	4,143.5	3,283.4	3,423.1	6,522.2
2228	10,641.0	7,638.9	9,686.0	7,301.3	7,444.2	8,542.3
2229	23,929.0	24,572.0	25,770.0	27,387.0	30,199.5	26,371.5
2230	9,645.0	16,034.0	629.7	505.2	422.5	5,447.3
2231	16,098.0	4,721.5	1,974.4	2,005.3	2,028.3	5,365.5
2232	11,798.0	8,035.6	8,780.0	8,178.5	7,866.1	8,931.6
2233	8,732.5	4,777.0	6,106.8	2,233.0	4,930.6	5,356.0
2234	1,095.1	6,443.2	3,913.0	7,375.9	6,761.4	5,117.7
2235	7,582.9	5,398.0	11,187.0	13,153.0	12,628.0	9,989.8
2236	17,084.0	13,424.0	11,699.0	14,403.0	15,198.0	14,361.6
2237	8,599.1	4,635.5	10,719.0	9,960.0	8,791.9	8,541.1

Table S11. The results of CO₂ concentration in soil gas in additional piezometers drilled in 2022 based on measurements series performed from 21.11. to 26.11.2022

No. of piezometer	CO ₂ concentration in soil gas [ppm]						average value
	21.11.2022	22.11.2022	23.11.2022	24.11.2022	25.11.2022	26.11.2022	
ST1_1	4,477.4	760.1	1,531.2	15,700.0	16,911.0	4,316.1	7,282.6
ST1_2	4,854.0	2,294.3	23,450.0	26,912.0	25,392.0	11,347.0	15,708.2
ST1_3	12,575.0	9,049.0	8,447.3	8,605.3	9,358.0	4,783.4	8,803.0
ST1_4	2,473.6	813.2	1,970.5	2,022.1	2,046.7	1,660.3	1,831.1
ST1_5	6,644.6	3,650.5	1,736.7	1,531.4	1,729.1	1,768.5	2,843.5
ST1_6	12,865.0	1,639.2	4,610.8	5,976.7	5,881.1	4,253.9	5,871.1
ST2_1	990.9	2,175.8	424.1	375.5	346.8	621.1	822.4
ST2_2	1,856.9	7,929.9	351.2	329.7	358.5	440.9	1,877.9
ST2_3	4,474.0	13,497.0	11,931.0	1,097.1	14,413.0	403.4	7,635.9
ST2_4	10,452.0	7,058.4	33,490.0	34,959.0	37,554.0	6,083.5	21,599.5
ST2_5	11,772.0	4,461.4	14,080.0	13,428.0	17,741.0	13,396.0	12,479.7
ST2_6	20,153.0	23,224.0	7,458.3	1,320.5	19,568.0	1,029.3	12,125.5

Table S12. The results of CO₂ concentration in soil gas in additional piezometers drilled in 2022 based on measurements series performed from 28.11.2022 to 02.12.2022

No. of piezometer	CO ₂ concentration in soil gas [ppm]					average value
	28.11.2022	29.11.2022	30.11.2022	01.12.2022	02.12.2022	
ST1_1	4,316.1	5,043.4	8,172.1	4,731.2	9,579.0	6,368.4
ST1_2	11,347.0	15,232.0	11,483.0	24,156.0	12,795.0	15,002.6
ST1_3	4,783.4	6,988.0	4,057.5	4,342.0	4,853.5	5,004.9
ST1_4	1,660.3	1,852.5	1,742.8	1,542.3	1,670.1	1,693.6
ST1_5	1,768.5	1,557.3	1,456.6	1,627.2	1,746.3	1,631.2
ST1_6	4,253.9	5,039.5	4,561.4	5,970.5	6,220.7	5,209.2
ST2_1	621.1	1,136.5	298.1	347.0	310.0	542.5
ST2_2	440.9	817.7	363.4	363.0	300.2	457.0
ST2_3	403.4	722.4	794.4	954.5	1,020.9	779.1
ST2_4	6,083.5	23,823.0	31,256.0	30,189.0	37,384.0	25,747.1
ST2_5	13,396.0	16,015.0	2,032.9	2,580.1	3,873.5	7,579.5
ST2_6	1,029.3	1,880.9	642.9	626.1	668.4	969.5