

# Radioxenon concentration data collected at Japan Chemical Analysis Center (Chiba, Japan)

Data period: 2025/8/1~2025/08/31

| Sample collection start time (JST)                   | Sample collection stop time (JST) | <sup>131m</sup> Xe concentration (mBq/m <sup>3</sup> ) | <sup>133</sup> Xe concentration (mBq/m <sup>3</sup> ) | <sup>133m</sup> Xe concentration (mBq/m <sup>3</sup> ) | <sup>135</sup> Xe concentration (mBq/m <sup>3</sup> ) | Xenon isotopic activity ratio           |                                       |  |
|--|-----------------------------------|--|---|--|---|---|---------------------------------------|--|
|  |                                   |  |   |  |   | <sup>133m</sup> Xe / <sup>131m</sup> Xe | <sup>135</sup> Xe / <sup>133</sup> Xe | <sup>133m</sup> Xe / <sup>133</sup> Xe |
| 2025/7/31-2025/8/5 : No data (equipment malfunction) |                                   |  |   |  |   |   |                                       |  |
| 2025/08/05 00:01                                     | 2025/08/05 12:01                  | < 0.14   | < 0.17  | < 0.13   | < 0.77  | -                                       | -                                     | -                                      |
| 2025/08/05 12:01                                     | 2025/08/06 00:01                  | < 0.07   | < 0.17  | < 0.11   | < 0.58  | -                                       | -                                     | -                                      |
| 2025/08/06 00:01                                     | 2025/08/06 12:01                  | < 0.10   | < 0.13  | < 0.11   | < 0.61  | -                                       | -                                     | -                                      |
| 2025/08/06 12:01                                     | 2025/08/07 00:01                  | < 0.09   | < 0.15  | < 0.08   | < 0.68  | -                                       | -                                     | -                                      |
| 2025/08/07 00:01                                     | 2025/08/07 12:01                  | < 0.12   | < 0.14  | < 0.10   | < 0.62  | -                                       | -                                     | -                                      |
| 2025/08/07 12:01                                     | 2025/08/08 00:01                  | < 0.08   | < 0.16  | 0.09±0.03  | < 0.70  | -                                       | -                                     | -                                      |
| 2025/08/08 00:01                                     | 2025/08/08 12:01                  | < 0.57   | 10.09±0.20  | < 0.54   | < 0.63  | -                                       | -                                     | -                                      |
| 2025/08/08 12:01                                     | 2025/08/09 00:01                  | < 0.68   | 15.97±0.27  | < 0.66   | < 0.67  | -                                       | -                                     | -                                      |
| 2025/08/09 00:01                                     | 2025/08/09 12:01                  | < 0.61   | 11.77±0.24  | < 0.57   | < 0.71  | -                                       | -                                     | -                                      |
| 2025/08/09 12:01                                     | 2025/08/10 00:01                  | < 0.69   | 15.83±0.31  | < 0.67   | < 0.68  | -                                       | -                                     | -                                      |
| 2025/08/10 00:01                                     | 2025/08/10 12:02                  | < 0.23   | 1.34±0.08   | < 0.23   | < 0.70  | -                                       | -                                     | -                                      |
| 2025/08/10 12:02                                     | 2025/08/11 00:02                  | < 0.05   | < 0.20  | < 0.08   | < 0.70  | -                                       | -                                     | -                                      |
| 2025/08/11 00:02                                     | 2025/08/11 12:02                  | < 0.13   | < 0.14  | < 0.10   | < 0.62  | -                                       | -                                     | -                                      |
| 2025/08/11 12:02                                     | 2025/08/12 00:02                  | 0.05±0.02  | < 0.16  | < 0.08   | < 0.59  | -                                       | -                                     | -                                      |
| 2025/08/12 00:02                                     | 2025/08/12 12:02                  | < 0.05   | < 0.20  | < 0.08   | < 0.70  | -                                       | -                                     | -                                      |
| 2025/08/12 12:02                                     | 2025/08/13 00:02                  | < 0.08   | < 0.14  | < 0.10   | < 0.61  | -                                       | -                                     | -                                      |
| 2025/08/13 00:02                                     | 2025/08/13 12:02                  | < 0.18   | 0.56±0.06   | < 0.17   | < 0.70  | -                                       | -                                     | -                                      |
| 2025/08/13 12:02                                     | 2025/08/14 00:02                  | < 0.40   | 5.15±0.14   | < 0.39   | < 0.62  | -                                       | -                                     | -                                      |
| 2025/08/14 00:02                                     | 2025/08/14 12:02                  | < 0.32   | 2.74±0.11   | < 0.29   | < 0.62  | -                                       | -                                     | -                                      |
| 2025/08/14 12:02                                     | 2025/08/15 00:02                  | < 0.34   | 3.30±0.12   | < 0.32   | < 0.67  | -                                       | -                                     | -                                      |
| 2025/08/15 00:02                                     | 2025/08/15 12:02                  | < 0.33   | 3.18±0.12   | < 0.32   | < 0.68  | -                                       | -                                     | -                                      |
| 2025/08/15 12:02                                     | 2025/08/16 00:02                  | < 0.29   | 2.65±0.12   | < 0.29   | < 0.61  | -                                       | -                                     | -                                      |
| 2025/08/16 00:02                                     | 2025/08/16 12:02                  | < 0.28   | 2.22±0.10   | < 0.27   | < 0.70  | -                                       | -                                     | -                                      |

2025/8/16-2025/8/19 : No data (equipment malfunction)

|                  |                  |           |           |        |        |   |   |   |
|------------------|------------------|-----------|-----------|--------|--------|---|---|---|
| 2025/08/19 00:02 | 2025/08/19 12:02 | < 0.16    | 0.38±0.06 | < 0.15 | < 0.63 | - | - | - |
| 2025/08/19 12:02 | 2025/08/20 00:02 | < 0.08    | < 0.17    | < 0.09 | < 0.61 | - | - | - |
| 2025/08/20 00:02 | 2025/08/20 12:02 | < 0.08    | < 0.15    | < 0.10 | < 0.69 | - | - | - |
| 2025/08/20 12:02 | 2025/08/21 00:02 | < 0.09    | < 0.15    | < 0.08 | < 0.69 | - | - | - |
| 2025/08/21 00:02 | 2025/08/21 12:02 | < 0.12    | < 0.14    | < 0.10 | < 0.65 | - | - | - |
| 2025/08/21 12:02 | 2025/08/22 00:02 | < 0.07    | < 0.14    | < 0.09 | < 0.66 | - | - | - |
| 2025/08/22 00:02 | 2025/08/22 12:02 | 0.13±0.03 | < 0.19    | < 0.10 | < 0.64 | - | - | - |
| 2025/08/22 12:02 | 2025/08/23 00:02 | < 0.04    | < 0.16    | < 0.06 | < 0.60 | - | - | - |
| 2025/08/23 00:02 | 2025/08/23 12:02 | < 0.08    | < 0.14    | < 0.07 | < 0.67 | - | - | - |
| 2025/08/23 12:02 | 2025/08/24 00:02 | < 0.09    | < 0.13    | < 0.08 | < 0.67 | - | - | - |
| 2025/08/24 00:02 | 2025/08/24 12:02 | < 0.07    | < 0.15    | < 0.08 | < 0.70 | - | - | - |
| 2025/08/24 12:02 | 2025/08/25 00:02 | < 0.08    | < 0.13    | < 0.08 | < 0.59 | - | - | - |
| 2025/08/25 00:02 | 2025/08/25 12:02 | < 0.12    | < 0.13    | < 0.11 | < 0.63 | - | - | - |
| 2025/08/25 12:02 | 2025/08/26 00:02 | < 0.09    | < 0.13    | < 0.07 | < 0.61 | - | - | - |
| 2025/08/26 00:02 | 2025/08/26 12:02 | < 0.07    | < 0.23    | < 0.08 | < 0.69 | - | - | - |
| 2025/08/26 12:02 | 2025/08/27 00:02 | < 0.08    | < 0.13    | < 0.08 | < 0.59 | - | - | - |
| 2025/08/27 00:02 | 2025/08/27 12:02 | < 0.08    | < 0.20    | < 0.09 | < 0.70 | - | - | - |
| 2025/08/27 12:02 | 2025/08/28 00:02 | < 0.08    | < 0.14    | < 0.10 | < 0.60 | - | - | - |
| 2025/08/28 00:02 | 2025/08/28 12:02 | < 0.23    | 1.07±0.08 | < 0.22 | < 0.72 | - | - | - |
| 2025/08/28 12:02 | 2025/08/29 00:02 | < 0.15    | 0.53±0.07 | < 0.14 | < 0.59 | - | - | - |
| 2025/08/29 00:02 | 2025/08/29 12:02 | < 0.14    | 0.29±0.05 | < 0.14 | < 0.68 | - | - | - |
| 2025/08/29 12:02 | 2025/08/30 00:02 | < 0.15    | 0.40±0.05 | < 0.14 | < 0.60 | - | - | - |
| 2025/08/30 00:02 | 2025/08/30 12:02 | < 0.13    | < 0.16    | < 0.13 | < 0.69 | - | - | - |
| 2025/08/30 12:02 | 2025/08/31 00:02 | < 0.14    | 0.23±0.05 | < 0.13 | < 0.66 | - | - | - |
| 2025/08/31 00:02 | 2025/08/31 12:02 | < 0.14    | 0.21±0.06 | < 0.13 | < 0.73 | - | - | - |

\*1 Radioxenon concentrations were expressed as radioactivity concentration ± combined standard uncertainty.

\*2 Radioxenon concentrations below the detection limit were reported as the detection limit. (e.g., "< 0.50" indicates a value less than 0.50 mBq/m<sup>3</sup>).

\*3 "-" indicates that calculation was not possible because the concentration of one or both xenon isotopes was below the detection limit.