

福島県が実施するALPS処理水に係る海水モニタリングの結果について

令和5年12月22日

福 島 県

県では、ALPS処理水の海洋放出に伴う海域への影響を監視するため、令和4年度から福島第一原子力発電所周辺海域において、調査測点を3測点追加し、既存6測点と合わせた計9測点で海水のモニタリングを実施しています。

海洋放出後の令和5年8月25日から12月15日までに実施したトリチウムの迅速分析の結果は、全て検出下限値未満でした。

また、令和5年9月3日、10月12日に採水した海水について、電解濃縮法によるトリチウムの分析及びその他核種の分析を行った結果は、全ての測定項目で海洋放出前の測定値の範囲内でした。

表1 トリチウムの迅速分析結果 (単位：Bq/L)

| 測定項目 | 測定結果 | | 検出下限値 |
|-----------------|---------------|--------------------|---------|
| | 海洋放出後 | | |
| | R5.8.25~12.15 | 海洋放出前 | |
| トリチウム (迅速分析) | ND | ND~0.66 (電解濃縮法) | 3.4~6.3 |

表2 電解濃縮法によるトリチウムの分析及びその他核種の分析結果 (単位：Bq/L PuはmBq/L)

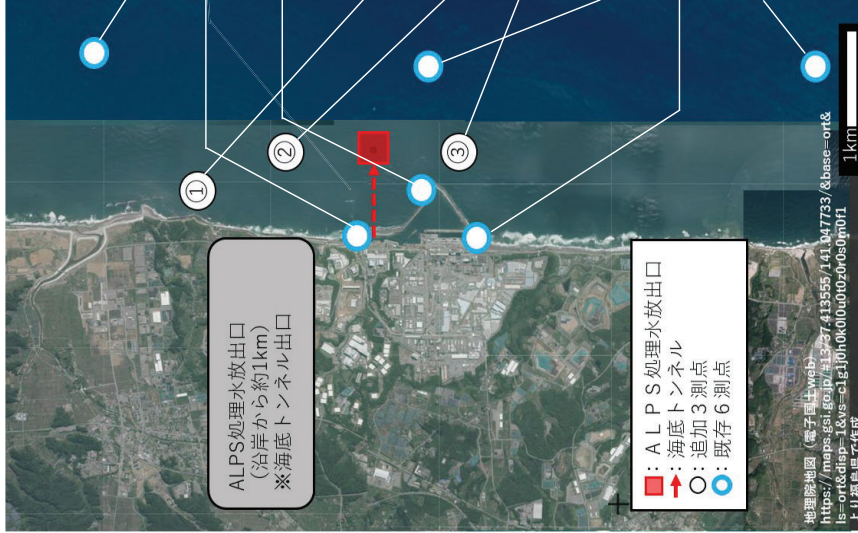
| 測定項目 | 測定結果 | | | 検出下限値 |
|------------------|----------------|-----------------|-----------|------------------|
| | 海洋放出後 | | 海洋放出前 | |
| | R5.10.12 | R5.9.3 | | |
| トリチウム (電解濃縮法) | ND~0.33 | 0.06~0.63 | ND~0.66 | 約0.03~ 0.06 |
| セシウム 134 | ND~0.003 | ND | ND~0.006 | 約0.001~ 0.002 |
| セシウム 137 | 0.008~ 0.12 | 0.004~ 0.011 | ND~0.16 | |
| 全ベータ放射能 | 0.01~0.02 | 0.01 | 0.01~0.07 | 約0.01 |
| ストロンチウム 90 | ND~0.0032 | ND~0.0009 | ND~0.015 | 約0.0005 |
| プルトニウム 238 | ND | ND | ND | 約0.003~ 0.01 |
| プルトニウム 239+240 | ND~0.018 | ND | ND~0.018 | |

- (注) 1 「ND」：検出下限値未満 「-」は測定値なし
 2 その他のガンマ線放出核種（マンガン54、コバルト58、鉄59、コバルト60、ジルコニウム95、ニオブ95、ルテニウム106、セリウム144）はNDでした。

ALPS 処理水に係る海水モニタリングの調査結果（トリウム迅速分析）

（単位：Bq/L）

| 調査測点 | 採水日 | | | | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|-------|-------|-------|------|------|-------|-------|-------|------|-------|
| | 8/25 | 8/30 | 9/3 | 9/12 | 9/19 | 9/26 | 10/8 | 10/12 | 10/20 | 10/24 | 11/3 | 11/9 | 11/14 | 11/22 | 11/28 | 12/5 | 12/15 |
| 双葉・前田川沖 2km | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 第一（発）北放水 口付近 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 第一（発）取水口 付近 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ALPS処理水放出口 北2km西0.5km | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ALPS処理水放出口 北1km | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ALPS処理水放出口 南1km | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 第一（発）沖合 2km | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 第一（発）南放水 口付近 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 夫沢・熊川沖2km | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 検出下限値 | 3.7～ | 3.9～ | 3.8～ | 3.4～ | 5.0～ | 3.7～ | 3.7～ | 3.8～ | 4.1～ | 4.1～ | 4.2～ | 3.6～ | 4.0～ | 3.6～ | 3.9～ | 4.0～ | 4.3～ |
| | 4.1 | 4.4 | 4.4 | 4.0 | 6.3 | 4.0 | 4.6 | 4.5 | 4.6 | 4.6 | 4.6 | 4.0 | 4.6 | 4.3 | 4.3 | 4.4 | 5.1 |

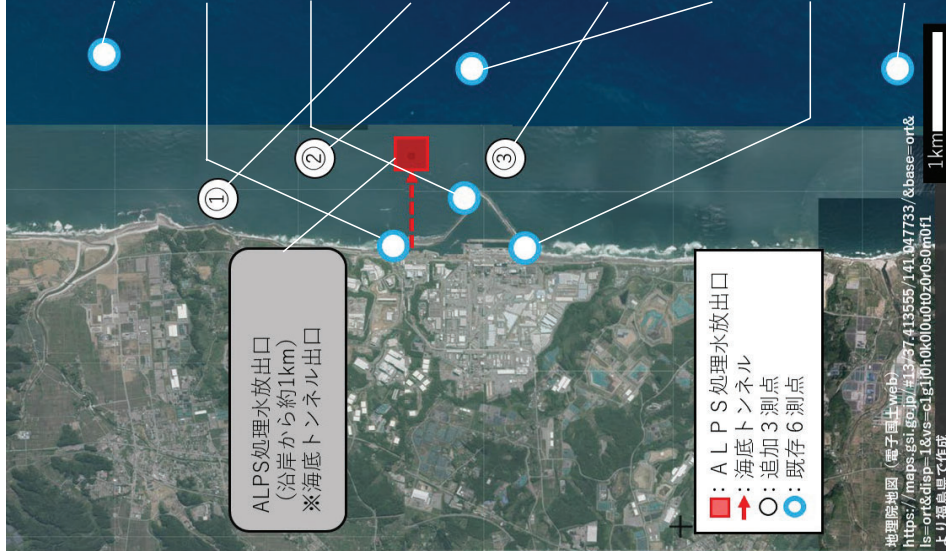


ALPS 処理水に係る海水モニタリングの調査結果 (速報)

(単位: Bq/L、PuはmBq/L)

| 調査測点 | 採水時期 | H-3 (減圧蒸留法) | H-3 (電解濃縮法) | Cs-134 | Cs-137 | 全ベータ 放射能濃度 | Sr-90 | Pu-238 | Pu-239+240 |
|--------------------------|----------|----------------|----------------|--------------|--------------|---------------|---------------|-------------|------------|
| 双葉・前田川沖2km | R5.10.12 | — | <0.05 | <0.002 | 0.012 | 0.02 | 0.0005 | <0.007 | <0.006 |
| | R5.9.3 | — | 0.06 | <0.002 | 0.006 | 0.01 | <0.0005 | <0.010 | <0.008 |
| | 海洋放出前 | ND~0.39 | ND~0.10 | ND | ND~0.009 | 0.01~0.07 | 0.0005~0.0013 | ND | ND~0.009 |
| 第一(発)北放水口 付近 | R5.10.12 | — | 0.30 | <0.003 | 0.056 | 0.02 | 0.0005 | <0.007 | 0.018 |
| | R5.9.3 | — | 0.11 | <0.003 | 0.004 | 0.01 | <0.0006 | <0.007 | <0.007 |
| | 海洋放出前 | ND | ND~0.34 | ND | 0.004~0.11 | 0.01~0.07 | 0.0007~0.0015 | ND | ND~0.018 |
| 第一(発)取水口 付近 | R5.10.12 | — | 0.25 | 0.003 | 0.12 | 0.02 | 0.0032 | <0.008 | <0.008 |
| | R5.9.3 | — | 0.09 | <0.003 | 0.004 | 0.01 | <0.0005 | <0.007 | <0.006 |
| | 海洋放出前 | ND~0.62 | 0.05~0.66 | ND~0.006 | 0.004~0.16 | 0.01~0.06 | 0.007~0.015 | ND | ND~0.014 |
| ALPS処理水放出口 北2km西0.5km | R5.10.12 | — | <0.05 | <0.003 | 0.029 | 0.02 | 0.0010 | <0.007 | <0.007 |
| | R5.9.3 | — | 0.13 | <0.003 | 0.005 | 0.01 | <0.0005 | <0.006 | <0.006 |
| | 海洋放出前 | ND | ND~0.12 | ND | 0.005~0.033 | 0.01~0.03 | 0.0007~0.0012 | ND | ND~0.010 |
| ALPS処理水放出口 北1km | R5.10.12 | — | 0.05 | <0.003 | 0.020 | 0.01 | 0.0006 | <0.008 | <0.008 |
| | R5.9.3 | — | 0.08 | <0.003 | 0.006 | 0.01 | 0.0009 | <0.008 | <0.007 |
| | 海洋放出前 | ND | ND~0.11 | ND | 0.004~0.010 | 0.01~0.02 | ND~0.0013 | ND | ND |
| ALPS処理水放出口 南1km | R5.10.12 | — | 0.27 | <0.002 | 0.015 | 0.01 | <0.0004 | <0.008 | <0.008 |
| | R5.9.3 | — | 0.12 | <0.003 | 0.006 | 0.01 | 0.0006 | <0.007 | <0.007 |
| | 海洋放出前 | ND | ND~0.09 | ND | 0.003~0.20 | 0.01~0.03 | ND~0.0013 | ND | ND~0.008 |
| 第一(発)沖合2km | R5.10.12 | — | 0.05 | <0.003 | 0.008 | 0.02 | 0.0008 | <0.009 | <0.008 |
| | R5.9.3 | — | 0.15 | <0.002 | 0.004 | 0.01 | 0.0006 | <0.007 | <0.006 |
| | 海洋放出前 | ND | ND~0.09 | ND | 0.002~0.025 | 0.01~0.07 | ND~0.0016 | ND | ND~0.012 |
| 第一(発)南放水口 付近 | R5.10.12 | — | 0.33 | <0.002 | 0.028 | 0.01 | 0.0007 | <0.006 | 0.010 |
| | R5.9.3 | — | 0.34 | <0.003 | 0.011 | 0.01 | 0.0008 | <0.008 | <0.006 |
| | 海洋放出前 | ND | ND~0.11 | ND | 0.003~0.038 | 0.01~0.06 | ND~0.0015 | ND | ND~0.015 |
| 夫沢・熊川沖2km | R5.10.12 | — | <0.05 | <0.003 | 0.009 | 0.02 | <0.0005 | <0.006 | <0.006 |
| | R5.9.3 | — | 0.63 | <0.003 | 0.007 | 0.01 | <0.0006 | <0.007 | <0.007 |
| | 海洋放出前 | ND | ND~0.09 | ND | 0.003~0.011 | 0.01~0.06 | ND~0.0017 | ND | ND~0.007 |
| 検出下限値 | | 約0.3~0.5 | 約0.03~0.06 | 約0.001~0.002 | 約0.001~0.002 | 約0.01 | 約0.0005 | 約0.003~0.01 | |

(注) 1 「ND」: 検出下限値未満 「—」: 測定値なし
 2 その他のガンマ線放出核種 (マンガン54、コバルト58、鉄59、コバルト60、ジルコニウム95、ニオブ95、ルテニウム106、セリウム144) はNDでした。
 3 海洋放出前は令和4年4月から令和5年8月採水分までの結果です。



A L P S 処理水に係る海水モニタリングの調査結果（令和4年度以降）

（単位：Bq/L、PuはmBq/L）

| 調査測点 | 採取 年月日 | H-3 (減圧蒸留法) | H-3 (電解濃縮法) | Cs-134 | Cs-137 | 全ベータ 放射能濃度 | Sr-90 | Pu-238 | Pu-239 +240 | 気温 (°C) | 水温 (°C) | pH | Cl- (%) |
|---------------------|-----------|----------------|----------------|--------|--------|---------------|--------|--------|----------------|------------|------------|------|------------|
| 第一（発）双葉・前田 川沖2km | R4. 4.13 | ND | - | ND | 0.009 | 0.01 | 0.0012 | ND | ND | 17.0 | 10.0 | 8.0 | 20.6 |
| | R4. 5.19 | ND | 0.10 | ND | 0.007 | 0.02 | 0.0006 | ND | ND | 19.0 | 14.5 | 8.0 | 19.2 |
| | R4. 6.19 | ND | - | ND | 0.005 | 0.01 | 0.0007 | ND | ND | 21.0 | 16.2 | 8.2 | 18.6 |
| | R4. 7. 5 | ND | - | ND | 0.006 | 0.01 | 0.0005 | ND | ND | 22.0 | 19.3 | 8.2 | 19.2 |
| | R4. 8. 2 | ND | 0.10 | ND | 0.004 | 0.02 | 0.0008 | ND | ND | 28.0 | 26.1 | 8.2 | 19.2 |
| | R4. 9.13 | ND | - | ND | 0.002 | 0.01 | 0.0010 | ND | ND | 25.7 | 23.7 | 8.4 | 19.3 |
| | R4.10.21 | ND | - | ND | 0.005 | 0.02 | 0.0006 | ND | ND | 19.5 | 18.8 | 8.1 | 21.0 |
| | R4.11. 8 | ND | 0.06 | ND | 0.006 | 0.02 | 0.0007 | ND | ND | 16.0 | 19.3 | 8.1 | 20.3 |
| | R4.12. 9 | ND | - | ND | 0.003 | 0.05 | 0.0009 | ND | ND | 10.5 | 16.6 | 8.1 | 22.1 |
| | R5. 1.13 | ND | - | ND | ND | 0.07 | 0.0011 | ND | ND | 12.0 | 14.7 | 8.1 | 20.9 |
| | R5. 2. 7 | ND | 0.05 | ND | 0.003 | 0.07 | 0.0011 | ND | ND | 9.5 | 10.6 | 8.1 | 22.9 |
| | R5. 3. 7 | ND | - | ND | 0.004 | 0.02 | 0.0010 | ND | 0.009 | 12.5 | 12.4 | 8.1 | 22.8 |
| | R5. 4.25 | ND | - | ND | 0.003 | 0.02 | 0.0008 | ND | ND | 11.0 | 12.5 | 8.1 | 22.5 |
| | R5. 5.10 | ND | ND | ND | 0.008 | 0.01 | 0.0009 | ND | 0.008 | 15.5 | 14.5 | 8.1 | 21.7 |
| | R5. 6. 7 | ND | - | ND | 0.006 | 0.01 | 0.0007 | ND | ND | 19.5 | 17.0 | 7.9 | 21.5 |
| | R5. 7.11 | ND | - | ND | 0.004 | 0.01 | 0.0013 | ND | ND | 24.5 | 23.0 | 8.1 | 20.6 |
| | R5. 8. 8 | 0.39 | ND | ND | 0.003 | 0.02 | 0.0008 | ND | ND | 25.5 | 21.0 | 8.0 | 21.0 |
| R5. 9. 3 | - | 0.06 | ND | 0.006 | 0.01 | ND | ND | ND | 24.0 | 21.2 | 8.0 | 20.7 | |
| R5.10.12 | - | ND | ND | 0.012 | 0.02 | 0.0005 | ND | ND | 15.0 | 20.0 | 8.0 | 20.0 | |
| R4. 4.13 | ND | - | ND | 0.007 | 0.02 | 0.0010 | ND | ND | 15.0 | 9.7 | 8.0 | 20.5 | |
| R4. 5.19 | ND | 0.34 | ND | 0.027 | 0.02 | 0.0014 | ND | ND | 19.0 | 14.9 | 8.1 | 20.1 | |
| R4. 6.19 | ND | - | ND | 0.011 | 0.02 | 0.0015 | ND | ND | 21.0 | 15.9 | 8.1 | 18.8 | |
| R4. 7. 5 | ND | - | ND | 0.006 | 0.01 | 0.0007 | ND | ND | 22.0 | 18.6 | 8.2 | 19.6 | |
| R4. 8. 2 | ND | 0.08 | ND | 0.004 | 0.01 | 0.0009 | ND | ND | 29.0 | 25.9 | 8.2 | 18.7 | |
| R4. 9.13 | ND | - | ND | 0.005 | 0.01 | 0.0007 | ND | ND | 25.8 | 23.9 | 8.2 | 20.7 | |
| R4.10.21 | ND | - | ND | 0.020 | 0.02 | 0.0013 | ND | ND | 19.5 | 18.6 | 8.1 | 21.1 | |
| R4.11. 8 | ND | 0.09 | ND | 0.018 | 0.02 | 0.0009 | ND | ND | 17.0 | 18.2 | 8.1 | 20.2 | |
| R4.12. 9 | ND | - | ND | 0.008 | 0.05 | 0.0009 | ND | ND | 10.5 | 16.3 | 8.1 | 22.0 | |
| R5. 1.13 | ND | - | ND | 0.017 | 0.06 | 0.0010 | ND | 0.009 | 12.0 | 13.3 | 8.1 | 19.7 | |
| R5. 2. 7 | ND | ND | ND | 0.005 | 0.07 | 0.0008 | ND | ND | 9.5 | 10.5 | 8.1 | 23.6 | |
| R5. 3. 7 | ND | - | ND | 0.018 | 0.02 | 0.0015 | ND | 0.009 | 13.0 | 12.4 | 8.1 | 22.8 | |
| 第一（発）北放水口付 近 | | | | | | | | | | | | | |

ALPS処理水に係る海水モニタリングの調査結果（令和4年度以降）

（単位：Bq/L、PuはmBq/L）

| 調査測点 | 採取 年月日 | H-3 (減圧蒸留法) | H-3 (電解濃縮法) | Cs-134 | Cs-137 | 全ベータ 放射能濃度 | Sr-90 | Pu-238 | Pu-239 +240 | 気温 (°C) | 水温 (°C) | pH | Cl- (%) |
|--------------------------|-----------|----------------|----------------|--------|--------|---------------|--------|--------|----------------|------------|------------|------|------------|
| 第一（発）北放水口付 近 | R5. 4.25 | ND | — | ND | 0.008 | 0.01 | 0.0009 | ND | ND | 11.0 | 13.0 | 8.1 | 22.3 |
| | R5. 5.10 | ND | 0.05 | ND | 0.011 | 0.01 | 0.0009 | ND | 0.018 | 14.5 | 14.8 | 8.1 | 22.0 |
| | R5. 6. 7 | ND | — | ND | 0.11 | 0.01 | 0.0012 | ND | ND | 20.5 | 17.0 | 7.9 | 21.6 |
| | R5. 7.11 | ND | — | ND | 0.004 | 0.02 | 0.0011 | ND | ND | 24.5 | 23.5 | 8.1 | 22.0 |
| | R5. 8. 8 | ND | ND | ND | 0.012 | 0.01 | 0.0011 | ND | ND | 26.5 | 20.5 | 8.0 | 20.6 |
| | R5. 9. 3 | — | 0.11 | ND | 0.004 | 0.01 | ND | ND | ND | 24.0 | 21.5 | 8.0 | 20.7 |
| | R5.10.12 | — | 0.30 | ND | 0.056 | 0.02 | 0.0005 | ND | 0.018 | 15.5 | 20.0 | 8.0 | 19.9 |
| | R4. 4.13 | ND | — | ND | 0.016 | 0.02 | 0.0016 | ND | ND | 16.0 | 9.1 | 8.0 | 20.8 |
| | R4. 5.19 | 0.62 | 0.66 | 0.006 | 0.16 | 0.02 | 0.012 | ND | 0.010 | 19.5 | 14.4 | 8.1 | 19.9 |
| | R4. 6.19 | ND | — | ND | 0.013 | 0.02 | 0.0019 | ND | ND | 22.0 | 16.1 | 8.2 | 18.4 |
| 第一（発）取水口付近 | R4. 7. 5 | ND | — | ND | 0.007 | 0.02 | 0.0008 | ND | ND | 22.5 | 18.9 | 8.1 | 19.5 |
| | R4. 8. 2 | ND | 0.09 | ND | 0.004 | 0.01 | 0.0007 | ND | ND | 29.5 | 26.2 | 8.2 | 18.7 |
| | R4. 9.13 | 0.61 | — | ND | 0.073 | 0.02 | 0.0025 | ND | ND | 25.5 | 23.7 | 8.2 | 20.9 |
| | R4.10.21 | 0.55 | — | ND | 0.10 | 0.02 | 0.015 | ND | 0.009 | 19.5 | 18.6 | 8.1 | 20.9 |
| | R4.11. 8 | 0.58 | 0.56 | ND | 0.13 | 0.02 | 0.0051 | ND | 0.014 | 18.0 | 17.0 | 8.1 | 19.9 |
| | R4.12. 9 | ND | — | ND | 0.012 | 0.05 | 0.0014 | ND | ND | 11.0 | 15.5 | 8.2 | 22.1 |
| | R5. 1.13 | ND | — | ND | 0.042 | 0.06 | 0.0012 | ND | ND | 12.5 | 13.0 | 8.1 | 19.9 |
| | R5. 2. 7 | ND | 0.05 | ND | 0.010 | 0.06 | 0.0011 | ND | 0.012 | 9.5 | 10.6 | 8.1 | 23.5 |
| | R5. 3. 7 | 0.51 | — | ND | 0.070 | 0.02 | 0.0025 | ND | 0.007 | 13.5 | 12.0 | 8.2 | 22.7 |
| | R5. 4.25 | ND | — | ND | 0.006 | 0.02 | 0.0008 | ND | ND | 10.5 | 13.5 | 8.1 | 23.2 |
| ALPS処理水放出口 北2km西0.5km | R5. 5.10 | ND | 0.21 | 0.003 | 0.14 | 0.02 | 0.012 | ND | 0.007 | 14.5 | 15.0 | 8.0 | 21.6 |
| | R5. 6. 7 | 0.39 | — | 0.003 | 0.12 | 0.02 | 0.0072 | ND | 0.011 | 20.5 | 17.5 | 8.0 | 21.2 |
| | R5. 7.11 | ND | — | ND | 0.16 | 0.02 | 0.011 | ND | ND | 25.0 | 22.5 | 8.0 | 21.2 |
| | R5. 8. 8 | 0.46 | 0.20 | ND | 0.055 | 0.02 | 0.0018 | ND | ND | 26.5 | 20.0 | 8.0 | 20.8 |
| | R5. 9. 3 | — | 0.09 | ND | 0.004 | 0.01 | ND | ND | ND | 24.0 | 21.5 | 8.0 | 20.9 |
| | R5.10.12 | — | 0.25 | 0.003 | 0.12 | 0.02 | 0.0032 | ND | ND | 15.5 | 20.0 | 8.0 | 20.1 |
| | R4. 5.19 | ND | 0.10 | ND | 0.012 | 0.02 | 0.0010 | ND | ND | 19.0 | 15.0 | 8.1 | 19.6 |
| | R4. 8. 2 | ND | 0.10 | ND | 0.005 | 0.02 | 0.0007 | ND | ND | 28.0 | 25.6 | 8.2 | 18.9 |
| | R4.11. 8 | ND | 0.06 | ND | 0.015 | 0.03 | 0.0011 | ND | ND | 16.0 | 18.2 | 8.1 | 20.0 |
| | R5. 2. 7 | ND | 0.05 | ND | 0.007 | 0.01 | 0.0010 | ND | ND | 9.5 | 10.5 | 8.1 | 23.2 |
| R5. 5.10 | ND | ND | ND | 0.009 | 0.01 | 0.0009 | ND | 0.010 | 15.0 | 14.5 | 8.1 | 21.4 | |

ALPS処理水に係る海水モニタリングの調査結果（令和4年度以降）

（単位：Bq/L、PuはmBq/L）

| 調査測点 | 採取 年月日 | H-3 (減圧蒸留法) | H-3 (電解濃縮法) | Cs-134 | Cs-137 | 全ベータ 放射能濃度 | Sr-90 | Pu-238 | Pu-239 +240 | 気温 (°C) | 水温 (°C) | pH | Cl- (%) |
|--------------------------|-----------|----------------|----------------|--------|--------|---------------|--------|--------|----------------|------------|------------|-----|------------|
| ALPS処理水放出口 北2km西0.5km | R5. 8. 8 | ND | 0.12 | ND | 0.033 | 0.01 | 0.0012 | ND | ND | 25.0 | 20.5 | 8.0 | 21.2 |
| | R5. 9. 3 | — | 0.13 | ND | 0.005 | 0.01 | ND | ND | ND | 24.0 | 21.5 | 8.0 | 21.1 |
| | R5.10.12 | — | ND | ND | 0.029 | 0.02 | 0.0010 | ND | ND | 15.0 | 20.0 | 8.0 | 20.0 |
| ALPS処理水放出口 北1km | R4. 5.19 | ND | 0.09 | ND | 0.010 | 0.01 | 0.0013 | ND | ND | 19.0 | 14.5 | 8.0 | 20.7 |
| | R4. 8. 2 | ND | 0.11 | ND | 0.004 | 0.02 | 0.0009 | ND | ND | 29.0 | 26.2 | 8.2 | 19.1 |
| | R4.11. 8 | ND | 0.04 | ND | 0.006 | 0.02 | 0.0007 | ND | ND | 16.5 | 18.5 | 8.2 | 20.4 |
| | R5. 2. 7 | ND | ND | ND | 0.007 | 0.02 | ND | ND | ND | 9.5 | 10.7 | 8.1 | 23.2 |
| | R5. 5.10 | ND | ND | ND | 0.009 | 0.01 | 0.011 | ND | ND | 14.5 | 14.5 | 8.1 | 21.8 |
| | R5. 8. 8 | ND | ND | ND | 0.007 | 0.01 | ND | ND | ND | 24.5 | 19.5 | 8.0 | 21.5 |
| | R5. 9. 3 | — | 0.08 | ND | 0.006 | 0.01 | 0.0009 | ND | ND | 23.5 | 21.2 | 8.0 | 20.7 |
| | R5.10.12 | — | 0.05 | ND | 0.020 | 0.01 | 0.0006 | ND | ND | 15.5 | 20.0 | 8.0 | 19.8 |
| | R4. 5.19 | ND | 0.08 | ND | 0.010 | 0.01 | 0.0007 | ND | 0.008 | 21.0 | 15.2 | 8.1 | 20.2 |
| | R4. 8. 2 | ND | 0.09 | ND | 0.003 | 0.02 | ND | ND | ND | 30.0 | 26.3 | 8.2 | 19.0 |
| ALPS処理水放出口 南1km | R4.11. 8 | ND | 0.04 | ND | 0.006 | 0.03 | 0.0008 | ND | ND | 18.5 | 18.8 | 8.2 | 20.5 |
| | R5. 2. 7 | ND | 0.04 | ND | 0.003 | 0.03 | 0.0007 | ND | ND | 9.5 | 11.2 | 8.1 | 23.1 |
| | R5. 5.10 | ND | ND | ND | 0.020 | 0.01 | 0.0013 | ND | ND | 14.5 | 14.8 | 8.1 | 21.7 |
| | R5. 8. 8 | ND | ND | ND | 0.004 | 0.02 | 0.0009 | ND | ND | 27.0 | 20.0 | 8.0 | 20.6 |
| | R5. 9. 3 | — | 0.12 | ND | 0.006 | 0.01 | 0.0006 | ND | ND | 24.5 | 21.7 | 8.0 | 20.6 |
| | R5.10.12 | — | 0.27 | ND | 0.015 | 0.01 | ND | ND | ND | 16.5 | 20.0 | 8.0 | 20.0 |
| | R4. 4.13 | ND | — | ND | 0.017 | 0.01 | 0.0009 | ND | ND | 15.0 | 9.1 | 7.8 | 21.2 |
| | R4. 5.19 | ND | 0.09 | ND | 0.011 | 0.01 | 0.0008 | ND | ND | 19.0 | 14.9 | 8.1 | 20.0 |
| 第一（発）沖合2km | R4. 6.19 | ND | — | ND | 0.008 | 0.01 | ND | ND | ND | 24.5 | 16.5 | 8.2 | 19.8 |
| | R4. 7. 5 | ND | — | ND | 0.012 | 0.01 | 0.0007 | ND | ND | 22.0 | 18.9 | 8.1 | 19.7 |
| | R4. 8. 2 | ND | 0.08 | ND | 0.004 | 0.01 | 0.0008 | ND | ND | 28.0 | 26.0 | 8.2 | 18.8 |
| | R4. 9.13 | ND | — | ND | 0.004 | 0.01 | 0.0007 | ND | ND | 26.2 | 23.7 | 8.3 | 19.1 |
| | R4.10.21 | ND | — | ND | 0.007 | 0.02 | 0.0011 | ND | ND | 19.5 | 18.9 | 8.1 | 20.9 |
| | R4.11. 8 | ND | 0.05 | ND | 0.007 | 0.01 | 0.0009 | ND | ND | 15.5 | 18.2 | 8.1 | 20.1 |
| | R4.12. 9 | ND | — | ND | 0.003 | 0.05 | 0.0012 | ND | ND | 10.0 | 17.0 | 8.1 | 22.5 |
| | R5. 1.13 | ND | — | ND | 0.003 | 0.05 | 0.0009 | ND | ND | 11.0 | 14.5 | 8.1 | 20.3 |
| | R5. 2. 7 | ND | 0.06 | ND | 0.003 | 0.07 | 0.0008 | ND | 0.008 | 9.0 | 11.3 | 8.1 | 23.2 |
| | R5. 3. 7 | ND | — | ND | 0.002 | 0.02 | 0.0005 | ND | ND | 12.2 | 12.9 | 8.1 | 22.6 |

ALPS処理水に係る海水モニタリングの調査結果（令和4年度以降）

（単位：Bq/L、PuはmBq/L）

| 調査測点 | 採取 年月日 | H-3 (減圧蒸留法) | H-3 (電解濃縮法) | Cs-134 | Cs-137 | 全ベータ 放射能濃度 | Sr-90 | Pu-238 | Pu-239 +240 | 気温 (°C) | 水温 (°C) | pH | Cl- (%) |
|--------------------|-----------|----------------|----------------|--------|--------|---------------|--------|--------|----------------|------------|------------|------|------------|
| 第一（発）沖合2km | R5. 4.25 | ND | - | ND | 0.004 | 0.02 | 0.0009 | ND | 0.010 | 10.5 | 13.5 | 8.1 | 22.3 |
| | R5. 5.10 | ND | ND | ND | 0.010 | 0.01 | 0.0009 | ND | 0.012 | 15.0 | 14.5 | 8.1 | 22.0 |
| | R5. 6. 7 | ND | - | ND | 0.025 | 0.02 | 0.0016 | ND | ND | 19.0 | 17.0 | 7.9 | 21.2 |
| | R5. 7.11 | ND | - | ND | 0.006 | 0.01 | 0.0008 | ND | ND | 23.5 | 23.0 | 8.1 | 21.2 |
| | R5. 8. 8 | ND | ND | ND | 0.004 | 0.02 | ND | ND | ND | 25.0 | 20.5 | 8.0 | 20.6 |
| | R5. 9. 3 | - | 0.15 | ND | 0.004 | 0.01 | 0.0006 | ND | ND | 23.5 | 21.2 | 8.0 | 21.0 |
| | R5.10.12 | - | 0.05 | ND | 0.008 | 0.02 | 0.0008 | ND | ND | 15.0 | 20.0 | 8.1 | 20.4 |
| | R4. 4.13 | ND | - | ND | 0.025 | 0.02 | 0.0007 | ND | ND | 16.5 | 8.4 | 8.0 | 20.3 |
| | R4. 5.19 | ND | 0.11 | ND | 0.021 | 0.02 | 0.0012 | ND | ND | 21.0 | 15.6 | 8.1 | 19.9 |
| | R4. 6.19 | ND | - | ND | 0.026 | 0.01 | 0.0009 | ND | ND | 22.0 | 16.0 | 8.2 | 18.0 |
| 第一（発）南放水口付 近 | R4. 7. 5 | ND | - | ND | 0.014 | 0.01 | 0.0008 | ND | ND | 23.0 | 18.4 | 8.1 | 19.9 |
| | R4. 8. 2 | ND | 0.10 | ND | 0.003 | 0.01 | 0.0008 | ND | ND | 29.5 | 26.1 | 8.6 | 18.9 |
| | R4. 9.13 | ND | - | ND | 0.005 | 0.01 | 0.0010 | ND | ND | 25.7 | 23.8 | 8.3 | 20.5 |
| | R4.10.21 | ND | - | ND | 0.013 | 0.01 | ND | ND | ND | 20.5 | 18.7 | 8.1 | 21.0 |
| | R4.11. 8 | ND | 0.04 | ND | 0.007 | 0.02 | 0.0006 | ND | 0.010 | 19.0 | 18.4 | 8.2 | 20.6 |
| | R4.12. 9 | ND | - | ND | 0.038 | 0.05 | 0.0007 | ND | ND | 11.0 | 16.2 | 8.2 | 22.7 |
| | R5. 1.13 | ND | - | ND | 0.007 | 0.06 | 0.0007 | ND | ND | 12.5 | 12.9 | 8.1 | 19.9 |
| | R5. 2. 7 | ND | 0.05 | ND | 0.003 | 0.06 | 0.0009 | ND | ND | 10.0 | 10.8 | 8.1 | 23.4 |
| | R5. 3. 7 | ND | - | ND | 0.015 | 0.02 | 0.0013 | ND | ND | 13.5 | 12.6 | 8.2 | 23.2 |
| | R5. 4.25 | ND | - | ND | 0.006 | 0.02 | 0.0009 | ND | ND | 10.5 | 13.2 | 8.1 | 22.5 |
| 第一（発）夫沢・熊川 沖2km | R5. 5.10 | ND | 0.05 | ND | 0.014 | 0.01 | 0.0013 | ND | 0.008 | 14.5 | 14.8 | 8.1 | 21.8 |
| | R5. 6. 7 | ND | - | ND | 0.010 | 0.01 | 0.0009 | ND | 0.015 | 21.0 | 16.5 | 7.8 | 21.1 |
| | R5. 7.11 | ND | - | ND | 0.031 | 0.01 | 0.0015 | ND | ND | 25.5 | 22.5 | 8.1 | 20.7 |
| | R5. 8. 8 | ND | ND | ND | 0.014 | 0.01 | ND | ND | 0.008 | 27.0 | 20.5 | 8.0 | 20.1 |
| | R5. 9. 3 | - | 0.34 | ND | 0.011 | 0.01 | 0.0008 | ND | ND | 26.5 | 21.0 | 8.0 | 20.7 |
| | R5.10.12 | - | 0.33 | ND | 0.028 | 0.01 | 0.0007 | ND | 0.010 | 17.5 | 20.5 | 8.0 | 19.9 |
| | R4. 4.13 | ND | - | ND | 0.003 | 0.01 | 0.0009 | ND | ND | 15.0 | 8.4 | 7.8 | 20.7 |
| | R4. 5.19 | ND | 0.09 | ND | 0.006 | 0.01 | 0.0006 | ND | ND | 19.0 | 15.1 | 8.1 | 19.9 |
| | R4. 6.19 | ND | - | ND | 0.008 | 0.01 | 0.0005 | ND | ND | 24.0 | 15.5 | 8.1 | 19.4 |
| | R4. 7. 5 | ND | - | ND | 0.003 | 0.02 | 0.0007 | ND | ND | 21.0 | 19.0 | 8.1 | 19.6 |
| R4. 8. 2 | ND | 0.08 | ND | 0.003 | 0.02 | 0.0007 | ND | ND | 26.5 | 25.9 | 8.2 | 18.8 | |

ALPS処理水に係る海水モニタリングの調査結果（令和4年度以降）

（単位：Bq/L、PuはmBq/L）

| 調査測点 | 採取年月日 | H-3 (減圧蒸留法) | H-3 (電解濃縮法) | Cs-134 | Cs-137 | 全ベータ 放射能濃度 | Sr-90 | Pu-238 | Pu-239 +240 | 気温 (°C) | 水温 (°C) | pH | Cl- (%) | |
|--------------------|----------|----------------|----------------|--------------|--------|---------------|-------------|--------|----------------|------------|------------|------|------------|------|
| 第一（発）夫沢・熊川 沖2km | R4. 9.13 | ND | - | ND | 0.003 | 0.01 | 0.0013 | ND | ND | 24.5 | 23.6 | 8.3 | 19.1 | |
| | R4.10.21 | ND | - | ND | 0.005 | 0.02 | ND | ND | ND | 18.5 | 18.4 | 8.1 | 20.4 | |
| | R4.11. 8 | ND | 0.06 | ND | 0.006 | 0.02 | 0.0007 | ND | ND | 15.5 | 18.2 | 8.1 | 20.2 | |
| | R4.12. 9 | ND | - | ND | 0.003 | 0.06 | 0.0008 | ND | ND | 10.0 | 16.8 | 8.1 | 22.3 | |
| | R5. 1.13 | ND | - | ND | 0.003 | 0.05 | 0.0009 | ND | ND | 10.5 | 14.0 | 8.1 | 20.0 | |
| | R5. 2. 7 | ND | ND | ND | 0.003 | 0.05 | 0.0009 | ND | ND | 9.0 | 11.1 | 8.1 | 23.2 | |
| | R5. 3. 7 | ND | - | ND | 0.005 | 0.02 | 0.0070 | ND | ND | 12.0 | 12.2 | 8.1 | 23.0 | |
| | R5. 4.25 | ND | - | ND | 0.004 | 0.01 | 0.0007 | ND | ND | 9.5 | 14.0 | 8.1 | 22.7 | |
| | R5. 5.10 | ND | ND | ND | 0.008 | 0.01 | ND | ND | ND | 13.5 | 14.5 | 8.1 | 21.7 | |
| | R5. 6. 7 | ND | - | ND | 0.008 | 0.02 | 0.0005 | ND | 0.007 | 18.5 | 16.5 | 7.9 | 20.9 | |
| | R5. 7.11 | ND | - | ND | 0.011 | 0.02 | 0.0017 | ND | ND | 23.5 | 22.5 | 8.1 | 20.9 | |
| | R5. 8. 8 | ND | ND | ND | 0.004 | 0.02 | 0.0012 | ND | ND | 24.5 | 20.0 | 8.0 | 21.0 | |
| | R5. 9. 3 | - | - | 0.63 | ND | 0.007 | 0.01 | ND | ND | ND | 23.0 | 20.5 | 8.0 | 21.3 |
| | R5.10.12 | - | - | ND | ND | 0.009 | 0.02 | ND | ND | ND | 14.0 | 20.0 | 8.1 | 19.8 |
| | 検出下限値 | 約0.3～0.5 | 約0.03～0.06 | 約0.001～0.002 | 約0.001 | 約0.0005 | 約0.003～0.01 | | | | | | | |

（注）1 「ND」：検出下限値未満 「-」：測定値なし

2 その他のガンマ線放出核種（マンガン54、コバルト58、コバルト59、コバルト60、ジルコニウム95、ニオブ95、ルテニウム106、セリウム144）はNDでした。