

# Sea Area Monitoring

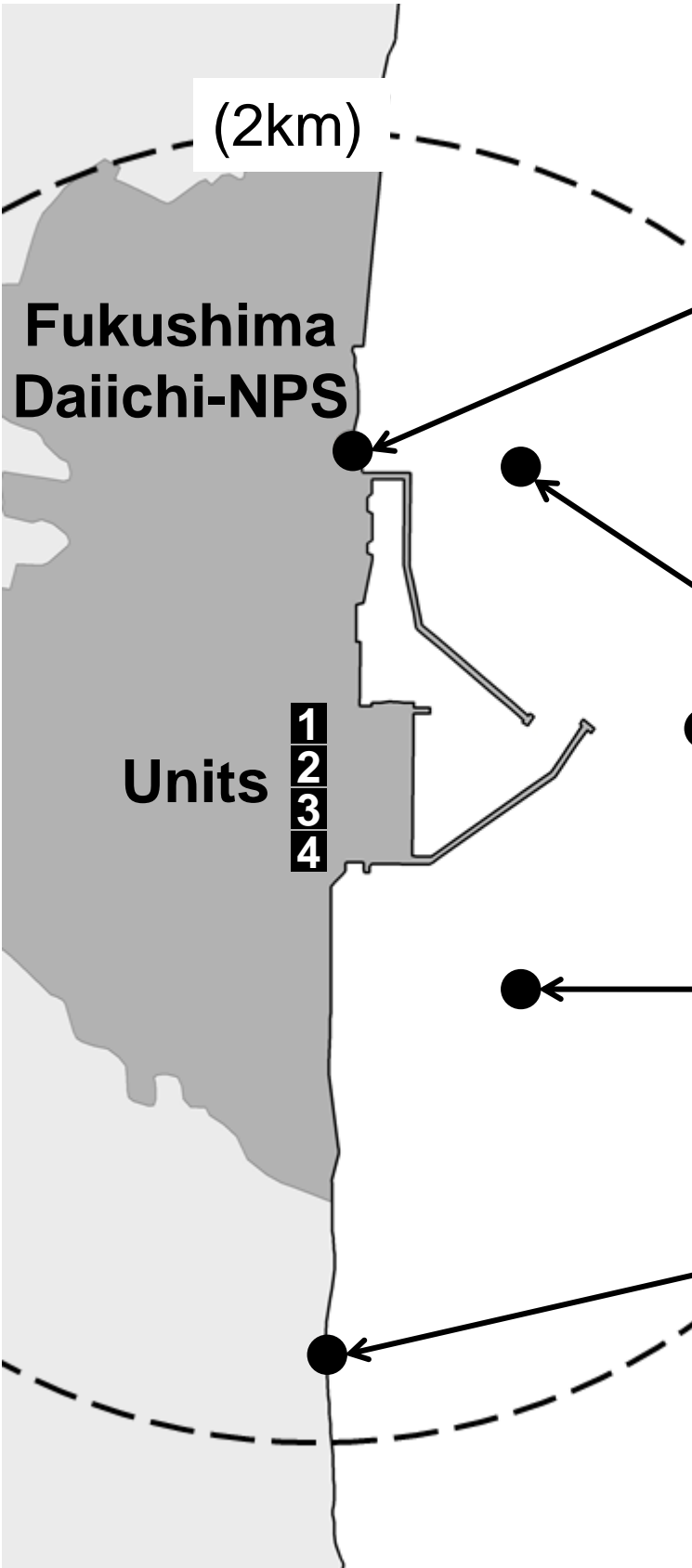
September 17, 2013

Nuclear Regulation Authority (NRA), Japan

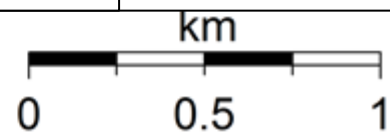
# Sea area within 2km radius from the NPS

| Sampling Point | Sampling Date | Cs-134 | Cs-137 | total $\beta$ | H-3 | Sr-90 | total $\alpha$ | Pu-238 | Pu-239+<br>Pu-240 |
|----------------|---------------|--------|--------|---------------|-----|-------|----------------|--------|-------------------|
|----------------|---------------|--------|--------|---------------|-----|-------|----------------|--------|-------------------|

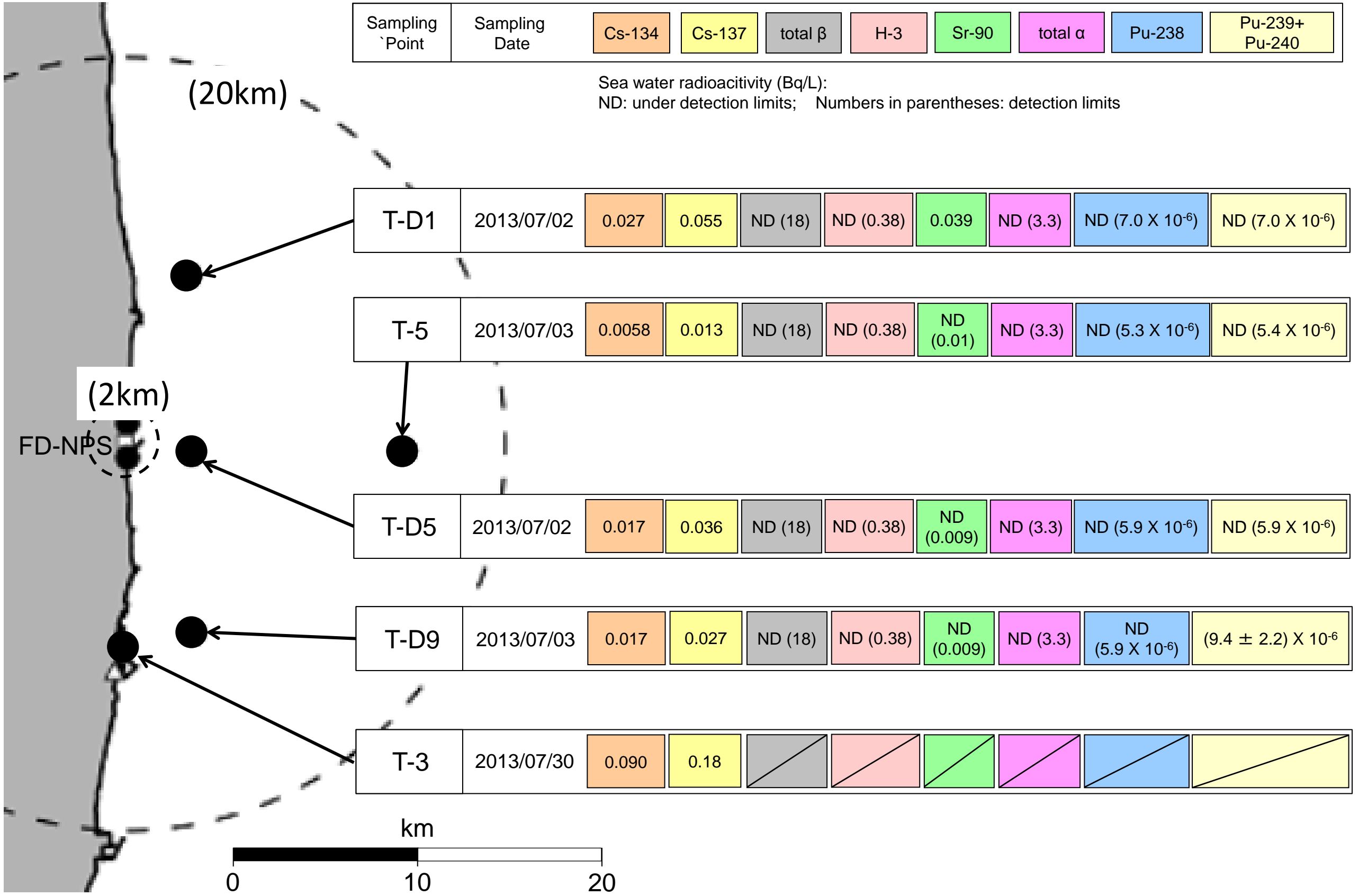
Sea water radioactivity (Bq/L):  
 ND: under detection limits; Numbers in parentheses: detection limits



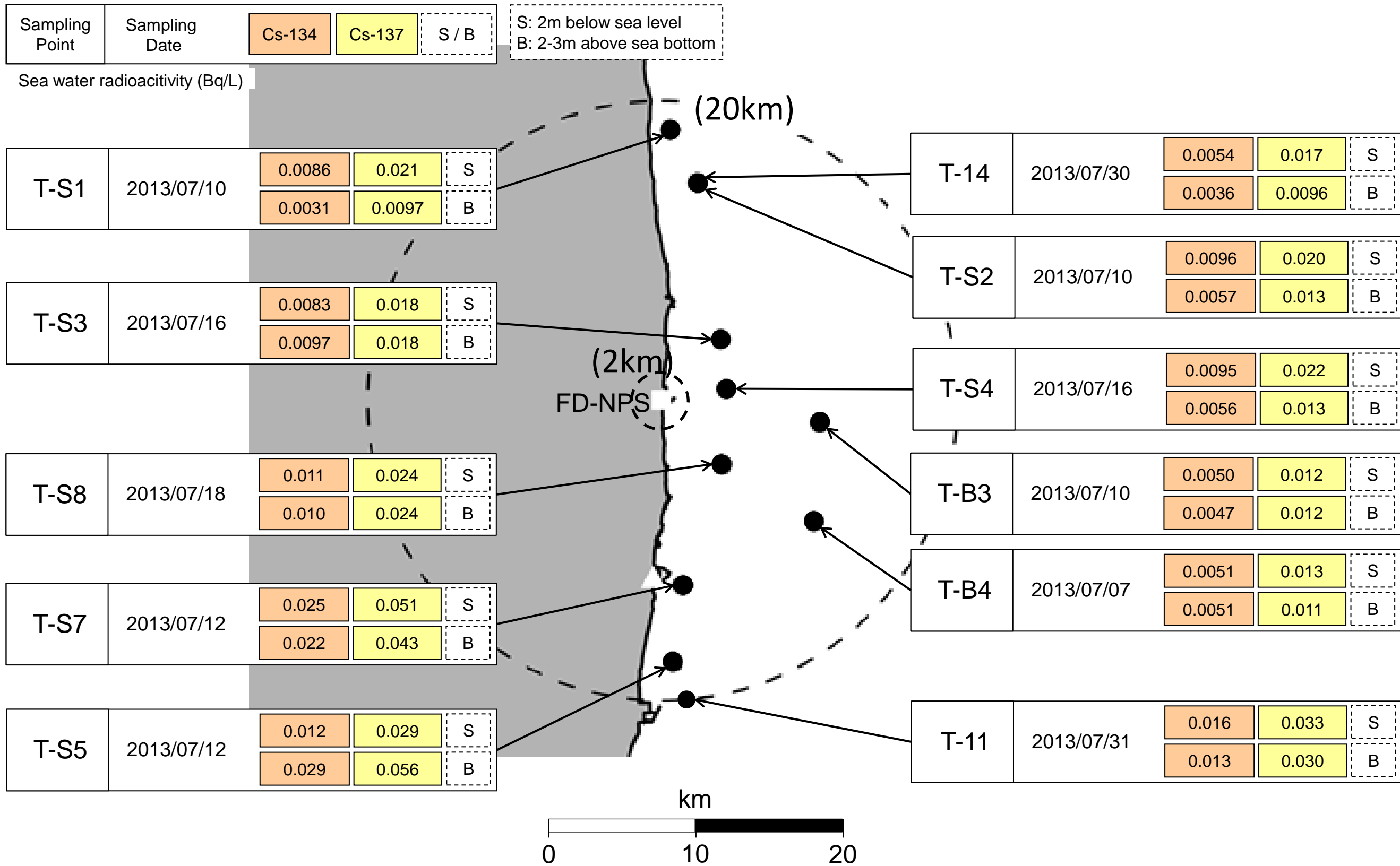
|       |            |           |           |         |             |             |             |             |             |
|-------|------------|-----------|-----------|---------|-------------|-------------|-------------|-------------|-------------|
| T-1   | 2013/09/02 | ND (1.4)  | ND (1.4)  | ND (16) | ND (1.8)    |             |             |             |             |
|       | 2013/08/12 | ND (1.2)  | 1.4       | ND (19) | 4.7         | In progress | In progress |             |             |
|       | 2013/08/06 | ND (1.4)  | 1.7       |         |             |             |             | In progress | In progress |
| T-0-1 | 2013/09/03 | ND (0.88) | ND (0.58) | ND (16) | In progress |             |             |             |             |
| T-0-2 | 2013/09/03 | ND (0.63) | ND (0.69) | ND (16) | In progress |             |             |             |             |
| T-0-3 | 2013/09/03 | ND (0.43) | ND (0.66) | ND (16) | In progress |             |             |             |             |
| T-2-1 | 2013/09/02 | ND (1.4)  | ND (1.4)  | ND (21) | ND (1.8)    |             |             |             |             |
|       | 2013/08/12 | ND (1.2)  | ND (1.4)  | ND (19) | ND (2.9)    | In progress | In progress |             |             |
|       | 2013/08/06 | ND (1.4)  | ND (1.3)  | ND (21) |             |             |             | In progress | In progress |



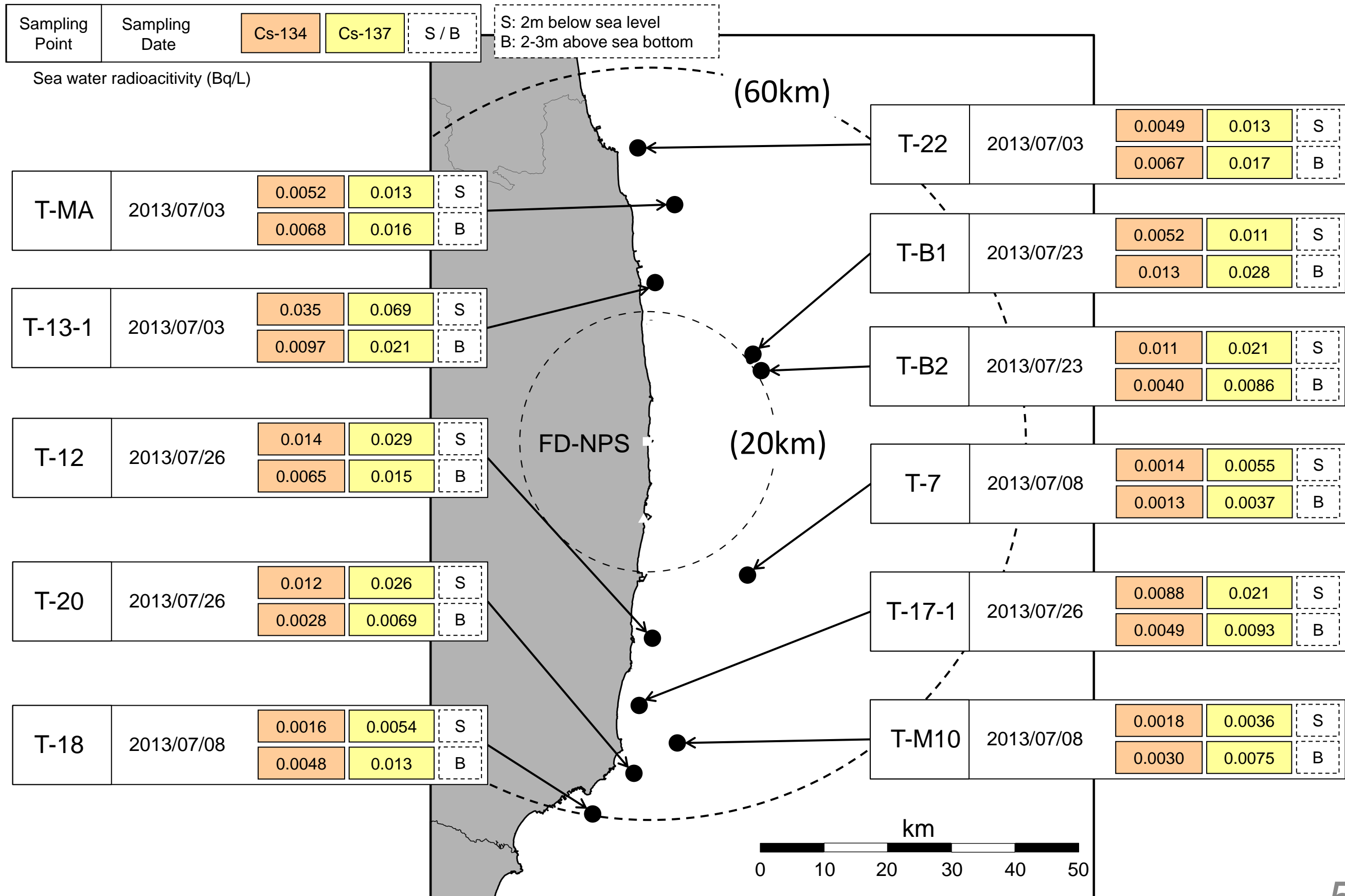
# Sea area between 2-20km radius from the NPS (1)



# Sea area between 2-20km radius from the NPS (2)



# Sea area between 20-60km radius from the NPS



# Sea area along the coast of Miyagi Prefecture

| Sampling Point | Sampling Date | Cs-134 | Cs-137 | Sr-90 | S / M / B |
|----------------|---------------|--------|--------|-------|-----------|
|----------------|---------------|--------|--------|-------|-----------|

S: 2m below sea level  
M: between 2m below sea level and 2-3m above sea bottom  
B: 2-3m above sea bottom

Sea water radioactivity (Bq/L):  
ND: under detection limits; Numbers in parentheses: detection limits

|       |            |                |        |  |   |
|-------|------------|----------------|--------|--|---|
| T-MG0 | 2013/07/10 | ND<br>(0.0017) | 0.0019 |  | S |
|       |            | ND<br>(0.0017) | 0.0014 |  | M |
|       |            | ND<br>(0.0017) | 0.0016 |  | B |

|       |            |                |        |  |   |
|-------|------------|----------------|--------|--|---|
| T-MG1 | 2013/07/10 | 0.0056         | 0.011  |  | S |
|       |            | 0.0039         | 0.0089 |  | M |
|       |            | ND<br>(0.0017) | 0.0046 |  | B |

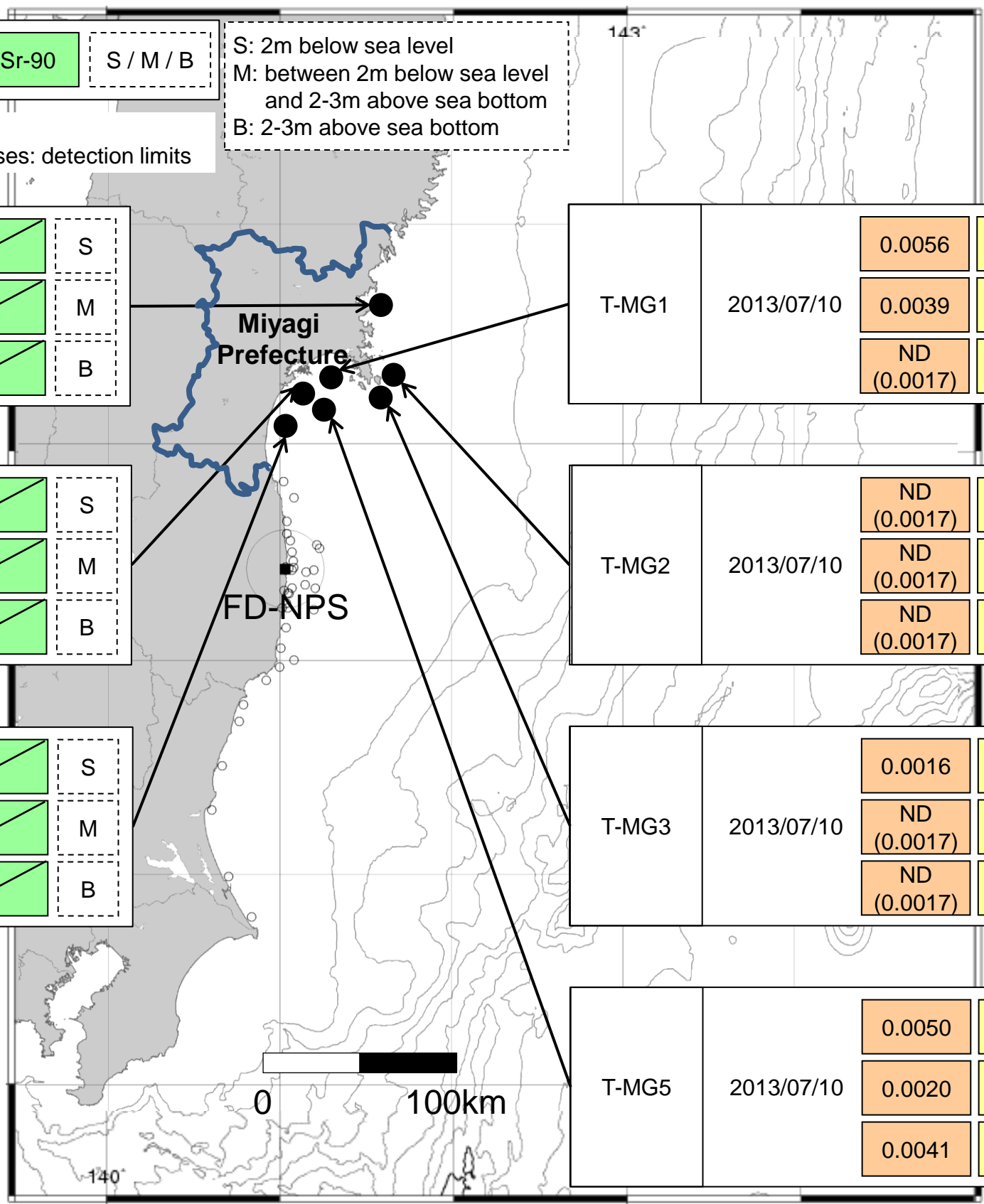
|       |            |        |        |  |   |
|-------|------------|--------|--------|--|---|
| T-MG4 | 2013/07/10 | 0.0040 | 0.010  |  | S |
|       |            | 0.0027 | 0.0083 |  | M |
|       |            | 0.0036 | 0.0074 |  | B |

|       |            |                |        |  |   |
|-------|------------|----------------|--------|--|---|
| T-MG2 | 2013/07/10 | ND<br>(0.0017) | 0.0016 |  | S |
|       |            | ND<br>(0.0017) | 0.0016 |  | M |
|       |            | ND<br>(0.0017) | 0.0020 |  | B |

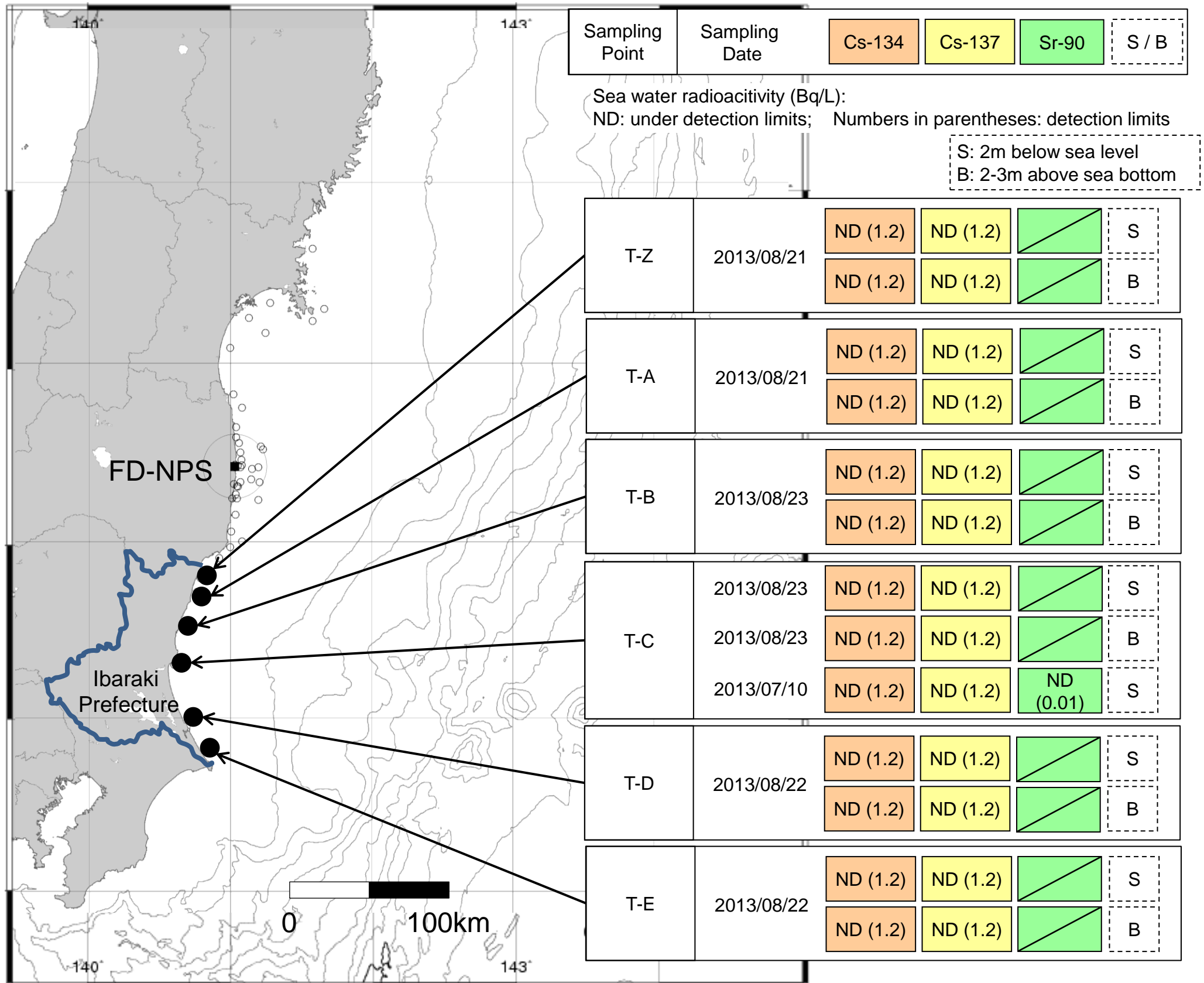
|       |            |                |        |  |   |
|-------|------------|----------------|--------|--|---|
| T-MG6 | 2013/07/10 | 0.0040         | 0.010  |  | S |
|       |            | ND<br>(0.0017) | 0.0021 |  | M |
|       |            | 0.0046         | 0.010  |  | B |

|       |            |                |        |  |   |
|-------|------------|----------------|--------|--|---|
| T-MG3 | 2013/07/10 | 0.0016         | 0.0064 |  | S |
|       |            | ND<br>(0.0017) | 0.0020 |  | M |
|       |            | ND<br>(0.0017) | 0.0015 |  | B |

|       |            |        |        |              |   |
|-------|------------|--------|--------|--------------|---|
| T-MG5 | 2013/07/10 | 0.0050 | 0.010  | ND<br>(0.01) | S |
|       |            | 0.0020 | 0.0048 |              | M |
|       |            | 0.0041 | 0.0069 |              | B |



# Sea area along the coast of Ibaraki Prefecture



# Open sea off the coast of Eastern Japan

| Sampling Point | Sampling Date | Cs-134 | Cs-137 | Depth (m) from sea level |
|----------------|---------------|--------|--------|--------------------------|
|----------------|---------------|--------|--------|--------------------------|

Sea water radioactivity (Bq/L):

ND: under detection limits; Numbers in parentheses: detection limits

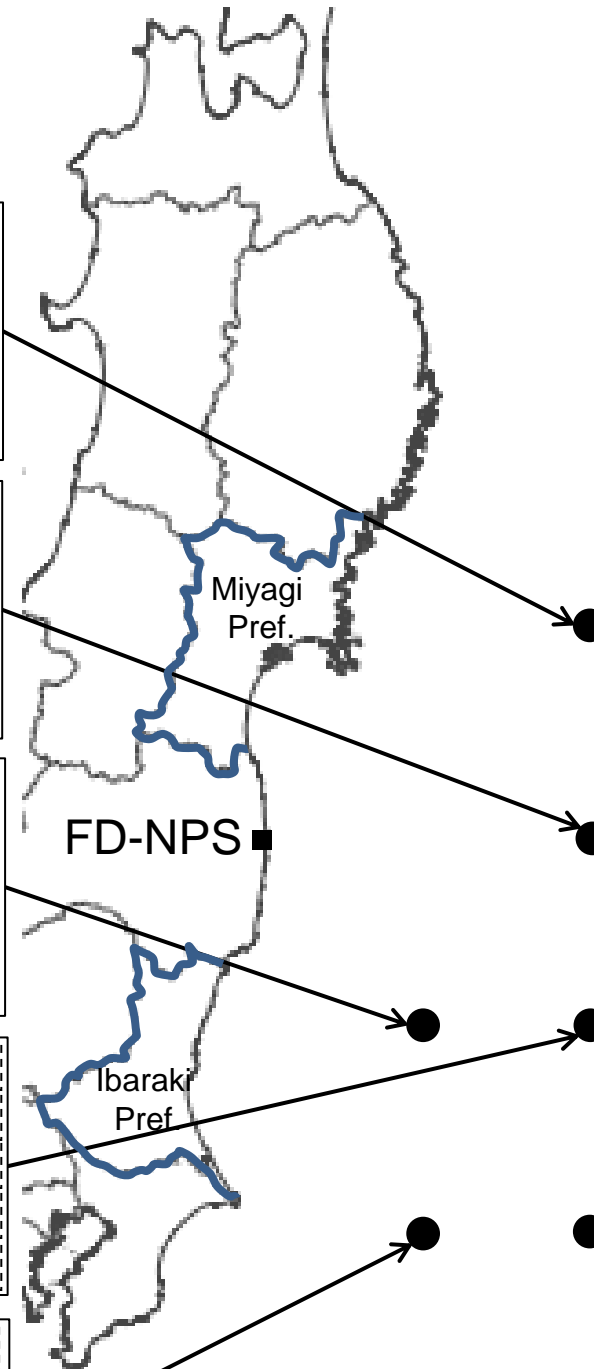
|      |            |              |         |      |
|------|------------|--------------|---------|------|
| M-10 | 2013/05/19 | 0.0011       | 0.0029  | 1m   |
|      |            | ND (0.00068) | 0.0021  | 100m |
|      |            | ND (0.00064) | 0.0022  | 200m |
|      |            | ND (0.00065) | 0.0019  | 300m |
|      |            | ND (0.00061) | 0.00091 | 500m |

|      |            |              |         |      |
|------|------------|--------------|---------|------|
| M-14 | 2013/05/18 | ND (0.00079) | 0.0026  | 1m   |
|      |            | ND (0.00074) | 0.0021  | 100m |
|      |            | ND (0.00074) | 0.0015  | 200m |
|      |            | ND (0.00066) | 0.0015  | 300m |
|      |            | ND (0.00068) | 0.00090 | 500m |

|      |            |              |        |      |
|------|------------|--------------|--------|------|
| M-19 | 2013/05/17 | 0.0010       | 0.0028 | 1m   |
|      |            | ND (0.00061) | 0.0014 | 100m |
|      |            | ND (0.00059) | 0.0017 | 200m |
|      |            | ND (0.00069) | 0.0014 | 300m |
|      |            | ND (0.00059) | 0.0010 | 500m |

|      |            |              |         |      |
|------|------------|--------------|---------|------|
| M-20 | 2013/05/18 | ND (0.00082) | 0.0025  | 1m   |
|      |            | ND (0.00095) | 0.0019  | 100m |
|      |            | ND (0.00092) | 0.0018  | 200m |
|      |            | ND (0.00096) | 0.0014  | 300m |
|      |            | ND (0.00084) | 0.00080 | 500m |

|      |            |              |        |      |
|------|------------|--------------|--------|------|
| M-25 | 2013/05/14 | ND (0.0010)  | 0.0016 | 1m   |
|      |            | ND (0.00092) | 0.0022 | 100m |
|      |            | 0.0020       | 0.0044 | 200m |
|      |            | ND (0.00094) | 0.0031 | 300m |
|      |            | ND (0.00087) | 0.0012 | 500m |



|      |            |              |         |      |
|------|------------|--------------|---------|------|
| M-11 | 2013/05/16 | ND (0.00096) | 0.0025  | 1m   |
|      |            | ND (0.00095) | 0.0023  | 100m |
|      |            | 0.0010       | 0.0018  | 200m |
|      |            | ND (0.00092) | 0.00095 | 300m |
|      |            | ND (0.00097) | 0.00068 | 500m |

|      |            |              |         |      |
|------|------------|--------------|---------|------|
| M-15 | 2013/05/16 | ND (0.00095) | 0.0023  | 1m   |
|      |            | ND (0.00088) | 0.0018  | 100m |
|      |            | ND (0.00097) | 0.0020  | 200m |
|      |            | ND (0.00096) | 0.0016  | 300m |
|      |            | ND (0.00085) | 0.00084 | 500m |

|      |            |              |        |      |
|------|------------|--------------|--------|------|
| M-21 | 2013/05/15 | ND (0.00068) | 0.0019 | 1m   |
|      |            | ND (0.00069) | 0.0026 | 100m |
|      |            | 0.0026       | 0.0056 | 200m |
|      |            | 0.0013       | 0.0043 | 300m |
|      |            | ND (0.00064) | 0.0015 | 500m |

|      |            |              |        |      |
|------|------------|--------------|--------|------|
| M-26 | 2013/05/14 | ND (0.00069) | 0.0020 | 1m   |
|      |            | ND (0.00065) | 0.0025 | 100m |
|      |            | 0.0011       | 0.0036 | 200m |
|      |            | 0.0011       | 0.0034 | 300m |
|      |            | ND (0.00085) | 0.0015 | 500m |

|      |            |              |        |      |
|------|------------|--------------|--------|------|
| M-27 | 2013/05/15 | ND (0.00094) | 0.0022 | 1m   |
|      |            | ND (0.00096) | 0.0030 | 100m |
|      |            | 0.0012       | 0.0044 | 200m |
|      |            | ND (0.0010)  | 0.0027 | 300m |
|      |            | ND (0.00089) | 0.0021 | 500m |