

**Downcoast Redistribution of Changjiang Diluted Water due to Typhoon Chan-Hom (2015)**

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**Introduction**

Two additional figures were provided here as supporting information for our manuscript “Downcoast Redistribution of Changjiang Diluted Water due to Typhoon Chan-Hom (2015)”.

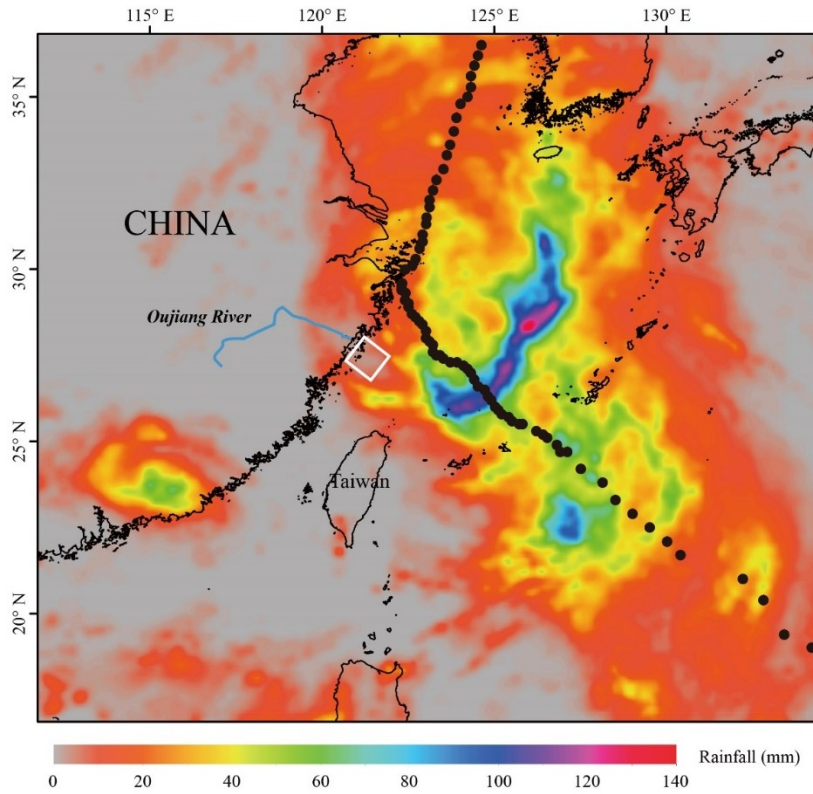
Figure S1 plots the precipitation during Typhoon Chan-Hom (9-12 July) in the East China Sea and eastern China. The precipitation was mainly occurred in the East China, and there was little precipitation in the drainage basin of Oujiang River.

Figure S2 plots the water turbidity in the study area immediately after the passing of Typhoon Chan-Hom and 3 weeks later. In the post-typhoon condition, the turbidity ranged from 0.26 to

855.74 FTU (averaged 26.79 FTU) in the water column, and the high turbidity was mainly occurred in the bottom layer. However, in the normal condition, the turbidity ranged from 0.1 to 355.92 FTU (averaged 16.93 FTU), which were significantly lower than that in the post-typhoon condition, and the high value also occurred in the bottom layer.

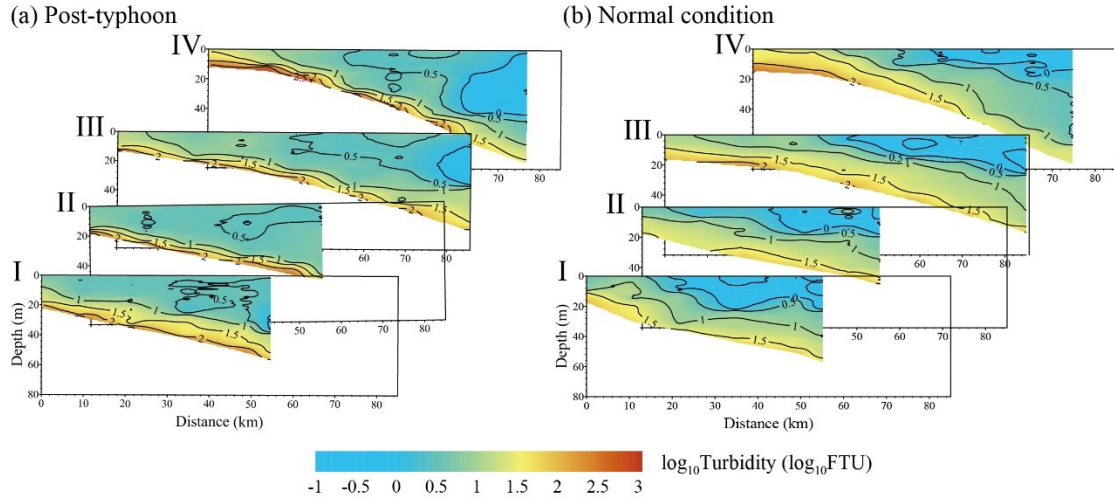
Figure S3 is the bi-plot showing the relationships of POC vs. PN in the post-typhoon and normal condition states.

Figure S4 plots the number and wind speed of typhoons influenced Changjiang River Estuary (passed north of study area) during 1961-2022. The information was collected from <http://www.wztf121.com/>.

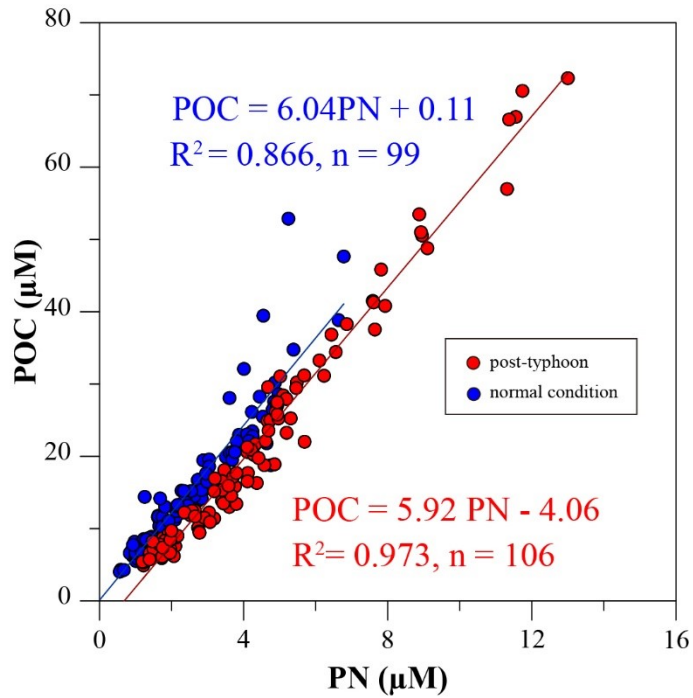


**Figure S1.** Distribution of total rainfall from July 9 to 12, 2015 under the influence of Typhoon Chan-Hom. The black dots indicate the track of Typhoon Chan-Hom. The different colors represent

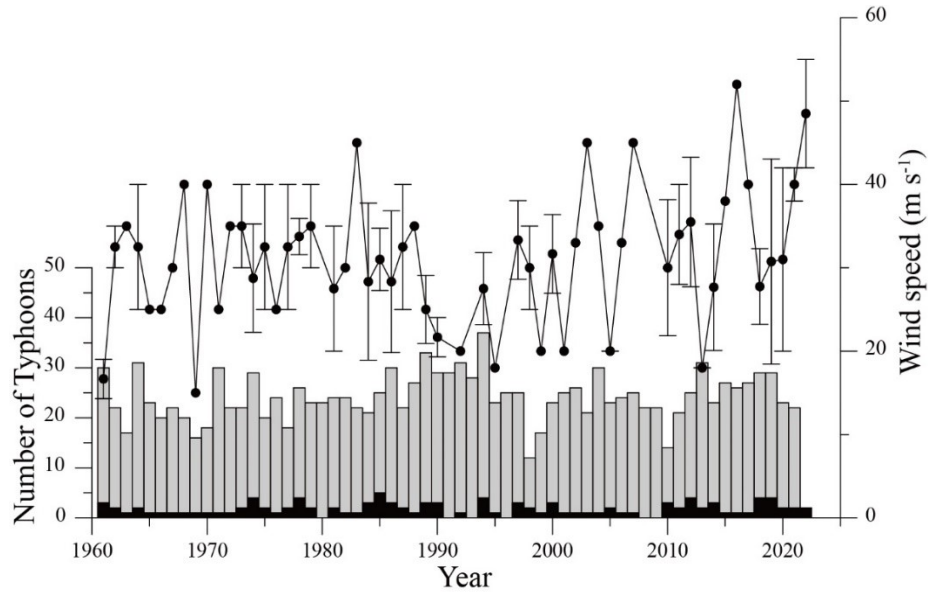
rainfall amount (mm). The highest rainfall occurred in the offshore area of East China Sea. The white box indicates study area located in the Zhejiang-Fujian coastal area.



**Figure S2.** The measured turbidity ( $\log_{10}$  value) along 4 cross-shelf transects immediately after the passing of Typhoon Chan-Hom (left panels) and 3 weeks later (right panels)



**Figure S3.** Bi-plot showing the relationships of POC vs. PN in the post-typhoon and normal condition states.



**Figure S4.** The number and wind speed of typhoons influenced Changjiang River Estuary (passed north of study area) during 1961-2022. The gray column is number of total typhoons that produced in the west Pacific Ocean and black number is the number of typhoons that influenced Changjiang River Estuary. The black point is the average wind speed with error bar of typhoons when they affected Changjiang River Estuary.

**Table S1.** The mean, minimum, and maximum contribution values of different endmembers and standard deviation of each sample in NCS calculated by three-endmember mixing model.

| Sample | CDW  |     |     |      | SSW  |     |     |      | SBW  |     |     |      |
|--------|------|-----|-----|------|------|-----|-----|------|------|-----|-----|------|
|        | mean | min | max | std  | mean | min | max | std  | mean | min | max | std  |
| E10-1  | 11%  | 8%  | 16% | 0.01 | 45%  | 34% | 62% | 0.03 | 43%  | 27% | 53% | 0.03 |
| E10-2  | 18%  | 14% | 26% | 0.01 | 41%  | 27% | 57% | 0.03 | 41%  | 25% | 51% | 0.03 |
| E10-3  | 20%  | 15% | 28% | 0.01 | 39%  | 25% | 56% | 0.03 | 41%  | 25% | 51% | 0.03 |
| E10-4  | 27%  | 20% | 38% | 0.02 | 39%  | 22% | 58% | 0.04 | 34%  | 16% | 46% | 0.03 |
| E10-5  | 27%  | 20% | 37% | 0.02 | 45%  | 27% | 66% | 0.04 | 28%  | 9%  | 40% | 0.03 |
| E10-6  | 27%  | 20% | 37% | 0.02 | 56%  | 37% | 77% | 0.04 | 18%  | 0%  | 31% | 0.04 |
| A1-1   | 10%  | 8%  | 14% | 0.01 | 46%  | 35% | 63% | 0.03 | 44%  | 27% | 53% | 0.03 |
| A1-2   | 10%  | 8%  | 15% | 0.01 | 46%  | 35% | 63% | 0.03 | 44%  | 27% | 53% | 0.03 |
| A1-3   | 13%  | 9%  | 18% | 0.01 | 44%  | 32% | 60% | 0.03 | 43%  | 27% | 53% | 0.03 |
| A1-4   | 24%  | 18% | 33% | 0.02 | 31%  | 16% | 47% | 0.03 | 45%  | 30% | 55% | 0.02 |
| A1-5   | 27%  | 20% | 38% | 0.02 | 29%  | 13% | 46% | 0.03 | 44%  | 28% | 54% | 0.03 |
| A1-6   | 32%  | 24% | 45% | 0.02 | 41%  | 20% | 62% | 0.04 | 27%  | 7%  | 40% | 0.03 |
| A2-1   | 32%  | 24% | 45% | 0.02 | 42%  | 22% | 64% | 0.04 | 25%  | 5%  | 39% | 0.03 |
| A2-2   | 31%  | 23% | 44% | 0.02 | 38%  | 19% | 58% | 0.04 | 31%  | 12% | 43% | 0.03 |
| A2-3   | 28%  | 21% | 40% | 0.02 | 27%  | 10% | 44% | 0.03 | 44%  | 29% | 54% | 0.03 |
| A2-4   | 26%  | 20% | 37% | 0.02 | 29%  | 13% | 45% | 0.03 | 45%  | 29% | 54% | 0.02 |
| A2-5   | 9%   | 6%  | 12% | 0.01 | 46%  | 35% | 63% | 0.03 | 45%  | 29% | 55% | 0.03 |
| A2-6   | 6%   | 4%  | 8%  | 0.00 | 53%  | 42% | 73% | 0.03 | 41%  | 22% | 52% | 0.03 |
| A3-1   | 4%   | 3%  | 6%  | 0.00 | 55%  | 44% | 75% | 0.03 | 41%  | 22% | 52% | 0.03 |
| A3-2   | 4%   | 3%  | 6%  | 0.00 | 55%  | 43% | 74% | 0.03 | 41%  | 22% | 52% | 0.03 |
| A3-3   | 4%   | 3%  | 6%  | 0.00 | 55%  | 43% | 74% | 0.03 | 41%  | 22% | 52% | 0.03 |
| A3-4   | 7%   | 5%  | 11% | 0.01 | 49%  | 37% | 66% | 0.03 | 44%  | 27% | 54% | 0.03 |
| A3-5   | 22%  | 16% | 30% | 0.01 | 32%  | 18% | 48% | 0.03 | 46%  | 31% | 55% | 0.02 |
| A3-6   | 32%  | 24% | 44% | 0.02 | 46%  | 25% | 68% | 0.04 | 22%  | 1%  | 36% | 0.03 |
| A4-1   | 36%  | 27% | 50% | 0.02 | 47%  | 24% | 68% | 0.05 | 17%  | 0%  | 32% | 0.04 |
| A4-2   | 36%  | 27% | 50% | 0.02 | 41%  | 19% | 63% | 0.04 | 24%  | 3%  | 37% | 0.03 |
| A4-3   | 29%  | 22% | 40% | 0.02 | 29%  | 12% | 46% | 0.03 | 42%  | 27% | 53% | 0.03 |
| A4-4   | 16%  | 12% | 23% | 0.01 | 38%  | 26% | 53% | 0.03 | 45%  | 31% | 54% | 0.02 |
| A4-5   | 5%   | 4%  | 7%  | 0.00 | 47%  | 36% | 64% | 0.03 | 48%  | 32% | 58% | 0.03 |
| A4-6   | 4%   | 3%  | 6%  | 0.00 | 45%  | 35% | 61% | 0.03 | 51%  | 35% | 60% | 0.03 |
| A5-1   | 4%   | 3%  | 5%  | 0.00 | 44%  | 34% | 59% | 0.03 | 53%  | 38% | 62% | 0.03 |
| A5-2   | 4%   | 3%  | 5%  | 0.00 | 46%  | 36% | 62% | 0.03 | 51%  | 35% | 60% | 0.03 |
| A5-3   | 4%   | 3%  | 6%  | 0.00 | 54%  | 43% | 74% | 0.03 | 42%  | 23% | 53% | 0.03 |
| A5-4   | 4%   | 3%  | 6%  | 0.00 | 59%  | 46% | 80% | 0.04 | 37%  | 17% | 49% | 0.03 |
| A5-5   | 10%  | 8%  | 15% | 0.01 | 46%  | 35% | 63% | 0.03 | 43%  | 27% | 53% | 0.03 |

|      |     |     |     |      |     |     |     |      |     |     |     |      |
|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|
| A5-6 | 33% | 25% | 46% | 0.02 | 39% | 18% | 59% | 0.04 | 29% | 9%  | 41% | 0.03 |
| E9-1 | 12% | 9%  | 17% | 0.01 | 44% | 33% | 61% | 0.03 | 44% | 28% | 53% | 0.03 |
| E9-2 | 24% | 18% | 34% | 0.02 | 36% | 20% | 53% | 0.03 | 40% | 23% | 50% | 0.03 |
| E9-3 | 25% | 19% | 35% | 0.02 | 42% | 25% | 61% | 0.04 | 33% | 15% | 44% | 0.03 |
| E9-4 | 28% | 21% | 39% | 0.02 | 47% | 28% | 69% | 0.04 | 25% | 5%  | 38% | 0.03 |
| E9-5 | 30% | 22% | 42% | 0.02 | 62% | 41% | 76% | 0.04 | 8%  | 0%  | 23% | 0.04 |
| E9-6 | 30% | 23% | 42% | 0.02 | 64% | 43% | 77% | 0.04 | 6%  | 0%  | 21% | 0.03 |
| B1-1 | 9%  | 7%  | 13% | 0.01 | 45% | 34% | 61% | 0.03 | 46% | 30% | 55% | 0.03 |
| B1-2 | 10% | 7%  | 14% | 0.01 | 45% | 34% | 61% | 0.03 | 46% | 30% | 55% | 0.03 |
| B1-3 | 16% | 12% | 23% | 0.01 | 37% | 25% | 52% | 0.03 | 47% | 32% | 55% | 0.02 |
| B1-4 | 25% | 19% | 35% | 0.02 | 29% | 14% | 45% | 0.03 | 46% | 31% | 56% | 0.02 |
| B1-5 | 31% | 23% | 43% | 0.02 | 27% | 9%  | 44% | 0.03 | 42% | 27% | 53% | 0.03 |
| B1-6 | 34% | 26% | 48% | 0.02 | 43% | 22% | 66% | 0.04 | 22% | 1%  | 36% | 0.03 |
| B2-1 | 34% | 26% | 48% | 0.02 | 50% | 28% | 71% | 0.05 | 15% | 0%  | 30% | 0.04 |
| B2-2 | 34% | 26% | 48% | 0.02 | 50% | 28% | 70% | 0.05 | 15% | 0%  | 30% | 0.04 |
| B2-3 | 33% | 25% | 46% | 0.02 | 30% | 11% | 49% | 0.04 | 37% | 19% | 48% | 0.03 |
| B2-4 | 32% | 24% | 45% | 0.02 | 24% | 6%  | 42% | 0.03 | 44% | 28% | 55% | 0.03 |
| B2-5 | 11% | 8%  | 16% | 0.01 | 42% | 31% | 58% | 0.03 | 46% | 31% | 55% | 0.03 |
| B2-6 | 8%  | 6%  | 11% | 0.01 | 46% | 35% | 62% | 0.03 | 46% | 30% | 56% | 0.03 |
| B3-1 | 6%  | 5%  | 9%  | 0.00 | 48% | 37% | 65% | 0.03 | 46% | 29% | 56% | 0.03 |
| B3-2 | 6%  | 5%  | 9%  | 0.00 | 48% | 37% | 65% | 0.03 | 46% | 29% | 56% | 0.03 |
| B3-3 | 8%  | 6%  | 11% | 0.01 | 49% | 37% | 66% | 0.03 | 44% | 27% | 54% | 0.03 |
| B3-4 | 21% | 16% | 29% | 0.01 | 33% | 19% | 48% | 0.03 | 46% | 32% | 55% | 0.02 |
| B3-5 | 34% | 26% | 48% | 0.02 | 21% | 2%  | 39% | 0.04 | 44% | 29% | 56% | 0.03 |
| B3-6 | 37% | 28% | 51% | 0.02 | 53% | 29% | 70% | 0.05 | 11% | 0%  | 26% | 0.04 |
| B4-1 | 37% | 28% | 52% | 0.02 | 29% | 7%  | 49% | 0.04 | 34% | 16% | 47% | 0.03 |
| B4-2 | 37% | 28% | 52% | 0.02 | 29% | 8%  | 50% | 0.04 | 34% | 15% | 46% | 0.03 |
| B4-3 | 36% | 27% | 51% | 0.02 | 22% | 1%  | 40% | 0.04 | 42% | 26% | 54% | 0.03 |
| B4-4 | 27% | 20% | 37% | 0.02 | 27% | 10% | 42% | 0.03 | 47% | 32% | 56% | 0.02 |
| B4-5 | 14% | 10% | 19% | 0.01 | 45% | 32% | 61% | 0.03 | 42% | 26% | 51% | 0.03 |
| B4-6 | 6%  | 5%  | 9%  | 0.00 | 49% | 38% | 67% | 0.03 | 45% | 27% | 55% | 0.03 |
| B5-1 | 6%  | 4%  | 9%  | 0.00 | 49% | 38% | 67% | 0.03 | 45% | 28% | 55% | 0.03 |
| B5-2 | 9%  | 7%  | 13% | 0.01 | 50% | 38% | 68% | 0.03 | 41% | 24% | 52% | 0.03 |
| B5-3 | 10% | 8%  | 14% | 0.01 | 48% | 36% | 66% | 0.03 | 41% | 24% | 51% | 0.03 |
| B5-4 | 13% | 10% | 19% | 0.01 | 45% | 33% | 62% | 0.03 | 42% | 25% | 51% | 0.03 |
| B5-5 | 25% | 19% | 35% | 0.02 | 28% | 13% | 44% | 0.03 | 47% | 32% | 56% | 0.02 |
| B5-6 | 38% | 28% | 53% | 0.02 | 48% | 24% | 68% | 0.05 | 15% | 0%  | 30% | 0.04 |
| E8-1 | 19% | 14% | 27% | 0.01 | 38% | 24% | 54% | 0.03 | 43% | 28% | 53% | 0.03 |
| E8-2 | 26% | 19% | 36% | 0.02 | 37% | 21% | 56% | 0.03 | 37% | 20% | 48% | 0.03 |
| E8-3 | 29% | 22% | 41% | 0.02 | 40% | 21% | 60% | 0.04 | 31% | 12% | 43% | 0.03 |
| E8-4 | 32% | 24% | 45% | 0.02 | 41% | 20% | 62% | 0.04 | 27% | 7%  | 40% | 0.03 |
| E8-5 | 37% | 28% | 52% | 0.02 | 56% | 32% | 70% | 0.04 | 7%  | 0%  | 22% | 0.04 |
| E8-6 | 37% | 28% | 52% | 0.02 | 56% | 33% | 71% | 0.04 | 7%  | 0%  | 22% | 0.03 |

|      |     |     |     |      |     |     |     |      |     |     |     |      |
|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|
| C1-1 | 16% | 12% | 23% | 0.01 | 38% | 26% | 53% | 0.03 | 46% | 32% | 55% | 0.02 |
| C1-2 | 18% | 14% | 26% | 0.01 | 37% | 24% | 52% | 0.03 | 45% | 30% | 54% | 0.02 |
| C1-3 | 26% | 19% | 36% | 0.02 | 34% | 18% | 52% | 0.03 | 40% | 24% | 50% | 0.03 |
| C1-4 | 31% | 23% | 43% | 0.02 | 30% | 12% | 48% | 0.03 | 39% | 23% | 50% | 0.03 |
| C1-5 | 32% | 24% | 45% | 0.02 | 34% | 14% | 54% | 0.04 | 33% | 15% | 45% | 0.03 |
| C1-6 | 33% | 25% | 46% | 0.02 | 42% | 21% | 64% | 0.04 | 25% | 5%  | 38% | 0.03 |
| C2-1 | 34% | 26% | 48% | 0.02 | 51% | 29% | 72% | 0.05 | 15% | 0%  | 29% | 0.04 |
| C2-2 | 34% | 26% | 48% | 0.02 | 53% | 31% | 72% | 0.05 | 13% | 0%  | 28% | 0.04 |
| C2-3 | 34% | 25% | 47% | 0.02 | 35% | 14% | 55% | 0.04 | 32% | 13% | 44% | 0.03 |
| C2-4 | 31% | 24% | 44% | 0.02 | 29% | 10% | 48% | 0.04 | 39% | 23% | 50% | 0.03 |
| C2-6 | 10% | 7%  | 14% | 0.01 | 44% | 33% | 60% | 0.03 | 46% | 30% | 55% | 0.03 |
| C3-1 | 8%  | 6%  | 11% | 0.01 | 48% | 37% | 66% | 0.03 | 44% | 27% | 54% | 0.03 |
| C3-2 | 9%  | 7%  | 13% | 0.01 | 47% | 35% | 64% | 0.03 | 45% | 28% | 54% | 0.03 |
| C3-3 | 21% | 16% | 30% | 0.01 | 33% | 19% | 48% | 0.03 | 46% | 32% | 56% | 0.02 |
| C3-4 | 26% | 20% | 37% | 0.02 | 28% | 11% | 44% | 0.03 | 46% | 31% | 56% | 0.02 |
| C3-5 | 33% | 25% | 46% | 0.02 | 30% | 10% | 48% | 0.04 | 37% | 20% | 49% | 0.03 |
| C3-6 | 36% | 27% | 50% | 0.02 | 46% | 23% | 68% | 0.04 | 18% | 0%  | 32% | 0.04 |
| C4-1 | 38% | 28% | 53% | 0.02 | 30% | 8%  | 50% | 0.04 | 32% | 14% | 45% | 0.03 |
| C4-2 | 38% | 29% | 53% | 0.03 | 28% | 6%  | 48% | 0.04 | 34% | 16% | 47% | 0.03 |
| C4-3 | 37% | 28% | 52% | 0.02 | 22% | 1%  | 41% | 0.04 | 41% | 24% | 53% | 0.03 |
| C4-4 | 34% | 25% | 47% | 0.02 | 21% | 2%  | 38% | 0.04 | 45% | 30% | 56% | 0.03 |
| C4-5 | 14% | 11% | 20% | 0.01 | 42% | 31% | 58% | 0.03 | 43% | 28% | 53% | 0.03 |
| C4-6 | 3%  | 2%  | 5%  | 0.00 | 49% | 38% | 66% | 0.03 | 48% | 32% | 58% | 0.03 |
| C5-1 | 2%  | 1%  | 3%  | 0.00 | 41% | 33% | 56% | 0.02 | 57% | 43% | 65% | 0.02 |
| C5-2 | 2%  | 1%  | 3%  | 0.00 | 42% | 33% | 57% | 0.03 | 56% | 42% | 64% | 0.02 |
| C5-3 | 3%  | 2%  | 4%  | 0.00 | 48% | 38% | 65% | 0.03 | 50% | 33% | 59% | 0.03 |
| C5-4 | 3%  | 2%  | 4%  | 0.00 | 50% | 40% | 68% | 0.03 | 47% | 30% | 57% | 0.03 |
| C5-5 | 29% | 22% | 40% | 0.02 | 24% | 7%  | 40% | 0.03 | 47% | 33% | 57% | 0.02 |
| C5-6 | 37% | 28% | 51% | 0.02 | 40% | 17% | 62% | 0.04 | 24% | 3%  | 37% | 0.03 |
| C6-1 | 0%  | 0%  | 1%  | 0.00 | 10% | 8%  | 13% | 0.01 | 90% | 87% | 92% | 0.01 |
| C6-2 | 0%  | 0%  | 1%  | 0.00 | 10% | 8%  | 13% | 0.01 | 90% | 87% | 92% | 0.01 |
| C6-3 | 0%  | 0%  | 1%  | 0.00 | 11% | 9%  | 15% | 0.01 | 88% | 84% | 91% | 0.01 |
| C6-4 | 2%  | 1%  | 3%  | 0.00 | 43% | 34% | 58% | 0.03 | 55% | 41% | 64% | 0.02 |
| C6-5 | 2%  | 1%  | 3%  | 0.00 | 62% | 50% | 85% | 0.04 | 36% | 15% | 48% | 0.04 |
| C6-6 | 17% | 13% | 24% | 0.01 | 61% | 45% | 83% | 0.04 | 22% | 1%  | 35% | 0.04 |
| E1-1 | 32% | 24% | 45% | 0.02 | 32% | 13% | 52% | 0.04 | 36% | 18% | 47% | 0.03 |
| E1-2 | 34% | 25% | 47% | 0.02 | 34% | 14% | 54% | 0.04 | 33% | 14% | 45% | 0.03 |
| E1-3 | 35% | 27% | 49% | 0.02 | 36% | 14% | 57% | 0.04 | 29% | 10% | 42% | 0.03 |
| E1-4 | 38% | 28% | 53% | 0.02 | 36% | 14% | 58% | 0.04 | 26% | 6%  | 40% | 0.03 |
| E1-5 | 40% | 30% | 56% | 0.03 | 38% | 14% | 61% | 0.05 | 22% | 1%  | 37% | 0.04 |
| E1-6 | 40% | 30% | 55% | 0.03 | 38% | 14% | 61% | 0.04 | 22% | 1%  | 37% | 0.03 |
| D1-1 | 23% | 17% | 32% | 0.02 | 33% | 18% | 49% | 0.03 | 44% | 29% | 54% | 0.02 |
| D1-2 | 26% | 20% | 37% | 0.02 | 32% | 15% | 49% | 0.03 | 42% | 26% | 52% | 0.03 |

|      |     |     |     |      |     |     |     |      |     |     |     |      |
|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|
| D1-3 | 33% | 25% | 46% | 0.02 | 32% | 13% | 52% | 0.04 | 35% | 17% | 47% | 0.03 |
| D1-4 | 34% | 26% | 48% | 0.02 | 34% | 13% | 54% | 0.04 | 32% | 13% | 44% | 0.03 |
| D1-5 | 35% | 26% | 49% | 0.02 | 47% | 24% | 69% | 0.04 | 18% | 0%  | 32% | 0.04 |
| D1-6 | 36% | 28% | 51% | 0.02 | 60% | 38% | 72% | 0.04 | 4%  | 0%  | 18% | 0.03 |
| D2-1 | 32% | 24% | 45% | 0.02 | 57% | 35% | 74% | 0.05 | 10% | 0%  | 25% | 0.04 |
| D2-2 | 33% | 24% | 46% | 0.02 | 51% | 29% | 72% | 0.04 | 17% | 0%  | 31% | 0.04 |
| D2-3 | 30% | 23% | 42% | 0.02 | 36% | 17% | 55% | 0.04 | 34% | 16% | 46% | 0.03 |
| D2-4 | 28% | 21% | 39% | 0.02 | 33% | 15% | 50% | 0.03 | 40% | 23% | 50% | 0.03 |
| D2-6 | 17% | 13% | 24% | 0.01 | 37% | 25% | 53% | 0.03 | 45% | 31% | 54% | 0.02 |
| D3-1 | 5%  | 4%  | 7%  | 0.00 | 49% | 38% | 66% | 0.03 | 46% | 29% | 56% | 0.03 |
| D3-2 | 9%  | 7%  | 13% | 0.01 | 47% | 36% | 64% | 0.03 | 44% | 27% | 54% | 0.03 |
| D3-3 | 21% | 16% | 29% | 0.01 | 32% | 18% | 47% | 0.03 | 47% | 32% | 56% | 0.02 |
| D3-4 | 28% | 21% | 39% | 0.02 | 27% | 11% | 44% | 0.03 | 45% | 30% | 55% | 0.02 |
| D3-5 | 34% | 26% | 48% | 0.02 | 23% | 3%  | 40% | 0.04 | 43% | 28% | 55% | 0.03 |
| D3-6 | 36% | 27% | 51% | 0.02 | 56% | 32% | 71% | 0.05 | 8%  | 0%  | 23% | 0.04 |
| D4-1 | 38% | 29% | 53% | 0.02 | 44% | 21% | 66% | 0.05 | 18% | 0%  | 32% | 0.04 |
| D4-2 | 38% | 28% | 53% | 0.02 | 37% | 15% | 60% | 0.04 | 25% | 4%  | 39% | 0.03 |
| D4-3 | 35% | 27% | 49% | 0.02 | 24% | 3%  | 42% | 0.04 | 41% | 25% | 53% | 0.03 |
| D4-4 | 28% | 21% | 39% | 0.02 | 26% | 9%  | 42% | 0.03 | 46% | 31% | 56% | 0.02 |
| D4-5 | 14% | 11% | 20% | 0.01 | 42% | 30% | 58% | 0.03 | 44% | 29% | 53% | 0.03 |
| D4-6 | 4%  | 3%  | 6%  | 0.00 | 50% | 39% | 68% | 0.03 | 46% | 29% | 56% | 0.03 |
| D5-1 | 1%  | 1%  | 2%  | 0.00 | 28% | 22% | 37% | 0.02 | 71% | 62% | 77% | 0.02 |
| D5-2 | 3%  | 2%  | 4%  | 0.00 | 49% | 39% | 67% | 0.03 | 48% | 31% | 58% | 0.03 |
| D5-3 | 3%  | 2%  | 4%  | 0.00 | 52% | 41% | 70% | 0.03 | 45% | 28% | 56% | 0.03 |
| D5-4 | 8%  | 6%  | 12% | 0.01 | 50% | 38% | 68% | 0.03 | 42% | 25% | 53% | 0.03 |
| D5-5 | 29% | 22% | 41% | 0.02 | 21% | 4%  | 36% | 0.03 | 50% | 37% | 60% | 0.02 |
| D5-6 | 38% | 28% | 53% | 0.02 | 49% | 25% | 69% | 0.05 | 13% | 0%  | 28% | 0.04 |
| D6-1 | 36% | 27% | 50% | 0.02 | 32% | 10% | 52% | 0.04 | 32% | 14% | 45% | 0.03 |
| D6-2 | 36% | 27% | 51% | 0.02 | 31% | 10% | 52% | 0.04 | 32% | 14% | 45% | 0.03 |
| D6-3 | 31% | 24% | 44% | 0.02 | 32% | 13% | 51% | 0.04 | 37% | 20% | 48% | 0.03 |
| D6-4 | 9%  | 7%  | 13% | 0.01 | 52% | 39% | 70% | 0.03 | 39% | 21% | 50% | 0.03 |
| D6-5 | 2%  | 1%  | 4%  | 0.00 | 47% | 37% | 64% | 0.03 | 51% | 34% | 60% | 0.03 |
| D6-6 | 0%  | 0%  | 0%  | 0.00 | 10% | 8%  | 13% | 0.01 | 90% | 87% | 92% | 0.01 |
| D7-1 | 0%  | 0%  | 0%  | 0.00 | 4%  | 3%  | 6%  | 0.00 | 95% | 94% | 96% | 0.00 |
| D7-2 | 0%  | 0%  | 0%  | 0.00 | 6%  | 5%  | 8%  | 0.00 | 94% | 92% | 95% | 0.00 |
| D7-3 | 1%  | 0%  | 1%  | 0.00 | 27% | 21% | 36% | 0.02 | 73% | 63% | 78% | 0.02 |
| D7-4 | 0%  | 0%  | 1%  | 0.00 | 69% | 55% | 89% | 0.04 | 31% | 11% | 44% | 0.04 |
| D7-5 | 3%  | 2%  | 5%  | 0.00 | 60% | 47% | 81% | 0.04 | 37% | 17% | 49% | 0.03 |
| D7-6 | 6%  | 4%  | 8%  | 0.00 | 72% | 56% | 95% | 0.04 | 23% | 0%  | 37% | 0.04 |



**Table S2.** The mean, minimum, and maximum contribution values of different endmembers and standard deviation of each sample in NCS calculated by three-endmember mixing model.

| Sample | CDW  |     |     |      | SSW  |     |     |      | SBW  |     |     |      |
|--------|------|-----|-----|------|------|-----|-----|------|------|-----|-----|------|
|        | mean | min | max | std  | mean | min | max | std  | mean | min | max | std  |
| E10-1  | 1%   | 1%  | 2%  | 0.00 | 59%  | 48% | 79% | 0.03 | 39%  | 20% | 51% | 0.03 |
| E10-2  | 1%   | 1%  | 2%  | 0.00 | 60%  | 48% | 79% | 0.03 | 39%  | 20% | 51% | 0.03 |
| E10-3  | 2%   | 1%  | 3%  | 0.00 | 64%  | 51% | 85% | 0.03 | 34%  | 14% | 47% | 0.03 |
| E10-4  | 2%   | 1%  | 4%  | 0.00 | 70%  | 56% | 93% | 0.04 | 28%  | 5%  | 41% | 0.04 |
| E10-5  | 2%   | 1%  | 4%  | 0.00 | 88%  | 70% | 98% | 0.04 | 10%  | 0%  | 27% | 0.04 |
| E10-6  | 3%   | 1%  | 4%  | 0.00 | 88%  | 71% | 98% | 0.04 | 10%  | 0%  | 26% | 0.04 |
| A1-1   | 1%   | 0%  | 2%  | 0.00 | 62%  | 50% | 82% | 0.03 | 37%  | 17% | 49% | 0.03 |
| A1-2   | 1%   | 0%  | 2%  | 0.00 | 62%  | 50% | 82% | 0.03 | 37%  | 17% | 49% | 0.03 |
| A1-3   | 1%   | 1%  | 2%  | 0.00 | 64%  | 52% | 85% | 0.03 | 34%  | 14% | 47% | 0.03 |
| A1-4   | 1%   | 1%  | 2%  | 0.00 | 67%  | 54% | 89% | 0.04 | 32%  | 10% | 45% | 0.04 |
| A1-5   | 2%   | 1%  | 3%  | 0.00 | 69%  | 55% | 91% | 0.04 | 30%  | 8%  | 43% | 0.04 |
| A1-6   | 2%   | 1%  | 3%  | 0.00 | 73%  | 58% | 96% | 0.04 | 25%  | 2%  | 40% | 0.04 |
| A2-1   | 4%   | 3%  | 6%  | 0.00 | 84%  | 67% | 97% | 0.04 | 12%  | 0%  | 29% | 0.04 |
| A2-2   | 4%   | 3%  | 6%  | 0.00 | 84%  | 67% | 97% | 0.04 | 12%  | 0%  | 29% | 0.04 |
| A2-3   | 4%   | 3%  | 6%  | 0.00 | 82%  | 66% | 97% | 0.04 | 14%  | 0%  | 30% | 0.04 |
| A2-4   | 2%   | 1%  | 3%  | 0.00 | 64%  | 51% | 85% | 0.03 | 34%  | 14% | 47% | 0.03 |
| A2-5   | 1%   | 0%  | 2%  | 0.00 | 62%  | 50% | 82% | 0.03 | 37%  | 17% | 49% | 0.03 |
| A2-6   | 1%   | 0%  | 2%  | 0.00 | 60%  | 48% | 80% | 0.03 | 39%  | 19% | 50% | 0.03 |
| A3-1   | 1%   | 1%  | 2%  | 0.00 | 68%  | 54% | 90% | 0.04 | 31%  | 9%  | 44% | 0.04 |
| A3-2   | 1%   | 1%  | 2%  | 0.00 | 67%  | 54% | 89% | 0.04 | 31%  | 10% | 44% | 0.04 |
| A3-3   | 1%   | 1%  | 2%  | 0.00 | 68%  | 54% | 89% | 0.04 | 31%  | 10% | 44% | 0.04 |
| A3-4   | 3%   | 2%  | 5%  | 0.00 | 81%  | 65% | 97% | 0.04 | 15%  | 0%  | 31% | 0.04 |
| A3-5   | 4%   | 2%  | 5%  | 0.00 | 83%  | 66% | 97% | 0.04 | 14%  | 0%  | 30% | 0.04 |
| A3-6   | 4%   | 3%  | 6%  | 0.00 | 88%  | 71% | 97% | 0.04 | 8%   | 0%  | 25% | 0.04 |
| A4-1   | 3%   | 2%  | 5%  | 0.00 | 89%  | 72% | 98% | 0.04 | 7%   | 0%  | 24% | 0.04 |
| A4-2   | 3%   | 2%  | 5%  | 0.00 | 88%  | 70% | 98% | 0.04 | 9%   | 0%  | 26% | 0.04 |
| A4-3   | 3%   | 2%  | 5%  | 0.00 | 86%  | 69% | 97% | 0.04 | 10%  | 0%  | 27% | 0.04 |
| A4-4   | 3%   | 2%  | 5%  | 0.00 | 81%  | 64% | 97% | 0.04 | 16%  | 0%  | 32% | 0.04 |
| A4-5   | 1%   | 0%  | 2%  | 0.00 | 74%  | 60% | 99% | 0.04 | 24%  | 0%  | 39% | 0.04 |
| A4-6   | 1%   | 0%  | 2%  | 0.00 | 75%  | 60% | 99% | 0.04 | 24%  | 0%  | 39% | 0.04 |
| A5-1   | 1%   | 0%  | 2%  | 0.00 | 75%  | 60% | 98% | 0.04 | 23%  | 1%  | 38% | 0.04 |
| A5-2   | 1%   | 1%  | 2%  | 0.00 | 75%  | 60% | 98% | 0.04 | 23%  | 1%  | 38% | 0.04 |
| A5-3   | 1%   | 0%  | 2%  | 0.00 | 75%  | 60% | 98% | 0.04 | 23%  | 1%  | 38% | 0.04 |
| A5-4   | 2%   | 1%  | 3%  | 0.00 | 75%  | 60% | 98% | 0.04 | 23%  | 1%  | 38% | 0.04 |
| A5-5   | 3%   | 2%  | 4%  | 0.00 | 84%  | 67% | 98% | 0.04 | 13%  | 0%  | 30% | 0.04 |

|      |    |    |    |      |     |     |     |      |     |     |     |      |
|------|----|----|----|------|-----|-----|-----|------|-----|-----|-----|------|
| A5-6 | 2% | 1% | 4% | 0.00 | 91% | 74% | 99% | 0.04 | 7%  | 0%  | 23% | 0.04 |
| E9-1 | 2% | 1% | 3% | 0.00 | 63% | 50% | 83% | 0.03 | 36% | 16% | 48% | 0.03 |
| E9-2 | 2% | 1% | 3% | 0.00 | 63% | 50% | 83% | 0.03 | 36% | 15% | 48% | 0.03 |
| E9-3 | 2% | 1% | 3% | 0.00 | 63% | 51% | 84% | 0.03 | 35% | 15% | 47% | 0.03 |
| E9-4 | 2% | 1% | 3% | 0.00 | 66% | 53% | 88% | 0.04 | 32% | 11% | 45% | 0.04 |
| E9-5 | 2% | 1% | 4% | 0.00 | 88% | 71% | 98% | 0.04 | 9%  | 0%  | 26% | 0.04 |
| E9-6 | 3% | 2% | 4% | 0.00 | 90% | 72% | 98% | 0.04 | 8%  | 0%  | 25% | 0.04 |
| B1-1 | 2% | 1% | 3% | 0.00 | 66% | 53% | 88% | 0.04 | 32% | 11% | 45% | 0.04 |
| B1-2 | 2% | 1% | 3% | 0.00 | 66% | 53% | 88% | 0.04 | 32% | 11% | 45% | 0.04 |
| B1-3 | 2% | 1% | 3% | 0.00 | 66% | 53% | 88% | 0.04 | 32% | 11% | 45% | 0.04 |
| B1-4 | 2% | 1% | 3% | 0.00 | 67% | 53% | 88% | 0.04 | 32% | 10% | 45% | 0.04 |
| B1-5 | 2% | 1% | 3% | 0.00 | 76% | 61% | 99% | 0.04 | 23% | 0%  | 37% | 0.04 |
| B1-6 | 3% | 2% | 4% | 0.00 | 91% | 75% | 98% | 0.03 | 6%  | 0%  | 22% | 0.03 |
| B2-1 | 2% | 1% | 3% | 0.00 | 79% | 63% | 98% | 0.04 | 19% | 0%  | 34% | 0.04 |
| B2-2 | 2% | 1% | 3% | 0.00 | 78% | 62% | 98% | 0.04 | 20% | 0%  | 35% | 0.04 |
| B2-3 | 2% | 1% | 3% | 0.00 | 73% | 58% | 96% | 0.04 | 26% | 2%  | 40% | 0.04 |
| B2-4 | 2% | 1% | 3% | 0.00 | 70% | 56% | 92% | 0.04 | 29% | 6%  | 42% | 0.04 |
| B2-6 | 1% | 1% | 2% | 0.00 | 67% | 54% | 89% | 0.04 | 32% | 10% | 45% | 0.04 |
| B3-1 | 2% | 1% | 3% | 0.00 | 71% | 57% | 94% | 0.04 | 28% | 5%  | 42% | 0.04 |
| B3-2 | 2% | 1% | 2% | 0.00 | 71% | 57% | 94% | 0.04 | 27% | 5%  | 41% | 0.04 |
| B3-3 | 2% | 1% | 2% | 0.00 | 71% | 57% | 94% | 0.04 | 27% | 5%  | 41% | 0.04 |
| B3-4 | 2% | 1% | 3% | 0.00 | 75% | 60% | 98% | 0.04 | 23% | 1%  | 38% | 0.04 |
| B3-5 | 2% | 1% | 4% | 0.00 | 80% | 64% | 98% | 0.04 | 17% | 0%  | 33% | 0.04 |
| B3-6 | 3% | 2% | 4% | 0.00 | 89% | 71% | 98% | 0.04 | 9%  | 0%  | 26% | 0.04 |
| B4-1 | 3% | 2% | 4% | 0.00 | 90% | 73% | 98% | 0.04 | 7%  | 0%  | 24% | 0.04 |
| B4-2 | 3% | 2% | 4% | 0.00 | 90% | 73% | 98% | 0.04 | 7%  | 0%  | 23% | 0.04 |
| B4-3 | 3% | 2% | 5% | 0.00 | 89% | 72% | 98% | 0.04 | 8%  | 0%  | 25% | 0.04 |
| B4-4 | 3% | 2% | 5% | 0.00 | 88% | 71% | 98% | 0.04 | 9%  | 0%  | 26% | 0.04 |
| B4-5 | 2% | 1% | 3% | 0.00 | 72% | 58% | 96% | 0.04 | 26% | 3%  | 40% | 0.04 |
| B4-6 | 2% | 1% | 3% | 0.00 | 73% | 58% | 96% | 0.04 | 26% | 3%  | 40% | 0.04 |
| B5-1 | 2% | 1% | 3% | 0.00 | 73% | 58% | 97% | 0.04 | 25% | 2%  | 40% | 0.04 |
| B5-2 | 2% | 1% | 3% | 0.00 | 73% | 58% | 96% | 0.04 | 26% | 2%  | 40% | 0.04 |
| B5-3 | 2% | 1% | 3% | 0.00 | 73% | 58% | 97% | 0.04 | 26% | 2%  | 40% | 0.04 |
| B5-4 | 2% | 1% | 3% | 0.00 | 75% | 60% | 97% | 0.04 | 24% | 1%  | 38% | 0.04 |
| B5-5 | 3% | 2% | 4% | 0.00 | 89% | 71% | 98% | 0.04 | 9%  | 0%  | 25% | 0.04 |
| B5-6 | 3% | 2% | 4% | 0.00 | 90% | 73% | 98% | 0.04 | 7%  | 0%  | 24% | 0.04 |
| E8-1 | 2% | 1% | 3% | 0.00 | 72% | 57% | 95% | 0.04 | 26% | 3%  | 40% | 0.04 |
| E8-2 | 2% | 1% | 3% | 0.00 | 72% | 57% | 95% | 0.04 | 26% | 3%  | 40% | 0.04 |
| E8-3 | 2% | 1% | 4% | 0.00 | 72% | 58% | 95% | 0.04 | 26% | 3%  | 40% | 0.04 |
| E8-4 | 2% | 1% | 4% | 0.00 | 76% | 61% | 98% | 0.04 | 21% | 0%  | 36% | 0.04 |
| E8-5 | 3% | 2% | 4% | 0.00 | 82% | 65% | 98% | 0.04 | 16% | 0%  | 32% | 0.04 |
| E8-6 | 3% | 2% | 5% | 0.00 | 88% | 70% | 98% | 0.04 | 9%  | 0%  | 26% | 0.04 |
| C1-1 | 2% | 1% | 3% | 0.00 | 70% | 56% | 92% | 0.04 | 28% | 6%  | 42% | 0.04 |

|      |    |    |     |      |     |     |     |      |     |     |     |      |
|------|----|----|-----|------|-----|-----|-----|------|-----|-----|-----|------|
| C1-2 | 2% | 1% | 3%  | 0.00 | 70% | 56% | 93% | 0.04 | 27% | 5%  | 41% | 0.04 |
| C1-3 | 2% | 1% | 3%  | 0.00 | 71% | 57% | 94% | 0.04 | 27% | 4%  | 41% | 0.04 |
| C1-4 | 2% | 1% | 3%  | 0.00 | 74% | 60% | 97% | 0.04 | 23% | 1%  | 38% | 0.04 |
| C1-5 | 2% | 1% | 3%  | 0.00 | 91% | 74% | 99% | 0.04 | 7%  | 0%  | 24% | 0.04 |
| C1-6 | 2% | 1% | 4%  | 0.00 | 92% | 75% | 99% | 0.04 | 6%  | 0%  | 23% | 0.04 |
| C2-1 | 2% | 1% | 3%  | 0.00 | 91% | 74% | 99% | 0.04 | 7%  | 0%  | 24% | 0.04 |
| C2-2 | 2% | 1% | 3%  | 0.00 | 91% | 74% | 99% | 0.04 | 7%  | 0%  | 23% | 0.04 |
| C2-3 | 2% | 1% | 4%  | 0.00 | 84% | 67% | 98% | 0.04 | 14% | 0%  | 30% | 0.04 |
| C2-4 | 2% | 1% | 3%  | 0.00 | 68% | 54% | 90% | 0.04 | 30% | 8%  | 43% | 0.04 |
| C2-6 | 2% | 1% | 3%  | 0.00 | 63% | 50% | 83% | 0.03 | 35% | 15% | 48% | 0.03 |
| C3-1 | 2% | 1% | 3%  | 0.00 | 65% | 52% | 86% | 0.03 | 33% | 13% | 46% | 0.03 |
| C3-2 | 2% | 1% | 3%  | 0.00 | 65% | 52% | 86% | 0.03 | 33% | 12% | 46% | 0.03 |
| C3-3 | 2% | 1% | 3%  | 0.00 | 65% | 52% | 86% | 0.03 | 33% | 13% | 46% | 0.03 |
| C3-4 | 2% | 1% | 3%  | 0.00 | 66% | 53% | 87% | 0.04 | 32% | 11% | 45% | 0.03 |
| C3-5 | 2% | 1% | 3%  | 0.00 | 69% | 55% | 92% | 0.04 | 29% | 7%  | 42% | 0.04 |
| C3-6 | 3% | 2% | 4%  | 0.00 | 92% | 76% | 98% | 0.03 | 5%  | 0%  | 21% | 0.03 |
| C4-1 | 2% | 1% | 4%  | 0.00 | 94% | 78% | 99% | 0.03 | 4%  | 0%  | 19% | 0.03 |
| C4-2 | 2% | 1% | 4%  | 0.00 | 93% | 77% | 98% | 0.03 | 5%  | 0%  | 20% | 0.03 |
| C4-3 | 2% | 1% | 4%  | 0.00 | 91% | 73% | 98% | 0.04 | 7%  | 0%  | 24% | 0.04 |
| C4-4 | 3% | 1% | 4%  | 0.00 | 87% | 70% | 98% | 0.04 | 10% | 0%  | 27% | 0.04 |
| C4-5 | 1% | 1% | 2%  | 0.00 | 77% | 61% | 99% | 0.04 | 22% | 0%  | 37% | 0.04 |
| C4-6 | 1% | 1% | 2%  | 0.00 | 77% | 61% | 99% | 0.04 | 22% | 0%  | 37% | 0.04 |
| C5-1 | 1% | 1% | 3%  | 0.00 | 80% | 64% | 99% | 0.04 | 19% | 0%  | 34% | 0.04 |
| C5-2 | 1% | 1% | 2%  | 0.00 | 80% | 64% | 99% | 0.04 | 19% | 0%  | 34% | 0.04 |
| C5-3 | 1% | 1% | 2%  | 0.00 | 80% | 64% | 99% | 0.04 | 19% | 0%  | 34% | 0.04 |
| C5-4 | 1% | 1% | 3%  | 0.00 | 80% | 64% | 99% | 0.04 | 19% | 0%  | 34% | 0.04 |
| C5-5 | 3% | 2% | 5%  | 0.00 | 87% | 70% | 97% | 0.04 | 10% | 0%  | 26% | 0.04 |
| C5-6 | 4% | 2% | 5%  | 0.00 | 91% | 74% | 97% | 0.03 | 5%  | 0%  | 22% | 0.03 |
| C6-1 | 3% | 2% | 4%  | 0.00 | 93% | 78% | 98% | 0.03 | 4%  | 0%  | 19% | 0.03 |
| C6-2 | 3% | 2% | 4%  | 0.00 | 93% | 78% | 98% | 0.03 | 4%  | 0%  | 19% | 0.03 |
| C6-3 | 3% | 2% | 4%  | 0.00 | 93% | 78% | 98% | 0.03 | 4%  | 0%  | 19% | 0.03 |
| C6-4 | 3% | 2% | 4%  | 0.00 | 92% | 75% | 98% | 0.03 | 5%  | 0%  | 21% | 0.03 |
| C6-5 | 2% | 1% | 3%  | 0.00 | 81% | 65% | 99% | 0.04 | 17% | 0%  | 33% | 0.04 |
| C6-6 | 1% | 1% | 2%  | 0.00 | 47% | 38% | 63% | 0.03 | 51% | 36% | 61% | 0.03 |
| E1-1 | 4% | 3% | 6%  | 0.00 | 75% | 60% | 96% | 0.04 | 21% | 0%  | 36% | 0.04 |
| E1-2 | 4% | 3% | 6%  | 0.00 | 75% | 60% | 96% | 0.04 | 21% | 1%  | 36% | 0.04 |
| E1-3 | 4% | 3% | 6%  | 0.00 | 75% | 60% | 95% | 0.04 | 20% | 0%  | 35% | 0.04 |
| E1-4 | 6% | 5% | 9%  | 0.00 | 76% | 60% | 95% | 0.04 | 18% | 0%  | 33% | 0.04 |
| E1-5 | 8% | 6% | 11% | 0.01 | 77% | 61% | 93% | 0.04 | 15% | 0%  | 31% | 0.04 |
| E1-6 | 8% | 6% | 11% | 0.01 | 78% | 61% | 93% | 0.04 | 14% | 0%  | 30% | 0.04 |
| D1-1 | 3% | 2% | 4%  | 0.00 | 70% | 56% | 93% | 0.04 | 27% | 5%  | 41% | 0.04 |
| D1-2 | 3% | 2% | 4%  | 0.00 | 71% | 57% | 94% | 0.04 | 26% | 4%  | 40% | 0.04 |
| D1-3 | 3% | 2% | 5%  | 0.00 | 72% | 58% | 96% | 0.04 | 24% | 1%  | 39% | 0.04 |

|      |    |    |    |      |     |     |     |      |     |     |     |      |
|------|----|----|----|------|-----|-----|-----|------|-----|-----|-----|------|
| D1-4 | 3% | 2% | 5% | 0.00 | 74% | 59% | 97% | 0.04 | 22% | 0%  | 37% | 0.04 |
| D1-5 | 4% | 3% | 5% | 0.00 | 76% | 61% | 96% | 0.04 | 20% | 0%  | 35% | 0.04 |
| D1-6 | 5% | 3% | 6% | 0.00 | 79% | 63% | 96% | 0.04 | 17% | 0%  | 32% | 0.04 |
| D2-1 | 4% | 2% | 5% | 0.00 | 85% | 68% | 97% | 0.04 | 12% | 0%  | 28% | 0.04 |
| D2-2 | 4% | 2% | 5% | 0.00 | 85% | 68% | 97% | 0.04 | 12% | 0%  | 28% | 0.04 |
| D2-3 | 3% | 2% | 4% | 0.00 | 80% | 64% | 98% | 0.04 | 18% | 0%  | 33% | 0.04 |
| D2-4 | 2% | 1% | 3% | 0.00 | 68% | 55% | 90% | 0.04 | 30% | 8%  | 43% | 0.04 |
| D2-6 | 2% | 1% | 3% | 0.00 | 67% | 53% | 89% | 0.04 | 31% | 10% | 44% | 0.04 |
| D3-1 | 2% | 1% | 3% | 0.00 | 61% | 49% | 81% | 0.03 | 37% | 18% | 49% | 0.03 |
| D3-2 | 2% | 1% | 2% | 0.00 | 61% | 49% | 81% | 0.03 | 37% | 18% | 49% | 0.03 |
| D3-3 | 2% | 1% | 2% | 0.00 | 61% | 49% | 81% | 0.03 | 37% | 18% | 49% | 0.03 |
| D3-4 | 2% | 1% | 3% | 0.00 | 65% | 52% | 87% | 0.03 | 33% | 12% | 45% | 0.03 |
| D3-5 | 2% | 1% | 3% | 0.00 | 80% | 64% | 98% | 0.04 | 18% | 0%  | 33% | 0.04 |
| D3-6 | 2% | 1% | 4% | 0.00 | 86% | 69% | 98% | 0.04 | 11% | 0%  | 28% | 0.04 |
| D4-1 | 3% | 2% | 4% | 0.00 | 89% | 72% | 98% | 0.04 | 8%  | 0%  | 25% | 0.04 |
| D4-2 | 3% | 2% | 4% | 0.00 | 89% | 72% | 98% | 0.04 | 8%  | 0%  | 25% | 0.04 |
| D4-3 | 3% | 2% | 4% | 0.00 | 89% | 72% | 98% | 0.04 | 8%  | 0%  | 25% | 0.04 |
| D4-4 | 2% | 1% | 3% | 0.00 | 67% | 54% | 89% | 0.04 | 31% | 10% | 44% | 0.04 |
| D4-5 | 2% | 1% | 3% | 0.00 | 63% | 51% | 84% | 0.03 | 35% | 15% | 47% | 0.03 |
| D4-6 | 2% | 1% | 3% | 0.00 | 63% | 50% | 83% | 0.03 | 36% | 15% | 48% | 0.03 |
| D5-1 | 1% | 1% | 2% | 0.00 | 22% | 18% | 30% | 0.01 | 77% | 69% | 81% | 0.01 |
| D5-2 | 1% | 1% | 2% | 0.00 | 31% | 25% | 41% | 0.02 | 68% | 58% | 74% | 0.02 |
| D5-3 | 2% | 1% | 3% | 0.00 | 77% | 62% | 98% | 0.04 | 21% | 1%  | 36% | 0.04 |
| D5-4 | 2% | 1% | 3% | 0.00 | 77% | 62% | 98% | 0.04 | 21% | 1%  | 36% | 0.04 |
| D5-5 | 2% | 1% | 4% | 0.00 | 79% | 64% | 98% | 0.04 | 18% | 0%  | 34% | 0.04 |
| D5-6 | 3% | 1% | 4% | 0.00 | 92% | 75% | 98% | 0.03 | 6%  | 0%  | 22% | 0.03 |
| D6-1 | 3% | 2% | 4% | 0.00 | 91% | 74% | 98% | 0.04 | 6%  | 0%  | 23% | 0.04 |
| D6-2 | 3% | 2% | 4% | 0.00 | 91% | 74% | 98% | 0.04 | 6%  | 0%  | 23% | 0.04 |
| D6-3 | 3% | 2% | 4% | 0.00 | 91% | 74% | 98% | 0.04 | 6%  | 0%  | 23% | 0.04 |
| D6-4 | 3% | 2% | 4% | 0.00 | 88% | 71% | 98% | 0.04 | 9%  | 0%  | 26% | 0.04 |
| D6-5 | 2% | 1% | 3% | 0.00 | 78% | 62% | 98% | 0.04 | 21% | 0%  | 36% | 0.04 |
| D6-6 | 1% | 1% | 1% | 0.00 | 6%  | 5%  | 8%  | 0.00 | 93% | 91% | 95% | 0.00 |
| D7-2 | 1% | 0% | 1% | 0.00 | 0%  | 1%  | 2%  | 0.01 | 98% | 97% | 98% | 0.00 |
| D7-3 | 2% | 1% | 3% | 0.00 | 4%  | 61% | 98% | 0.75 | 23% | 1%  | 37% | 0.04 |
| D7-4 | 2% | 1% | 3% | 0.00 | 4%  | 61% | 98% | 0.76 | 22% | 0%  | 37% | 0.04 |
| D7-5 | 2% | 1% | 3% | 0.00 | 4%  | 63% | 98% | 0.78 | 20% | 0%  | 35% | 0.04 |
| D7-6 | 3% | 2% | 5% | 0.00 | 3%  | 76% | 98% | 0.92 | 5%  | 0%  | 21% | 0.03 |