Table 2. Percentage of wetted dimension and area of moisture redistribution for continuous and pulse irrigation

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment |  | |  | |  | |  | |  | |
|  | CI | PI30-30 | CI | PI30-30 | CI | PI30-30 | CI | PI30-30 | CI | PI30-30 |
| DI-FT-q1 | 0.101 | 0.098 | 0.138 | 0.069 | - | - | 0.318 | 0.159 | - | - |
| DI-MT-q1 | 0.108 | 0.068 | 0.144 | 0.109 | - | - | 0.345 | 0.261 | - | - |
| DI-CT-q1 | 0.146 | 0.085 | 0.144 | 0.155 | - | - | 0.466 | 0.411 | - | - |
| DI-FT-q2 | 0.162 | 0.124 | 0.153 | 0.078 | - | - | 0.268 | 0.224 | - | - |
| DI-MT-q2 | 0.108 | 0.089 | 0.131 | 0.127 | - | - | 0.281 | 0.309 | - | - |
| DI-CT-q2 | 0.144 | 0.157 | 0.146 | 0.168 | - | - | 0.45 | 0.481 | - | - |
| DI-FT-q3 | 0.088 | 0.055 | 0.117 | 0.112 | - | - | 0.261 | 0.234 | - | - |
| DI-MT-q3 | 0.11 | 0.123 | 0.11 | 0.113 | - | - | 0.286 | 0.313 | - | - |
| DI-CT-q3 | 0.163 | 0.085 | 0.132 | 0.209 | - | - | 0.413 | 0.505 | - | - |
| SDI-15-FT-q1 | 0.155 | 0.149 | 0.068 | 0.082 | 0.027 | - | 0.197 | 0.218 | 0.102 | 0.051 |
| SDI-15-MT-q1 | 0.186 | 0.167 | 0.093 | 0.125 | - | - | 0.243 | 0.282 | 0.076 | 0.078 |
| SDI-15-CT-q1 | 0.255 | 0.225 | 0.157 | 0.164 | 0.041 | 0.021 | 0.476 | 0.462 | 0.122 | 0.085 |
| SDI-15-FT-q2 | 0.152 | 0.097 | 0.08 | 0.079 | - | - | 0.202 | 0.192 | 0.057 | 0.028 |
| SDI-15-MT-q2 | 0.171 | 0.111 | 0.092 | 0.085 | - | - | 0.232 | 0.233 | 0.059 | 0.027 |
| SDI-15-CT-q2 | 0.242 | 0.208 | 0.099 | 0.17 | - | 0.015 | 0.381 | 0.461 | 0.072 | 0.031 |
| SDI-15-FT-q3 | 0.128 | 0.1 | 0.07 | 0.074 | - | - | 0.2 | 0.191 | 0.043 | 0.023 |
| SDI-15-MT-q3 | 0.157 | 0.147 | 0.074 | 0.073 | - | - | 0.249 | 0.221 | 0.049 | 0.027 |
| SDI-15-CT-q3 | 0.238 | 0.145 | 0.153 | 0.183 | 0.006 | 0.018 | 0.445 | 0.387 | 0.054 | 0.03 |
| SDI-30-FT-q1 | 0.125 | 0.101 | 0.08 | 0.07 | 0.047 | 0.034 | 0.2 | 0.163 | 0.09 | 0.06 |
| SDI-30-MT-q1 | 0.225 | 0.17 | 0.118 | 0.092 | 0.075 | 0.029 | 0.313 | 0.234 | 0.13 | 0.075 |
| SDI-30-CT-q1 | 0.275 | 0.178 | 0.214 | 0.124 | 0.087 | 0.035 | 0.479 | 0.385 | 0.149 | 0.059 |
| SDI-30-FT-q2 | 0.12 | 0.126 | 0.104 | 0.077 | 0.025 | 0.034 | 0.217 | 0.177 | 0.066 | 0.065 |
| SDI-30-MT-q2 | 0.136 | 0.154 | 0.093 | 0.096 | 0.048 | 0.036 | 0.248 | 0.256 | 0.087 | 0.067 |
| SDI-30-CT-q2 | 0.259 | 0.15 | 0.134 | 0.073 | 0.056 | 0.034 | 0.456 | 0.355 | 0.09 | 0.047 |
| SDI-30-FT-q3 | 0.116 | 0.115 | 0.082 | 0.065 | 0.023 | 0.022 | 0.199 | 0.169 | 0.067 | 0.044 |
| SDI-30-MT-q3 | 0.128 | 0.144 | 0.1 | 0.08 | 0.038 | 0.025 | 0.256 | 0.216 | 0.092 | 0.048 |
| SDI-30-CT-q3 | 0.217 | 0.165 | 0.119 | 0.074 | 0.049 | 0.021 | 0.503 | 0.348 | 0.106 | 0.03 |
| Note: DI: surface drip irrigation; SDI: subsurface drip irrigation. | | | | | | | | | | |

Table 3. Percentage of wetted dimension and area of moisture redistribution for pulse irrigation

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment |  | |  | |  | |  | |  | |
|  | PI40-20 | PI20-40 | PI40-20 | PI20-40 | PI40-20 | PI20-40 | PI40-20 | PI20-40 | PI40-20 | PI20-40 |
| DI-FT-q1 | 0.09 | 0.043 | 0.118 | 0.099 | - | - | 0.265 | 0.19 | - | - |
| DI-MT-q1 | 0.089 | 0.052 | 0.161 | 0.079 | - | - | 0.322 | 0.192 | - | - |
| DI-CT-q1 | 0.147 | 0.057 | 0.191 | 0.131 | - | - | 0.482 | 0.333 | - | - |
| DI-FT-q2 | 0.044 | 0.068 | 0.18 | 0.11 | - | - | 0.278 | 0.193 | - | - |
| DI-MT-q2 | 0.056 | 0.05 | 0.127 | 0.105 | - | - | 0.288 | 0.208 | - | - |
| DI-CT-q2 | 0.095 | 0.109 | 0.229 | 0.104 | - | - | 0.515 | 0.29 | - | - |
| DI-FT-q3 | 0.076 | 0.079 | 0.131 | 0.068 | - | - | 0.258 | 0.171 | - | - |
| DI-MT-q3 | 0.09 | 0.077 | 0.134 | 0.095 | - | - | 0.319 | 0.234 | - | - |
| DI-CT-q3 | 0.096 | 0.077 | 0.223 | 0.126 | - | - | 0.526 | 0.329 | - | - |
| SDI-15-FT-q1 | 0.133 | 0.093 | 0.07 | 0.069 | - | 0.031 | 0.174 | 0.16 | 0.068 | 0.056 |
| SDI-15-MT-q1 | 0.141 | 0.091 | 0.096 | 0.073 | 0.029 | 0.018 | 0.208 | 0.166 | 0.087 | 0.077 |
| SDI-15-CT-q1 | 0.176 | 0.135 | 0.101 | 0.108 | 0.053 | 0.055 | 0.334 | 0.314 | 0.104 | 0.111 |
| SDI-15-FT-q2 | 0.09 | 0.119 | 0.075 | 0.056 | - | - | 0.186 | 0.144 | 0.037 | 0.037 |
| SDI-15-MT-q2 | 0.128 | 0.109 | 0.079 | 0.086 | - | 0.018 | 0.216 | 0.174 | 0.047 | 0.047 |
| SDI-15-CT-q2 | 0.151 | 0.191 | 0.116 | 0.06 | 0.032 | 0.023 | 0.377 | 0.305 | 0.066 | 0.058 |
| SDI-15-FT-q3 | 0.094 | 0.103 | 0.078 | 0.065 | - | - | 0.178 | 0.167 | 0.03 | 0.037 |
| SDI-15-MT-q3 | 0.104 | 0.137 | 0.079 | 0.077 | - | - | 0.203 | 0.194 | 0.032 | 0.041 |
| SDI-15-CT-q3 | 0.162 | 0.19 | 0.1 | 0.081 | 0.014 | 0.017 | 0.361 | 0.261 | 0.07 | 0.063 |
| SDI-30-FT-q1 | 0.138 | 0.122 | 0.065 | 0.063 | 0.046 | 0.035 | 0.191 | 0.154 | 0.111 | 0.072 |
| SDI-30-MT-q1 | 0.152 | 0.133 | 0.132 | 0.075 | 0.054 | 0.052 | 0.254 | 0.161 | 0.126 | 0.088 |
| SDI-30-CT-q1 | 0.351 | 0.231 | 0.122 | 0.106 | 0.056 | 0.053 | 0.347 | 0.315 | 0.121 | 0.106 |
| SDI-30-FT-q2 | 0.107 | 0.128 | 0.056 | 0.077 | 0.032 | 0.039 | 0.155 | 0.164 | 0.066 | 0.078 |
| SDI-30-MT-q2 | 0.163 | 0.151 | 0.059 | 0.065 | 0.034 | 0.039 | 0.174 | 0.178 | 0.062 | 0.084 |
| SDI-30-CT-q2 | 0.238 | 0.179 | 0.093 | 0.101 | 0.044 | 0.049 | 0.306 | 0.29 | 0.094 | 0.079 |
| SDI-30-FT-q3 | 0.115 | 0.105 | 0.059 | 0.054 | 0.044 | 0.033 | 0.166 | 0.141 | 0.078 | 0.069 |
| SDI-30-MT-q3 | 0.127 | 0.115 | 0.068 | 0.075 | 0.035 | 0.038 | 0.189 | 0.185 | 0.084 | 0.06 |
| SDI-30-CT-q3 | 0.265 | 0.174 | 0.07 | 0.111 | 0.036 | 0.042 | 0.317 | 0.208 | 0.061 | 0.091 |
| Note: DI: surface drip irrigation; SDI: subsurface drip irrigation. | | | | | | | | | | |

Table4. Wetted absolute dimension and area of moisture bulb for continuous and pulse irrigation

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment | D+Dre (cm) | | | | V+Vre+Vre-up (cm) | | | | Airr+ Are+ Are-up (m2) | | | |
|  | CI | PI40-20 | PI30-30 | PI 20-40 | CI | PI40-20 | PI30-30 | PI 20-40 | CI | PI40-20 | PI30-30 | PI 20-40 |
| DI-FT-q1 | 46.65 | 45.53 | 47.95 | 45.36 | 36.82 | 38.94 | 34.7 | 36.19 | 0.1871 | 0.1924 | 0.1651 | 0.1697 |
| DI-MT-q1 | 56.84 | 53.47 | 59.52 | 49.56 | 35.04 | 34.44 | 37.24 | 34.14 | 0.1853 | 0.1688 | 0.204 | 0.1768 |
| DI-CT-q1 | 57.45 | 46.97 | 62.67 | 48.02 | 42.26 | 46.14 | 47.02 | 37.12 | 0.245 | 0.2634 | 0.31 | 0.2098 |
| DI-FT-q2 | 67.2 | 70.47 | 56.29 | 61.25 | 36.39 | 43.4 | 44.71 | 41.27 | 0.2167 | 0.2853 | 0.2649 | 0.2517 |
| DI-MT-q2 | 68.42 | 62.22 | 57.75 | 61.33 | 38.85 | 51.11 | 47.52 | 42.94 | 0.2574 | 0.3412 | 0.3055 | 0.2828 |
| DI-CT-q2 | 69.67 | 60.28 | 65.59 | 55.35 | 56.83 | 67.41 | 70.18 | 47.34 | 0.3934 | 0.492 | 0.5329 | 0.357 |
| DI-FT-q3 | 76.16 | 64.84 | 72.31 | 68.42 | 46.59 | 57.5 | 56.79 | 43.97 | 0.3744 | 0.4074 | 0.4035 | 0.3076 |
| DI-MT-q3 | 78 | 62 | 65.92 | 75.67 | 46.82 | 58.9 | 64.37 | 47.71 | 0.3619 | 0.4356 | 0.5191 | 0.3757 |
| DI-CT-q3 | 69.75 | 53.43 | 55.28 | 71.6 | 68.95 | 84.62 | 87.46 | 60.68 | 0.5531 | 0.6777 | 0.7073 | 0.5112 |
| SDI-15-FT-q1 | 55.58 | 55.96 | 58.29 | 57.12 | 40.1 | 41.88 | 50.4 | 37.78 | 0.18 | 0.1949 | 0.2565 | 0.1762 |
| SDI-15-MT-q1 | 59.13 | 63.12 | 64.08 | 71.57 | 41.49 | 39.72 | 54.63 | 38.85 | 0.2077 | 0.2061 | 0.2995 | 0.2149 |
| SDI-15-CT-q1 | 70.13 | 63.28 | 55.93 | 69.19 | 51.66 | 42.73 | 60.4 | 37.25 | 0.3333 | 0.2471 | 0.3834 | 0.2112 |
| SDI-15-FT-q2 | 65.86 | 63.46 | 68.65 | 66.01 | 53.25 | 52.17 | 57.36 | 49.4 | 0.2994 | 0.2877 | 0.3394 | 0.2806 |
| SDI-15-MT-q2 | 66.08 | 77.11 | 63.46 | 75.29 | 54.33 | 53.3 | 61.27 | 48.78 | 0.3213 | 0.3176 | 0.3795 | 0.3107 |
| SDI-15-CT-q2 | 78.11 | 74.02 | 56.97 | 67.57 | 63.27 | 56.01 | 88.53 | 54.51 | 0.4757 | 0.4051 | 0.6035 | 0.3794 |
| SDI-15-FT-q3 | 69.17 | 72.16 | 77.77 | 94.21 | 59.92 | 57.35 | 62.26 | 53.58 | 0.3816 | 0.3606 | 0.4301 | 0.3552 |
| SDI-15-MT-q3 | 79.37 | 80.36 | 75.22 | 86.97 | 83.6 | 58.18 | 66.44 | 53.29 | 0.4183 | 0.4064 | 0.482 | 0.4049 |
| SDI-15-CT-q3 | 80.88 | 93.53 | 71.07 | 76.41 | 82.01 | 85.67 | 98.97 | 63.9 | 0.6484 | 0.5437 | 0.6811 | 0.438 |
| SDI-30-FT-q1 | 54.45 | 57.55 | 51.89 | 52.88 | 42.68 | 42.73 | 47.3 | 39.03 | 0.1845 | 0.1871 | 0.2099 | 0.1721 |
| SDI-30-MT-q1 | 58.47 | 65.78 | 63.52 | 61.67 | 46.2 | 40.43 | 48.49 | 41.03 | 0.2309 | 0.2141 | 0.2409 | 0.2073 |
| SDI-30-CT-q1 | 69.17 | 72.36 | 54.13 | 61.7 | 57.27 | 42.87 | 61.22 | 43.51 | 0.348 | 0.2544 | 0.3281 | 0.2478 |
| SDI-30-FT-q2 | 62.44 | 65.59 | 70.33 | 66.09 | 53.73 | 56.35 | 65.94 | 49.27 | 0.2839 | 0.2917 | 0.3717 | 0.2707 |
| SDI-30-MT-q2 | 73.92 | 70.56 | 69.84 | 77.44 | 58.89 | 53.12 | 68.38 | 52.31 | 0.3646 | 0.3246 | 0.4118 | 0.3242 |
| SDI-30-CT-q2 | 69.32 | 76.25 | 60.41 | 77.52 | 75.3 | 56.85 | 86.28 | 56.25 | 0.5125 | 0.3736 | 0.5566 | 0.4018 |
| SDI-30-FT-q3 | 71 | 76.79 | 74.85 | 77.03 | 66.02 | 62.06 | 69.73 | 59.35 | 0.391 | 0.4186 | 0.4395 | 0.3854 |
| SDI-30-MT-q3 | 85.04 | 86.78 | 75.47 | 83.47 | 69.53 | 63.09 | 73.2 | 59.51 | 0.4778 | 0.4431 | 0.4054 | 0.431 |
| SDI-30-CT-q3 | 93.38 | 72.56 | 57.75 | 74.14 | 87.29 | 75.2 | 83.84 | 70.73 | 0.6568 | 0.4688 | 0.537 | 0.4722 |

Table 5. The coefficients of the suggested models with statistical indices

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model coefficient | | | | | | | | | | | Statistical indices | | |
| ***Surface irrigation system*** | | | | | | | | | | | | | | |
| Eq. (5): Ad | a | a1 | a2 | a3 | a4 | a5 | a6 | a7 | a8 | a9 | MAE | | RMSE | R2 | |
| 1.437 | 0.589 | 0.686 | 0.86 | 0.033 | -0.552 | 0.408 | -0.439 | 0.45 | - | 0.016 | | 0.0146 | 0.95 | |
| ***Subsurface irrigation system*** | | | | | | | | | | | | | | | |
| Eq. (6): Ad | b | b1 | b2 | b3 | b4 | b5 | b6 | b7 | b8 | b9 | MAE | | RMSE | R2 | |
|  | 0.355 | 0.788 | 0.871 | 0.452 | 0.152 | -0.193 | 0.053 | 0.743 | 0.178 | 0.028 | 0.007 | | 0.0107 | 0.96 | |
| Eq. (7): Aup | c | c1 | c2 | c3 | c4 | c5 | c6 | c7 | c8 | c9 | MAE | | RMSE | R2 | |
|  | 0.491 | 0.63 | 0.647 | -0.001 | 0.025 | 0.149 | 0.185 | 0.599 | 0.166 | 0.36 | 0.009 | | 0.013 | 0.9 | |

Table6. Statistical parameters of horizontal and vertical redistribution models for pulse surface drip irrigation

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment | Pulse |  | Wetted Dimension | | | | | | | | | |
|  |  | R2 | |  | MAE (cm) | |  | RMSE (cm) | |  | NS | |
|  |  | Dre | Vre |  | Dre | Vre |  | Dre | Vre |  | Dre | Vre |
| CT | 30-30 | 0.83 | 0.95 |  | 0.43 | 0.58 |  | 0.53 | 0.79 |  | 0.81 | 0.88 |
| CT | 40-20 | 0.96 | 0.97 |  | 0.3 | 0.45 |  | 0.31 | 0.57 |  | 0.95 | 0.97 |
| CT | 20-40 | 0.9 | 0.86 |  | 0.4 | 0.59 |  | 0.48 | 0.71 |  | 0.9 | 0.74 |
| MT | 30-30 | 0.91 | 0.98 |  | 0.47 | 0.37 |  | 0.51 | 0.42 |  | 0.91 | 0.9 |
| MT | 40-20 | 0.93 | 0.94 |  | 0.34 | 0.39 |  | 0.39 | 0.49 |  | 0.93 | 0.83 |
| MT | 20-40 | 0.9 | 0.83 |  | 0.49 | 0.39 |  | 0.53 | 0.5 |  | 0.88 | 0.78 |
| FT | 30-30 | 0.93 | 0.92 |  | 0.48 | 0.47 |  | 0.57 | 0.57 |  | 0.9 | 0.84 |
| FT | 40-20 | 0.97 | 0.92 |  | 0.19 | 0.4 |  | 0.25 | 0.5 |  | 0.95 | 0.89 |
| FT | 20-40 | 0.85 | 0.85 |  | 0.52 | 0.26 |  | 0.59 | 0.3 |  | 0.84 | 0.84 |

Table8. Statistical parameters of horizontal and vertical redistribution models for pulse subsurface drip irrigation

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment | Pulse |  | Wetted Dimension | | | | | | | | | |
|  |  | R2 | |  | MAE (cm) | |  | RMSE (cm) | |  | NS | |
|  |  | Dre | Vre |  | Dre | Vre |  | Dre | Vre |  | Dre | Vre |
| CT-SDI-15 | 30-30 | 0.94 | 0.98 |  | 0.65 | 0.25 |  | 0.78 | 0.27 |  | 0.94 | 0.65 |
| CT-SDI-15 | 40-20 | 0.91 | 0.97 |  | 0.67 | 0.25 |  | 0.82 | 0.3 |  | 0.89 | 0.92 |
| CT-SDI-15 | 20-40 | 0.95 | 0.91 |  | 0.68 | 0.37 |  | 0.82 | 0.4 |  | 0.92 | 0.82 |
| CT-SDI-30 | 30-30 | 0.97 | 0.92 |  | 0.44 | 0.35 |  | 0.53 | 0.46 |  | 0.84 | 0.81 |
| CT-SDI-30 | 40-20 | 0.99 | 0.98 |  | 0.36 | 0.42 |  | 0.37 | 0.45 |  | 0.78 | 0.66 |
| CT-SDI-30 | 20-40 | 0.96 | 0.99 |  | 0.67 | 0.33 |  | 0.83 | 0.36 |  | 0.95 | 0.9 |
| MT-SDI-15 | 30-30 | 0.96 | 0.97 |  | 0.72 | 0.19 |  | 0.82 | 0.24 |  | 0.93 | 0.96 |
| MT-SDI-15 | 40-20 | 0.95 | 0.97 |  | 0.49 | 0.24 |  | 0.62 | 0.28 |  | 0.9 | 0.91 |
| MT-SDI-15 | 20-40 | 0.87 | 0.84 |  | 0.64 | 0.27 |  | 0.83 | 0.36 |  | 0.77 | 0.81 |
| MT-SDI-30 | 30-30 | 0.93 | 0.98 |  | 0.59 | 0.16 |  | 0.7 | 0.22 |  | 0.92 | 0.98 |
| MT-SDI-30 | 40-20 | 0.97 | 0.85 |  | 0.58 | 0.42 |  | 0.66 | 0.48 |  | 0.92 | 0.79 |
| MT-SDI-30 | 20-40 | 0.92 | 0.87 |  | 0.55 | 0.26 |  | 0.69 | 0.35 |  | 0.92 | 0.85 |
| FT-SDI-15 | 30-30 | 0.87 | 0.92 |  | 0.66 | 0.31 |  | 0.79 | 0.33 |  | 0.83 | 0.91 |
| FT-SDI-15 | 40-20 | 0.89 | 0.8 |  | 0.49 | 0.41 |  | 0.63 | 0.45 |  | 0.85 | 0.77 |
| FT-SDI-15 | 20-40 | 0.9 | 0.95 |  | 0.46 | 0.31 |  | 0.59 | 0.35 |  | 0.9 | 0.82 |
| FT-SDI-30 | 30-30 | 0.94 | 0.94 |  | 0.34 | 0.26 |  | 0.52 | 0.31 |  | 0.94 | 0.92 |
| FT-SDI-30 | 40-20 | 0.92 | 0.8 |  | 0.5 | 0.28 |  | 0.55 | 0.33 |  | 0.92 | 0.75 |
| FT-SDI-30 | 20-40 | 0.96 | 0.97 |  | 0.36 | 0.13 |  | 0.42 | 0.17 |  | 0.96 | 0.96 |

Table9. Statistical parameters of wetted area models after irrigation cutoff for pulse subsurface drip irrigation

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment | Pulse |  | Wetted Area | | | | | | | | | |
|  |  | R2 | |  | MAE (m2) | |  | RMSE (m2) | |  | NS | |
|  |  | Are | Are-up |  | Are | Are-up |  | Are | Are-up |  | Are | Are-up |
| CT-SDI-15 | 30-30 | 0.99 | 0.9 |  | 0.0014 | 0.0012 |  | 0.0021 | 0.0013 |  | 0.83 | 0.87 |
| CT-SDI-15 | 40-20 | 0.99 | 0.96 |  | 0.003 | 0.0019 |  | 0.0032 | 0.0022 |  | 0.98 | 0.92 |
| CT-SDI-15 | 20-40 | 0.95 | 0.97 |  | 0.0051 | 0.001 |  | 0.0065 | 0.0012 |  | 0.91 | 0.94 |
| CT-SDI-30 | 30-30 | 0.99 | 0.94 |  | 0.0034 | 0.0019 |  | 0.0044 | 0.0021 |  | 0.82 | 0.72 |
| CT-SDI-30 | 40-20 | 0.96 | 0.97 |  | 0.0035 | 0.0013 |  | 0.0041 | 0.0015 |  | 0.95 | 0.96 |
| CT-SDI-30 | 20-40 | 0.91 | 0.97 |  | 0.0064 | 0.0012 |  | 0.0077 | 0.0013 |  | 0.85 | 0.96 |
| MT-SDI-15 | 30-30 | 0.99 | 0.87 |  | 0.0044 | 0.001 |  | 0.0051 | 0.0013 |  | 0.94 | 0.86 |
| MT-SDI-15 | 40-20 | 0.98 | 0.94 |  | 0.0066 | 0.0008 |  | 0.0074 | 0.001 |  | 0.79 | 0.9 |
| MT-SDI-15 | 20-40 | 0.98 | 0.94 |  | 0.0035 | 0.0009 |  | 0.0039 | 0.001 |  | 0.87 | 0.92 |
| MT-SDI-30 | 30-30 | 0.98 | 0.96 |  | 0.0044 | 0.001 |  | 0.0054 | 0.0011 |  | 0.93 | 0.96 |
| MT-SDI-30 | 40-20 | 0.99 | 0.92 |  | 0.0029 | 0.0013 |  | 0.0036 | 0.0015 |  | 0.94 | 0.91 |
| MT-SDI-30 | 20-40 | 0.96 | 0.89 |  | 0.0036 | 0.0016 |  | 0.0038 | 0.0018 |  | 0.94 | 0.88 |
| FT-SDI-15 | 30-30 | 0.99 | 0.86 |  | 0.0042 | 0.0008 |  | 0.0045 | 0.0011 |  | 0.93 | 0.79 |
| FT-SDI-15 | 40-20 | 0.95 | 0.93 |  | 0.0028 | 0.0008 |  | 0.0033 | 0.0011 |  | 0.93 | 0.8 |
| FT-SDI-15 | 20-40 | 0.97 | 0.9 |  | 0.0041 | 0.0009 |  | 0.0046 | 0.001 |  | 0.85 | 0.85 |
| FT-SDI-30 | 30-30 | 0.98 | 0.94 |  | 0.0041 | 0.0008 |  | 0.0048 | 0.001 |  | 0.9 | 0.93 |
| FT-SDI-30 | 40-20 | 0.96 | 0.96 |  | 0.0025 | 0.0009 |  | 0.0031 | 0.0012 |  | 0.93 | 0.93 |
| FT-SDI-30 | 20-40 | 0.98 | 0.92 |  | 0.0022 | 0.0015 |  | 0.0025 | 0.0017 |  | 0.95 | 0.87 |