

Table S3 Calculation of accuracy indicators for the Logistic model in the chamber

| 15°C, 60% | | | 15°C, 75% | | | 15°C, 85% | | |
|-----------|-------------------|---------------|-----------|-------------------|---------------|-----------|-------------------|---------------|
| Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) |
| 24 | 3.127715012 | 0.000 | 24 | 3.356535344 | 0.000 | 24 | 3.205992318 | 0.000 |
| 48 | 3.825220587 | 0.000 | 48 | 4.118360144 | 0.000 | 48 | 3.920295701 | 0.000 |
| 72 | 4.667549786 | 0.000 | 72 | 5.039436472 | 0.000 | 72 | 4.781868474 | 0.000 |
| 96 | 5.679638134 | 0.000 | 96 | 6.146426647 | 3.770 | 96 | 5.815409011 | 3.479 |
| 120 | 6.88833067 | 4.603 | 120 | 7.467351646 | 4.795 | 120 | 7.047143542 | 4.218 |
| 144 | 8.321387076 | 6.989 | 144 | 9.030137992 | 8.392 | 144 | 8.503665879 | 8.279 |
| 168 | 10.00591631 | 10.133 | 168 | 10.86047768 | 11.022 | 168 | 10.21018781 | 9.987 |
| 192 | 11.96615976 | 12.597 | 192 | 12.97897239 | 13.860 | 192 | 12.18814782 | 12.544 |
| 216 | 14.22062915 | 15.770 | 216 | 15.39768092 | 17.087 | 216 | 14.4522335 | 15.805 |
| 240 | 16.77875334 | 17.917 | 240 | 18.11640411 | 19.171 | 240 | 17.00703982 | 17.835 |
| 264 | 19.63739005 | 21.940 | 264 | 21.11928939 | 23.254 | 264 | 19.843795 | 21.795 |
| 288 | 22.77777563 | 24.853 | 288 | 24.37253809 | 26.205 | 288 | 22.93778343 | 24.301 |
| 312 | 26.16364183 | 28.202 | 312 | 27.82403818 | 29.782 | 312 | 26.24719657 | 28.209 |
| 336 | 29.74122482 | 32.277 | 336 | 31.40552125 | 33.126 | 336 | 29.71405017 | 31.880 |
| 360 | 33.44164981 | 34.283 | 360 | 35.03733503 | 36.439 | 360 | 33.26746946 | 34.258 |
| 384 | 37.18569465 | 37.633 | 384 | 38.63525148 | 38.975 | 384 | 36.82910864 | 37.411 |
| 408 | 40.89033828 | 40.607 | 408 | 42.1181346 | 42.298 | 408 | 40.31989841 | 40.658 |
| 432 | 44.475994 | 43.963 | 432 | 45.41502475 | 44.054 | 432 | 43.66692537 | 42.848 |
| 456 | 47.87312295 | 47.107 | 456 | 48.47037869 | 45.706 | 456 | 46.80920753 | 46.122 |

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|-----------|--------------|-----------|-------------|-------------|-------------|-------------|--------------|-------------|
| 480 | 51.02710862 | 49.964 | 480 | 51.24675349 | 49.064 | 480 | 49.70145732 | 47.754 |
| 504 | 53.90076806 | 52.161 | 504 | 53.7249005 | 52.621 | 504 | 52.31547673 | 50.943 |
| 528 | 56.47447397 | 54.023 | 528 | 55.90178897 | 54.085 | 528 | 54.63938845 | 52.528 |
| 552 | 58.74435173 | 57.270 | 552 | 57.78736126 | 57.092 | 552 | 56.67529255 | 56.088 |
| 576 | 60.71927035 | 59.847 | 576 | 59.40082695 | 58.902 | 576 | 58.43607892 | 57.633 |
| 600 | 62.41736104 | 62.043 | 600 | 60.76712462 | 61.016 | 600 | 59.94205699 | 59.052 |
| 624 | 63.86264651 | 63.537 | 624 | 61.91393335 | 61.897 | 624 | 61.21787863 | 61.203 |
| 648 | 65.08214847 | 64.659 | 648 | 62.86939074 | 63.097 | 648 | 62.29001712 | 62.368 |
| 672 | 66.10363661 | 66.496 | 672 | 63.66051157 | 64.236 | 672 | 63.18488709 | 62.946 |
| 696 | 66.95403135 | 67.957 | 696 | 64.31221013 | 65.370 | 696 | 63.92757062 | 63.931 |
| 720 | 67.65838248 | 68.592 | 720 | 64.84679284 | 65.682 | 720 | 64.54105106 | 64.869 |
| 744 | 68.23930668 | 68.723 | 744 | 65.28378795 | 65.741 | 744 | 65.04583571 | 65.312 |
| 768 | 68.71676223 | 69.348 | 768 | 65.6399982 | 65.979 | 768 | 65.45985372 | 65.701 |
| 792 | 69.10805279 | 69.474 | 792 | 65.92968709 | 66.129 | 792 | 65.79853412 | 66.662 |
| 816 | 69.4279744 | 69.908 | 816 | 66.16483454 | 66.519 | 816 | 66.07499028 | 67.339 |
| 840 | 69.68904129 | 70.649 | 840 | 66.35541809 | 66.808 | 840 | 66.30025821 | 67.751 |
| | | | | | | | | |
| | | | 1.630243789 | 0.212252554 | 0.212252554 | 1.671574881 | 0.223125836 | 0.223125836 |
| 1.4963789 | 0.175041563 | 0.1750416 | 1.557428736 | 0.192408184 | 0.192408184 | 1.670632025 | 0.222880802 | 0.222880802 |
| 1.1906737 | 0.075792766 | 0.0757928 | 1.076083971 | 0.031846162 | 0.031846162 | 1.027136838 | 0.011628305 | 0.011628305 |
| 0.9874557 | -0.005482367 | 0.0054824 | 0.985345462 | -0.00641148 | 0.006411479 | 1.022347833 | 0.009598681 | 0.009598681 |
| 0.9499549 | -0.02229701 | 0.022297 | 0.936456316 | -0.02851248 | 0.028512477 | 0.971605863 | -0.012509873 | 0.012509873 |
| 0.9017599 | -0.044909058 | 0.0449091 | 0.901160619 | -0.0451978 | 0.045197795 | 0.914389668 | -0.03886869 | 0.03886869 |
| 0.9364653 | -0.028508297 | 0.0285083 | 0.944973612 | -0.02458032 | 0.024580319 | 0.953576665 | -0.020644385 | 0.020644385 |

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|-----------|--------------|-----------|-------------|-------------|-------------|-------------|--------------|-------------|
| 0.8950633 | -0.048146259 | 0.0481463 | 0.908200283 | -0.04181837 | 0.041818367 | 0.91047465 | -0.040732142 | 0.040732142 |
| 0.9165144 | -0.037860713 | 0.0378607 | 0.930080924 | -0.03147926 | 0.031479263 | 0.943922283 | -0.025063762 | 0.025063762 |
| 0.9277302 | -0.032578291 | 0.0325783 | 0.934246416 | -0.02953856 | 0.029538559 | 0.930465693 | -0.031299635 | 0.031299635 |
| 0.9214276 | -0.035538797 | 0.0355388 | 0.948068311 | -0.02316037 | 0.023160369 | 0.93205929 | -0.03055646 | 0.03055646 |
| 0.9754697 | -0.010786197 | 0.0107862 | 0.961533934 | -0.01703538 | 0.017035384 | 0.971100327 | -0.0127359 | 0.0127359 |
| 0.9881105 | -0.00519448 | 0.0051945 | 0.991282912 | -0.00380238 | 0.00380238 | 0.984437211 | -0.006811979 | 0.006811979 |
| 1.0069893 | 0.003024848 | 0.0030248 | 0.995757078 | -0.0018466 | 0.001846598 | 0.99169645 | -0.003621241 | 0.003621241 |
| 1.0116668 | 0.005037519 | 0.0050375 | 1.030900315 | 0.013216672 | 0.013216672 | 1.019104408 | 0.00821868 | 0.00821868 |
| 1.016259 | 0.007004391 | 0.0070044 | 1.060481746 | 0.025503197 | 0.025503197 | 1.014907112 | 0.006426296 | 0.006426296 |
| 1.0212723 | 0.009141539 | 0.0091415 | 1.044479368 | 0.018899866 | 0.018899866 | 1.040791928 | 0.017363915 | 0.017363915 |
| 1.0333467 | 0.014246038 | 0.014246 | 1.020988027 | 0.009020649 | 0.009020649 | 1.02693638 | 0.011543539 | 0.011543539 |
| 1.0453751 | 0.019272157 | 0.0192722 | 1.033599009 | 0.014352084 | 0.014352084 | 1.040205387 | 0.017119098 | 0.017119098 |
| 1.0257389 | 0.011036826 | 0.0110368 | 1.012183208 | 0.005259128 | 0.005259128 | 1.010466409 | 0.004521881 | 0.004521881 |
| 1.0145792 | 0.006285973 | 0.006286 | 1.008473041 | 0.003664293 | 0.003664293 | 1.013943156 | 0.006013608 | 0.006013608 |
| 1.0060382 | 0.00261448 | 0.0026145 | 0.995918425 | -0.00177623 | 0.001776233 | 1.01506813 | 0.006495193 | 0.006495193 |
| 1.0051253 | 0.002220207 | 0.0022202 | 1.000273573 | 0.000118795 | 0.000118795 | 1.000239017 | 0.000103791 | 0.000103791 |
| 1.00655 | 0.00283536 | 0.0028354 | 0.996392709 | -0.00156946 | 0.001569459 | 0.998749633 | -0.000543367 | 0.000543367 |
| 0.9940994 | -0.002570169 | 0.0025702 | 0.991048744 | -0.00390498 | 0.003904985 | 1.003795111 | 0.001645076 | 0.001645076 |
| 0.985244 | -0.006456189 | 0.0064562 | 0.98381842 | -0.00708505 | 0.00708505 | 0.999946358 | -2.3297E-05 | 2.3297E-05 |
| 0.9863888 | -0.005951855 | 0.0059519 | 0.987281072 | -0.00555919 | 0.005559189 | 0.994944443 | -0.002201169 | 0.002201169 |
| 0.9929577 | -0.003069242 | 0.0030692 | 0.993045253 | -0.00303096 | 0.00303096 | 0.995924726 | -0.001773485 | 0.001773485 |
| 0.9908917 | -0.003973827 | 0.0039738 | 0.994865744 | -0.00223552 | 0.002235523 | 0.996329641 | -0.001596949 | 0.001596949 |
| 0.994735 | -0.002292606 | 0.0022926 | 0.996991024 | -0.00130875 | 0.001308752 | 0.987044144 | -0.005663424 | 0.005663424 |
| 0.9931294 | -0.002994143 | 0.0029941 | 0.994672734 | -0.00231979 | 0.002319787 | 0.981229158 | -0.008229555 | 0.008229555 |

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|-----------|--------------|--------------|-------------|-------------|--------------|-------------|--------------|--------------|
| 0.9864191 | -0.005938524 | 0.0059385 | 0.993225633 | -0.00295208 | 0.002952081 | 0.978587153 | -0.00940049 | 0.00940049 |
| | Af | 1.049 | | Af | 1.060 | | Af | 1.059 |
| | Bf | 1.002 | | Bf | 1.018 | | Bf | 1.021 |
| | 2.284997336 | 5.2212128 | | 2.376176647 | 5.646215457 | | 2.336409011 | 5.458807068 |
| | 1.332581521 | 1.7757735 | | 2.672684979 | 7.143244999 | | 2.828893542 | 8.002638669 |
| | -0.127111471 | 0.0161573 | | 0.638471325 | 0.407645633 | | 0.224665879 | 0.050474757 |
| | -0.630395799 | 0.3973989 | | -0.16152232 | 0.02608946 | | 0.223187805 | 0.049812796 |
| | -1.549231962 | 2.4001197 | | -0.88069428 | 0.775622415 | | -0.356185514 | 0.12686812 |
| | -1.138357775 | 1.2958584 | | -1.68881908 | 2.852109901 | | -1.353099838 | 1.830879171 |
| | -2.30227662 | 5.3004776 | | -1.05492923 | 1.112875676 | | -0.827960176 | 0.685518054 |
| | -2.074835479 | 4.3049423 | | -2.13471061 | 4.556989378 | | -1.951205002 | 3.80720096 |
| | -2.038135952 | 4.1539982 | | -1.83221191 | 3.357000469 | | -1.362716573 | 1.856996458 |
| | -2.53610851 | 6.4318464 | | -1.95829515 | 3.834919889 | | -1.961470095 | 3.847364935 |
| | -0.8409613 | 0.7072159 | | -1.72027875 | 2.959358979 | | -2.165949832 | 4.691338674 |
| | -0.447438685 | 0.2002014 | | -1.40166497 | 1.964664695 | | -0.990030544 | 0.980160478 |
| | 0.2838105 | 0.0805484 | | -0.33974852 | 0.115429059 | | -0.582224688 | 0.338985588 |
| | 0.512910669 | 0.2630774 | | -0.1794654 | 0.03220783 | | -0.33760159 | 0.113974834 |
| | 0.765914613 | 0.5866252 | | 1.361274754 | 1.853068955 | | 0.818592032 | 0.670092915 |
| | 1.062853065 | 1.1296566 | | 2.76437869 | 7.64178954 | | 0.687540858 | 0.472712432 |
| | 1.73940695 | 3.0255365 | | 2.18235349 | 4.762666757 | | 1.947957321 | 3.794537726 |
| | 2.451307304 | 6.0089075 | | 1.104400497 | 1.219700458 | | 1.372226731 | 1.883006202 |
| | 1.474073948 | 2.172894 | | 1.817188966 | 3.302175737 | | 2.111888445 | 4.460072804 |
| | 0.872520352 | 0.7612918 | | 0.695561257 | 0.483805462 | | 0.587042553 | 0.344618959 |
| | 0.374627709 | 0.1403459 | | 0.499076955 | 0.249077807 | | 0.803578915 | 0.645739073 |

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|--|--------------|-----------|--|-------------|-------------|--|--------------|-------------|
| | 0.32564651 | 0.1060456 | | -0.24904205 | 0.062021943 | | 0.889806986 | 0.791756472 |
| | 0.423515134 | 0.1793651 | | 0.016933354 | 0.000286738 | | 0.014628634 | 0.000213997 |
| | -0.392363391 | 0.153949 | | -0.22760926 | 0.051805974 | | -0.077982881 | 0.00608133 |
| | -1.002768648 | 1.005545 | | -0.57498843 | 0.330611698 | | 0.238887087 | 0.057067041 |
| | -0.933617524 | 0.8716417 | | -1.05778987 | 1.118919406 | | -0.003429381 | 1.17607E-05 |
| | -0.483968316 | 0.2342253 | | -0.83540716 | 0.697905124 | | -0.327948935 | 0.107550504 |
| | -0.631648885 | 0.3989803 | | -0.45721205 | 0.209042855 | | -0.266164295 | 0.070843432 |
| | -0.365780541 | 0.1337954 | | -0.3387518 | 0.114752783 | | -0.24114628 | 0.058151528 |
| | -0.480308935 | 0.2306967 | | -0.19897958 | 0.039592873 | | -0.863665876 | 0.745918745 |
| | -0.959469825 | 0.9205823 | | -0.35436546 | 0.12557488 | | -1.264009725 | 1.597720584 |
| | | | | -0.45258191 | 0.204830386 | | -1.450741794 | 2.104651754 |
| | | 50.608912 | | | 57.25200322 | | | 49.65176782 |
| | RMSE | 1.344 | | RMSE | 1.405 | | RMSE | 1.308 |

| 20°C, 60% | | | 20°C, 75% | | | 20°C, 85% | | |
|-----------|-------------------|---------------|-----------|-------------------|---------------|-----------|-------------------|---------------|
| Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) |
| 24 | 5.715242613 | 0.000 | 24 | 5.382460673 | 0.000 | 24 | 5.064210098 | 0.000 |
| 48 | 7.293613344 | 4.118 | 48 | 6.733671593 | 3.923 | 48 | 6.44692798 | 3.452 |
| 72 | 9.2549271 | 5.634 | 72 | 8.389983234 | 5.303 | 72 | 8.168802107 | 4.031 |
| 96 | 11.66121694 | 9.084 | 96 | 10.40208074 | 7.984 | 96 | 10.29063955 | 6.242 |
| 120 | 14.56768204 | 14.398 | 120 | 12.81981365 | 12.934 | 120 | 12.87179387 | 11.729 |
| 144 | 18.01278129 | 21.239 | 144 | 15.6870869 | 17.496 | 144 | 15.96281739 | 16.232 |
| 168 | 22.00632601 | 24.600 | 168 | 19.03504449 | 21.884 | 168 | 19.59563646 | 21.109 |

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|-----------|--------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|
| 192 | 26.51775659 | 28.533 | 192 | 22.87405696 | 24.965 | 192 | 23.7722661 | 27.174 |
| 216 | 31.46812239 | 33.654 | 216 | 27.18572393 | 29.314 | 216 | 28.45431426 | 31.154 |
| 240 | 36.72972314 | 38.680 | 240 | 31.91680131 | 32.807 | 240 | 33.55659487 | 36.969 |
| 264 | 42.13602581 | 42.220 | 264 | 36.97729606 | 38.626 | 264 | 38.94829639 | 40.882 |
| 288 | 47.50124429 | 46.475 | 288 | 42.24453241 | 41.888 | 288 | 44.46366258 | 45.340 |
| 312 | 52.64513599 | 51.800 | 312 | 47.57361553 | 46.353 | 312 | 49.92113427 | 49.870 |
| 336 | 57.41626898 | 57.303 | 336 | 52.8127487 | 52.488 | 336 | 55.14661536 | 52.844 |
| 360 | 61.70770231 | 59.970 | 360 | 57.82013455 | 56.389 | 360 | 59.99476909 | 57.498 |
| 384 | 65.46225394 | 64.287 | 384 | 62.47859277 | 60.080 | 384 | 64.36310113 | 64.041 |
| 408 | 68.66833848 | 66.962 | 408 | 66.70488399 | 65.669 | 408 | 68.19651396 | 66.188 |
| 432 | 71.34983162 | 70.905 | 432 | 70.45257459 | 70.181 | 432 | 71.48332341 | 68.708 |
| 456 | 73.55390271 | 73.188 | 456 | 73.70918953 | 74.168 | 456 | 74.24584491 | 71.928 |
| 480 | 75.33980149 | 74.866 | 480 | 76.48961128 | 77.572 | 480 | 76.52906891 | 77.090 |
| 504 | 76.77015458 | 76.904 | 504 | 78.82795296 | 80.004 | 504 | 78.39012246 | 80.403 |
| 528 | 77.90512499 | 78.666 | 528 | 80.76970006 | 80.872 | 528 | 79.88996558 | 81.610 |
| 552 | 78.79907445 | 79.698 | 552 | 82.36519274 | 83.027 | 552 | 81.08770029 | 82.399 |
| 576 | 79.49909184 | 81.566 | 576 | 83.66484764 | 83.173 | 576 | 82.03721229 | 82.985 |
| | | | | | | | | |
| 1.7713694 | 0.248309129 | 0.2483091 | 1.716678545 | 0.234688979 | 0.234688979 | 1.867592115 | 0.271282032 | 0.271282032 |
| 1.6426921 | 0.21555616 | 0.2155562 | 1.582120165 | 0.199239466 | 0.199239466 | 2.026411405 | 0.306727621 | 0.306727621 |
| 1.2837801 | 0.108490654 | 0.1084907 | 1.302865824 | 0.114899692 | 0.114899692 | 1.648612552 | 0.217118602 | 0.217118602 |
| 1.0117851 | 0.005088285 | 0.0050883 | 0.991184386 | -0.00384555 | 0.003845548 | 1.09745658 | 0.040387347 | 0.040387347 |
| 0.8481193 | -0.071543065 | 0.0715431 | 0.896609905 | -0.04739647 | 0.047396468 | 0.983431693 | -0.0072558 | 0.0072558 |
| 0.8945661 | -0.048387565 | 0.0483876 | 0.869808971 | -0.06057612 | 0.060576117 | 0.928296195 | -0.03231343 | 0.03231343 |

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|-----------|--------------|-----------------|-------------|-------------|--------------------|-------------|--------------|--------------------|
| 0.9293715 | -0.031810657 | 0.0318107 | 0.916255216 | -0.03798354 | 0.03798354 | 0.874824641 | -0.058078993 | 0.058078993 |
| 0.9350485 | -0.02916586 | 0.0291659 | 0.927398161 | -0.03273377 | 0.03273377 | 0.913343849 | -0.039365692 | 0.039365692 |
| 0.949571 | -0.022472553 | 0.0224726 | 0.97285735 | -0.01195084 | 0.011950836 | 0.90769959 | -0.042057861 | 0.042057861 |
| 0.998011 | -0.000864658 | 0.0008647 | 0.957316214 | -0.01894459 | 0.018944586 | 0.952700367 | -0.021043668 | 0.021043668 |
| 1.0220761 | 0.009483251 | 0.0094833 | 1.008510227 | 0.003680307 | 0.003680307 | 0.980662858 | -0.008480273 | 0.008480273 |
| 1.0163088 | 0.007025697 | 0.0070257 | 1.026336733 | 0.011289873 | 0.011289873 | 1.001035388 | 0.000449431 | 0.000449431 |
| 1.0019767 | 0.000857608 | 0.0008576 | 1.006187104 | 0.002678747 | 0.002678747 | 1.043570536 | 0.018521809 | 0.018521809 |
| 1.0289705 | 0.012402913 | 0.0124029 | 1.025386748 | 0.0108877 | 0.0108877 | 1.043423582 | 0.018460648 | 0.018460648 |
| 1.0182814 | 0.007867795 | 0.0078678 | 1.039929566 | 0.017003926 | 0.017003926 | 1.005029608 | 0.002178856 | 0.002178856 |
| 1.0254822 | 0.010928123 | 0.0109281 | 1.015771315 | 0.006795944 | 0.006795944 | 1.030353374 | 0.012986198 | 0.012986198 |
| 1.0062736 | 0.002716091 | 0.0027161 | 1.003866453 | 0.001675941 | 0.001675941 | 1.040395541 | 0.017198482 | 0.017198482 |
| 1.0049995 | 0.002165842 | 0.0021658 | 0.993817997 | -0.00269314 | 0.002693143 | 1.032224515 | 0.013774169 | 0.013774169 |
| 1.0063287 | 0.002739842 | 0.0027398 | 0.986046657 | -0.00610253 | 0.006102535 | 0.992721539 | -0.003172555 | 0.003172555 |
| 0.9982661 | -0.000753691 | 0.0007537 | 0.985301515 | -0.00643085 | 0.006430849 | 0.974965144 | -0.011010911 | 0.011010911 |
| 0.9903278 | -0.004221039 | 0.004221 | 0.998731951 | -0.00055106 | 0.000551056 | 0.978929727 | -0.009248483 | 0.009248483 |
| 0.9887167 | -0.004928123 | 0.0049281 | 0.992025693 | -0.00347708 | 0.00347708 | 0.984088961 | -0.00696564 | 0.00696564 |
| 0.9746597 | -0.011146997 | 0.011147 | 1.005913549 | 0.002560658 | 0.002560658 | 0.988575829 | -0.004990012 | 0.004990012 |
| | Af | 1.089794 | | Af | 1.087523261 | | Af | 1.123487374 |
| | Bf | 1.041727 | | Bf | 1.038018349 | | Bf | 1.06992234 |
| | 3.176113344 | 10.087696 | | 2.811171593 | 7.902685727 | | 2.99492798 | 8.969593606 |
| | 3.6209271 | 13.111113 | | 3.086983234 | 9.529465486 | | 4.13763544 | 17.12002704 |
| | 2.577716939 | 6.6446246 | | 2.418080739 | 5.847114461 | | 4.048639549 | 16.3914822 |
| | 0.169682042 | 0.028792 | | -0.11401969 | 0.013000489 | | 1.143043867 | 1.306549283 |
| | -3.225718705 | 10.405261 | | -1.8089131 | 3.2721666 | | -0.26893261 | 0.072324749 |

| | | | | | | | | |
|--|--------------|-----------|--|-------------|-------------|--|--------------|-------------|
| | -2.593673993 | 6.7271448 | | -2.84912218 | 8.117497195 | | -1.513613543 | 2.291025959 |
| | -2.015243411 | 4.061206 | | -2.09066526 | 4.370881239 | | -3.401483902 | 11.57009274 |
| | -2.18587761 | 4.7780609 | | -2.12824829 | 4.529440778 | | -2.699685737 | 7.288303081 |
| | -1.950610191 | 3.8048801 | | -0.89047647 | 0.79294834 | | -3.412238466 | 11.64337135 |
| | -0.083974187 | 0.0070517 | | -1.64870394 | 2.718224671 | | -1.933703606 | 3.739209637 |
| | 1.025994289 | 1.0526643 | | 0.356476856 | 0.127075749 | | -0.876754086 | 0.768697727 |
| | 0.844802653 | 0.7136915 | | 1.220782196 | 1.490309171 | | 0.051634265 | 0.002666097 |
| | 0.113268976 | 0.0128299 | | 0.324748703 | 0.10546172 | | 2.302448691 | 5.301269972 |
| | 1.737368976 | 3.018451 | | 1.431523436 | 2.049259347 | | 2.496769093 | 6.233855906 |
| | 1.175253943 | 1.3812218 | | 2.398953878 | 5.75497971 | | 0.322101134 | 0.10374914 |
| | 1.706338476 | 2.911591 | | 1.035689546 | 1.072652837 | | 2.00901396 | 4.036137093 |
| | 0.444831622 | 0.1978752 | | 0.271352366 | 0.073632106 | | 2.775490076 | 7.703345163 |
| | 0.365902708 | 0.1338848 | | -0.45850491 | 0.210226753 | | 2.317844906 | 5.372405007 |
| | 0.473801488 | 0.2244879 | | -1.08238872 | 1.171565335 | | -0.561097762 | 0.314830698 |
| | -0.133345421 | 0.017781 | | -1.17593593 | 1.382825318 | | -2.012877542 | 4.051675999 |
| | -0.760875008 | 0.5789308 | | -0.10254994 | 0.01051649 | | -1.719534421 | 2.956798624 |
| | -0.899258882 | 0.8086665 | | -0.66208504 | 0.438356599 | | -1.311049706 | 1.718851332 |
| | -2.066908159 | 4.2721093 | | 0.491847644 | 0.241914105 | | -0.948037706 | 0.898775492 |
| | | 74.980015 | | | 61.22220023 | | | 119.8550379 |
| | RMSE | 1.936 | | RMSE | 1.750 | | RMSE | 2.448 |

| 25°C, 60% | | | 25°C, 75% | | | 25°C, 85% | | |
|-----------|-------------------|---------------|-----------|-------------------|---------------|-----------|-------------------|---------------|
| Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) |

| | | | | | | | | |
|-----------|--------------|-----------------|-------------|-------------|--------------------|-------------|--------------|--------------------|
| 24 | 9.644079948 | 5.356 | 24 | 9.410622698 | 4.531 | 24 | 9.675963535 | 7.233 |
| 48 | 15.50291058 | 17.201 | 48 | 16.03904749 | 16.220 | 48 | 16.08076884 | 18.213 |
| 72 | 23.97914685 | 23.939 | 72 | 25.90641434 | 29.239 | 72 | 25.49246371 | 25.446 |
| 96 | 35.16690787 | 38.415 | 96 | 38.82148746 | 40.332 | 96 | 37.84743753 | 38.118 |
| 120 | 48.27133119 | 47.996 | 120 | 53.14971631 | 51.368 | 120 | 51.86837183 | 51.509 |
| 144 | 61.6351812 | 57.783 | 144 | 66.40248686 | 64.975 | 144 | 65.37694247 | 64.621 |
| 168 | 73.47032253 | 75.444 | 168 | 76.75138041 | 77.003 | 168 | 76.48767108 | 77.415 |
| 192 | 82.71156092 | 82.802 | 192 | 83.8151069 | 84.629 | 192 | 84.49715105 | 84.230 |
| | | | | | | | | |
| 1.8006124 | 0.255420234 | 0.2554202 | 2.076941668 | 0.317424299 | 0.317424299 | 1.337798698 | 0.126390769 | 0.126390769 |
| 0.9012796 | -0.045140454 | 0.0451405 | 0.988856566 | -0.0048667 | 0.004866698 | 0.882922005 | -0.054077659 | 0.054077659 |
| 1.0016666 | 0.000723187 | 0.0007232 | 0.886037736 | -0.05254778 | 0.052547781 | 1.001839097 | 0.000797976 | 0.000797976 |
| 0.9154533 | -0.038363828 | 0.0383638 | 0.962539088 | -0.01658162 | 0.016581625 | 0.99289872 | -0.003095049 | 0.003095049 |
| 1.0057435 | 0.002487247 | 0.0024872 | 1.034692889 | 0.014811464 | 0.014811464 | 1.006984206 | 0.003022659 | 0.003022659 |
| 1.0666663 | 0.028028591 | 0.0280286 | 1.021963888 | 0.00943555 | 0.00943555 | 1.011694179 | 0.005049251 | 0.005049251 |
| 0.9738359 | -0.011514199 | 0.0115142 | 0.996735576 | -0.00142004 | 0.00142004 | 0.988016542 | -0.005235784 | 0.005235784 |
| 0.9989078 | -0.00047461 | 0.0004746 | 0.990380373 | -0.00419798 | 0.004197975 | 1.003175655 | 0.001376984 | 0.001376984 |
| | Af | 1.116269 | | Af | 1.128913533 | | Af | 1.058962952 |
| | Bf | 1.056564 | | Bf | 1.07834356 | | Bf | 1.021594729 |
| | 4.288079948 | 18.38763 | | 4.879622698 | 23.81071768 | | 2.443213535 | 5.969292376 |
| | -1.69808942 | 2.8835077 | | -0.18074418 | 0.032668459 | | -2.132356157 | 4.54694278 |
| | 0.039896853 | 0.0015918 | | -3.33208566 | 11.10279487 | | 0.046797042 | 0.002189963 |
| | -3.247842131 | 10.548479 | | -1.51088754 | 2.282781158 | | -0.270687475 | 0.073271709 |
| | 0.275664527 | 0.0759909 | | 1.782091313 | 3.175849447 | | 0.359746825 | 0.129417778 |

| | | | | | | | | |
|--|--------------|--------------|--|-------------|--------------|--|--------------|--------------|
| | 3.852181203 | 14.8393 | | 1.427111863 | 2.036648269 | | 0.755692473 | 0.571071114 |
| | -1.973927467 | 3.8963896 | | -0.25136959 | 0.06318667 | | -0.927703917 | 0.860634558 |
| | -0.090439084 | 0.0081792 | | -0.81410143 | 0.662761141 | | 0.26748438 | 0.071547894 |
| | | 50.641067 | | | 43.1674077 | | | 12.22436817 |
| | RMSE | 3.182 | | RMSE | 2.938 | | RMSE | 1.564 |

| 30°C, 60% | | | 30°C, 75% | | | 30°C, 85% | | |
|-----------|-------------------|---------------|-------------|-------------------|---------------|-------------|-------------------|---------------|
| Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) | Time (h) | Predictive Dt(mm) | Actual Dt(mm) |
| 24 | 9.755764974 | 3.500 | 24 | 9.011068832 | 3.875 | 24 | 9.877477063 | 3.500 |
| 48 | 16.65118876 | 19.961 | 48 | 15.41540814 | 17.249 | 48 | 17.45803705 | 20.567 |
| 72 | 26.99435323 | 29.648 | 72 | 25.1812917 | 27.374 | 72 | 28.96797445 | 31.990 |
| 96 | 40.69923545 | 40.646 | 96 | 38.48550577 | 38.712 | 96 | 43.97963553 | 43.054 |
| 120 | 56.15407642 | 53.992 | 120 | 54.07556666 | 54.323 | 120 | 60.10557129 | 59.190 |
| 144 | 70.71000973 | 70.845 | 144 | 69.42090171 | 66.700 | 144 | 74.18915973 | 73.125 |
| 168 | 82.270733 | 82.858 | 168 | 82.14031822 | 83.718 | 168 | 84.43159327 | 85.567 |
| | | | | | | | | |
| 2.7873614 | 0.445193285 | 0.4451933 | 2.325437118 | 0.3665046 | 0.3665046 | 2.822136304 | 0.450577985 | 0.450577985 |
| 0.8341861 | -0.078737051 | 0.0787371 | 0.89370902 | -0.04880386 | 0.048803859 | 0.848836627 | -0.071175889 | 0.071175889 |
| 0.9104949 | -0.040722476 | 0.0407225 | 0.919898141 | -0.03626026 | 0.036260259 | 0.905521566 | -0.043101202 | 0.043101202 |
| 1.0013097 | 0.000568438 | 0.0005684 | 0.994144114 | -0.00255065 | 0.002550654 | 1.021503363 | 0.009239801 | 0.009239801 |
| 1.0400444 | 0.017051874 | 0.0170519 | 0.995445146 | -0.00198267 | 0.001982667 | 1.01546477 | 0.006664861 | 0.006664861 |
| 0.9980946 | -0.000828308 | 0.0008283 | 1.040793129 | 0.017364417 | 0.017364417 | 1.014552612 | 0.006274573 | 0.006274573 |
| 0.9929084 | -0.003090827 | 0.0030908 | 0.981154808 | -0.00826246 | 0.008262464 | 0.986734247 | -0.005799798 | 0.005799798 |

| | | | | | | | | |
|--|--------------|-----------------|--|-------------|--------------------|--|--------------|--------------------|
| | | | | | | | | |
| | Af | 1.212668 | | Af | 1.171705361 | | Af | 1.215319838 |
| | Bf | 1.118126 | | Bf | 1.098647685 | | Bf | 1.12300814 |
| | 6.255764974 | 39.134595 | | 5.136068832 | 26.37920305 | | 6.377477063 | 40.67221369 |
| | -3.309811239 | 10.95485 | | -1.83339186 | 3.361325711 | | -3.108979616 | 9.665754252 |
| | -2.653646773 | 7.0418412 | | -2.1927083 | 4.807969687 | | -3.022400546 | 9.134905061 |
| | 0.053235453 | 0.002834 | | -0.22669423 | 0.051390272 | | 0.925802201 | 0.857109715 |
| | 2.162076423 | 4.6745745 | | -0.24743334 | 0.061223256 | | 0.915362954 | 0.837889338 |
| | -0.134990269 | 0.0182224 | | 2.720901713 | 7.403306134 | | 1.06415973 | 1.13243593 |
| | -0.587600333 | 0.3452742 | | -1.57768178 | 2.489079794 | | -1.135106729 | 1.288467287 |
| | | 62.172192 | | | 44.5534979 | | | 63.58877527 |
| | RMSE | 3.942 | | RMSE | 3.337 | | RMSE | 3.987 |