Fig. 1. Changing **ASHD** trends for C_1 and C_2 when using the flooding scheduling ADMM penalized decoder.

y1 = [20.977242 16.621035 13.303005 10.763525 8.892298 7.624653 6.702944 6.244586 6.008957]; %SNR=2.6

y2 = [16.210931 12.159231 9.155620 6.998545 5.532743 4.645973 4.021555 3.593566 3.317269]; %SNR=2.8

y3 = [12.130276 8.587258 6.152098 4.582397 3.610721 3.022769 2.654856 2.416265 2.280759]; %SNR=3.0

y4 = [9.102883 6.094420 4.195115 3.056551 2.470527 2.118101 1.942734 1.856374 1.806290]; %SNR=3.2

y5 = [6.592309 4.183188 2.780435 2.039558 1.641379 1.437501 1.359042 1.341803 1.376031]; %SNR=3.4

y6 = [4.647565 2.801340 1.839906 1.371228 1.140607 1.029995 0.979912 0.984743 1.012525]; %SNR=3.6

y20 = [36.671861 33.6398556 31.069038 28.706821 26.581368 24.700165 23.184575 22.073038 21.020276]; %SNR=2.8

y21 = [28.242493 24.713532 21.715004 19.108403 16.934848 15.110811 13.598258 12.326266 11.734466]; %SNR=3.0

y22 = [23.016866 19.421149 16.418309 13.859238 11.830390 10.138958 8.952509 8.208708 7.793802]; %SNR=3.2

y23 = [16.456897 13.241981 10.694260 8.762383 7.243205 6.107219 5.304351 4.621768 4.110924]; %SNR=3.4

y24 = [11.674937 8.820611 6.694977 5.128063 4.054019 3.320249 2.850497 2.535925 2.390851]; %SNR=3.6

y25 = [8.130032 5.805094 4.229502 3.140378 2.474363 2.050693 1.792535 1.619850 1.523813]; %SNR=3.8

Fig. 2. Changing **ASHD** trends for C_1 and C_2 when using the layered scheduling ADMM penalized decoder.

y1 = [21.001215 16.730216 13.413074 10.852589 9.000027 7.733015 6.799985 6.358075 6.110895]; %SNR=2.6

y2 = [16.301109 12.261224 9.388621 7.102821 5.629053 4.751041 4.112572 3.601132 3.401056]; %SNR=2.8

y3 = [12.212306 8.690252 6.261098 4.691211 3.709979 3.112238 2.760834 2.509967 2.459986]; %SNR=3.0

y4 = [9.199898 6.200124 4.211123 3.110213 2.581023 2.219310 2.027375 1.941239 1.948767]; %SNR=3.2

y5 = [6.611306 4.279885 2.879789 2.145510 1.747958 1.543811 1.404183 1.358012 1.360513]; %SNR=3.4

y6 = [4.755296 2.919492 1.960724 1.486745 1.260797 1.119951 1.017915 0.895864 1.000822]; %SNR=3.6

y20 = [36.869904 33.856231 31.288038 28.902386 26.780905 24.910677 23.400505 22.281773

21.227642]; %SNR=2.8

y21 = [28.443427 24.928604 21.904767 19.300569 17.148241 15.321212 13.782945 12.513022 11.938731]; %SNR=3.0

y22 = [23.220102 19.632292 16.628250 14.040568 12.039148 10.322465 9.157767 8.416754 7.998732]; %SNR=3.2

y23 = [16.678566 13.418895 10.916163 8.971036 7.432534 6.310321 5.5129067 4.834701 4.303794]; %SNR=3.4

y24 = [11.849617 9.006919 6.914859 5.306172 4.246706 3.502143 3.049876 2.749059 2.608280]; %SNR=3.6

y25 = [8.332972 6.087801 4.410846 3.350322 2.664564 2.301093 2.000131 1.799859 1.713806]; %SNR=3.8

Fig. 3. Comparison of FER and ANIs for C_1 when using the flooding scheduling ADMM penalized decoder with different *Thre* values and *Iter*=10.

yzheng = [0.410528 0.283255 0.156389 0.071216 0.034481 0.015126 0.005513 0.002230 0.000933]; % standard ε rule

yHx = [0.435679 0.267737 0.162671 0.074490 0.037466 0.015584 0.005997 0.002012 0.000915]; %Hx=0

y3 = [0.492983 0.305955 0.184438 0.083913 0.044260 0.0181683 0.007320 0.003279 0.001463]; %T=3

y4 = [0.485679 0.307736 0.182663 0.080491 0.043453 0.018084 0.007187 0.003112 0.001375]; %T=4

y5 = [0.480769 0.292721 0.180716 0.078990 0.041960 0.017985 0.006988 0.003012 0.001255]; %T=5

y6 = [0.495776 0.297617 0.178519 0.084090 0.041480 0.018104 0.006489 0.002993 0.001164]; %T=6

y7 = [0.465458 0.277776 0.170655 0.079891 0.039438 0.017064 0.006087 0.002714 0.001109]; %T=7

y8 = [0.462845 0.270361 0.169955 0.078989 0.038959 0.016985 0.005997 0.002621 0.001099]; %T=8

y9 = [0.460068 0.272520 0.167013 0.077012 0.036673 0.0168710 0.005877 0.002573 0.001056]; %T=9

yzheng = [25.754098 23.921444 22.118902 20.176349 18.388486 16.457266 14.856544 13.479669 12.242992]; % standard ε rule

yHx = [29.906694 25.958501 22.165649 18.940558 16.072845 13.720061 12.068665 10.676761 9.628732]; %Hx=0

y3 = [9.557328 10.781582 12.296297 13.013442 13.311867 13.558021 12.066248 10.719284 9.639804]; %T=3

y4 = [10.191233 11.352138 12.806987 13.530001 13.806987 13.478002 12.052138 10.706987 9.640001]; %T=4

y5 = [10.791632 11.892140 13.369976 14.050011 14.753145 13.860011 12.094312 10.659908 9.595009]; %T=5

y6 = [11.592023 12.882129 14.268998 15.345001 15.150146 13.969010 12.084921 10.689710

9.653909]; %T=6

y7 = [12.787931 14.492140 15.190987 16.194991 15.376154 14.069014 12.104911 10.779709 9.635908]; %T=7

y8 = [14.101943 15.252139 15.850875 16.588002 15.770143 14.065899 12.089909 10.769699 9.615899] %T=8

y9 = [14.756139 15.601516 16.48183 16.917810 15.830215 14.011642 12.109813 10.722710 9.624910] %T=9

Fig. 4. Comparison of FER and ANIs for C_1 when using the flooding scheduling ADMM penalized decoder with different *Iter* values and *Thre*=7.

yzheng = [0.410528 0.283255 0.156389 0.071216 0.034481 0.015126 0.005513 0.0022301 0.000933]; % standard ε rule

yHx = [0.435679 0.267737 0.162671 0.074490 0.037466 0.016284 0.005997 0.002012 0.000915]; %Hx=0

y7 = [0.515258 0.296412 0.1739711 0.0874234 0.044730 0.0177712 0.007197 0.003213 0.001324]; %I=7

y8 = [0.495679 0.293737 0.172671 0.084490 0.043466 0.017584 0.006787 0.003012 0.001255]; %I=8

y9 = [0.485984 0.292587 0.171972 0.081891 0.042468 0.017464 0.006887 0.003112 0.001279]; %I=9

y10 = [0.465680 0.277738 0.170669 0.079892 0.039467 0.017065 0.006088 0.002713 0.001109]; %I=10

y11 = [0.440681 0.270741 0.165670 0.075598 0.037470 0.015364 0.005989 0.002193 0.000970]; %I=11

y12 = [0.439999 0.279939 0.165001 0.075090 0.037966 0.015284 0.005897 0.002312 0.000965]; %I=12

y13 = [0.439181 0.274375 0.164419 0.074590 0.037110 0.015237 0.005835 0.002273 0.000962]; %I=13

yzheng = [25.754098 23.921444 22.118902 20.176349 18.388486 16.457266 14.856544 13.479669 12.242992]; % standard ε rule

yHx = [29.906694 25.958501 22.165649 18.940558 16.072845 13.720061 12.068665 10.676761 9.628732]; %Hx=0

y7 = [10.269651 12.001834 13.14519 13.989317 14.008972 13.998143 12.071679 10.711895 9.624318]; %I=7

y8 = [10.766633 12.572138 13.679890 14.400001 14.359995 14.060012 12.056911 10.679709 9.625909]; %I=8

y9 = [11.587933 13.392139 14.489881 15.188012 14.399145 13.869009 12.084912 10.590706 9.622209]; %I=9

y10 = [12.787935 14.492140 15.189772 16.194998 15.376147 14.069010 12.104910 10.779708 9.635908]; %I=10

y11 = [13.667929 14.992141 15.889870 16.465003 15.686150 13.787933 12.069138 10.699979 9.626001]; %I=11

y12 = [14.279899 15.692137 16.482881 16.897992 15.999144 13.799932 12.068937 10.669987

9.625500]; %I=12

y13 = [14.892179 16.110461 16.87564 17.120176 15.917433 13.802132 12.101834 10.671864 9.622211]; %I=13

Fig. 5. Comparison of FER and ANIs for C_2 when using the flooding scheduling ADMM penalized decoder with different *Thre* values and *Iter*=12.

yzheng = [0.263504 0.109709 0.030907 0.010490 0.002832 0.001207 0.000381];% standard ε rule

yHx = [0.279114 0.108049 0.035746 0.010192 0.003150 0.001155 0.000409];%Hx=0

y11 = [0.333228 0.127344 0.043302 0.012991 0.004438 0.001644 0.000665];%T=11

y12 = [0.317837 0.123917 0.041030 0.012598 0.004131 0.001588 0.000627];%T=12

y13 = [0.311524 0.119923 0.039011 0.011903 0.003823 0.001502 0.000560];%T=13

y14 = [0.305179 0.112952 0.037204 0.011375 0.003557 0.001411 0.000518];%T=14

y15 = [0.298103 0.108047 0.035821 0.010992 0.003298 0.001354 0.000467];%T=15

y16 = [0.287831 0.115521 0.034075 0.011301 0.003187 0.001305 0.000446];%T=16

y17 = [0.280134 0.109243 0.034102 0.011982 0.003102 0.001292 0.000438];%T=17

ydzheng = [24.557875 21.674952 19.040981 16.576653 14.401494 12.737839 11.395584];% standard ε rule

ydHx = [27.306647 21.960022 17.631635 14.632148 12.540667 11.059522 9.896200];%Hx=0

yd11 = [15.001019 16.092292 16.139013 14.619442 12.540398 11.061002 9.910733];%T=11

yd12 = [15.517013 16.300297 16.170811 14.621433 12.541203 11.060013 9.914578];%T=12

yd13 = [16.114174 16.508022 16.244978 14.618954 12.540511 11.061078 9.902315];%T=13

yd14 = [16.610041 17.198177 16.327001 14.620032 12.539860 11.061329 9.901988];%T=14

yd15 = [17.012764 17.610103 16.668735 14.619188 12.540787 11.060942 9.899732];%T=15

yd16 = [17.663387 18.101104 16.915571 14.623351 12.541016 11.061093 9.901659];%T=16

yd17 = [18.162833 18.493410 17.154518 14.621445 12.540013 11.060032 9.911543];%T=17

Fig. 6. Comparison of FER and ANIs for C_2 when using the flooding scheduling ADMM penalized decoder with different *Iter* values and *Thre*=15.

yzheng = [0.263504 0.109709 0.030907 0.010490 0.002832 0.001207 0.000381];% standard ε rule

yHx = [0.279114 0.108049 0.035746 0.010192 0.003150 0.001155 0.000409];%Hx=0

y9 = [0.321755 0.120619 0.040013 0.013344 0.004102 0.001734 0.000681];%Ite=9

y10 = [0.309858 0.116867 0.038022 0.012164 0.003987 0.001537 0.000598];%Ite=10

y11 = [0.305931 0.109562 0.036912 0.011875 0.003689 0.001441 0.000539];%Ite=11

y12 = [0.298103 0.108047 0.035821 0.010992 0.003298 0.001354 0.000467];%Ite=12

y13 = [0.282115 0.110051 0.033745 0.010391 0.003001 0.001265 0.000418];%Ite=13

y14 = [0.281132 0.109985 0.033291 0.010293 0.003171 0.001139 0.000410];%Ite=14

y15 = [0.287091 0.108542 0.033415 0.010231 0.003165 0.001124 0.000411];%Ite=15

yzheng = [24.557875 21.674952 19.040981 16.576653 14.401494 12.737839 11.395584];% standard ε rule

yHx = [27.306647 21.960022 17.631635 14.632148 12.540667 11.059522 9.896200];%Hx=0

y9 = [15.594313 16.072238 16.001351 14.625287 12.540102 11.060982 9.907144];%Ite=9

y10 = [16.004291 16.573087 16.260144 14.624896 12.544005 11.061187 9.902741];%Ite=10

y11 = [16.598948 17.100781 16.398627 14.621593 12.540079 11.061003 9.906268];%Ite=11

y12 = [17.012764 17.610103 16.668735 14.619188 12.540787 11.060942 9.899732];%Ite=12

y13 = [17.406550 18.000091 16.989159 14.622151 12.539976 11.061519 9.906199];%Ite=13

y14 = [17.981257 18.431806 17.438876 14.501325 12.541661 11.061621 9.906892];%Ite=14

y15 = [18.494823 18.991001 17.439173 14.602154 12.539863 11.062133 9.902123];%Ite=15

Fig. 7. Comparison of FER and ANIs for C_1 when using the layered scheduling ADMM penalized decoder with different *Thre* values and *Iter*=9.

yzheng = [0.310077 0.220022 0.113250 0.047562 0.023191 0.010280 0.004758 0.002108 0.000820]; % standard ε rule

yHx = [0.325234 0.206656 0.106353 0.050819 0.024723 0.011150 0.004439 0.002252 0.000866]; %Hx=0

y3 = [0.361982 0.263813 0.141173 0.070124 0.031735 0.014894 0.006943 0.003202 0.001601]; %T=3

y4 = [0.353879 0.254870 0.139174 0.068806 0.029878 0.013901 0.006591 0.003008 0.001492]; %T=4

y5 = [0.342921 0.247346 0.135072 0.064987 0.027942 0.013009 0.006110 0.002843 0.001301]; %T=5

y6 = [0.336910 0.241015 0.131140 0.060603 0.026201 0.012545 0.005701 0.002751 0.001115]; %T=6

y7 = [0.329724 0.237133 0.127533 0.058981 0.024677 0.011583 0.005297 0.002521 0.000978]; %T=7,I=9

y8 = [0.322012 0.228644 0.123011 0.057204 0.024201 0.010890 0.004953 0.002452 0.000899]; %T=8

y9 = [0.320044 0.221421 0.121982 0.056643 0.024009 0.010713 0.004885 0.002283 0.000877]; %T=9

ydzheng = [13.629126 12.774278 11.968454 11.309264 10.487286 9.714303 8.912546 8.248977 7.609695]; % standard ε rule

ydHx= [16.228205 14.753096 12.904621 11.046162 9.632152 8.503474 7.527861 6.788413 6.186668]; %Hx=0

y3 = [9.245287 9.739411 9.763139 9.589925 8.950098 8.209273 7.510393 6.800019 6.193458]; %T=3

y4 = [9.564219 9.999127 9.957328 9.600321 8.951147 8.208197 7.511998 6.801095 6.200094]; %T=4

y5 = [9.805123 10.237156 10.229941 9.610539 9.001308 8.110133 7.500110 6.794479 6.195966]; %T=5

y6 = [10.001369 10.502171 10.415024 9.554107 8.894123 8.101754 7.505873 6.793992 6.197715]; %T=6

y7 = [10.471544 10.998194 10.772417 9.944092 9.197651 8.290982 7.499784 6.797940 6.199013]; %T=7

y8 = [10.981301 11.413798 11.297780 10.159804 9.254464 8.322042 7.517528 6.808436 6.209372]; %T=8

y9 = [11.458233 11.776775 11.613302 10.505128 9.465612 8.301023 7.501372 6.800131 6.198223]; %T=9

Fig. 8. Comparison of FER and ANIs for C_1 when using the layered scheduling ADMM penalized decoder with different *Iter* values and *Thre*=7.

yzheng = [0.310077 0.220022 0.113250 0.047562 0.023191 0.010280 0.004758 0.002108 0.000820]; % standard ε rule

yHx = [0.325234 0.206656 0.106353 0.050819 0.024723 0.011150 0.004439 0.002252 0.000866]; %Hx=0

y6 = [0.350082 0.259644 0.136696 0.065722 0.027722 0.013344 0.006389 0.002851 0.001398]; %I=6

y7 = [0.338781 0.250683 0.134397 0.063073 0.026411 0.012983 0.006202 0.002696 0.001295]; %I=7

y8 = [0.350215 0.243611 0.131730 0.061130 0.025714 0.012001 0.005692 0.002605 0.001151]; %I=8

y9 = [0.329724 0.237133 0.127533 0.058981 0.024677 0.011583 0.005297 0.002521 0.000978]; %I=9

y10 = [0.322234 0.232656 0.123253 0.058819 0.023723 0.010950 0.004939 0.002452 0.000856]; %I=10

y11 = [0.318018 0.219498 0.121214 0.057107 0.023698 0.010998 0.004856 0.002286 0.000842]; %I=11

y12 = [0.317809 0.207913 0.120429 0.056310 0.023002 0.010824 0.004780 0.002259 0.000835]; %I=12

ydzheng = [13.629126 12.774278 11.968454 11.309264 10.487286 9.714303 8.912546 8.248977 7.609695]; % standard ε rule

ydHx= [16.228205 14.753096 12.904621 11.046162 9.632152 8.503474 7.527861

6.788413 6.186668]; %Hx=0
y6 = [9.659123 10.187372 9.968673 9.462015 8.831557 8.300110 7.501809 6.800187 6.200154]; %I=6
y7 = [9.899014 10.443177 10.262647 9.659703 9.101750 8.319142 7.510020 6.798847 6.195649]; %I=7
y8 = [10.170653 10.700278 10.553002 9.774208 9.079143 8.299748 7.508348 6.794103 6.190741]; %I=8
y9 = [10.471544 10.998194 10.772417 9.944092 9.197651 8.290982 7.499784 6.797940 6.199013]; %I=9
y10 = [10.887933 11.392138 11.229870 10.195001 9.156145 8.311011 7.497912 6.799708 6.198909]; %I=10
y11 = [11.461387 11.703144 11.501721 10.690314 9.348752 8.330893 7.510201 6.808910 6.209011]; %I=11
y12 = [11.821272 11.991349 11.661873 10.873809 9.381724 8.322018 7.501212 6.803302 6.199087]; %I=12

Fig. 9. Comparison of FER and ANIs for C_2 when using the layered scheduling ADMM penalized decoder with different *Thre* values and *Iter*=11.

yzheng = [0.247008 0.085961 0.022225 0.009102 0.001999 0.000896 0.000299]; % standard ε rule

yHx = [0.258845 0.089189 0.023540 0.008997 0.002264 0.000949 0.000316];%Hx=0

y11 = [0.289001 0.106082 0.035822 0.011112 0.003618 0.001303 0.000463];%T=11

y12 = [0.277543 0.103938 0.034185 0.010993 0.003523 0.001192 0.000438];%T=12

y13 = [0.260923 0.099413 0.032082 0.010249 0.003304 0.001098 0.000409];%T=13

y14 = [0.249916 0.098123 0.030009 0.009988 0.002921 0.001005 0.000360];%T=14

y15 = [0.241145 0.095671 0.028051 0.009602 0.002615 0.000996 0.000342];%T=15

y16 = [0.233746 0.089873 0.026747 0.009013 0.002526 0.000930 0.000319];%T=16

y17 = [0.236654 0.089009 0.025512 0.009156 0.002408 0.000921 0.000315];%T=17

ydzheng = [13.914712 12.319008 10.982767 9.788991 8.813596 7.990437 7.303630];% standard ε rule

ydHx = [14.435860 12.025393 10.135240 8.656272 7.517345 6.756802 6.120864];%Hx=0

y11 = [9.218943 9.593322 9.298018 8.657790 7.490073 6.720013 6.121083];%T=11

y12 = [9.500198 9.870534 9.500412 8.658982 7.507752 6.728432 6.120018];%T=12

y13 = [9.793156 10.110370 9.679431 8.657218 7.509975 6.722149 6.121002];%T=13

y14 = [10.119827 10.528972 9.749563 8.659979 7.510017 6.734273 6.120975];%T=14

y15 = [10.505551 10.797043 9.829176 8.660171 7.487524 6.700021 6.119789];%T=15

y16 = [10.901534 11.100122 10.001182 8.661290 7.520213 6.770923 6.122831];%T=16

y17 = [11.272332 11.390897 10.082924 8.660013 7.498244 6.755259 6.121198];%T=17

Fig. 10. Comparison of FER and ANIs for C_2 when using the layered scheduling ADMM penalized decoder with different *Iter* values and *Thre*=15.

yzheng = [0.247008 0.085961 0.022225 0.009102 0.001999 0.000896 0.000299]; % standard ε rule

yHx = [0.258845 0.089189 0.023540 0.008997 0.002264 0.000949 0.000316];%Hx=0
y8 = [0.269911 0.103015 0.036162 0.011823 0.003424 0.001285 0.000452];%Ite=8
y9 = [0.261192 0.101877 0.034669 0.010724 0.003076 0.001178 0.000417];%Ite=9
y10 = [0.249779 0.100352 0.031983 0.009971 0.002889 0.001059 0.000372];%Ite=10
y11 = [0.241145 0.095671 0.028051 0.009602 0.002615 0.000996 0.000342];%Ite=11
y12 = [0.230145 0.091898 0.025054 0.009343 0.002404 0.000928 0.000302];%Ite=12
y13 = [0.223952 0.087877 0.023998 0.009121 0.002312 0.000910 0.000301];%Ite=13
y14 = [0.229151 0.087002 0.024554 0.009210 0.002294 0.000919 0.000303];%Ite=14

ydzheng = [13.914712 12.319008 10.982767 9.788991 8.813596 7.990437 7.303630];% standard ε rule
ydHx = [14.435860 12.025393 10.135240 8.656272 7.517345 6.756802 6.120864];%Hx=0
y8 = [9.514564 9.720559 9.289043 8.659142 7.492443 6.720122 6.120190];%Ite=8
y9 = [9.773455 10.001382 9.499932 8.657997 7.502325 6.712138 6.120073];%Ite=9
y10 = [10.128742 10.434780 9.669569 8.658753 7.507422 6.722133 6.121777];%Ite=10
y11 = [10.505551 10.797043 9.829176 8.660171 7.487524 6.700021 6.119789];%Ite=11
y12 = [10.899576 11.000414 9.994941 8.652119 7.497233 6.767934 6.119873];%Ite=12
y13 = [11.265432 11.210371 10.099447 8.649177 7.505742 6.760042 6.112482];%Ite=13
y14 = [11.581153 11.390702 10.129129 8.650122 7.500021 6.777207 6.113322];%Ite=14

Fig. 11. Comparison of FER and ANIs for C_1 and C_2 when using the flooding scheduling ADMM penalized decoder with the three terminate methods.

C_1:
y0 = [0.410528 0.283255 0.156389 0.071216 0.034481 0.015126 0.005513 0.002230 0.000933]; % standard ε rule
y1 = [0.435679 0.267737 0.162671 0.074490 0.037466 0.016284 0.005997 0.002012 0.000915]; %Hx=0
y5 = [0.440681 0.270741 0.165670 0.075598 0.037470 0.015364 0.005989 0.002193 0.000970]; %T=7,Ite=11

y10 = [25.754098 23.921444 22.118902 20.176349 18.388486 16.457266 14.856544 13.479669 12.242992]; % standard ε rule
y11 = [29.906694 25.958501 22.165649 18.940558 16.072845 13.720061 12.068665 10.676761 9.628732]; %Hx=0
y15 = [13.667929 14.992141 15.889870 16.465003 15.686150 13.787933 12.069138 10.699979 9.626001]; %T=7,Ite=11

C_2:
y00 = [0.263504 0.109709 0.030907 0.010490 0.002832 0.001207 0.000381];% standard ε rule
y011 = [0.279114 0.108049 0.035746 0.010192 0.003150 0.001155 0.000409];%Hx=0
y015 = [0.282115 0.110051 0.033745 0.010391 0.003001 0.001265 0.000418];%Ite=13,T=15

y100 = [24.557875 21.674952 19.040981 16.576653 14.401494 12.737839 11.395584];% standard ε rule

y111 = [27.306647 21.960022 17.631635 14.632148 12.540667 11.059522 9.896201];%Hx=0

y115 = [17.406550 18.000091 16.989159 14.622151 12.539976 11.061519 9.906199];%Ite=13,T=15

Fig. 12. Comparison of FER and ANIs for C_1 and C_2 when using the layered scheduling ADMM penalized decoder with the three terminate methods.

C_1:

y0 = [0.310077 0.220022 0.113250 0.047562 0.023191 0.010280 0.004758 0.002108 0.000820]; % standard ε rule

y1 = [0.325234 0.206656 0.106353 0.050819 0.024723 0.011150 0.004439 0.002252 0.000866]; %Hx=0

y5 = [0.322234 0.232656 0.123253 0.058819 0.023723 0.010950 0.004939 0.002452 0.000856]; %I=10,T=7

y0 = [13.629126 12.774278 11.968454 11.309264 10.487286 9.714303 8.912546 8.248977 7.609695]; % standard ε rule

y1 = [16.228205 14.753096 12.904621 11.046162 9.632152 8.503474 7.527861 6.788413 6.186668]; %Hx=0

y5 = [10.887933 11.392138 11.229870 10.195001 9.156145 8.311011 7.497912 6.799708 6.198909]; %I=10,T=7

C_2:

y00 = [0.247008 0.085961 0.022225 0.009102 0.001999 0.000896 0.000299]; % standard ε rule

y011 = [0.258845 0.089189 0.023540 0.008997 0.002264 0.000949 0.000316];%Hx=0

y015 = [0.230145 0.091898 0.025054 0.009343 0.002404 0.000928 0.000302];%T=15,Ite=12

y100 = [13.914712 12.319008 10.982767 9.788991 8.813596 7.990437 7.303630];% standard ε rule

y111 = [14.435860 12.025393 10.135240 8.656272 7.517345 6.756802 6.120864];%Hx=0

y115 = [10.899576 11.000414 9.994941 8.652119 7.497233 6.767934 6.119873];%T=15,Ite=12