1800 model-dataset evaluation CMIP5\_ interim\_ CMIP5\_CMCC.CESM\_r1i1p1 CMIP5\_MIROC.ESM.CHEM\_r1i1p1 \_MIROC.ESM.CHEM\_r1i1p1\_rcp85 CMIP5\_MIROC.ESM\_ CMIP5\_MPI.ESM.LR\_r1i1p1\_rcp85 CMIP5\_ CMIP5\_ CMIP5\_ CMIP5\_ CMIP5\_BNU.ESM\_r1i1p1 CMIP5\_ CMIP5 IPSL.CM5A.MR CMIP5\_ IPSL.CM5A.LR 10d\_ 10d\_ GFDL. CMIP5\_CMCC.CESM\_r1i1p1 10d\_akima \_HadGEM2.ES\_ HadGEM2.CC \_10d\_akima\_cubic\_ CMIP5 CMIP5\_NorESM1.M \_EC.EARTH\_r12i1p1 CMIP5\_ \_NorESM1.M\_r1i1p1\_rcp85 CMIP5\_ CNRM.CM5\_r1i1p1 ACCESS1.0 CMIP5\_CanESM2\_r1i1p1 CMCC.CM\_r1i1p1\_ \_akima CanE \_IPSL.CM5A.MR SM1.BGC CMIP5 CM5B.LR \_MIROC5\_r1i1p1 \_IPSL \_IPSL.CM5A.LR\_r1i1p1 CSIRO.Mk3.6.0\_r1i1p1 \_GFDL. CCSM4\_r1i1p1 ESM2M\_r1i1p1 \_HadGEM2.CC ESM2G \_MRI.CGCM3\_r1i1p1 MIROC.ESM. MPI.ESM.LR SM2 GFDL.CM3\_r1i1p1 CMCC.CM \_cubic\_ 10d CM5B.LR MIROC5 \_inmcm4 ESM2M\_r1i1p1 \_r1i1p1\_ \_r1i1p1\_ \_r1i1p1\_ \_r1i1p1\_ \_r1i1p1\_ \_r1i1p1\_ \_r1i1p1\_rcp85 \_r1i1p1\_rcp85 v.exp \_v.exp \_v.exp\_ 0.95 0.75 CMIP5\_IPSL.CM5A.LR\_r1i1p1\_rcp85-30 22 16 17 26 28 22 67 24 18 22 24 21 21 15 16 19 34 16 20 20 25 18 27 20 23 8 14 31 20 18 27 8 22 25 9 25 29 20 29 25 20 22 29 26 14 17 35 18 27 24 31 21 30 29 30 0 3 10 18 23 28 CMIP5 HadGEM2.ES r1j1p1 rcp85- 18 18 12 17 17 19 18 85 16 15 17 16 23 15 12 12 23 20 24 16 16 15 15 35 16 12 19 17 25 27 13 23 9 16 16 10 21 19 17 20 17 17 18 30 18 12 15 28 15 20 25 22 21 20 18 23 2 4 8 13 15 18 CMIP5 MIROC.ESM.CHEM r1i1p1 - 38 22 16 27 22 27 20 235 19 17 21 19 35 21 15 16 43 41 53 20 20 37 10 101 9 30 43 33 33 75 15 39 7 18 20 7 32 27 26 21 37 33 32 47 19 11 24 73 27 29 38 28 66 27 22 32 0 3 9 15 19 24 CMIP5 MIROC.ESM r1i1p1 - 37 22 15 28 21 28 19 247 19 16 21 18 37 20 14 15 40 40 56 20 20 34 9 107 11 28 45 30 34 78 15 40 6 18 19 7 32 26 26 21 33 32 33 46 19 11 23 70 26 28 37 26 65 27 22 33 0 3 8 15 19 24 CMIP5 HadGEM2.CC r1i1p1 rcp85- 18 18 12 17 17 19 17 77 16 15 17 16 23 15 12 12 22 19 23 16 16 13 15 32 16 13 18 16 24 25 14 23 10 16 16 10 20 19 16 20 16 17 18 29 18 12 15 26 15 19 25 21 20 19 18 22 3 5 9 13 15 18 CMIP5 GFDL.ESM2M r1i1p1 rcp85-23 14 13 15 18 19 17 65 17 15 13 17 21 15 12 12 21 26 22 13 11 21 14 30 14 18 17 16 25 24 13 20 8 16 17 9 21 20 16 20 22 16 17 24 18 10 14 29 15 20 20 22 21 21 19 25 1 3 7 12 15 19 CMIP5 GFDL.ESM2G r1i1p1 rcp85-23 13 13 16 18 19 18 66 16 15 14 15 21 16 12 12 22 25 23 10 13 22 14 31 14 19 17 17 25 25 14 19 9 17 16 9 22 21 15 20 22 17 18 24 18 10 14 29 15 21 20 23 22 20 19 26 1 3 7 12 15 18 CMIP5 IPSL.CM5A.LR r1i1p1 - 23 17 14 15 20 20 18 48 18 16 17 18 17 18 13 14 16 25 12 16 17 21 15 20 15 19 11 13 23 16 15 20 10 18 18 10 20 22 16 21 21 16 18 21 20 12 15 26 15 20 18 23 18 22 21 23 2 5 9 14 17 21 CMIP5 HadGEM2.CC r1i1p1 - 16 16 13 16 16 17 16 61 15 15 16 15 20 15 13 13 19 16 20 15 16 16 15 27 15 15 17 16 21 22 14 20 12 15 15 15 12 20 18 16 18 17 16 17 25 17 13 15 23 15 18 22 19 20 17 16 20 5 7 10 13 14 16 CMIP5 IPSL.CM5A.MR r1i1p1 - 21 16 13 15 18 18 16 48 17 15 16 16 17 16 13 13 13 23 15 15 15 19 14 22 15 17 12 12 21 18 14 19 10 16 17 10 18 19 15 16 21 18 12 14 23 14 18 19 21 17 20 19 21 3 5 9 13 16 18 CMIP5 EC.EARTH r1i1p1 rcp85 91 55 9 105 25 104 45 2611 14 35 54 13 177 22 8 8 117 94 218 46 49 70 21 472 23 57 162 69 135 384 15 202 12 18 14 13 156 39 105 38 48 167 171 247 39 32 100 310 102 102 212 32 331 31 27 98 -1 3 9 17 21 27 CMIP5 EC.EARTH r12i1p1 rcp85-94 55 9 89 27 104 44 2757 14 35 55 14 150 23 7 9 107 98 192 46 49 72 21 446 23 59 142 63 126 368 15 198 12 19 14 13 144 38 102 39 48 162 171 219 40 33 105 297 106 94 185 32 313 31 27 94 -2 3 9 17 21 27 CMIP5 CNRM.CM5 r1i1p1 rcp85- 27 22 11 31 14 28 20 273 15 16 22 14 48 11 11 11 36 30 52 20 20 22 14 97 15 19 39 24 41 71 12 47 9 15 15 9 40 21 27 21 22 37 36 68 19 12 22 63 24 31 58 21 62 20 18 33 1 3 8 12 15 18 CMIP5 GFDL.CM3 r1i1p1 - 124 92 25 9 32 224 1163197 31 97 91 30 9 29 26 25 294 115 461 76 78 100 58 812 69 80 325 183 584 613 30 573 47 31 32 41 528 74 280 71 82 359 262 804 67 60 195 643 204 335 636 59 708 90 49 256 6 18 32 50 61 77 CMIP5 EC.EARTH r1i1p1-82 47 10 82 23 89 40 2390 12 32 48 10 134 21 9 10 94 85 177 40 43 65 18 391 20 53 131 56 111 326 15 169 13 17 12 14 134 33 91 32 43 142 150 207 34 30 91 258 85 86 178 27 273 25 22 87 1 4 9 14 18 22 CMIP5 GFDL.ESM2M r1i1p1 - 23 14 13 15 18 19 17 59 17 15 11 17 20 16 13 13 21 25 22 13 13 19 9 16 17 10 21 21 16 21 22 16 17 23 19 11 14 28 15 20 19 22 21 21 19 24 1 3 8 13 15 19 CMIP5\_CanESM2\_r1i1p1\_rcp85-27 20 13 17 20 23 15 102 19 9 19 19 23 17 13 13 26 29 29 17 17 23 15 52 15 20 22 18 27 38 14 25 8 17 19 8 22 22 19 22 22 20 21 28 19 11 16 39 17 22 22 24 30 23 21 25 0 3 9 14 18 22 CMIP5 EC.EARTH r12i1p1-87 50 10 83 23 95 41 2491 11 33 50 11 135 22 10 10 103 89 191 42 45 69 19 424 20 56 145 62 115 349 15 182 13 17 12 14 135 34 94 33 46 148 153 219 35 31 97 272 96 87 188 27 294 26 23 86 1 4 9 15 18 23 CMIP5 inmcm4 r1i1p1 - 20 17 16 16 18 18 18 19 18 17 17 17 18 16 16 18 21 17 17 17 20 17 19 16 17 20 17 18 14 18 18 14 18 20 17 20 20 16 17 18 19 15 16 20 16 18 17 20 17 19 19 20 9 10 13 16 17 18 CMIP5 CanESM2 r1i1p1 - 24 17 13 16 18 20 12 88 17 12 17 17 20 16 13 13 23 26 26 16 16 22 13 45 14 19 21 18 23 33 13 22 8 15 17 9 20 20 17 19 21 18 19 23 17 11 15 33 16 19 19 20 27 21 19 22 2 4 9 13 16 19 CMIP5 MRI.CGCM3 r1i1p1 - 21 16 14 15 17 12 18 50 16 16 15 15 17 17 13 13 20 22 22 15 15 21 14 27 14 18 17 16 11 20 18 15 18 21 14 15 22 17 11 14 23 14 18 18 23 19 18 16 24 2 4 8 12 14 17 CMIP5\_CNRM.CM5\_r1i1p1 - 26 21 12 32 12 26 19 262 14 17 20 14 49 13 11 11 37 28 53 19 19 24 14 94 14 20 39 25 39 70 13 44 10 14 14 10 39 20 27 19 23 35 33 65 18 13 22 61 25 30 56 20 62 19 17 32 2 4 8 12 14 17 CMIP5 GFDL.CM3 r1i1p1 rcp85-149 112 29 7 40 237 1203684 38 97 106 36 13 35 31 30 332 139 549 90 94 124 60 1029 70 97 391 209 559 767 35 607 46 37 40 41 514 85 303 76 100 382 235 868 73 64 198 743 235 333 693 70 823 107 57 294 5 23 39 62 75 93 CMIP5 EC.EARTH r2i1p1 rcp85 95 58 7 100 26 110 47 2707 14 36 58 14 168 23 8 9 119 99 221 49 52 73 22 493 24 60 166 70 144 397 15 216 13 19 14 14 166 39 111 40 50 173 186 264 40 34 107 326 113 109 225 32 348 32 28 102 -1 3 10 18 22 28 CMIP5\_GFDL.ESM2G\_r1i1p1 - 23 11 13 16 17 18 17 62 16 15 13 15 21 16 12 13 21 14 29 14 18 17 16 24 24 14 19 9 16 16 10 21 20 15 20 22 17 17 23 18 11 14 28 15 20 20 22 21 19 18 24 1 4 8 12 14 18 CMIP5\_HadGEM2.ES\_r1i1p1 - 15 16 13 16 16 17 16 57 15 15 16 15 19 15 15 16 15 19 15 15 16 15 19 15 15 16 15 19 15 15 16 15 19 17 20 15 15 14 16 15 21 22 14 20 11 15 15 11 19 18 16 18 17 16 16 24 17 12 14 23 15 18 21 19 19 17 17 20 4 6 9 12 14 16