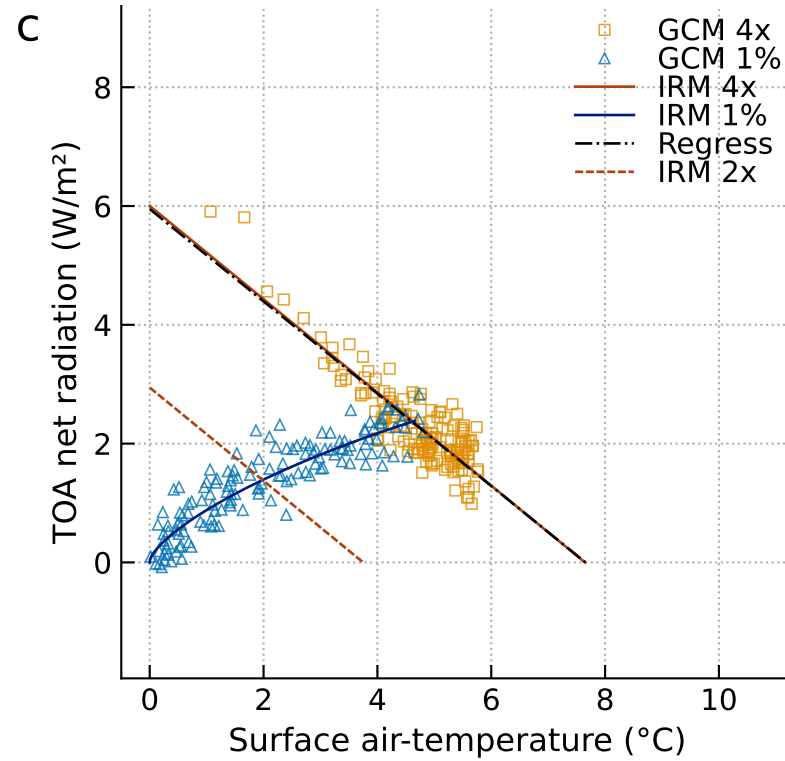
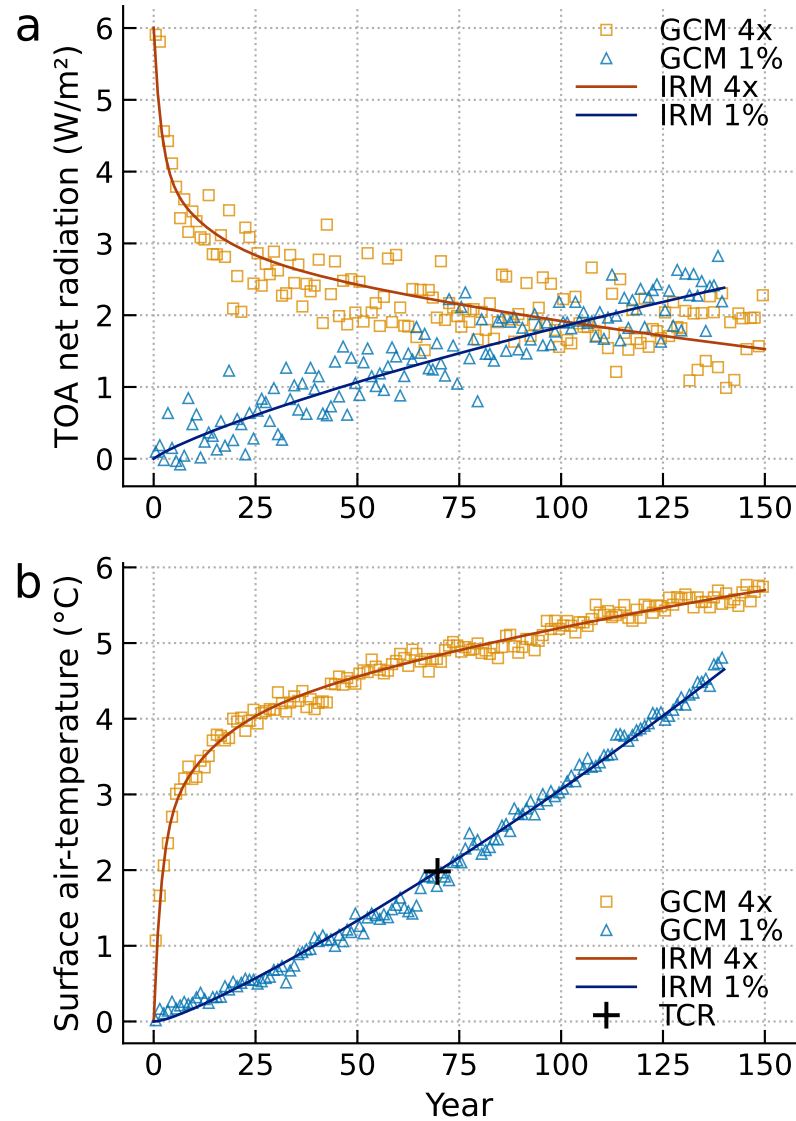
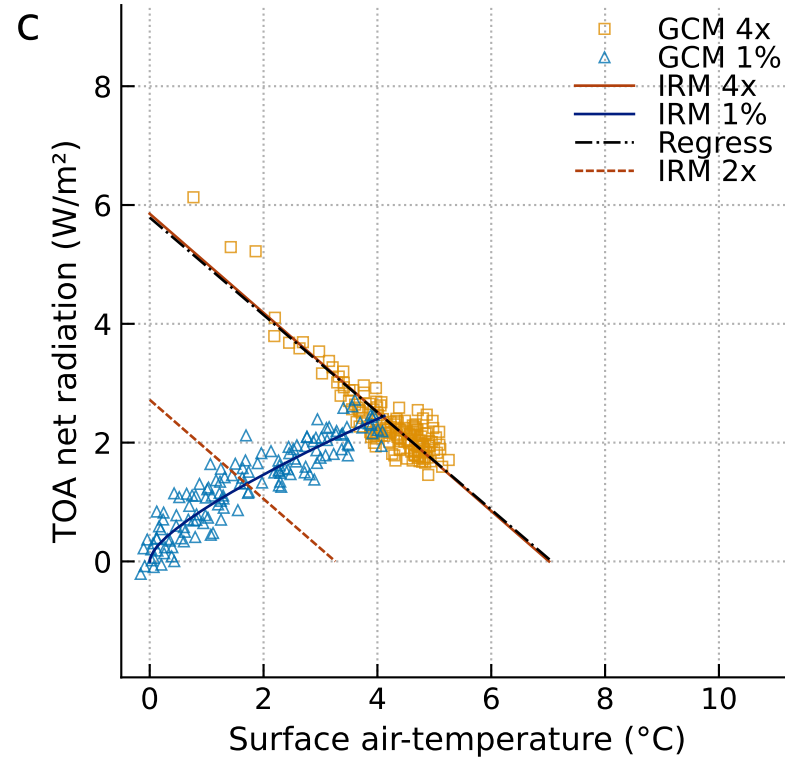
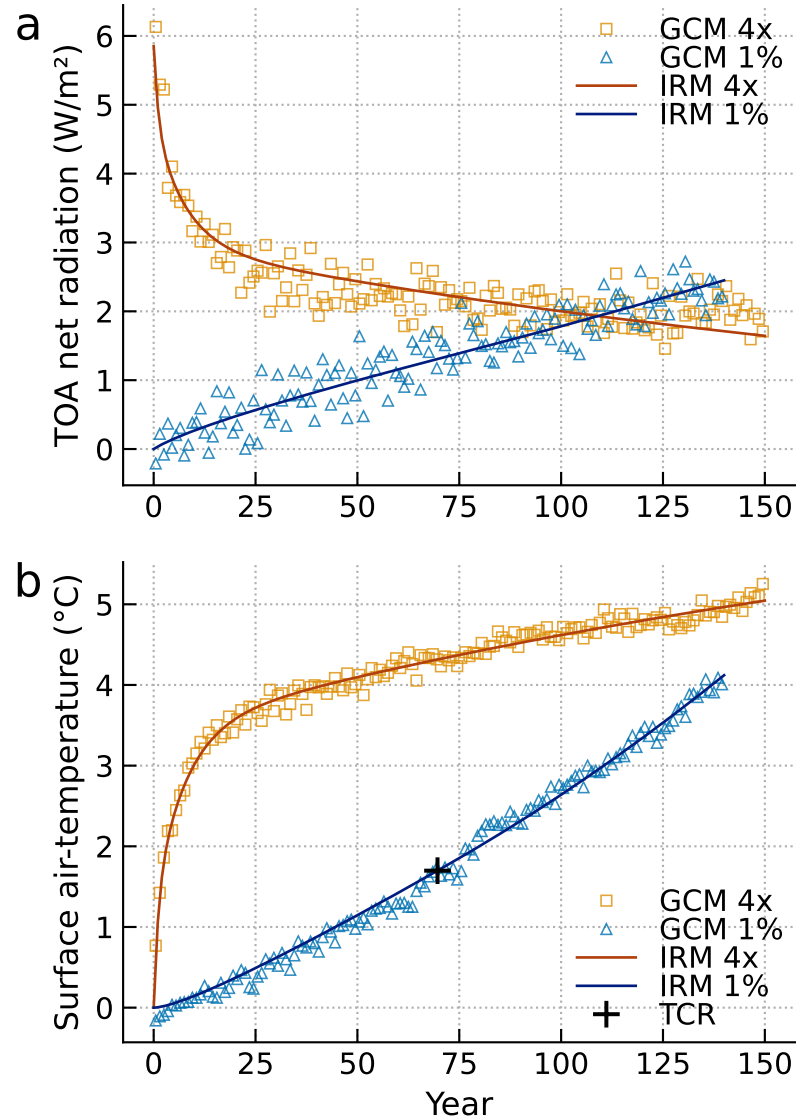


CMIP5, ACCESS1.0



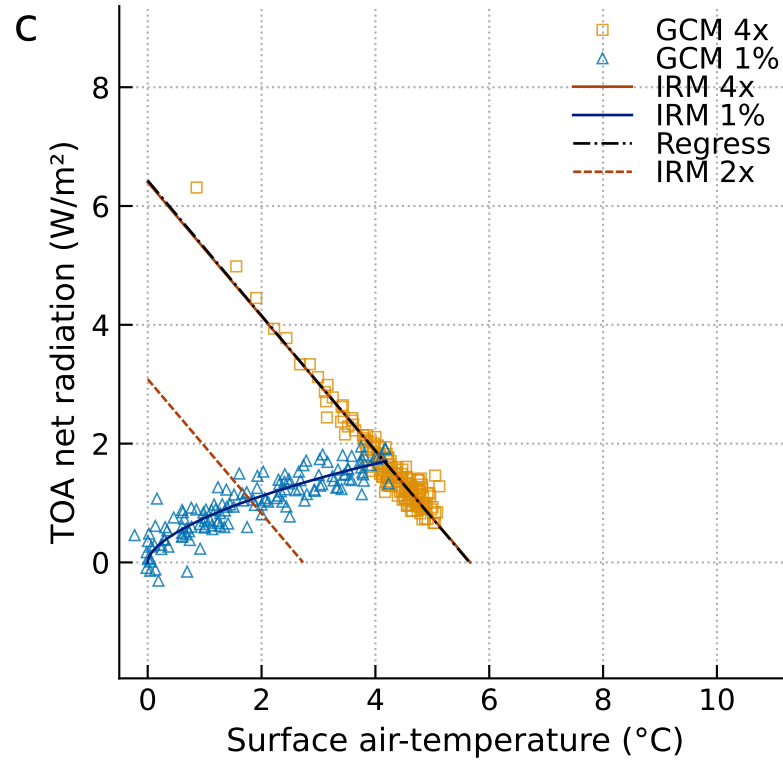
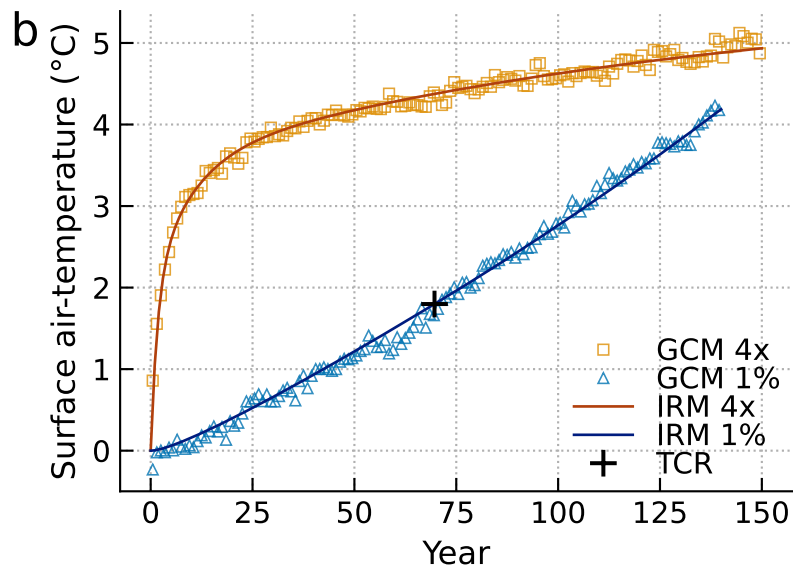
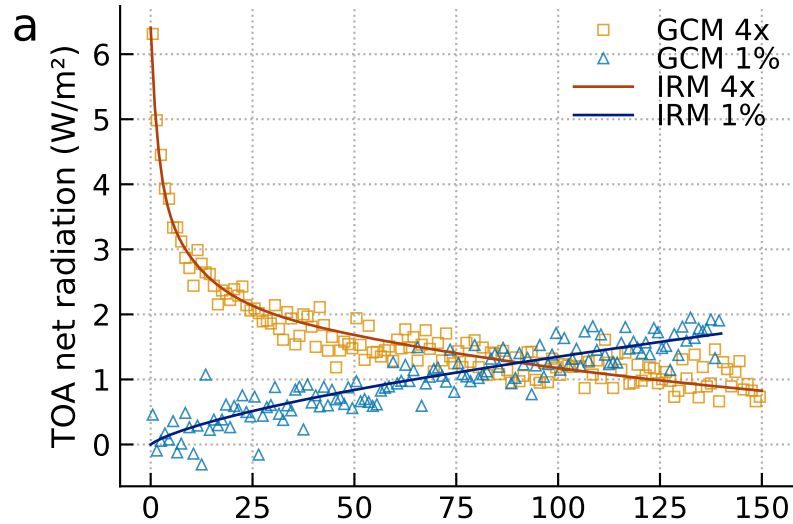
IRM-3 fitted to rtnt and tas of ACCESS1.0
 α : 4.25 W/m^2 , β : 1.02
 τ_0, τ_1, τ_2 : $1.77, 11.9, 220 \text{ y}$
 a_0, a_1, a_2 : $0.31, 0.19, 0.50$
 $\lambda, \lambda(\text{reg})$: $0.78, 0.78 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $3.75, 1.98^{\circ}\text{C}$, rwf : 0.53
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $3.83, 1.92^{\circ}\text{C}$, rwf : 0.50

CMIP5, ACCESS1.3



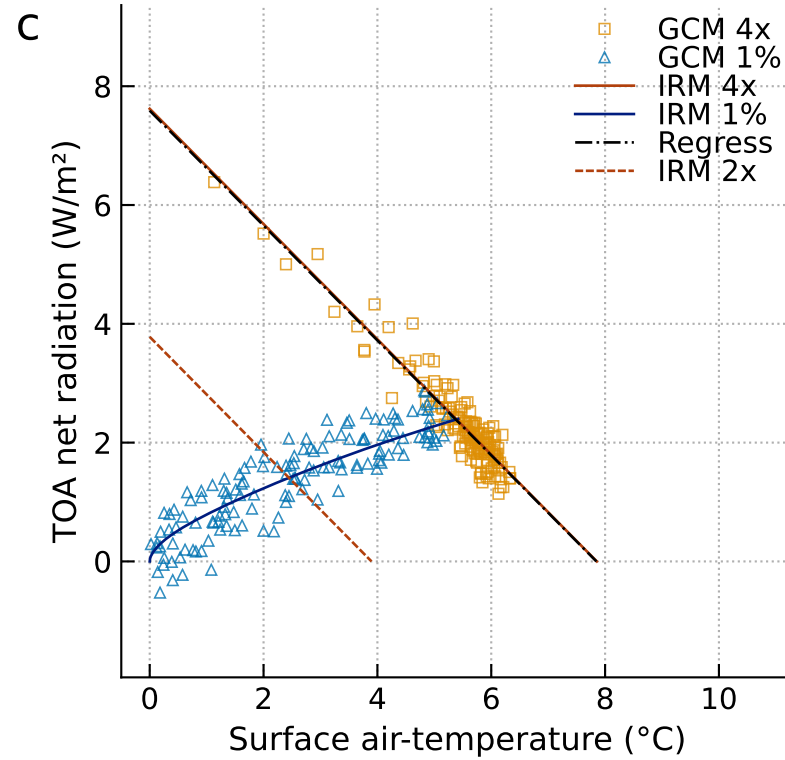
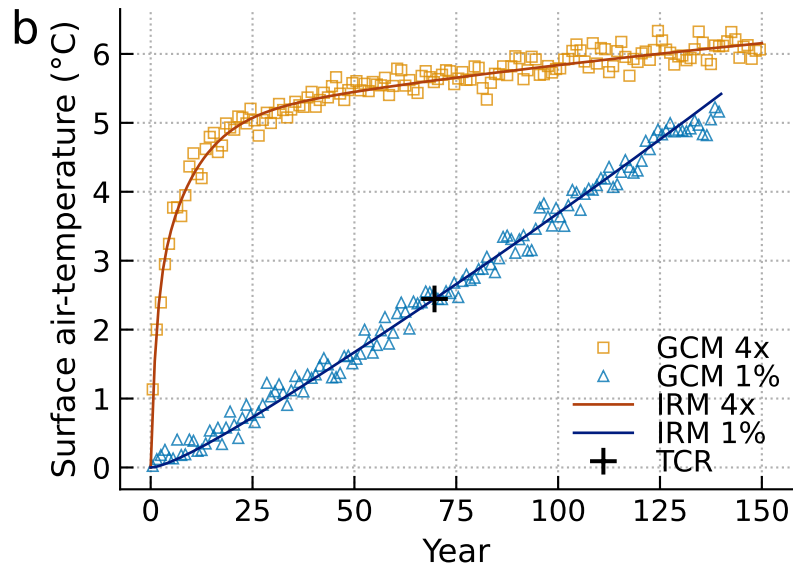
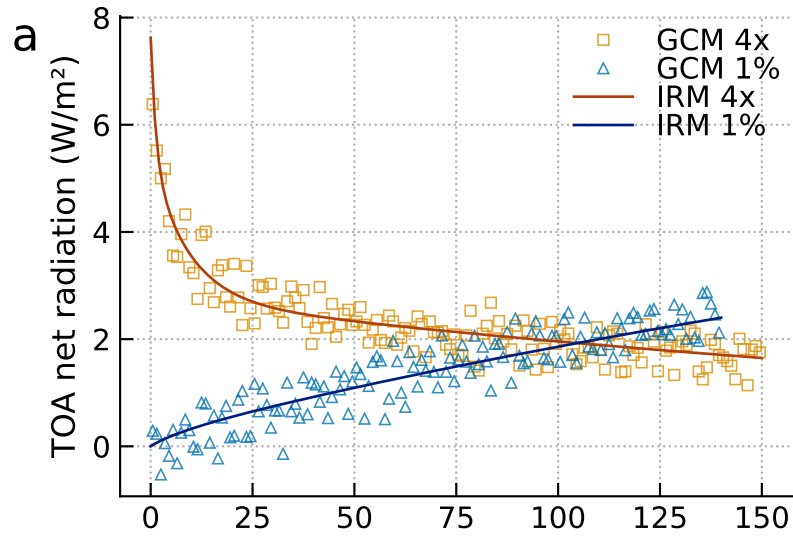
IRM-3 fitted to rtnt and tas of ACCESS1.3
 alpha: 3.93 W/m^2 , beta: 1.08
 tau0, tau1, tau2: 1.08, 7.64, 255 y
 a0, a1, a2: 0.18, 0.31, 0.51
 lambda, lambda(reg): $0.83, 0.82 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.26, 1.70^{\circ}\text{C}$, rwf: 0.52
 ecs(reg), tcr(gcm): $3.53, 1.63^{\circ}\text{C}$, rwf: 0.46

CMIP5, BCC-CSM1.1



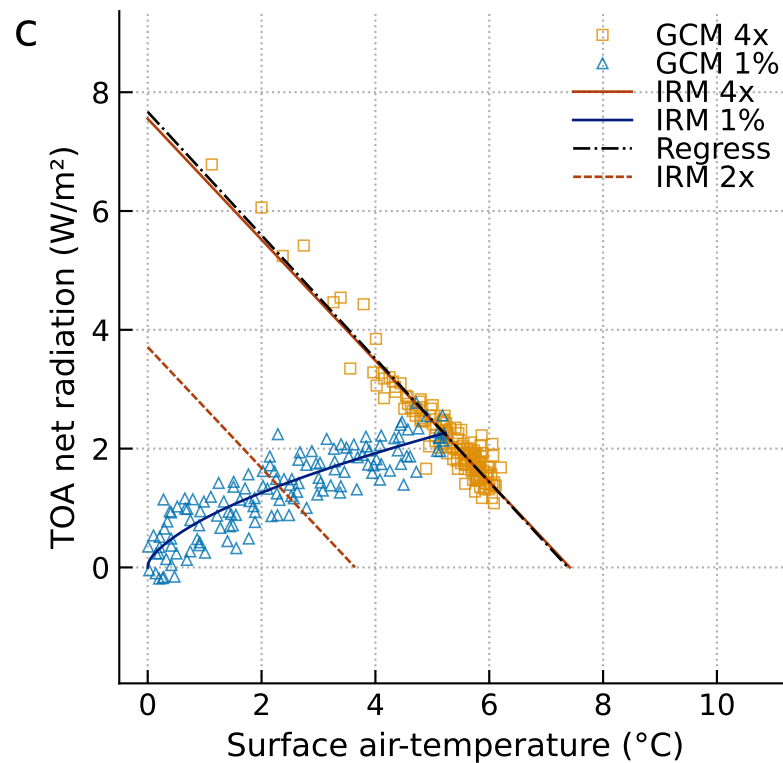
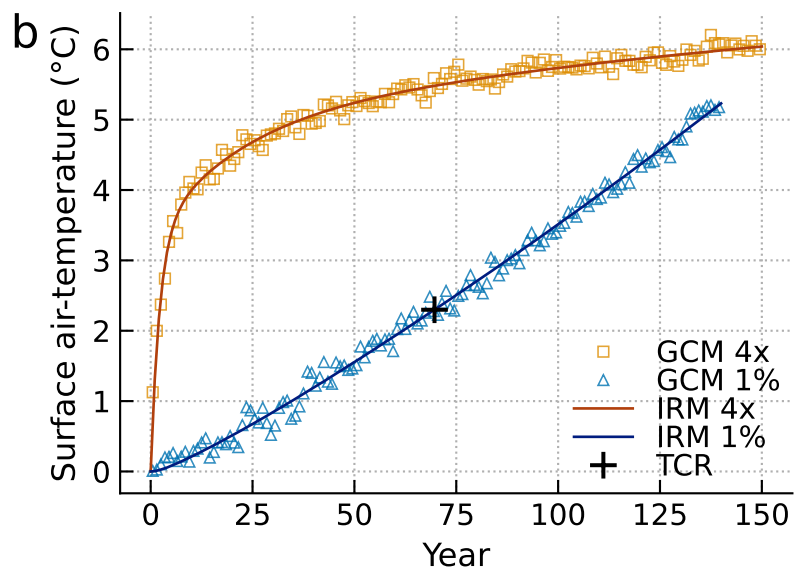
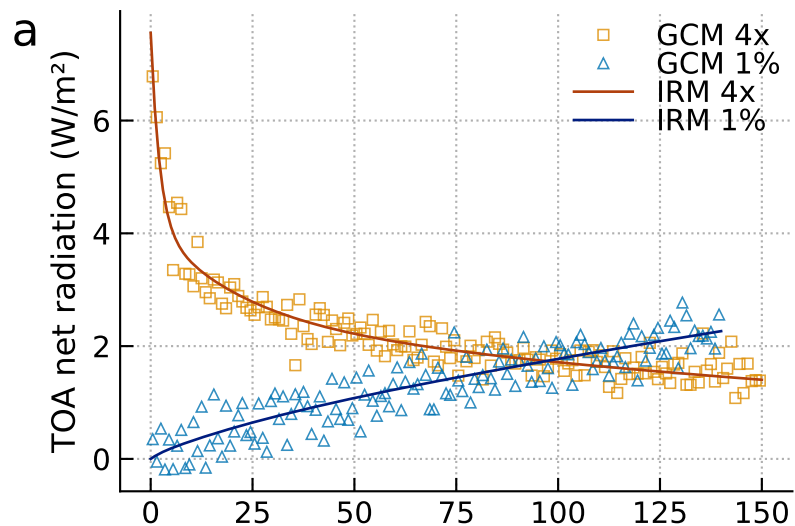
IRM-3 fitted to rtnt and tas of BCC-CSM1.1
 α : 4.45 W/m^2 , β : 1.04
 τ_0 , τ_1 , τ_2 : 1.68, 9.77, 142 y
 a_0 , a_1 , a_2 : 0.35, 0.28, 0.37
 λ , $\lambda(\text{reg})$: 1.13, 1.14 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.73, 1.80 $^{\circ}\text{C}$, rwf : 0.66
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.83, 1.74 $^{\circ}\text{C}$, rwf : 0.61

CMIP5, BNU-ESM



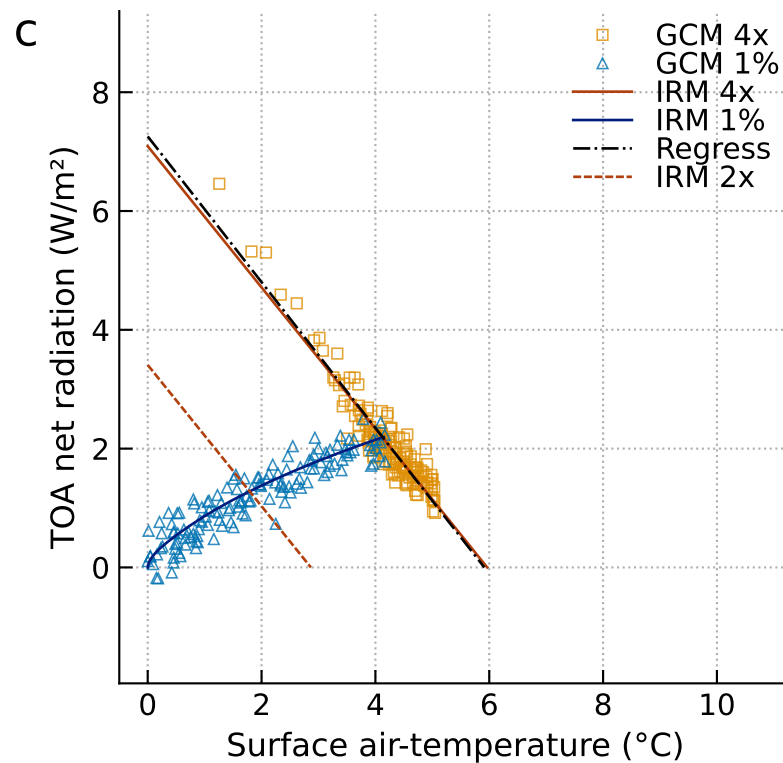
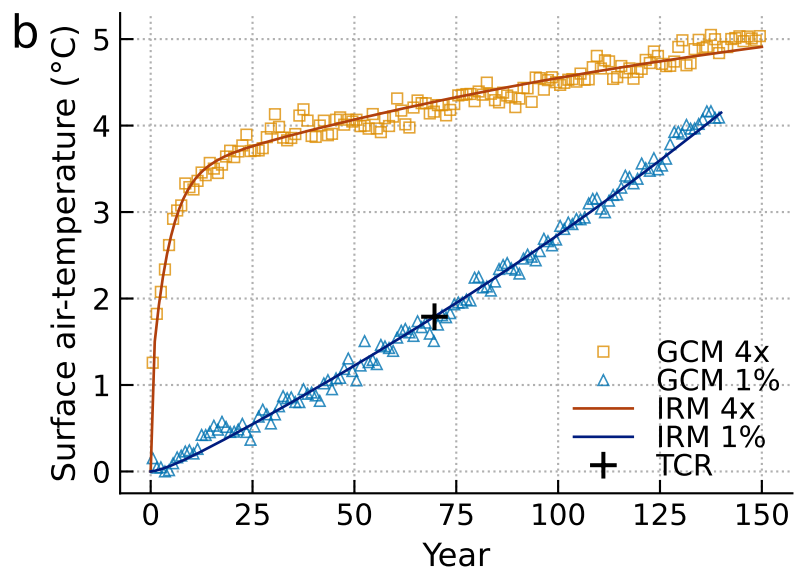
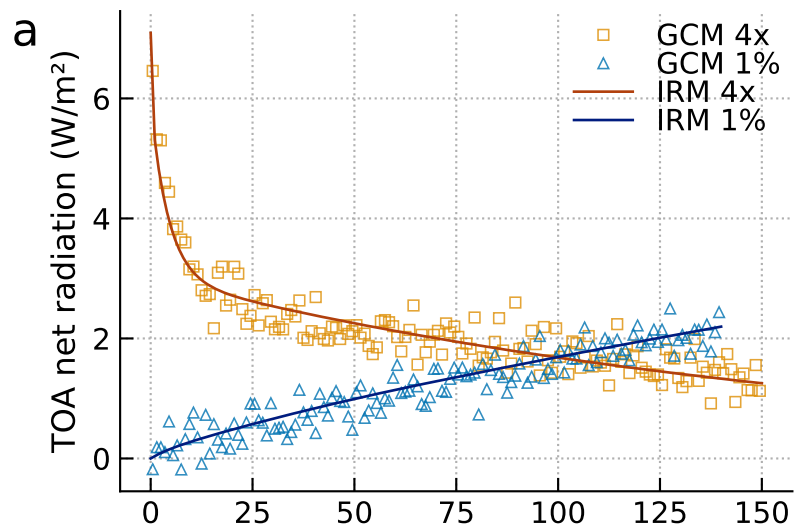
IRM-3 fitted to rtnt and tas of BNU-ESM
 alpha: 5.45 W/m^2 , beta: 1.01
 tau0, tau1, tau2: 1.26, 9.07, 292 y
 a0, a1, a2: 0.29, 0.35, 0.36
 lambda, lambda(reg): 0.97, 0.97 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 3.90, 2.45 $^{\circ}\text{C}$, rwf: 0.63
 ecs(reg), tcr(gcm): 3.92, 2.49 $^{\circ}\text{C}$, rwf: 0.63

CMIP5, CanESM2



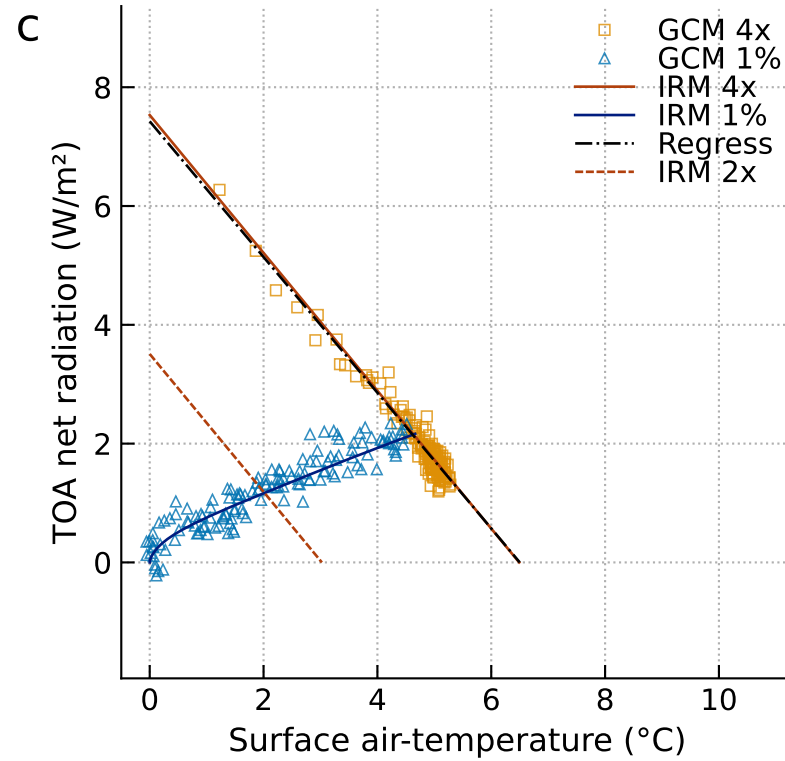
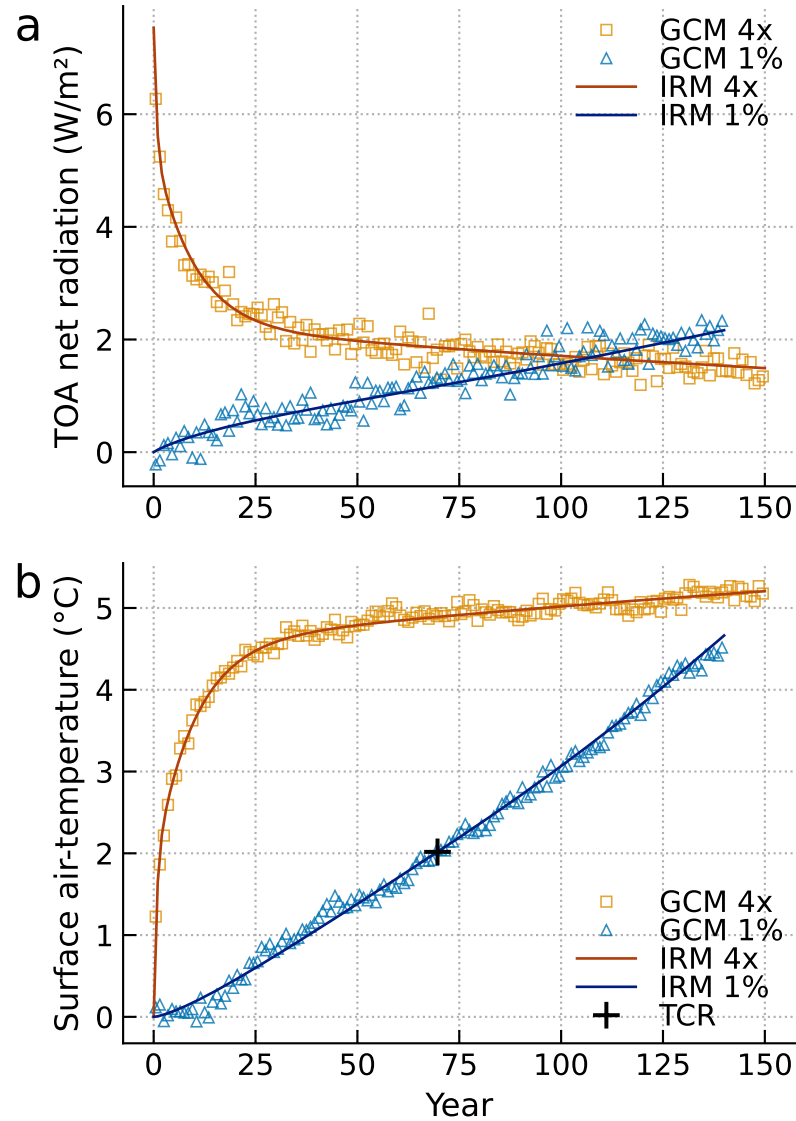
IRM-3 fitted to rtnt and tas of CanESM2
 alpha: 5.35 W/m^2 , beta: 1.02
 tau0, tau1, tau2: 2.17, 21.4, 262 y
 a0, a1, a2: 0.45, 0.22, 0.33
 lambda, lambda(reg): $1.02, 1.04 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.64, 2.30 ^{\circ}\text{C}$, rwf: 0.63
 ecs(reg), tcr(gcm): $3.69, 2.34 ^{\circ}\text{C}$, rwf: 0.63

CMIP5, CCSM4



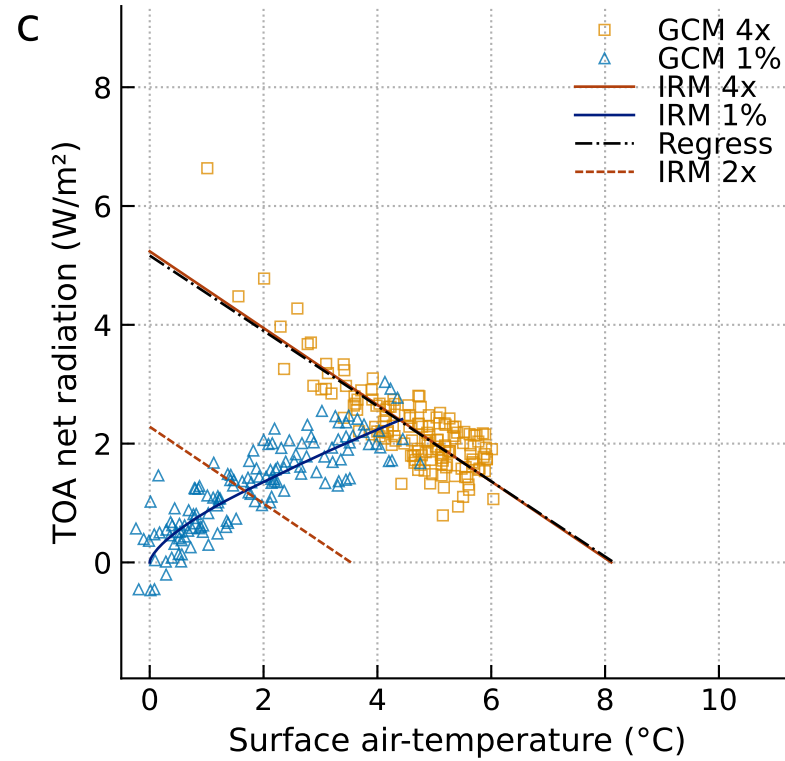
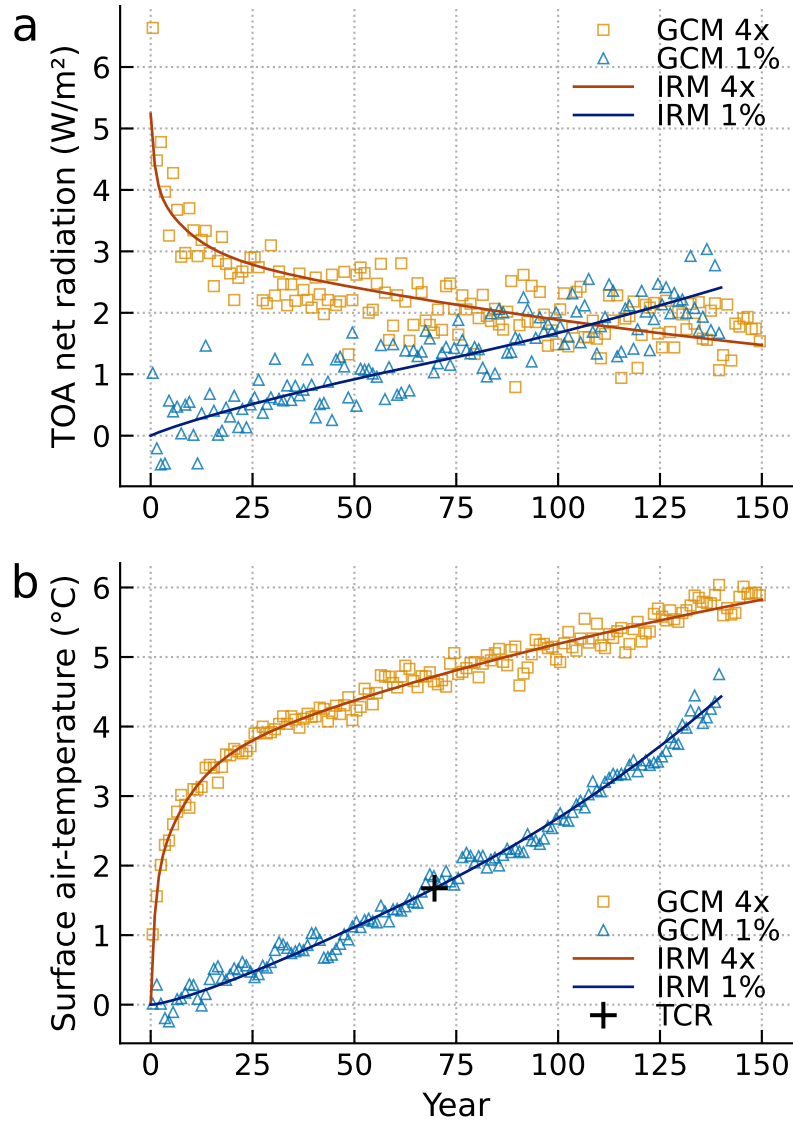
IRM-3 fitted to rtnt and tas of CCSM4
 alpha: 4.92 W/m^2 , beta: 1.04
 tau0, tau1, tau2: 0.208, 4.38, 171 y
 a0, a1, a2: 0.17, 0.41, 0.43
 lambda, lambda(reg): $1.19, 1.23 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.87, 1.79 ^{\circ}\text{C}$, rwf: 0.62
 ecs(reg), tcr(gcm): $2.96, 1.77 ^{\circ}\text{C}$, rwf: 0.60

CMIP5, CNRM-CM5



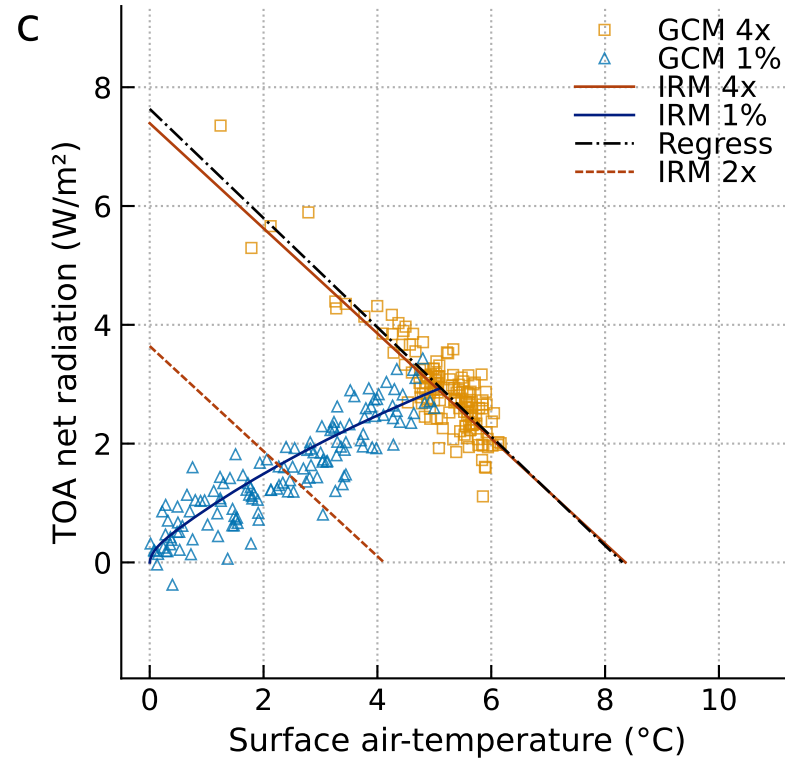
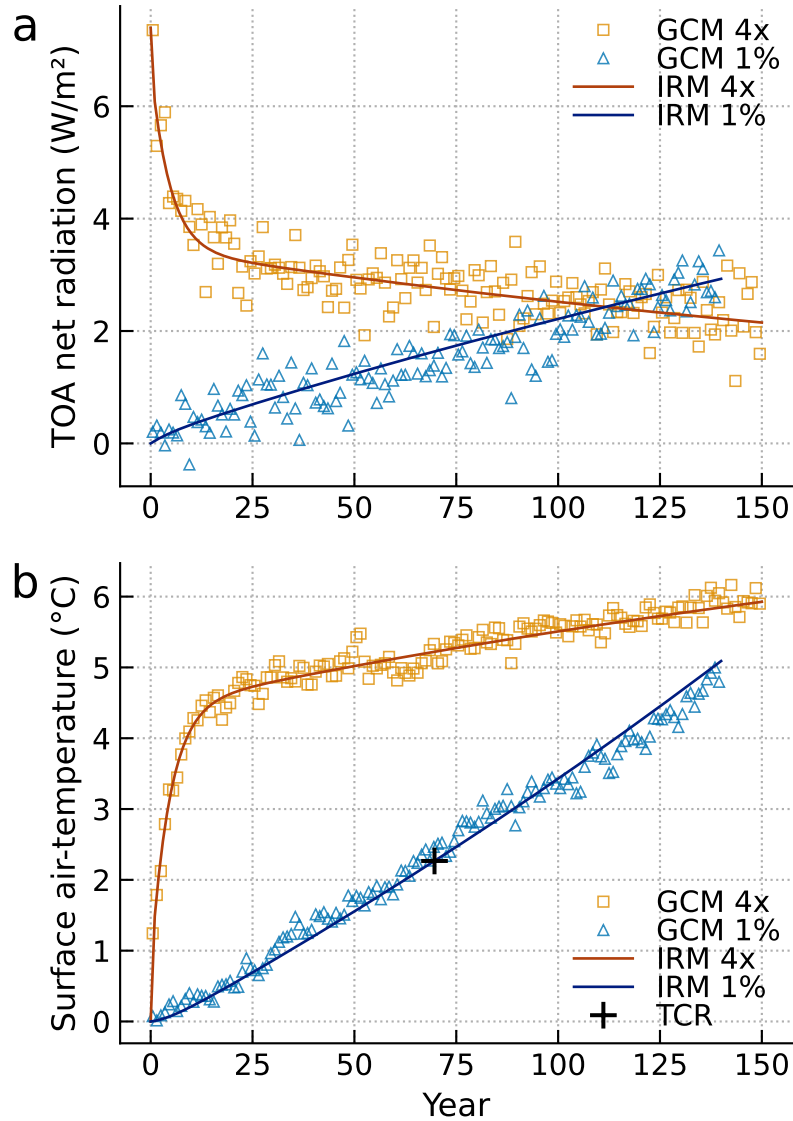
IRM-3 fitted to rtnt and tas of CNRM-CM5
 alpha: 5.06 W/m^2 , beta: 1.07
 tau0, tau1, tau2: $0.691, 9.72, 370 \text{ y}$
 a0, a1, a2: $0.28, 0.43, 0.30$
 lambda, lambda(reg): $1.16, 1.14 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.02, 2.02 \text{ }^{\circ}\text{C}$, rwf: 0.67
 ecs(reg), tcr(gcm): $3.25, 2.02 \text{ }^{\circ}\text{C}$, rwf: 0.62

CMIP5, CSIRO-Mk3.6.0



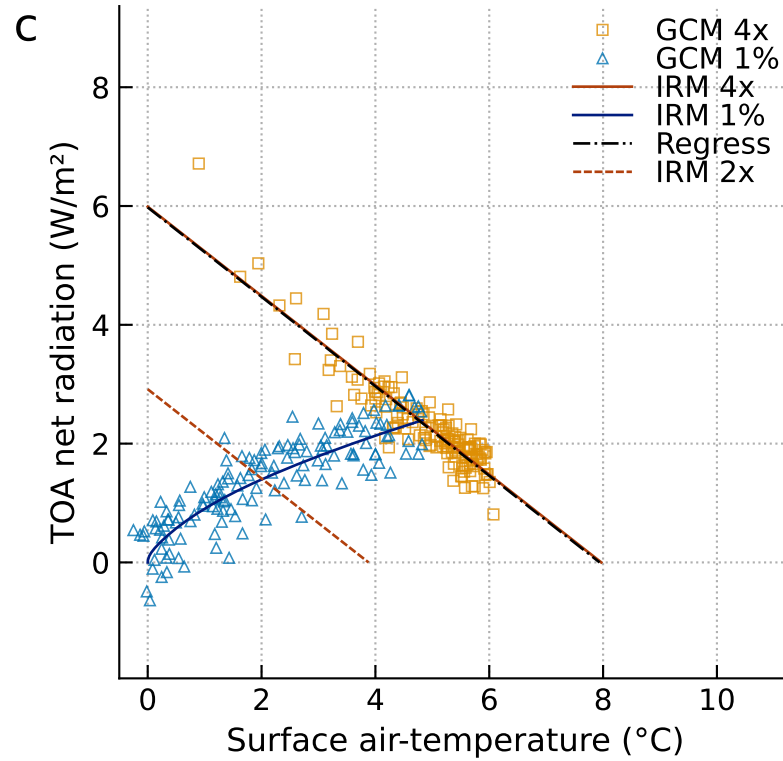
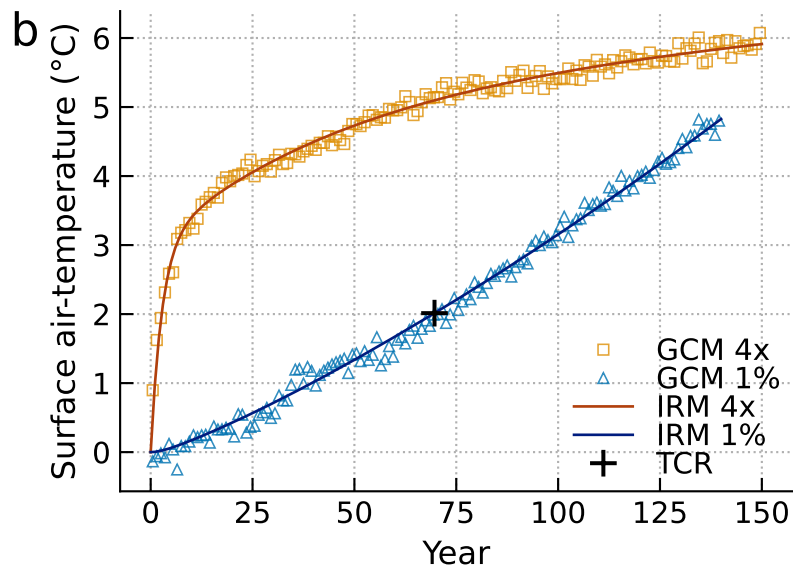
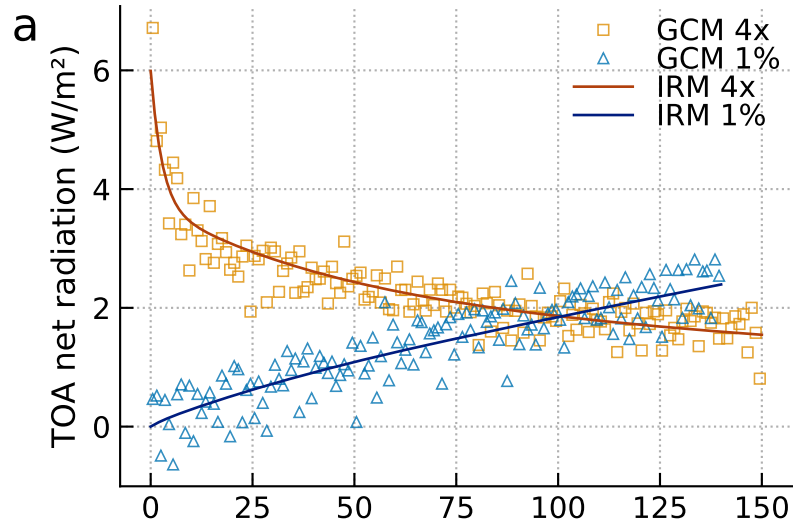
IRM-3 fitted to rtnt and tas of CSIRO-Mk3.6.0
 alpha: 3.29 W/m^2 , beta: 1.15
 tau0, tau1, tau2: 0.954, 8.63, 204 y
 a0, a1, a2: 0.20, 0.21, 0.59
 lambda, lambda(reg): $0.65, 0.63 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.54, 1.67^{\circ}\text{C}$, rwf: 0.47
 ecs(reg), tcr(gcm): $4.08, 1.75^{\circ}\text{C}$, rwf: 0.43

CMIP5, FGOALS-s2



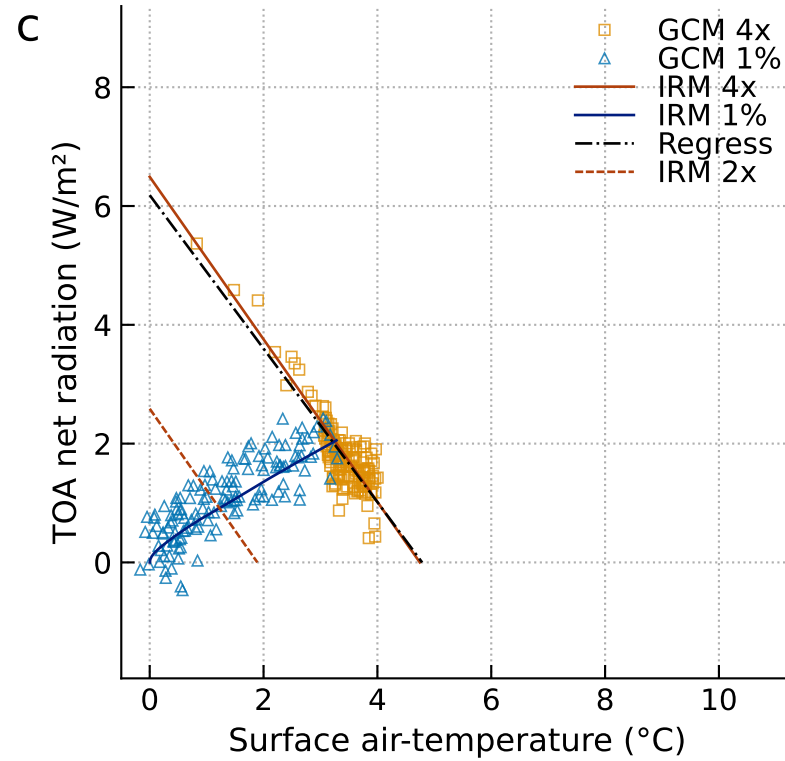
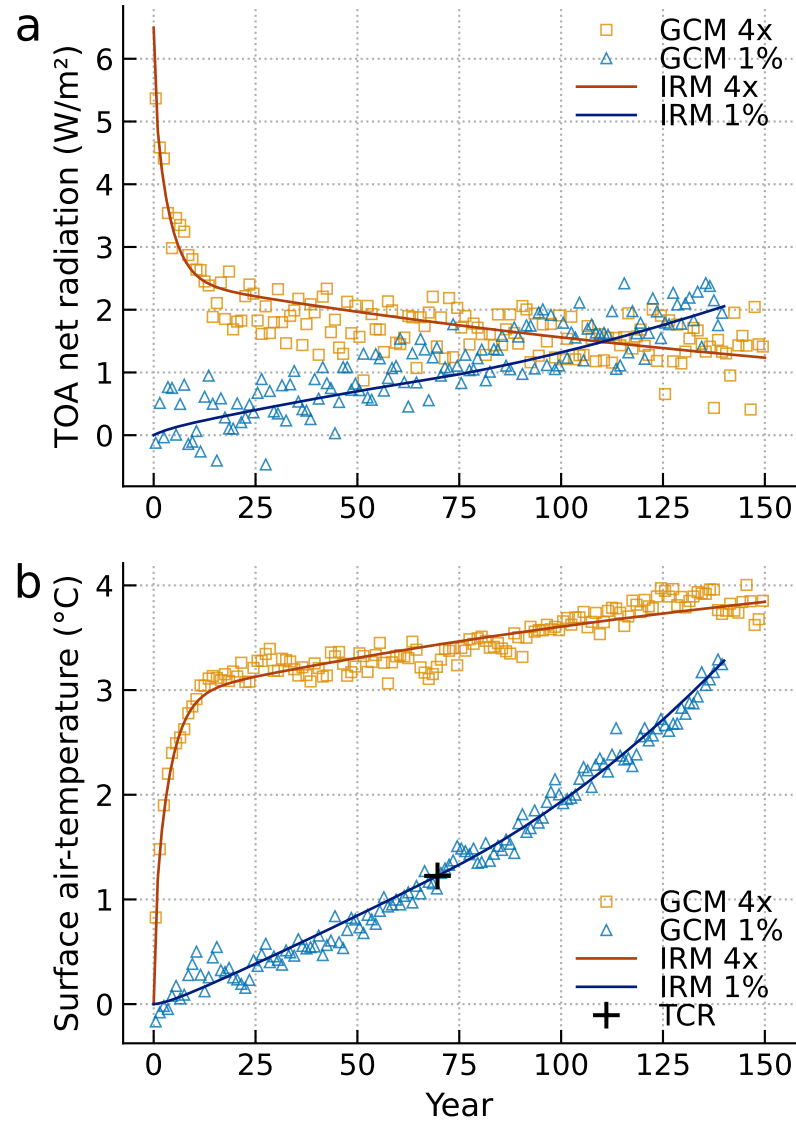
IRM-3 fitted to rtnt and tas of FGOALS-s2
 alpha: 5.25 W/m^2 , beta: 1.02
 tau0, tau1, tau2: $0.000763, 4.66, 316 \text{ y}$
 a0, a1, a2: $0.09, 0.44, 0.47$
 lambda, lambda(reg): $0.88, 0.92 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.12, 2.27 \text{ }^{\circ}\text{C}$, rwf: 0.55
 ecs(reg), tcr(gcm): $4.15, 2.43 \text{ }^{\circ}\text{C}$, rwf: 0.58

CMIP5, GFDL-CM3



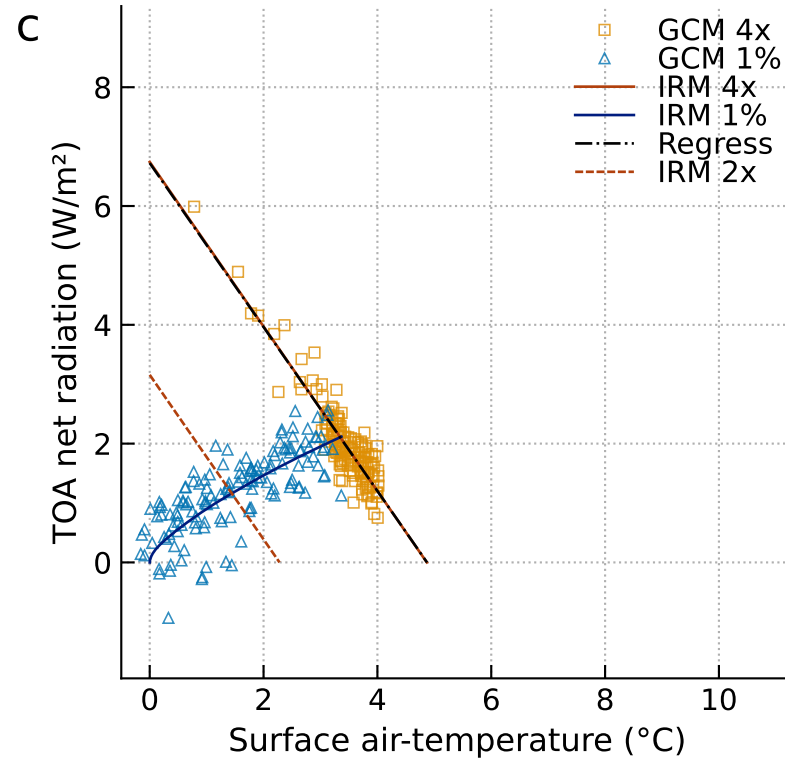
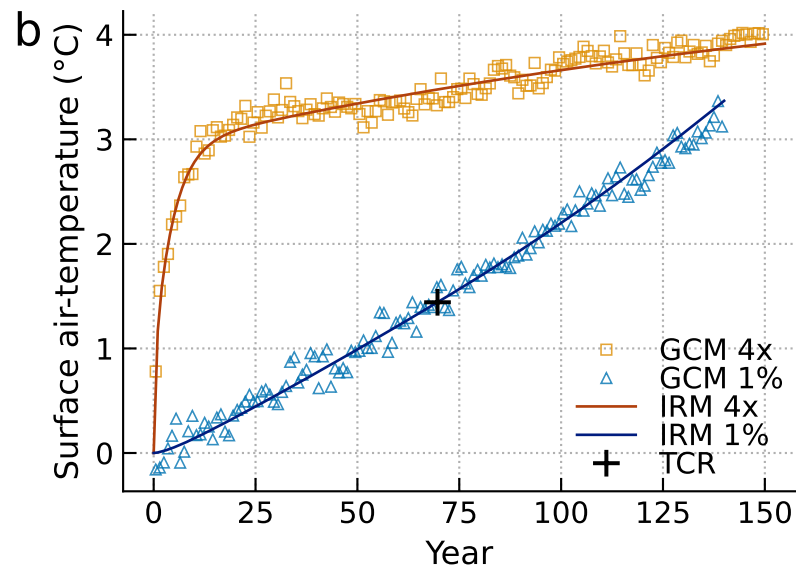
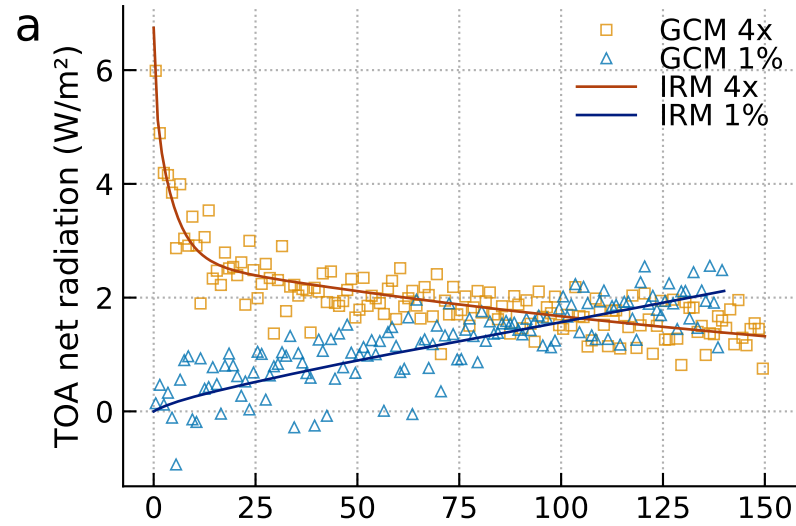
IRM-3 fitted to rtnt and tas of GFDL-CM3
 alpha: 4.21 W/m^2 , beta: 1.03
 tau0, tau1, tau2: 2.76, 45, 397 y
 a0, a1, a2: 0.38, 0.26, 0.36
 lambda, lambda(reg): $0.75, 0.75 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 3.88, 2.01 $^{\circ}\text{C}$, rwf: 0.52
 ecs(reg), tcr(gcm): 3.97, 1.95 $^{\circ}\text{C}$, rwf: 0.49

CMIP5, GFDL-ESM2G



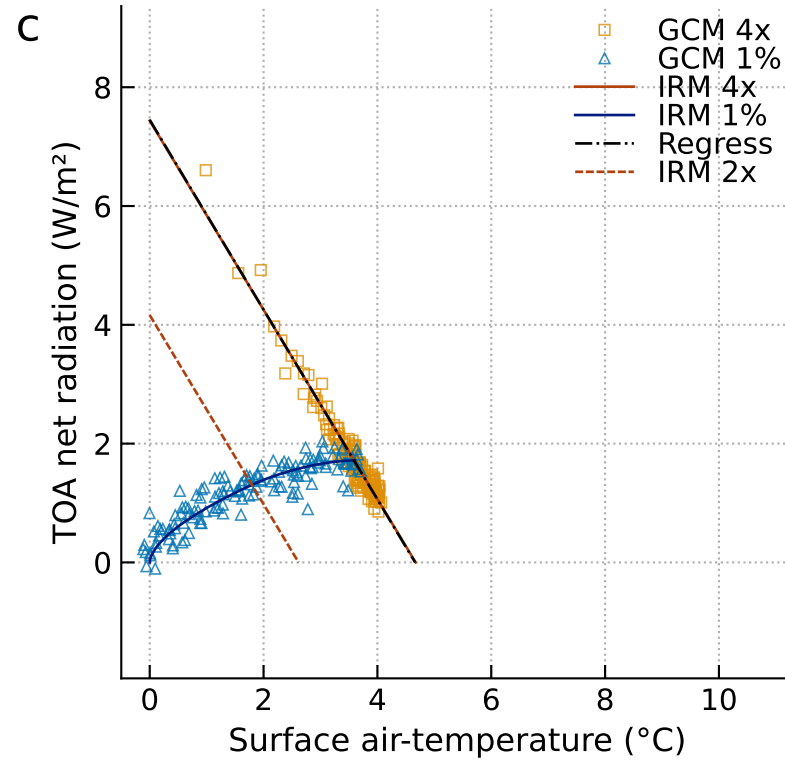
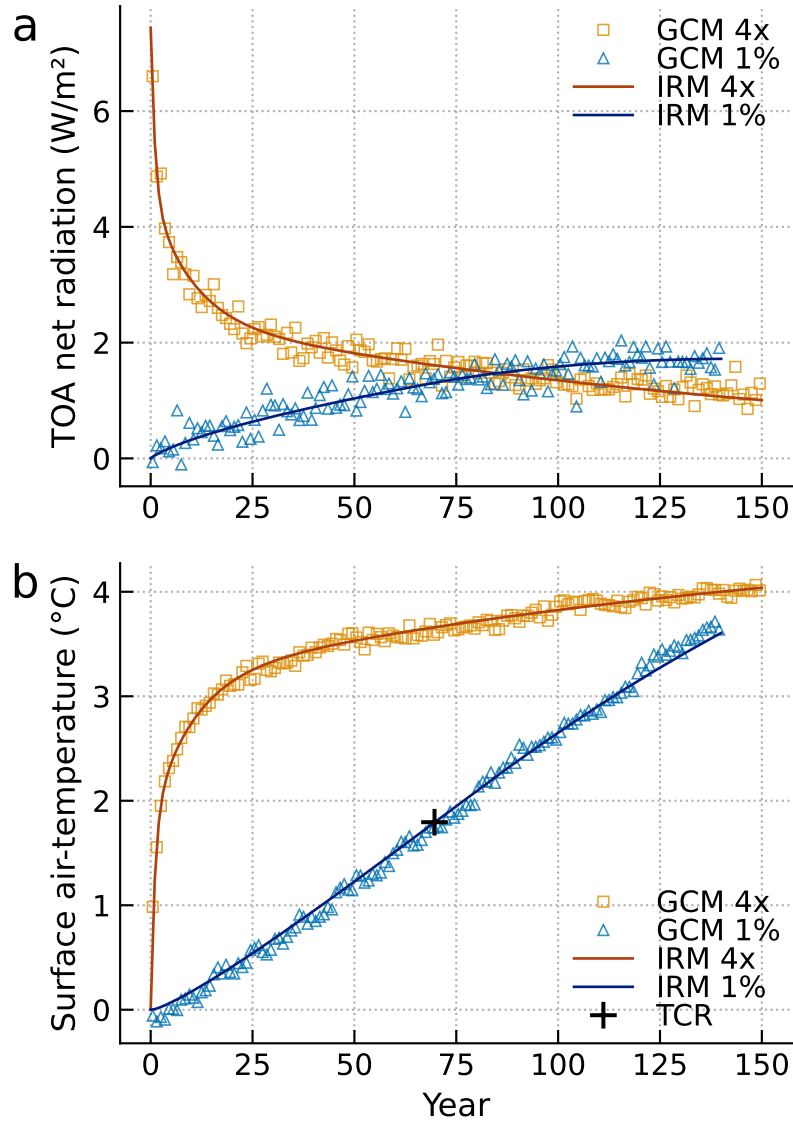
IRM-3 fitted to rtnt and tas of GFDL-ESM2G
 alpha: 3.73 W/m^2 , beta: 1.25
 tau0, tau1, tau2: $0.403, 3.77, 215 \text{ y}$
 a0, a1, a2: $0.16, 0.46, 0.38$
 lambda, lambda(reg): $1.37, 1.29 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $1.89, 1.22 ^{\circ}\text{C}$, rwf: 0.65
 ecs(reg), tcr(gcm): $2.39, 1.24 ^{\circ}\text{C}$, rwf: 0.52

CMIP5, GFDL-ESM2M



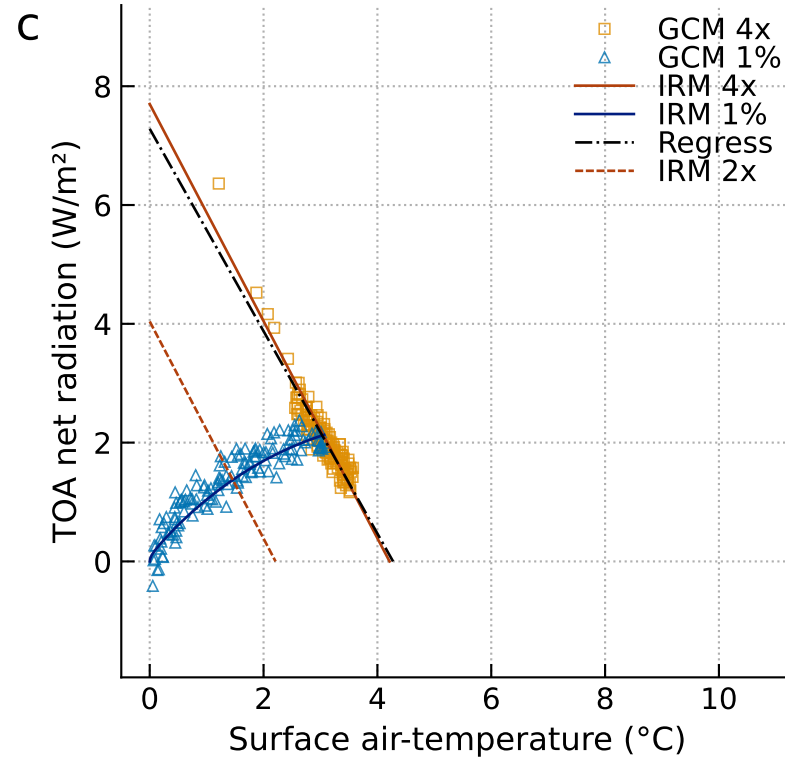
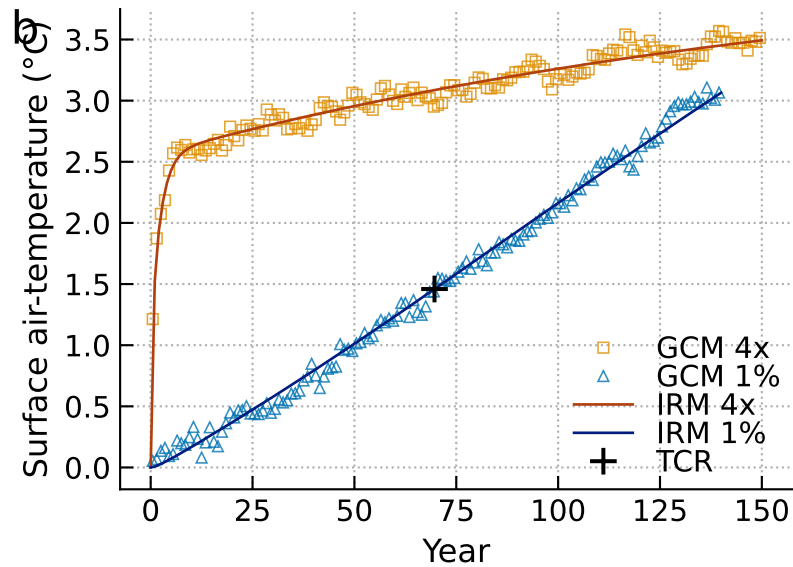
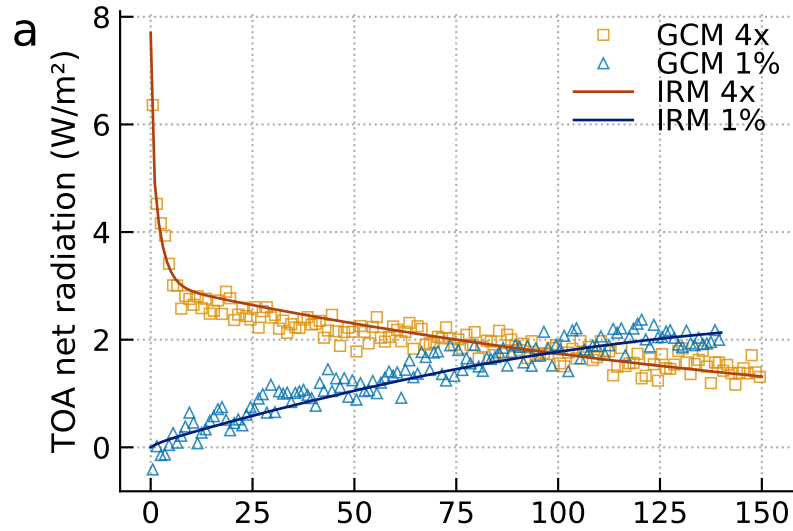
IRM-3 fitted to rtnt and tas of GFDL-ESM2M
 alpha: 4.56 W/m^2 , beta: 1.07
 tau0, tau1, tau2: 0.464, 4.66, 213 y
 a0, a1, a2: 0.18, 0.43, 0.40
 lambda, lambda(reg): 1.38, 1.38 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 2.28, 1.44 $^{\circ}\text{C}$, rwf: 0.63
 ecs(reg), tcr(gcm): 2.44, 1.48 $^{\circ}\text{C}$, rwf: 0.61

CMIP5, GISS-E2-H



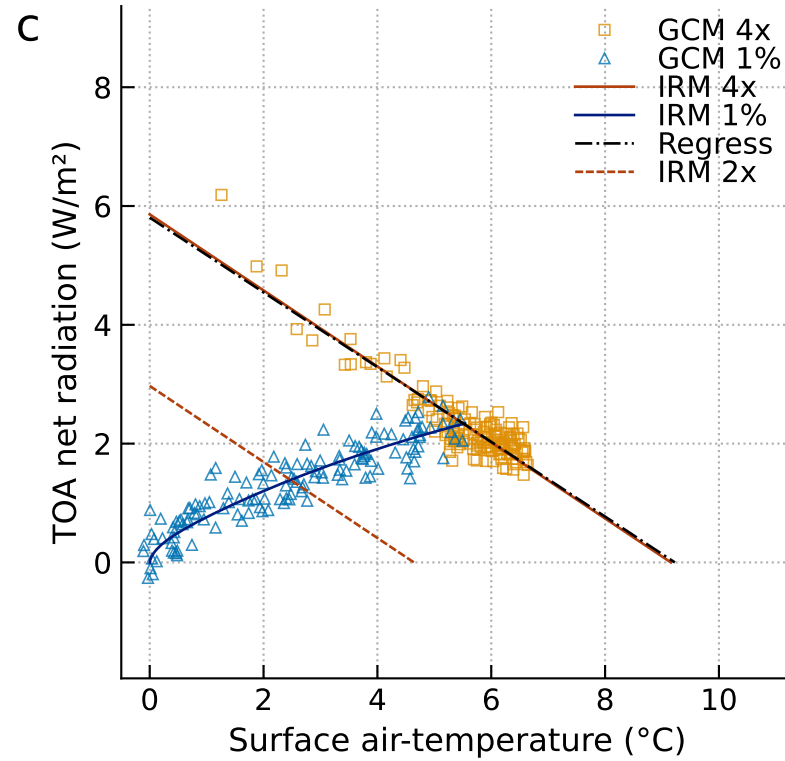
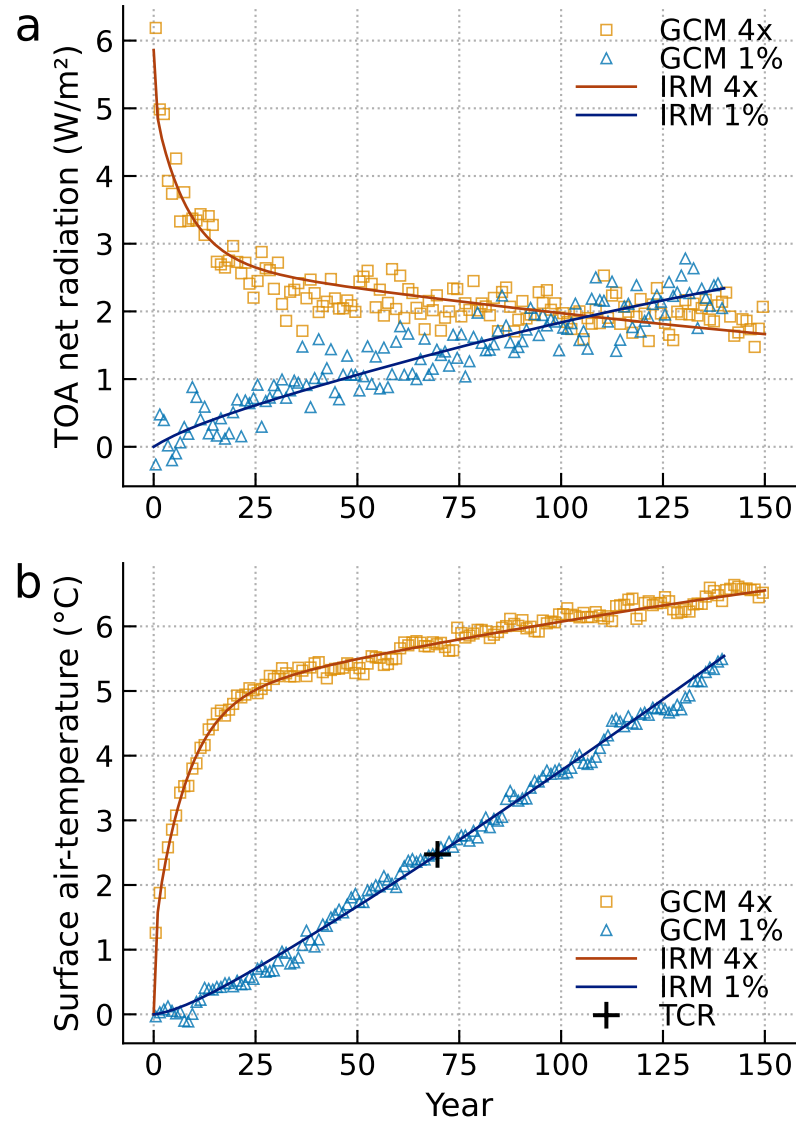
IRM-3 fitted to rtnt and tas of GISS-E2-H
 alpha: 6.01 W/m^2 , beta: 0.89
 tau0, tau1, tau2: 1.03, 9.88, 172 y
 a0, a1, a2: 0.38, 0.29, 0.32
 lambda, lambda(reg): $1.59, 1.60 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.62, 1.79 ^{\circ}\text{C}$, rwf: 0.69
 ecs(reg), tcr(gcm): $2.33, 1.75 ^{\circ}\text{C}$, rwf: 0.75

CMIP5, GISS-E2-R



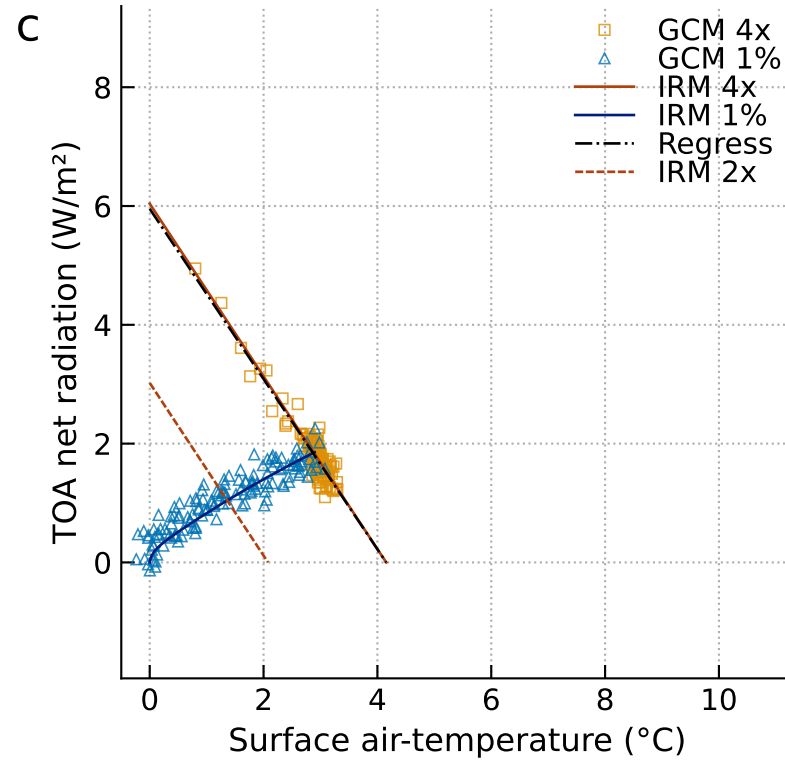
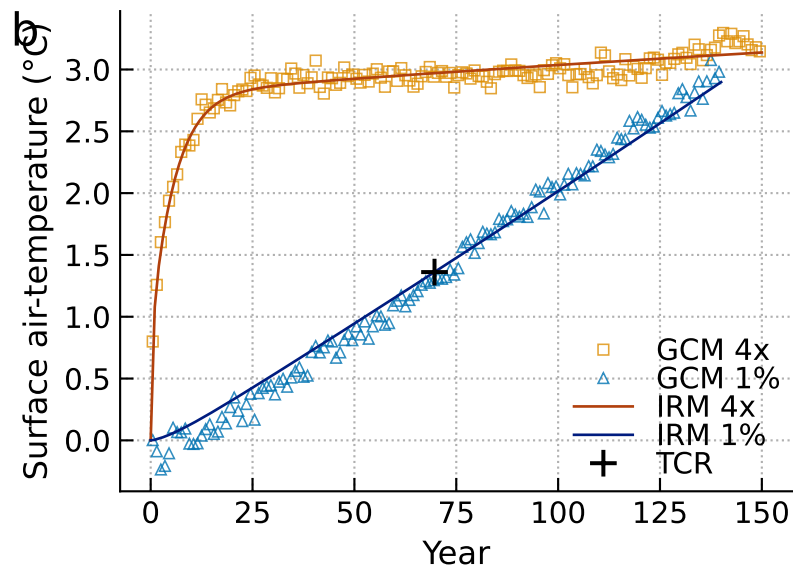
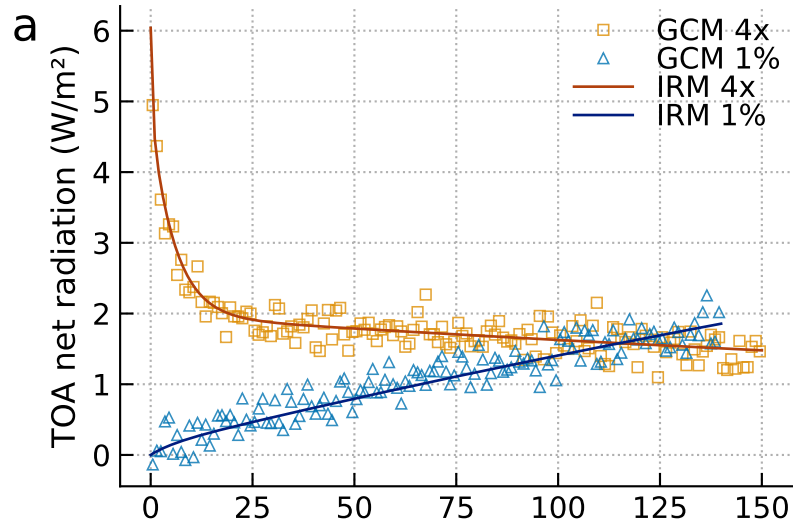
IRM-3 fitted to rtnt and tas of GISS-E2-R
 alpha: 5.83 W/m^2 , beta: 0.95
 tau0, tau1, tau2: 0.344, 2.26, 179 y
 a0, a1, a2: 0.24, 0.36, 0.39
 lambda, lambda(reg): 1.83, 1.70 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 2.21, 1.46 $^{\circ}\text{C}$, rwf: 0.66
 ecs(reg), tcr(gcm): 2.14, 1.46 $^{\circ}\text{C}$, rwf: 0.68

CMIP5, HadGEM2-ES



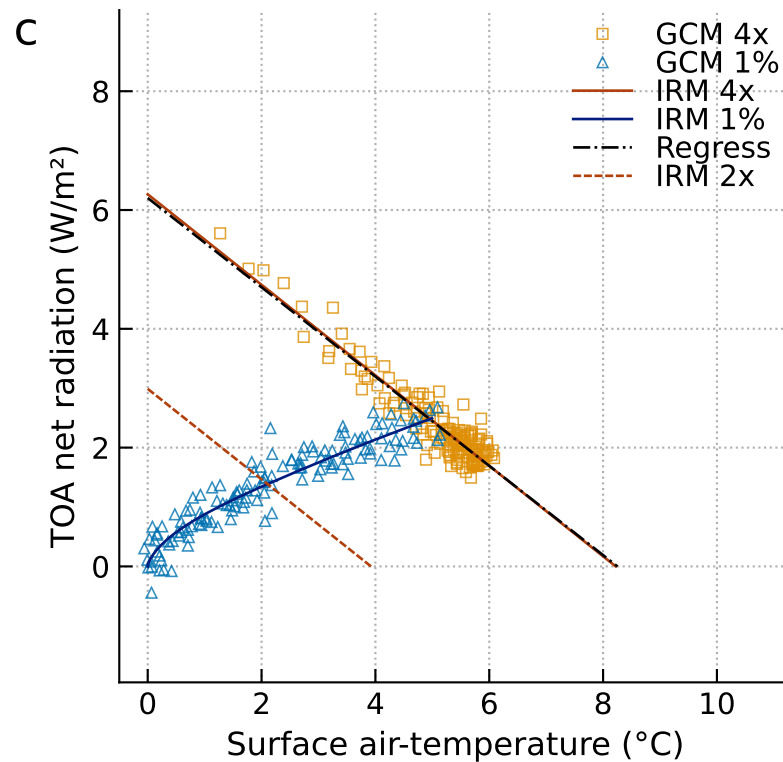
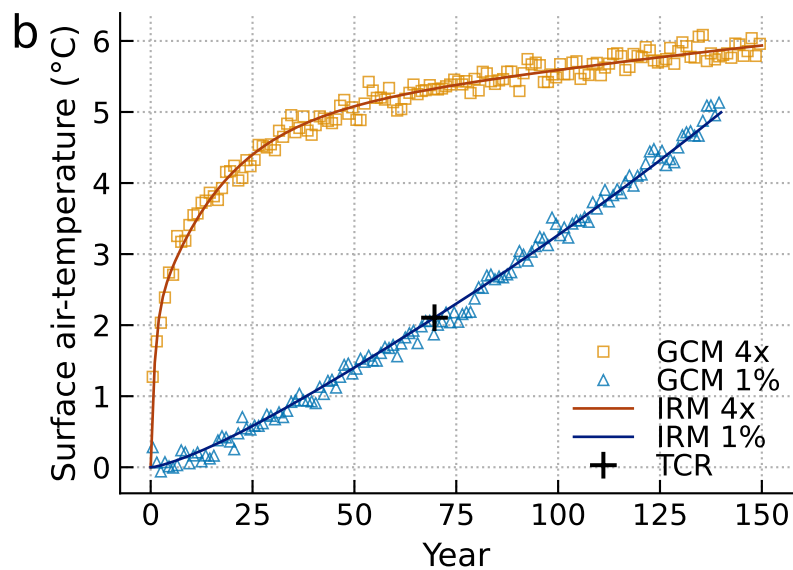
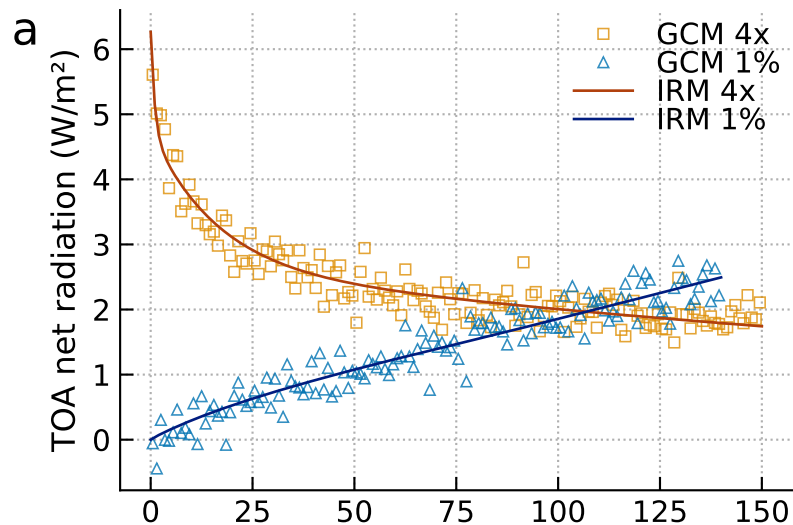
IRM-3 fitted to rtnt and tas of HadGEM2-ES
 alpha: 4.29 W/m^2 , beta: 0.99
 tau0, tau1, tau2: 0.368, 8.02, 294 y
 a0, a1, a2: 0.13, 0.39, 0.47
 lambda, lambda(reg): $0.64, 0.63 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.64, 2.47 ^{\circ}\text{C}$, rwf: 0.53
 ecs(reg), tcr(gcm): $4.61, 2.53 ^{\circ}\text{C}$, rwf: 0.55

CMIP5, INM-CM4



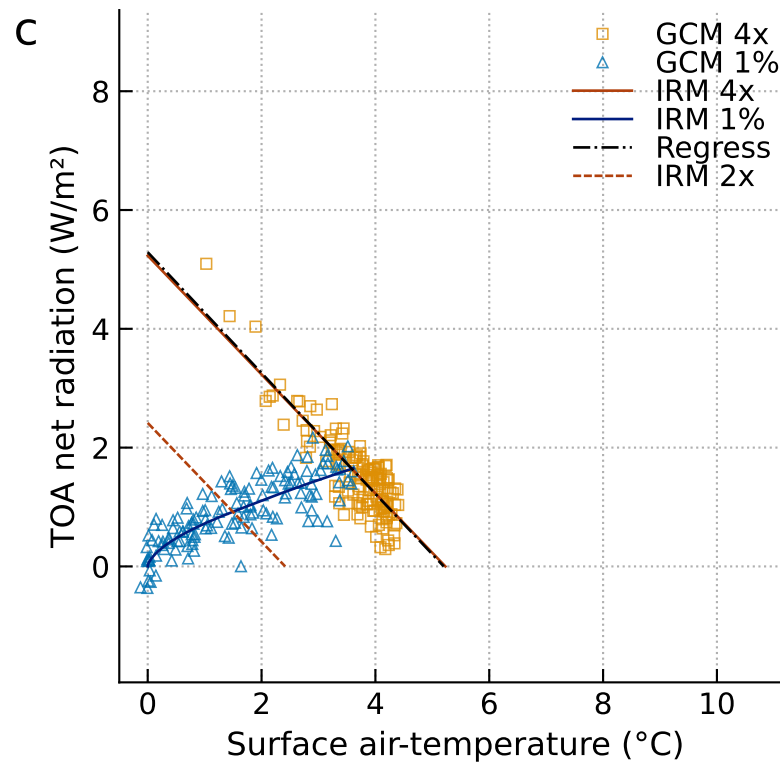
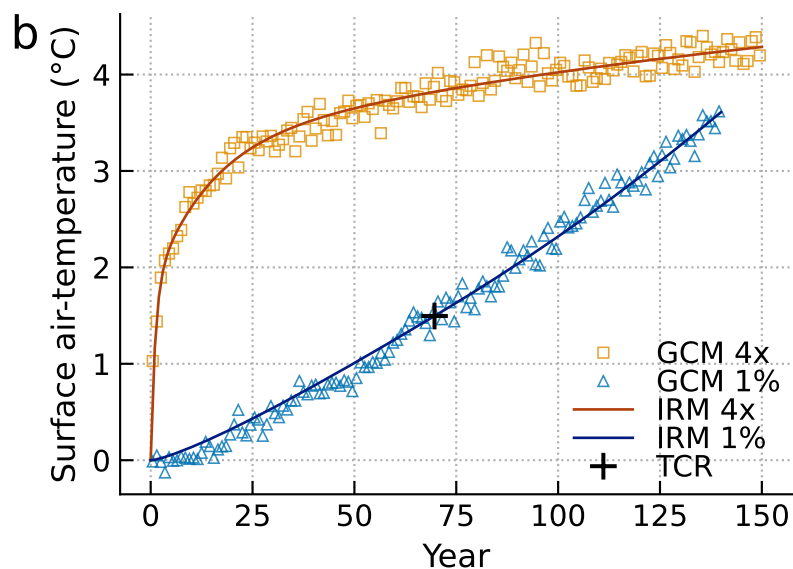
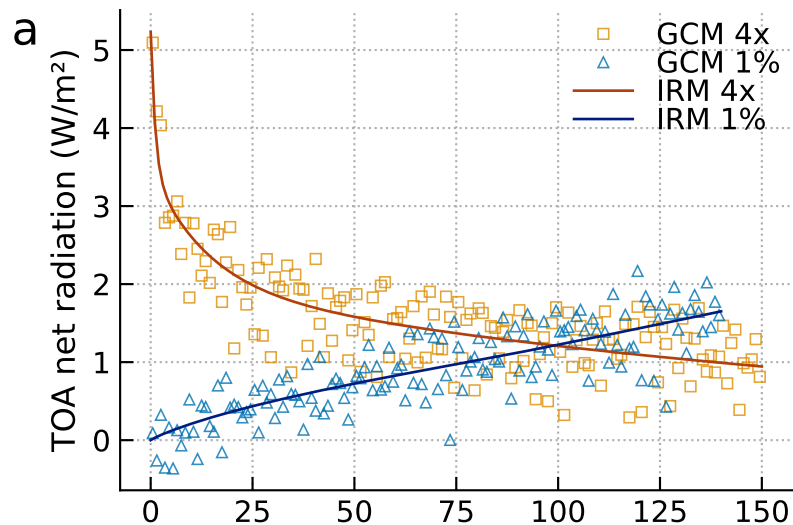
IRM-3 fitted to rtnt and tas of INM-CM4
 alpha: 4.36 W/m^2 , beta: 1.00
 tau0, tau1, tau2: 0.416, 5.8, 529 y
 a0, a1, a2: 0.20, 0.47, 0.33
 lambda, lambda(reg): $1.45, 1.43 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 2.08, 1.36 $^{\circ}\text{C}$, rwf: 0.65
 ecs(reg), tcr(gcm): 2.08, 1.32 $^{\circ}\text{C}$, rwf: 0.64

CMIP5, IPSL-CM5A-LR



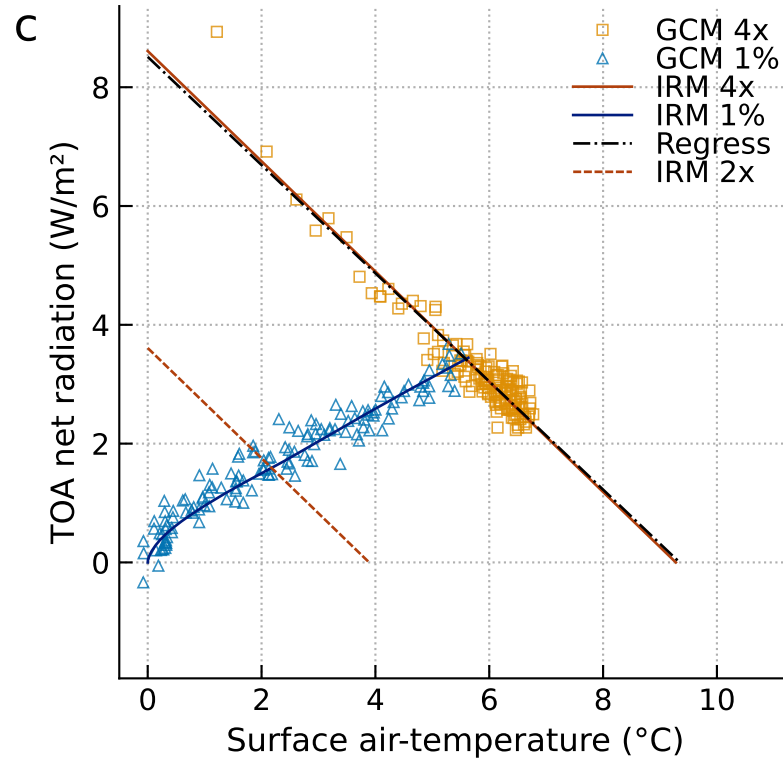
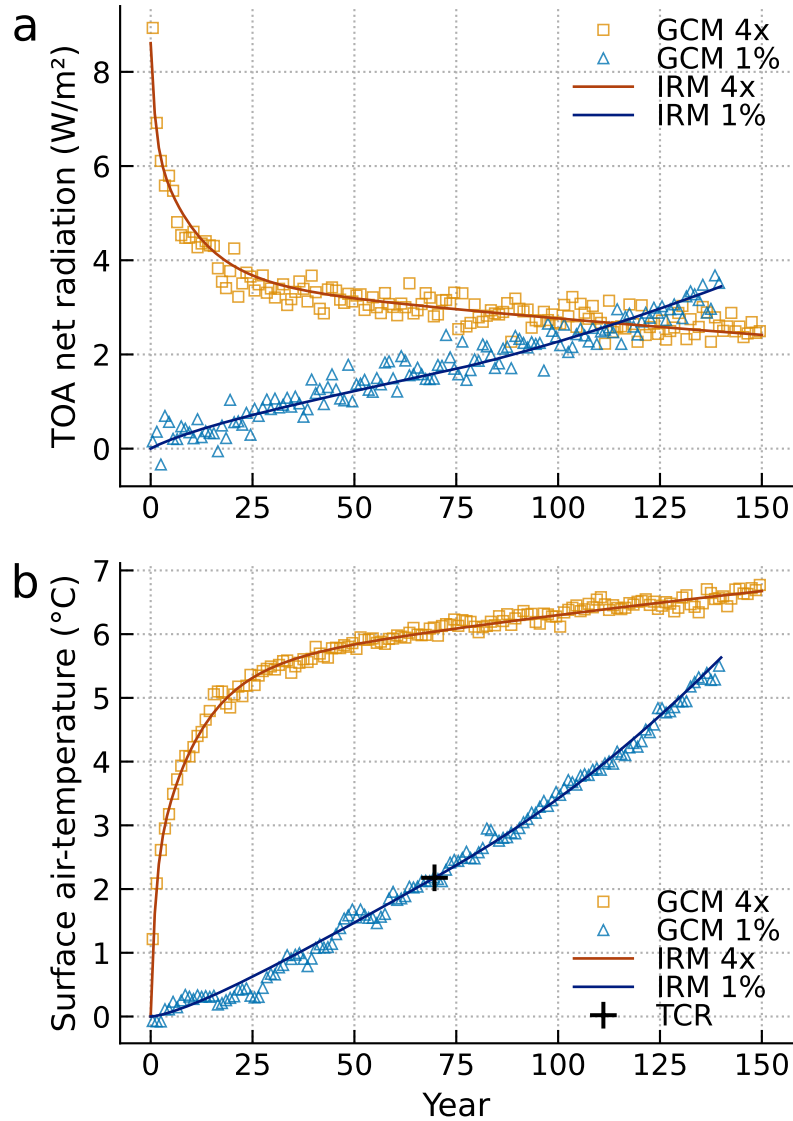
IRM-3 fitted to $rtnt$ and tas of IPSL-CM5A-LR
 α : 4.31 W/m^2 , β : 1.05
 τ_0 , τ_1 , τ_2 : 0.95, 16.2, 361 y
 a_0 , a_1 , a_2 : 0.24, 0.34, 0.42
 λ , $\lambda(\text{reg})$: 0.76, 0.75 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 3.92, 2.10 $^{\circ}\text{C}$, r_{wf} : 0.54
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 4.13, 2.00 $^{\circ}\text{C}$, r_{wf} : 0.49

CMIP5, IPSL-CM5B-LR



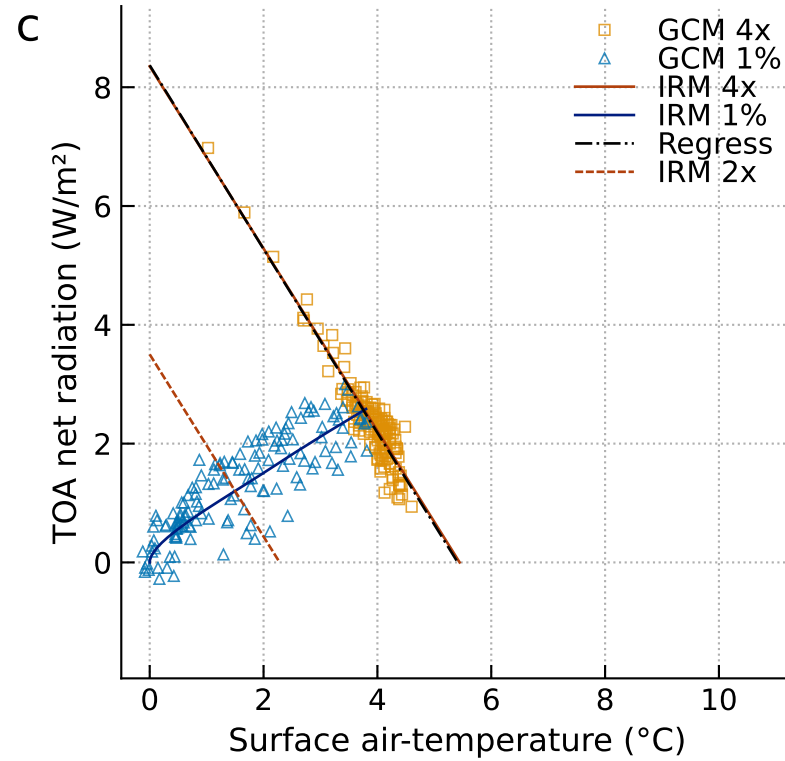
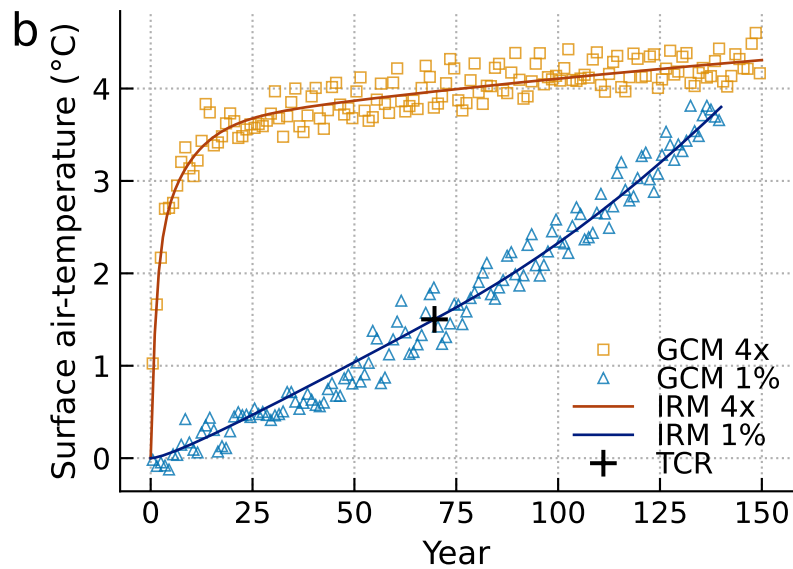
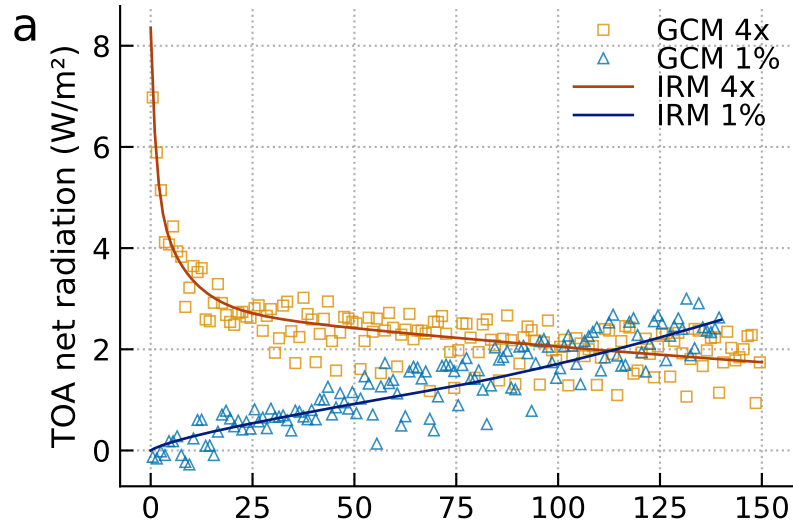
IRM-3 fitted to rtnt and tas of IPSL-CM5B-LR
 α : 3.49 W/m^2 , β : 1.08
 τ_0, τ_1, τ_2 : $1.1, 13.7, 204 \text{ y}$
 a_0, a_1, a_2 : $0.34, 0.29, 0.38$
 $\lambda, \lambda(\text{reg})$: $1.00, 1.02 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $2.41, 1.50 \text{ }^{\circ}\text{C}$, rwf : 0.62
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $2.60, 1.52 \text{ }^{\circ}\text{C}$, rwf : 0.58

CMIP5, MIROC-ESM



IRM-3 fitted to rtnt and tas of MIROC-ESM
 α : 5.21 W/m^2 , β : 1.19
 τ_0, τ_1, τ_2 : 1.06, 10.8, 370 y
 a_0, a_1, a_2 : 0.23, 0.35, 0.42
 $\lambda, \lambda(\text{reg})$: 0.93, 0.91 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 3.89, 2.18 $^{\circ}\text{C}$, rwf : 0.56
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: 4.67, 2.21 $^{\circ}\text{C}$, rwf : 0.47

CMIP5, MIROC5



IRM-3 fitted to rtnt and tas of MIROC5

alpha: 5.05 W/m^2 , beta: 1.19

tau0, tau1, tau2: 1.22, 7.71, 308 y

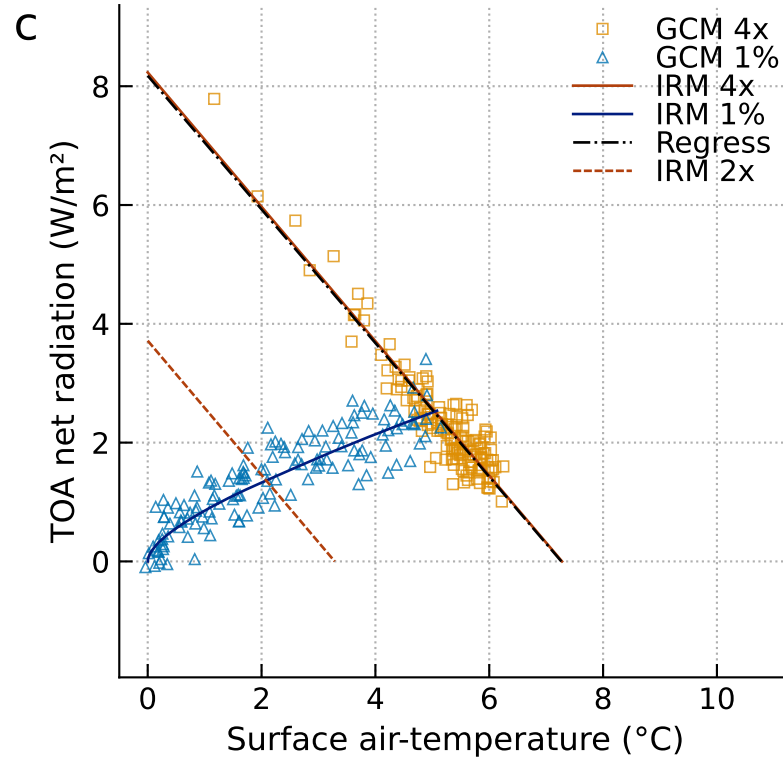
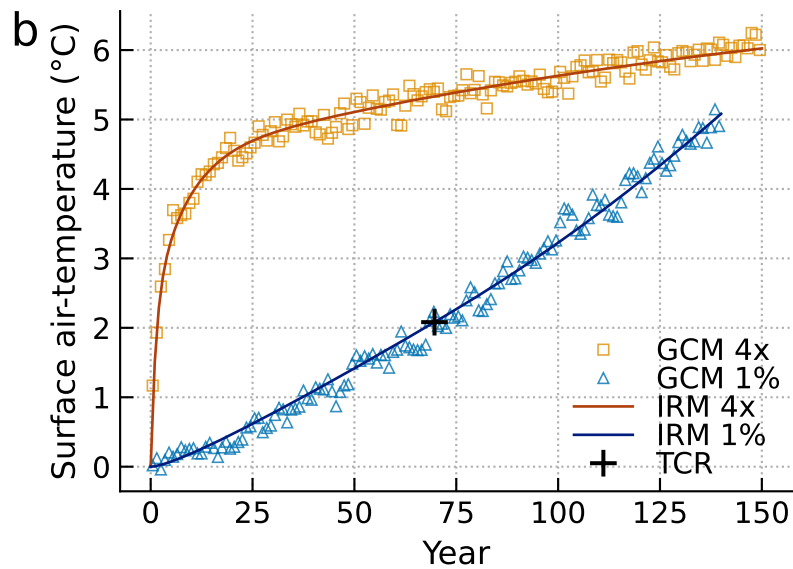
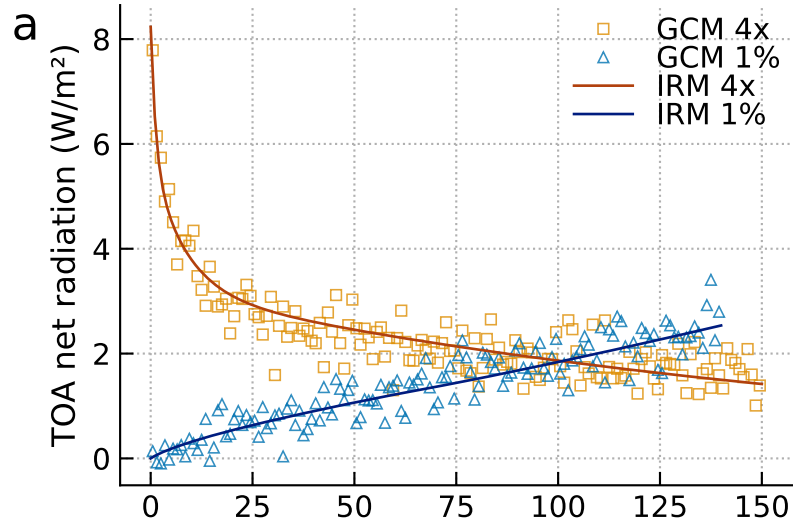
a0, a1, a2: 0.38, 0.28, 0.34

lambda, lambda(reg): $1.53, 1.55 \text{ W/m}^2/^{\circ}\text{C}$

ecs, tcr: 2.28, 1.50°C , rwf: 0.66

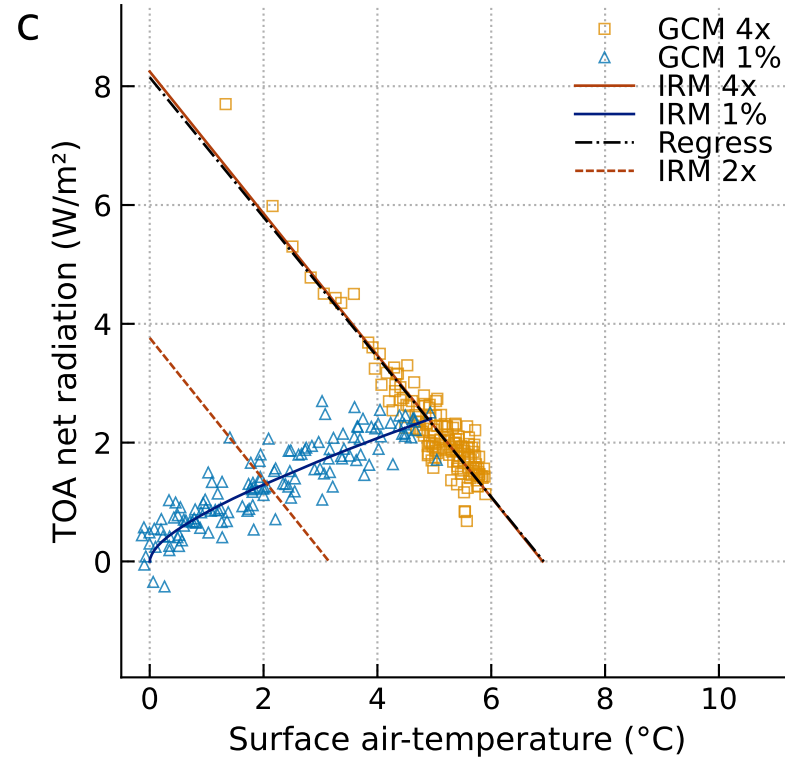
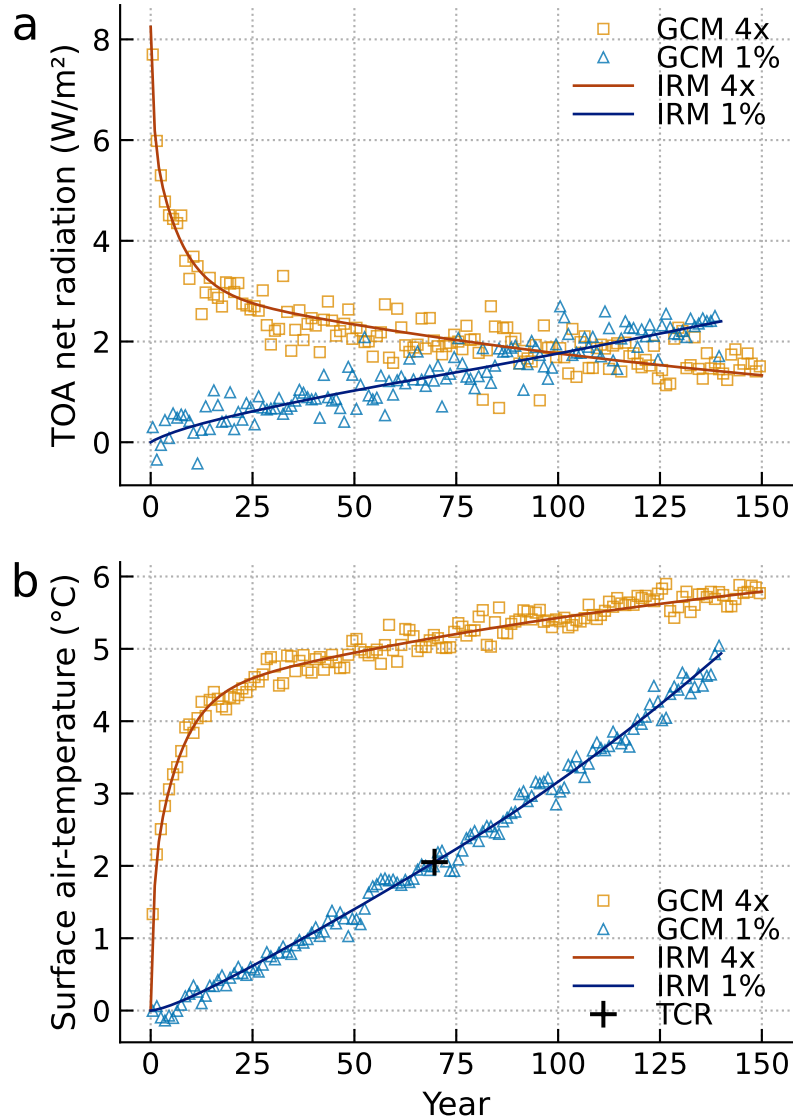
ecs(reg), tcr(gcm): 2.71, 1.49°C , rwf: 0.55

CMIP5, MPI-ESM-LR



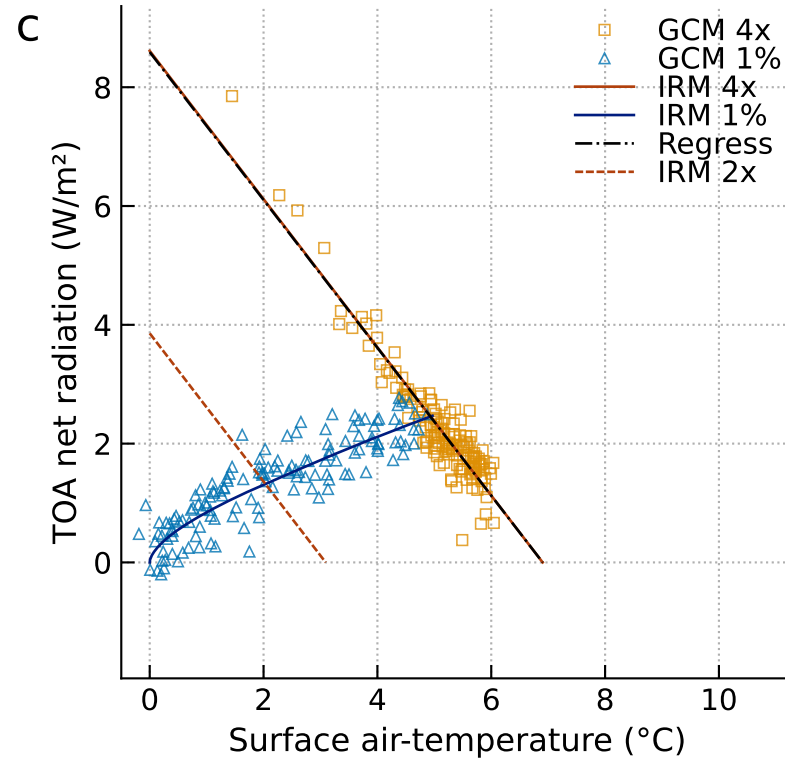
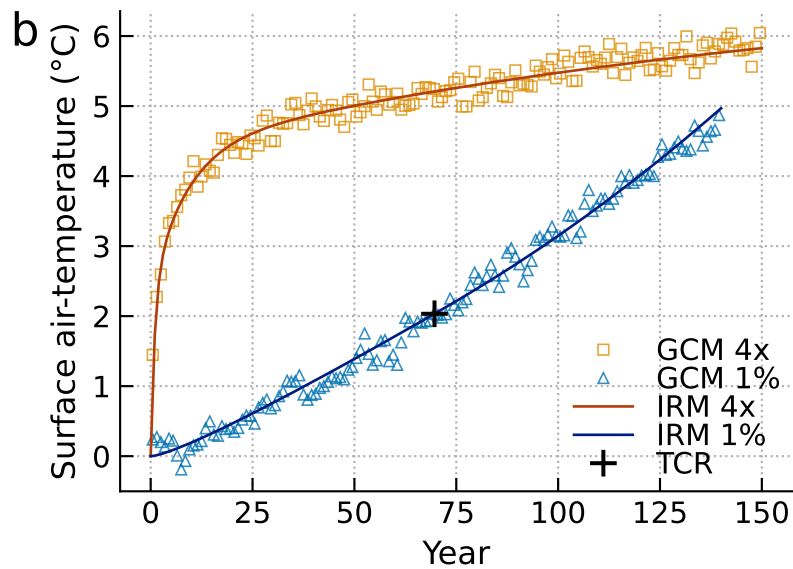
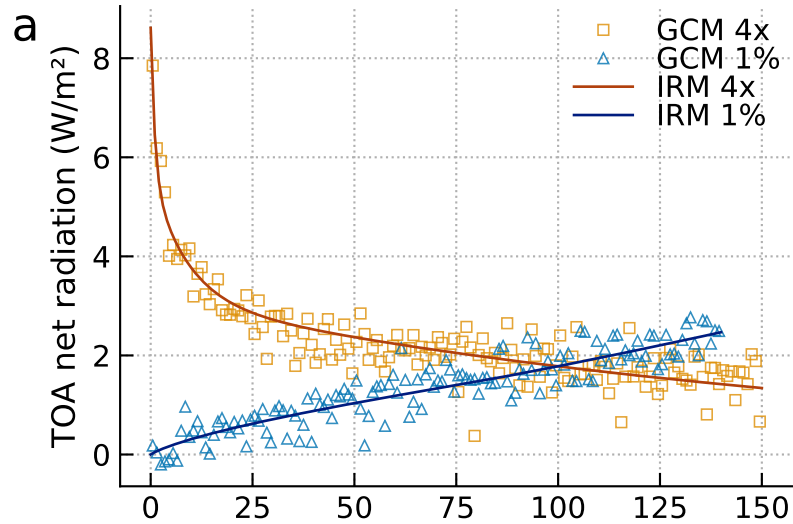
IRM-3 fitted to $rtnt$ and tas of MPI-ESM-LR
 α : 5.36 W/m^2 , β : 1.11
 τ_0 , τ_1 , τ_2 : 1.2 , 8.11 , 183 y
 a_0 , a_1 , a_2 : 0.30 , 0.31 , 0.39
 λ , $\lambda(\text{reg})$: 1.13 , $1.13 \text{ W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 3.29 , $2.08 \text{ }^{\circ}\text{C}$, rwf : 0.63
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 3.63 , $2.02 \text{ }^{\circ}\text{C}$, rwf : 0.56

CMIP5, MPI-ESM-MR



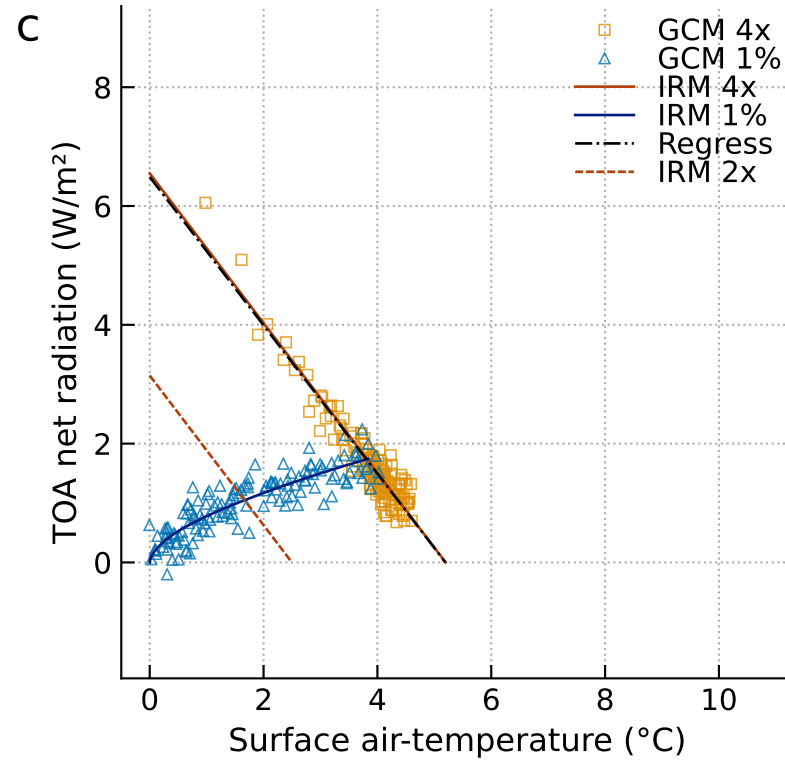
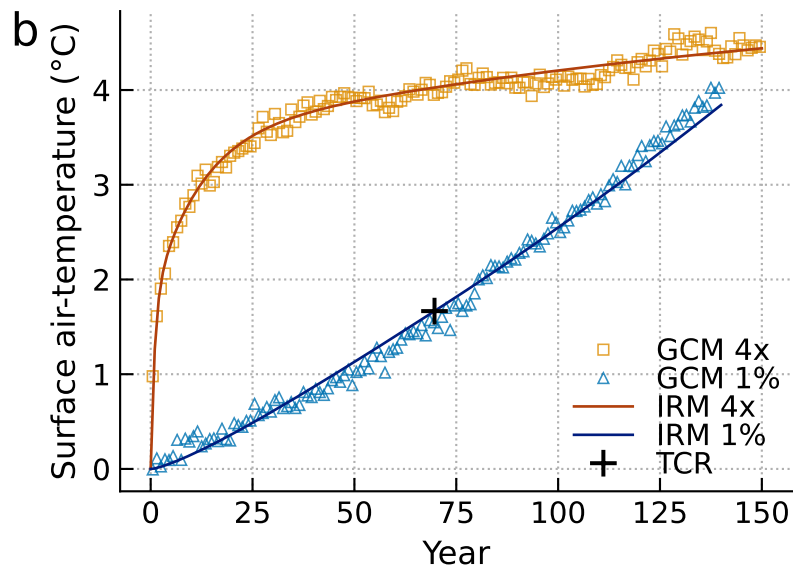
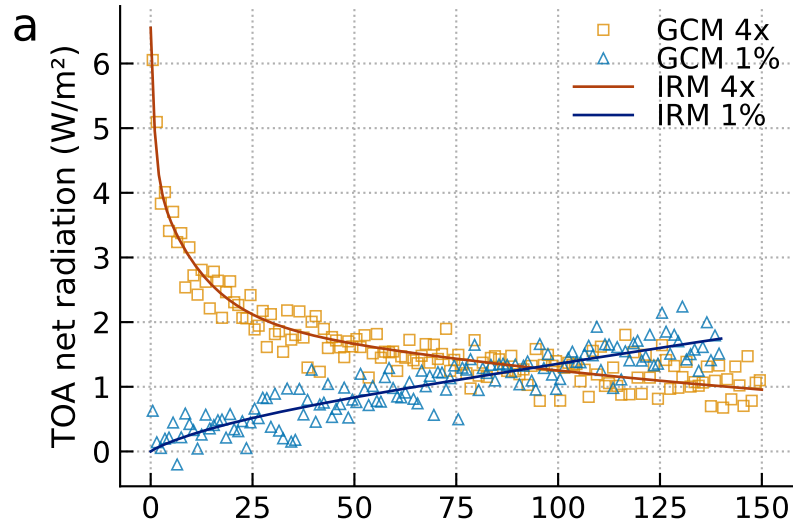
IRM-3 fitted to $rtnt$ and tas of MPI-ESM-MR
 α : 5.43 W/m^2 , β : 1.10
 τ_0, τ_1, τ_2 : $0.631, 6.6, 177 \text{ y}$
 a_0, a_1, a_2 : $0.24, 0.38, 0.38$
 $\lambda, \lambda(\text{reg})$: $1.19, 1.18 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $3.15, 2.05 \text{ }^{\circ}\text{C}$, r_{wf} : 0.65
 $ecs(\text{reg}), tcr(\text{gcm})$: $3.46, 2.04 \text{ }^{\circ}\text{C}$, r_{wf} : 0.59

CMIP5, MPI-ESM-P



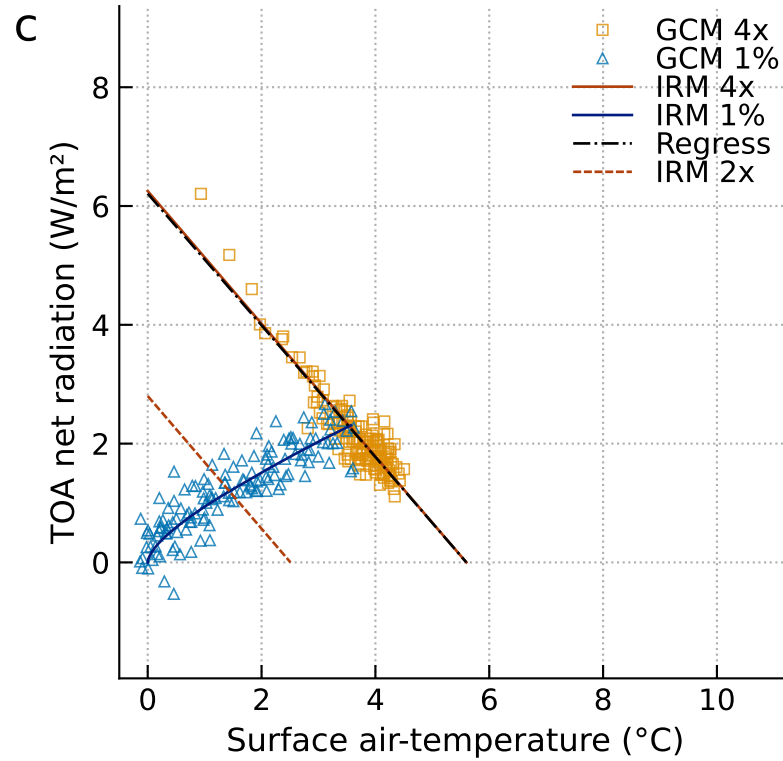
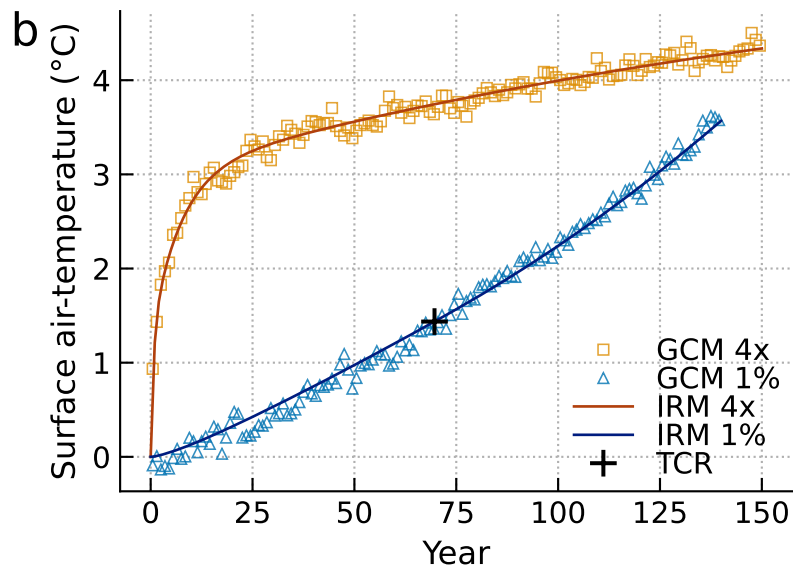
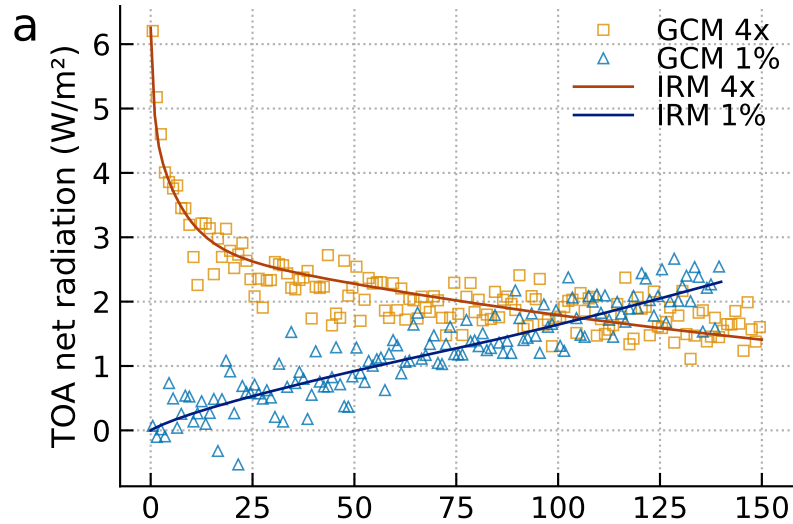
IRM-3 fitted to rtnt and tas of MPI-ESM-P
 α : 5.56 W/m^2 , β : 1.12
 τ_0 , τ_1 , τ_2 : 0.988, 8.65, 177 y
 a_0 , a_1 , a_2 : 0.34, 0.30, 0.36
 λ , $\lambda(\text{reg})$: 1.25, 1.24 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 3.09, 2.03 $^{\circ}\text{C}$, rwf : 0.66
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 3.45, 2.02 $^{\circ}\text{C}$, rwf : 0.58

CMIP5, MRI-CGCM3



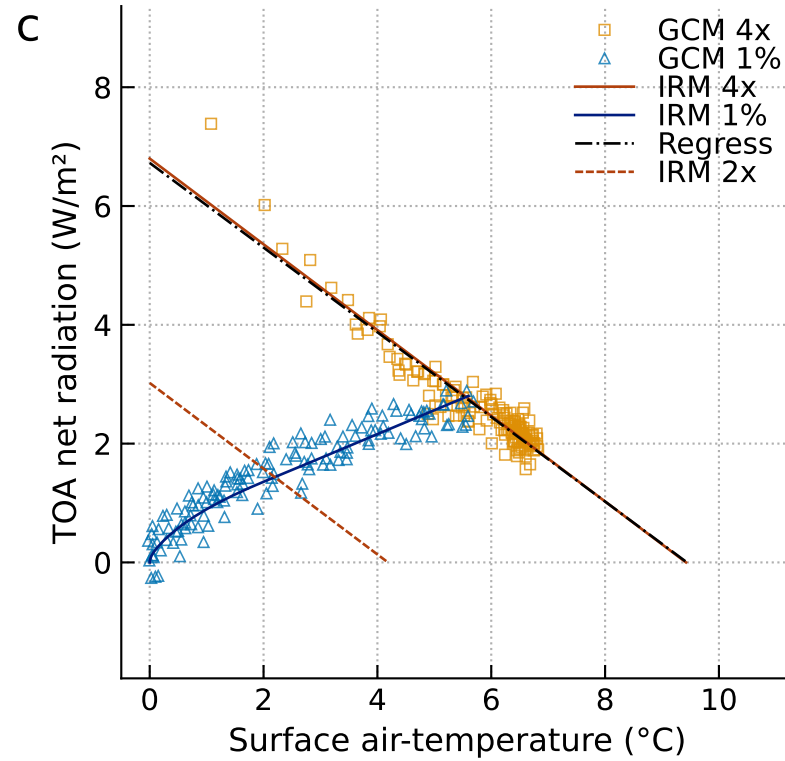
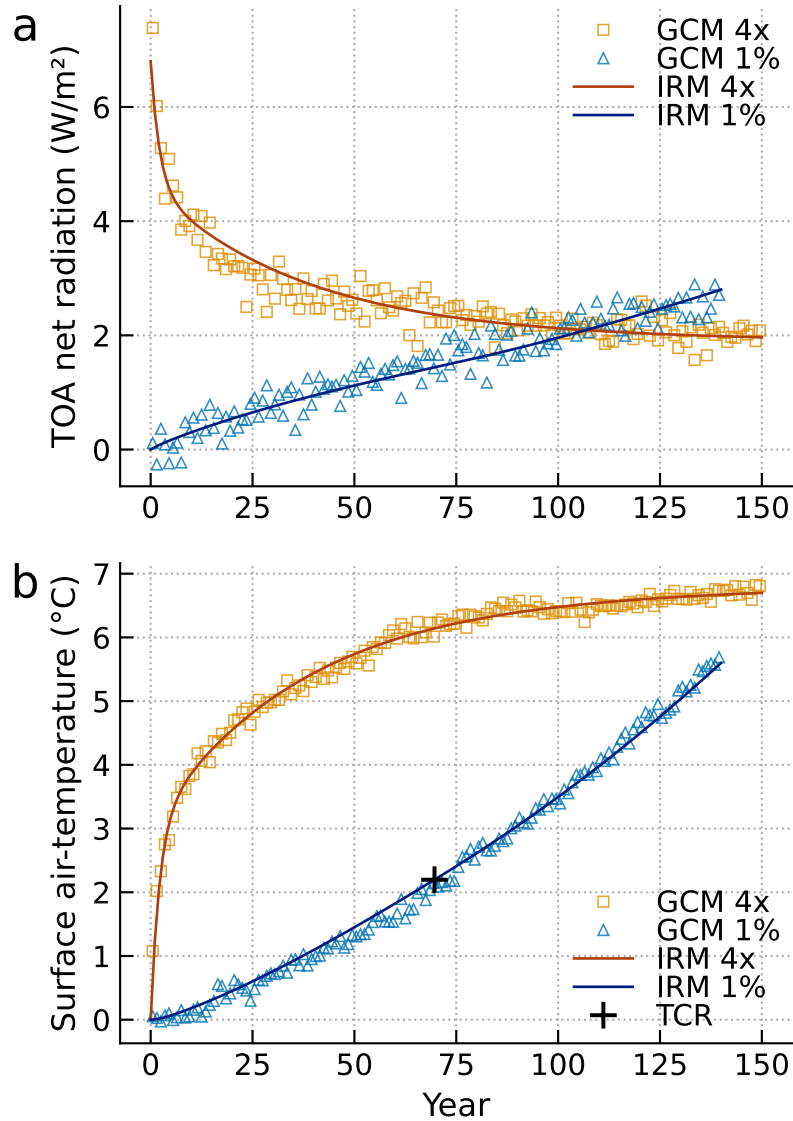
IRM-3 fitted to rtnt and tas of MRI-CGCM3
 alpha: 4.54 W/m^2 , beta: 1.04
 tau0, tau1, tau2: 0.96, 11.3, 186 y
 a0, a1, a2: 0.33, 0.35, 0.33
 lambda, lambda(reg): 1.26, 1.25 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 2.50, 1.67 $^{\circ}\text{C}$, rwf: 0.67
 ecs(reg), tcr(gcm): 2.60, 1.56 $^{\circ}\text{C}$, rwf: 0.60

CMIP5, NorESM1-M



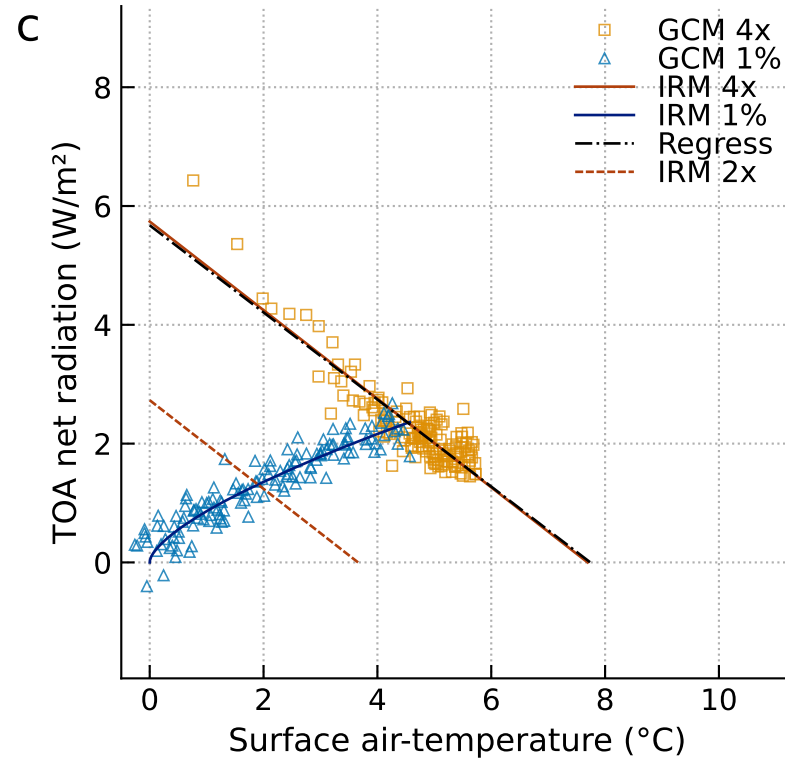
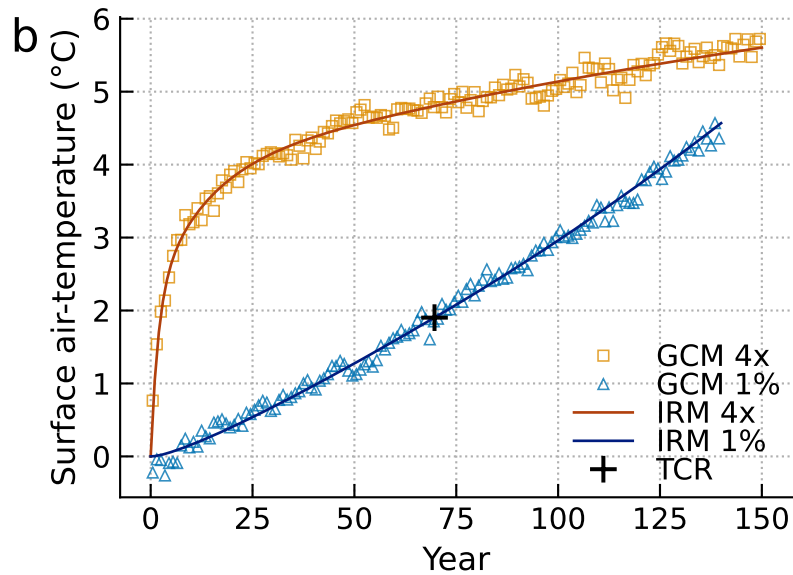
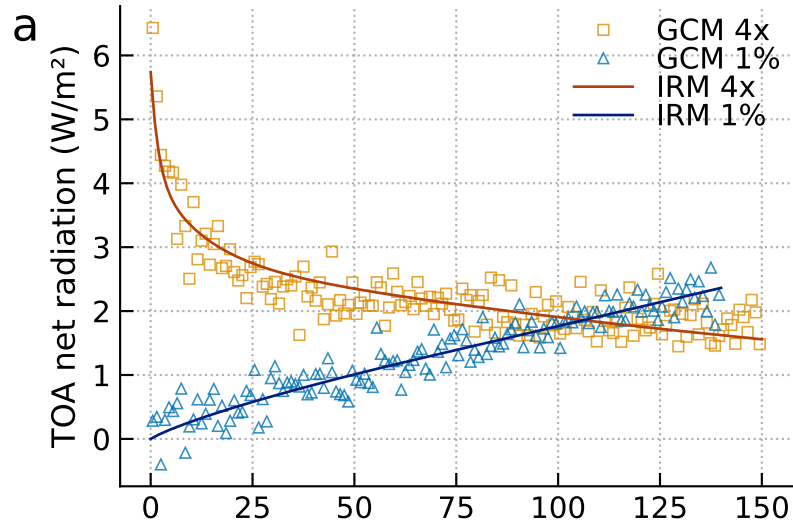
IRM-3 fitted to rtnt and tas of NorESM1-M
 alpha: 4.04 W/m^2 , beta: 1.12
 tau0, tau1, tau2: 0.684, 7.18, 209 y
 a0, a1, a2: 0.23, 0.31, 0.46
 lambda, lambda(reg): $1.12, 1.11 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.51, 1.44 ^{\circ}\text{C}$, rwf: 0.57
 ecs(reg), tcr(gcm): $2.80, 1.41 ^{\circ}\text{C}$, rwf: 0.50

CMIP6, ACCESS-CM2



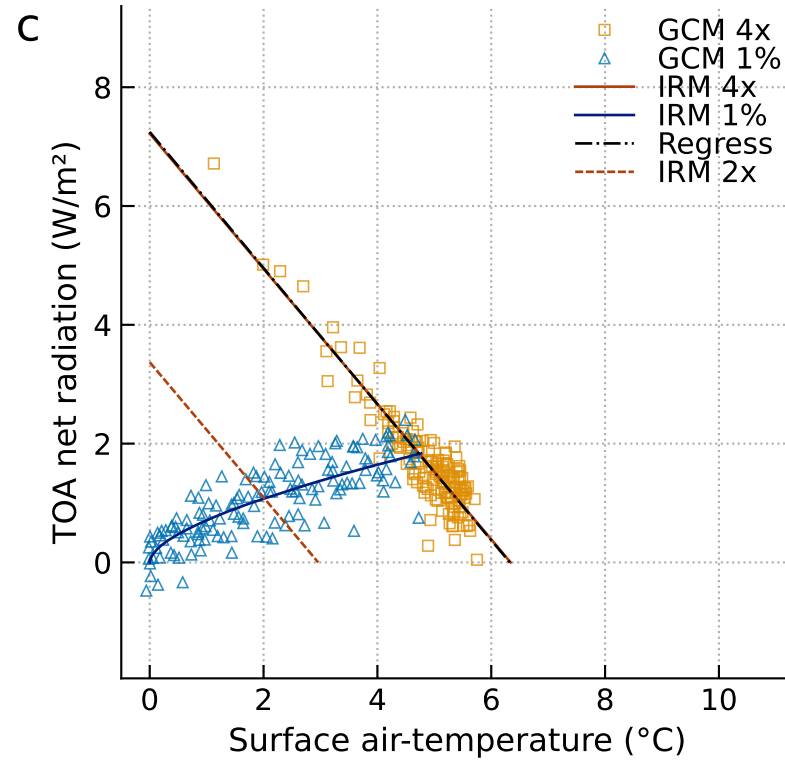
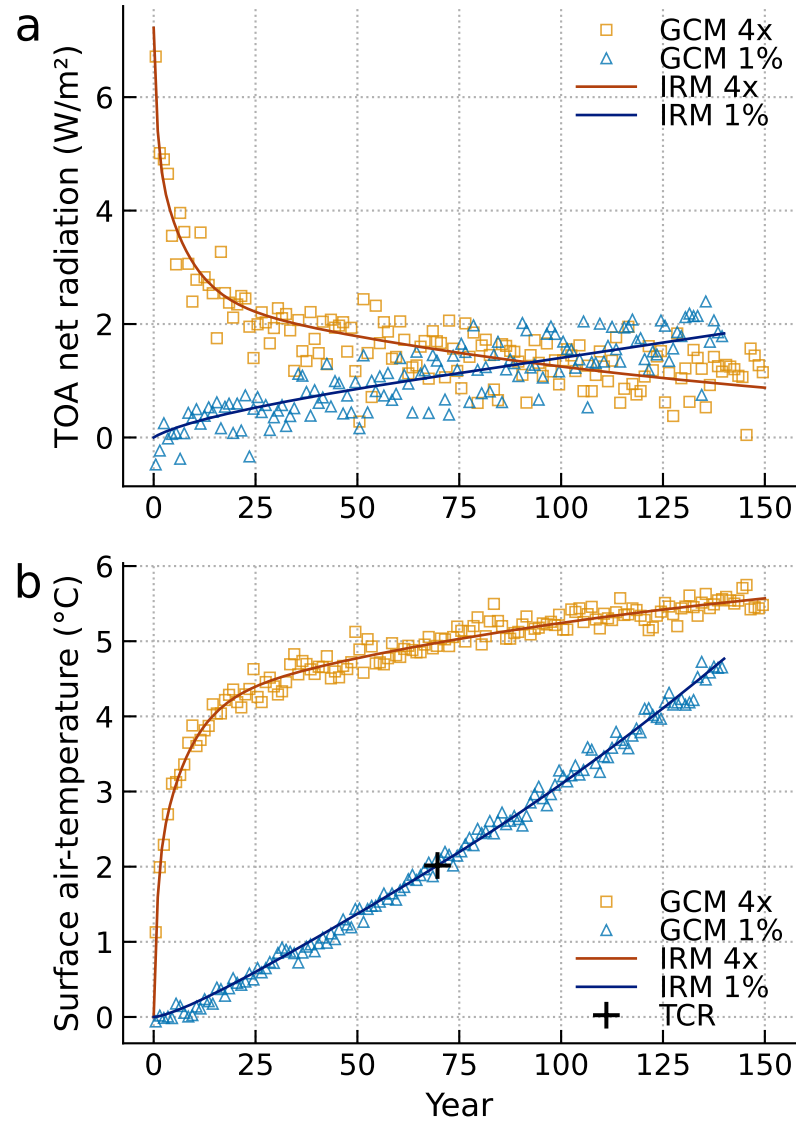
IRM-3 fitted to rtnt and tas of ACCESS-CM2
 alpha: 4.36 W/m^2 , beta: 1.13
 tau0, tau1, tau2: 2.16, 37.5, $3.66 \times 10^3 \text{ y}$
 a0, a1, a2: 0.32, 0.38, 0.29
 lambda, lambda(reg): $0.72, 0.71 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.19, 2.20 ^{\circ}\text{C}$, rwf: 0.52
 ecs(reg), tcr(gcm): $4.72, 2.11 ^{\circ}\text{C}$, rwf: 0.45

CMIP6, ACCESS-ESM1-5



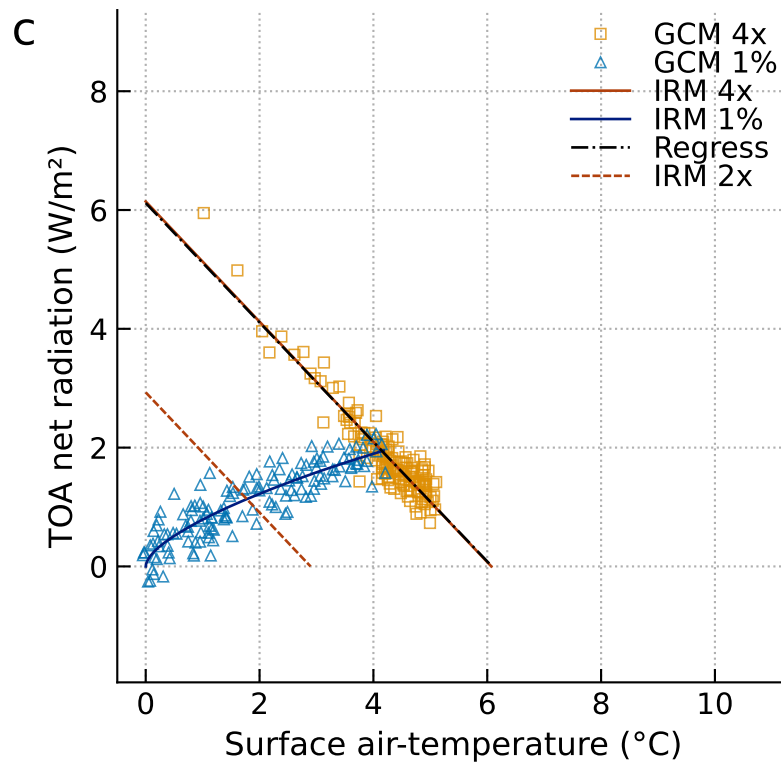
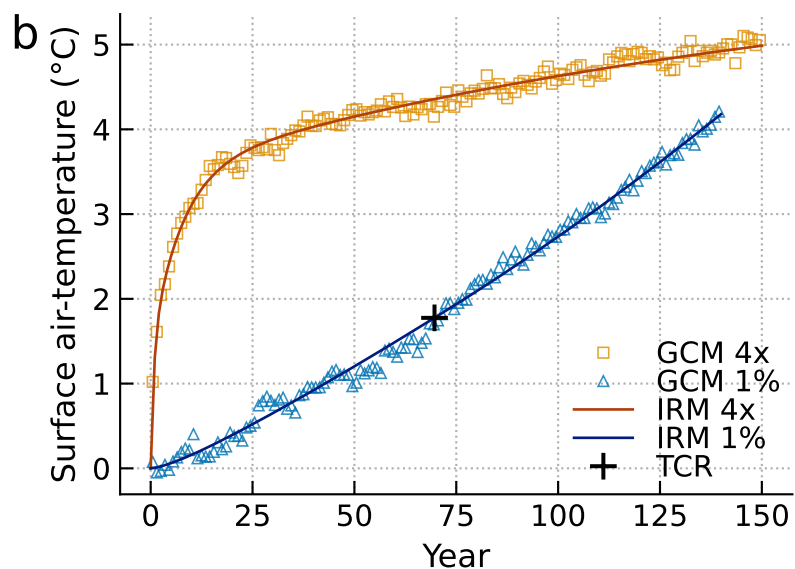
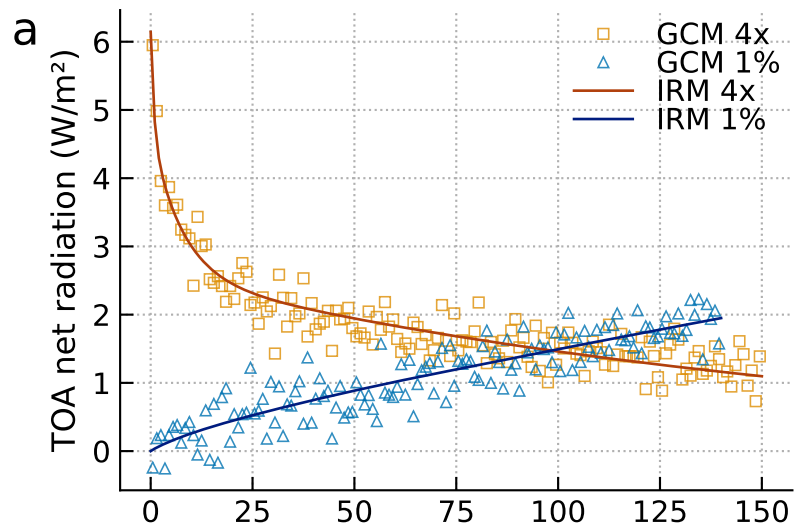
IRM-3 fitted to $rtnt$ and tas of ACCESS-ESM1-5
 α : 3.94 W/m^2 , β : 1.05
 τ_0 , τ_1 , τ_2 : 1.8, 12.3, 249 y
 a_0 , a_1 , a_2 : 0.27, 0.23, 0.50
 λ , $\lambda(\text{reg})$: 0.75, 0.73 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 3.66, 1.90 $^{\circ}\text{C}$, r_{wf} : 0.52
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 3.87, 1.95 $^{\circ}\text{C}$, r_{wf} : 0.50

CMIP6, AWI-CM-1-1-MR



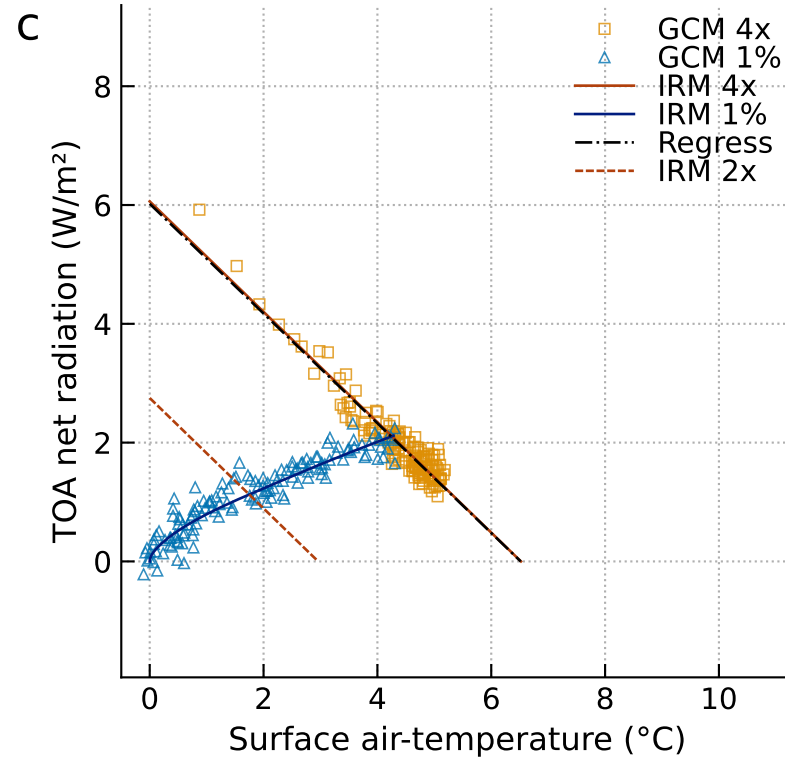
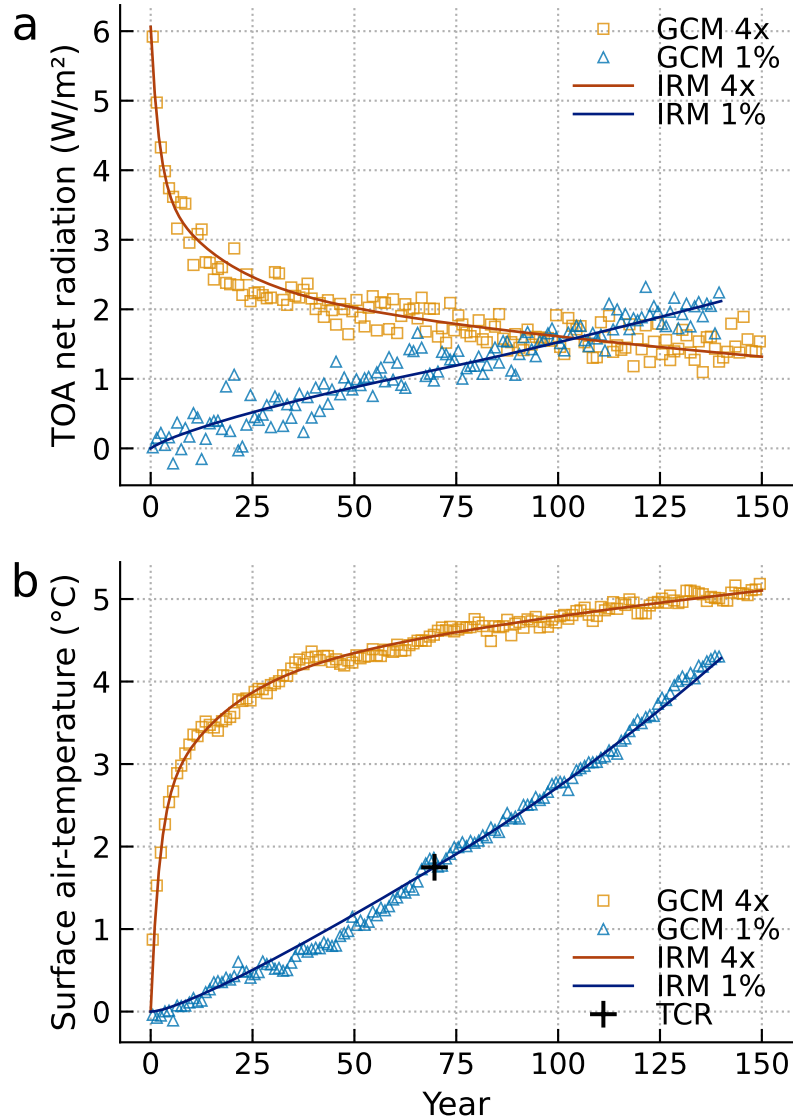
IRM-3 fitted to $rtnt$ and tas of AWI-CM-1-1-MR
 α : 4.86 W/m^2 , β : 1.07
 τ_0 , τ_1 , τ_2 : 0.8, 7.4, 141 y
 a_0 , a_1 , a_2 : 0.28, 0.36, 0.35
 λ , $\lambda(\text{reg})$: 1.14, 1.15 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.96, 2.02 $^{\circ}\text{C}$, rwf : 0.68
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 3.16, 2.06 $^{\circ}\text{C}$, rwf : 0.65

CMIP6, BCC-CSM2-MR



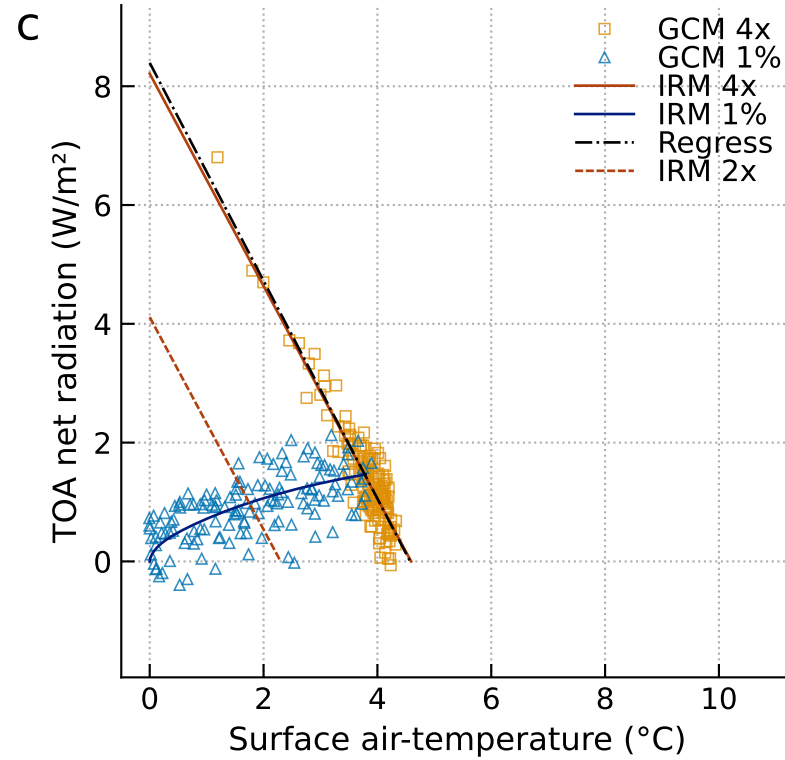
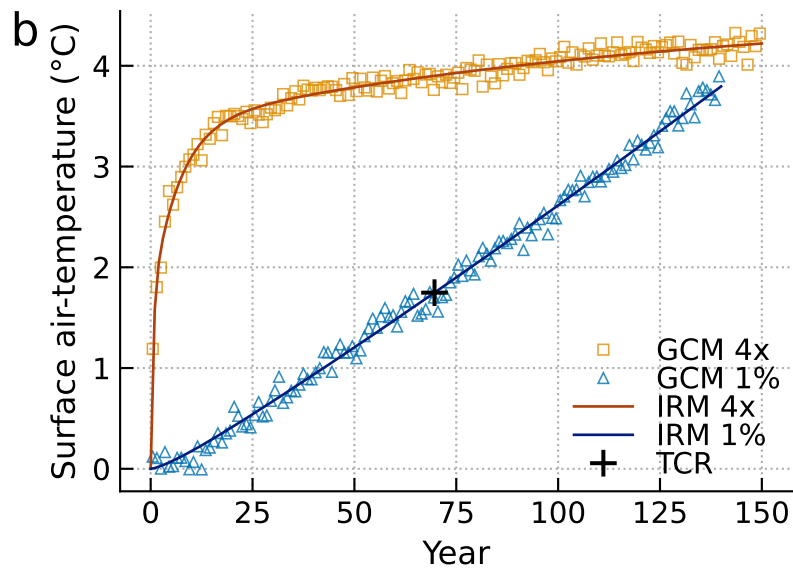
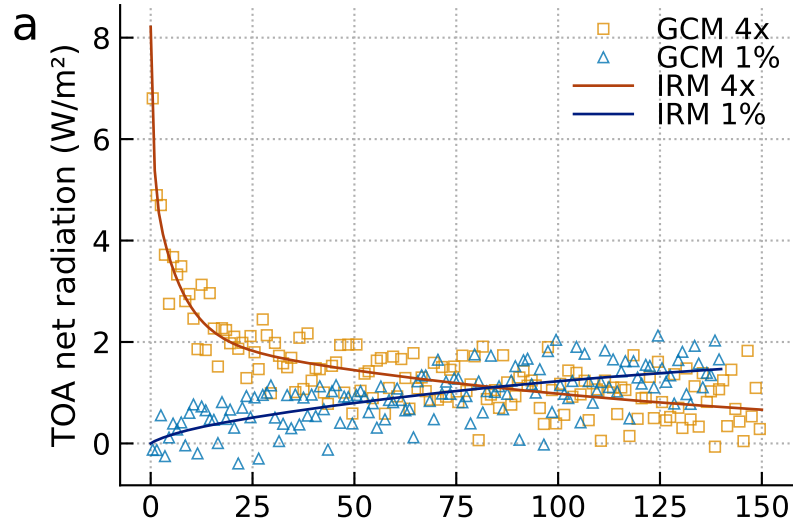
IRM-3 fitted to rtnt and tas of BCC-CSM2-MR
 alpha: 4.23 W/m^2 , beta: 1.05
 tau0, tau1, tau2: 0.769, 7.51, 175 y
 a0, a1, a2: 0.23, 0.35, 0.42
 lambda, lambda(reg): $1.01, 1.01 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.90, 1.78 ^{\circ}\text{C}$, rwf: 0.61
 ecs(reg), tcr(gcm): $3.04, 1.73 ^{\circ}\text{C}$, rwf: 0.57

CMIP6, BCC-ESM1



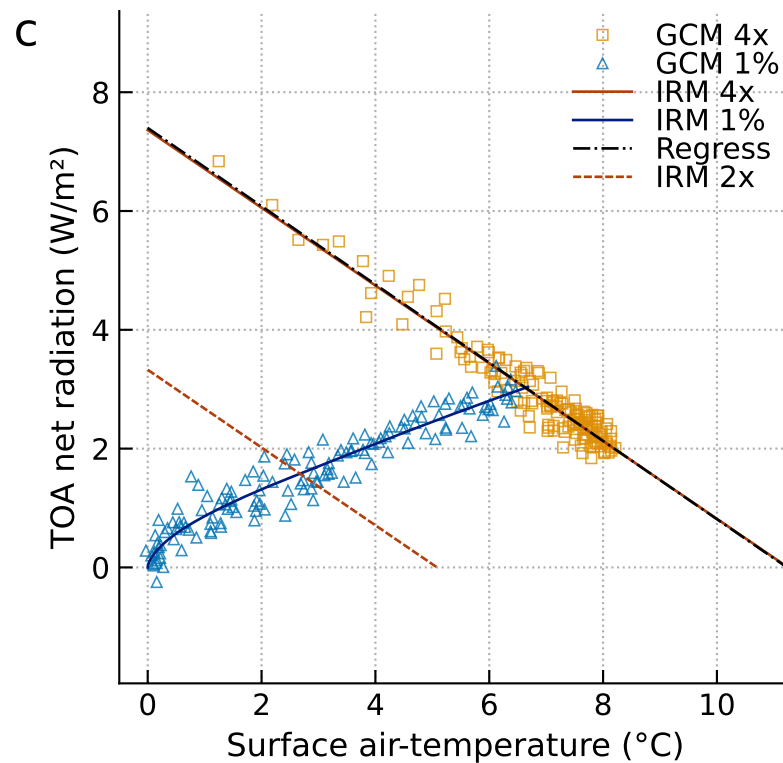
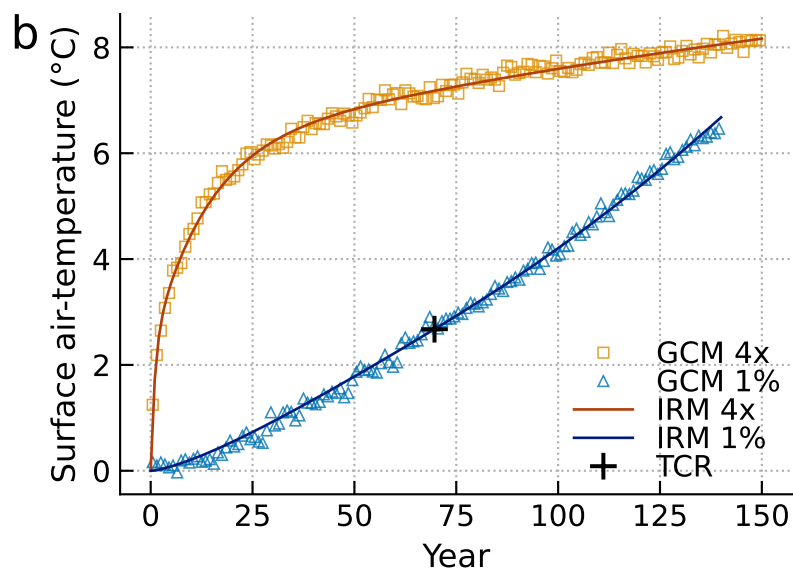
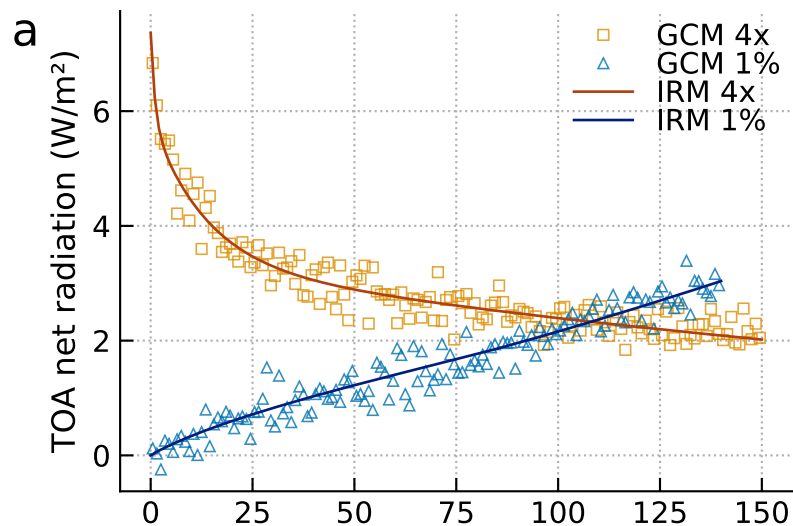
IRM-3 fitted to rtnt and tas of BCC-ESM1
 α : 3.97 W/m^2 , β : 1.10
 τ_0, τ_1, τ_2 : 2.03, 15.9, 253 y
 a_0, a_1, a_2 : 0.37, 0.24, 0.39
 $\lambda, \lambda(\text{reg})$: 0.93, 0.92 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 2.96, 1.75 $^{\circ}\text{C}$, rwf : 0.59
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: 3.26, 1.78 $^{\circ}\text{C}$, rwf : 0.55

CMIP6, CAMS-CSM1-0



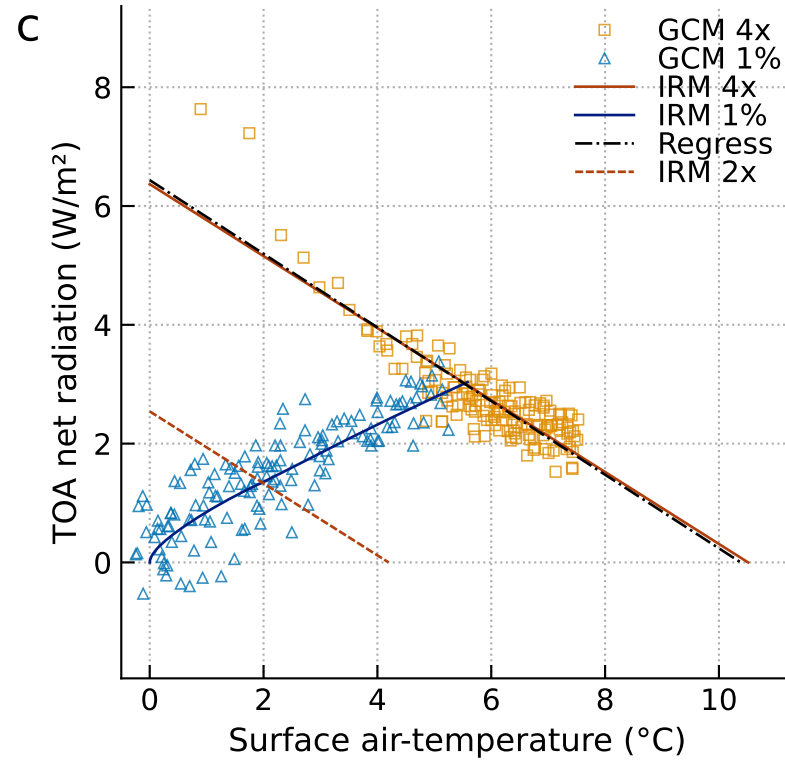
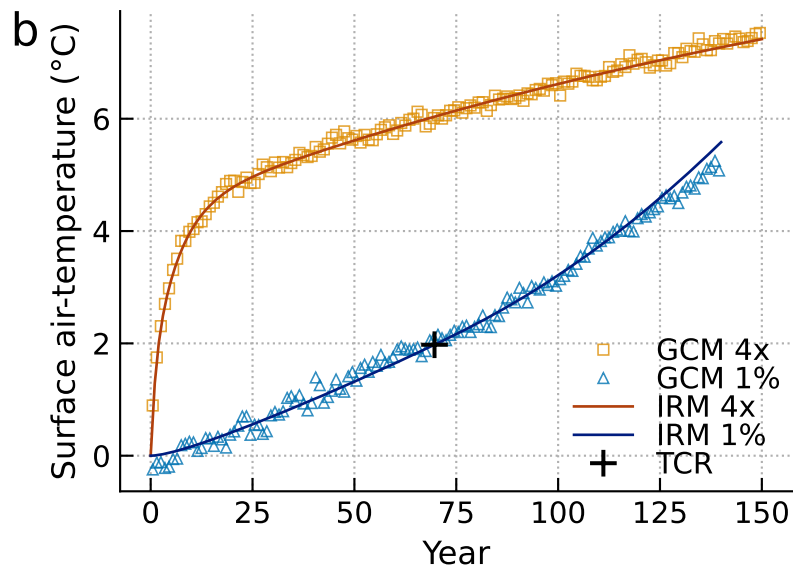
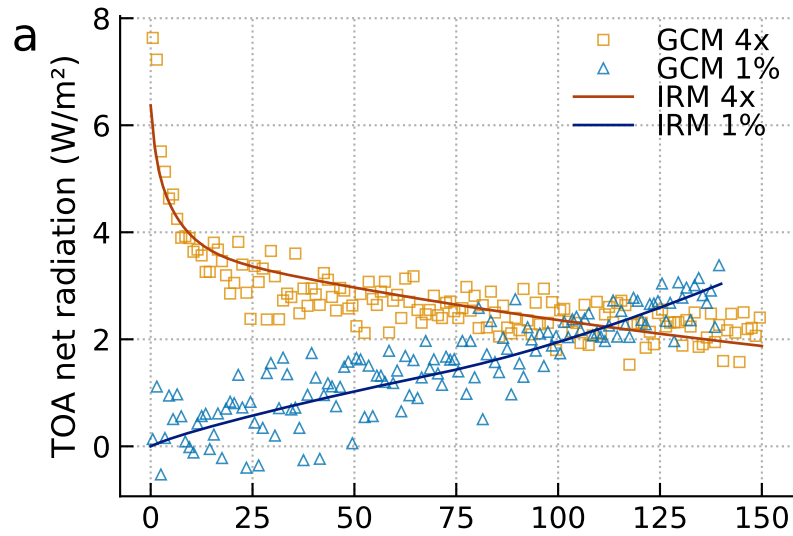
IRM-3 fitted to rtnt and tas of CAMS-CSM1-0
 α : 5.93 W/m^2 , β : 1.00
 τ_0 , τ_1 , τ_2 : 0.588, 6.71, 129 y
 a_0 , a_1 , a_2 : 0.35, 0.39, 0.26
 λ , $\lambda(\text{reg})$: 1.79, 1.83 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.30, 1.75 $^{\circ}\text{C}$, rwf : 0.76
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.29, 1.74 $^{\circ}\text{C}$, rwf : 0.76

CMIP6, CanESM5



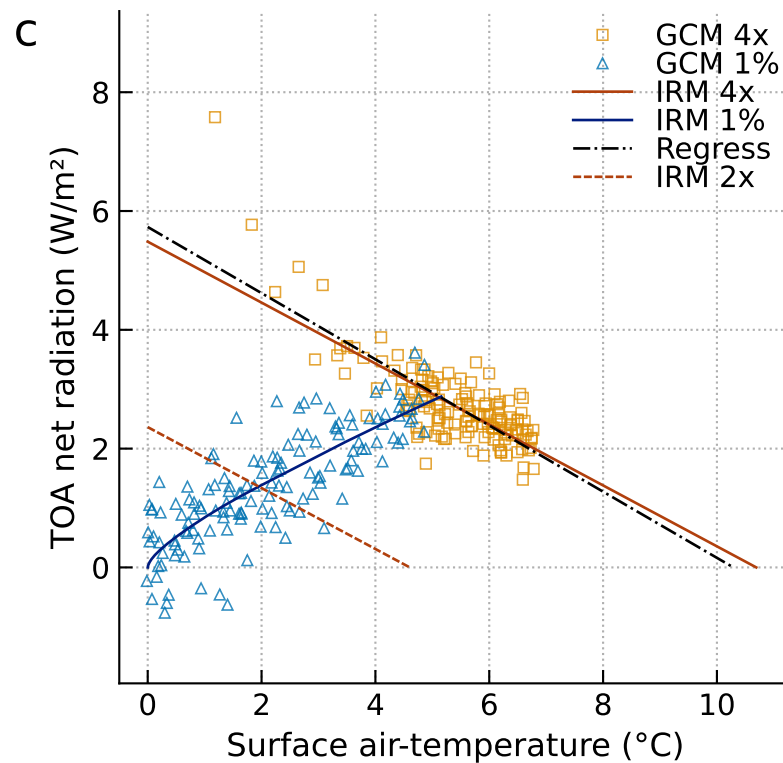
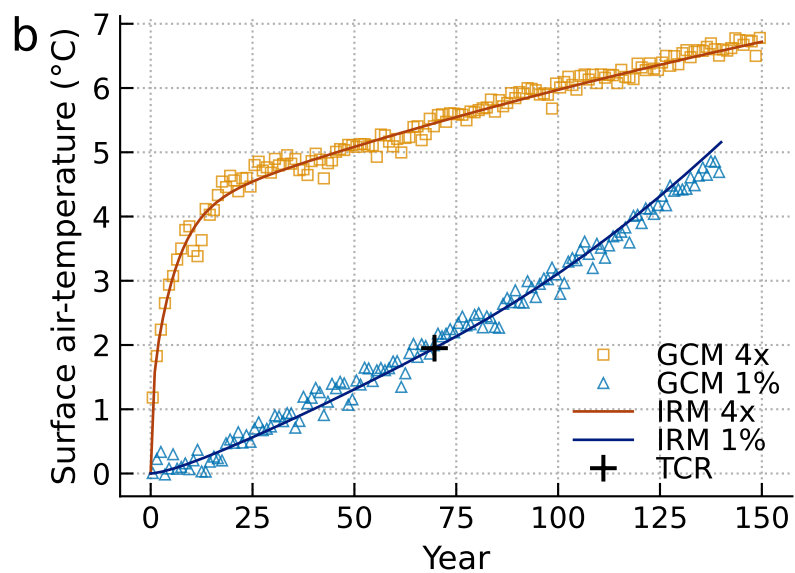
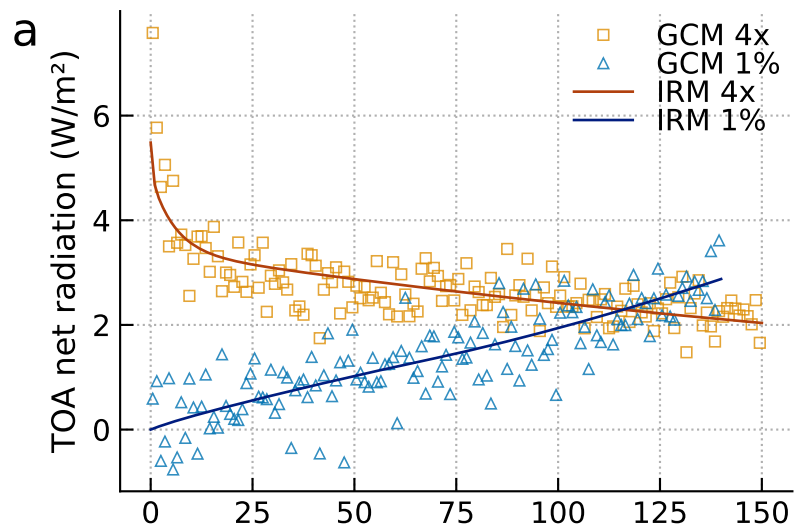
IRM-3 fitted to $rtnt$ and tas of CanESM5
 α : 4.80 W/m^2 , β : 1.11
 τ_0 , τ_1 , τ_2 : 0.998, 13.3, 296 y
 a_0 , a_1 , a_2 : 0.20, 0.34, 0.46
 λ , $\lambda(\text{reg})$: 0.65, 0.66 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 5.08, 2.67 $^{\circ}\text{C}$, r_{wf} : 0.53
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 5.62, 2.74 $^{\circ}\text{C}$, r_{wf} : 0.49

CMIP6, CESM2



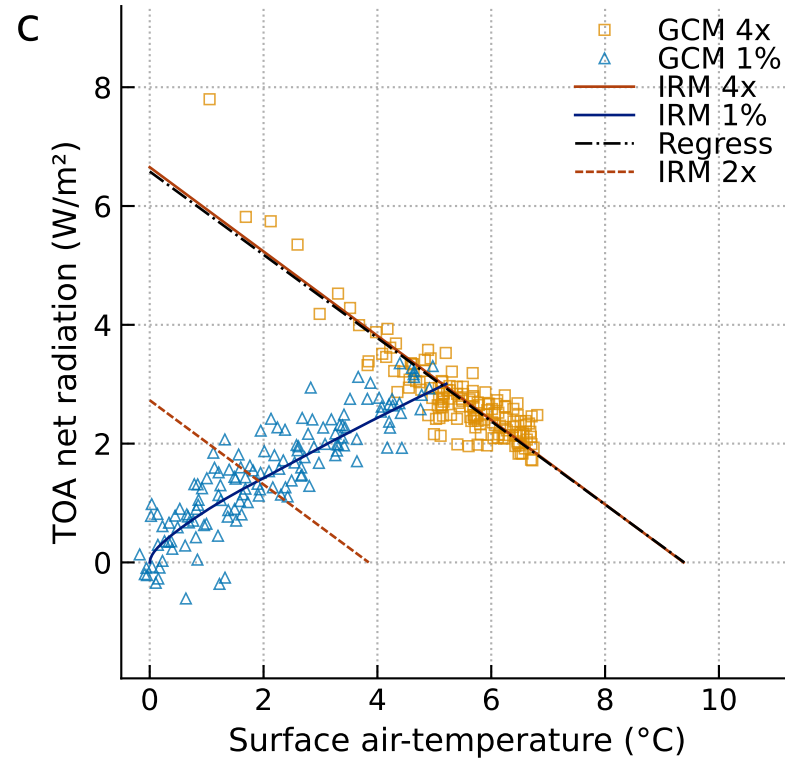
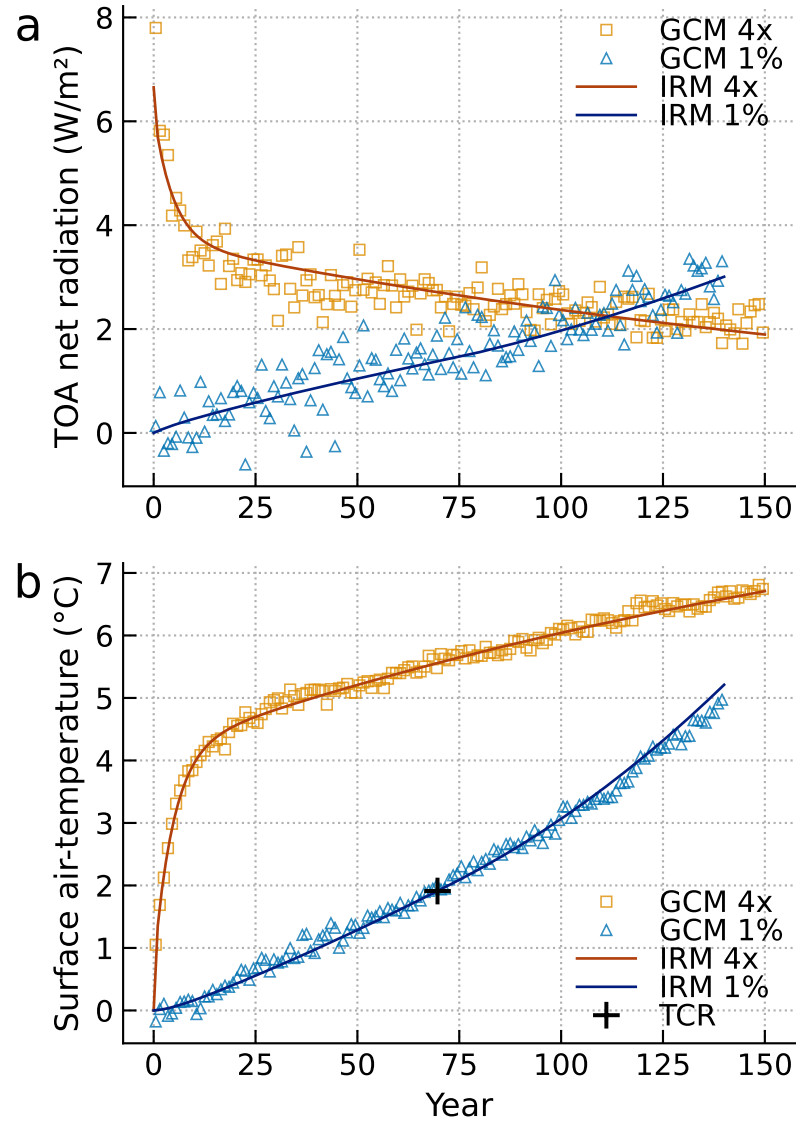
IRM-3 fitted to rtnt and tas of CESM2
 alpha: 3.67 W/m^2 , beta: 1.25
 tau0, tau1, tau2: 1.06, 6.25, 218 y
 a0, a1, a2: 0.13, 0.29, 0.59
 lambda, lambda(reg): $0.61, 0.62 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.20, 1.98 ^{\circ}\text{C}$, rwf: 0.47
 ecs(reg), tcr(gcm): $5.19, 2.06 ^{\circ}\text{C}$, rwf: 0.40

CMIP6, CESM2-FV2



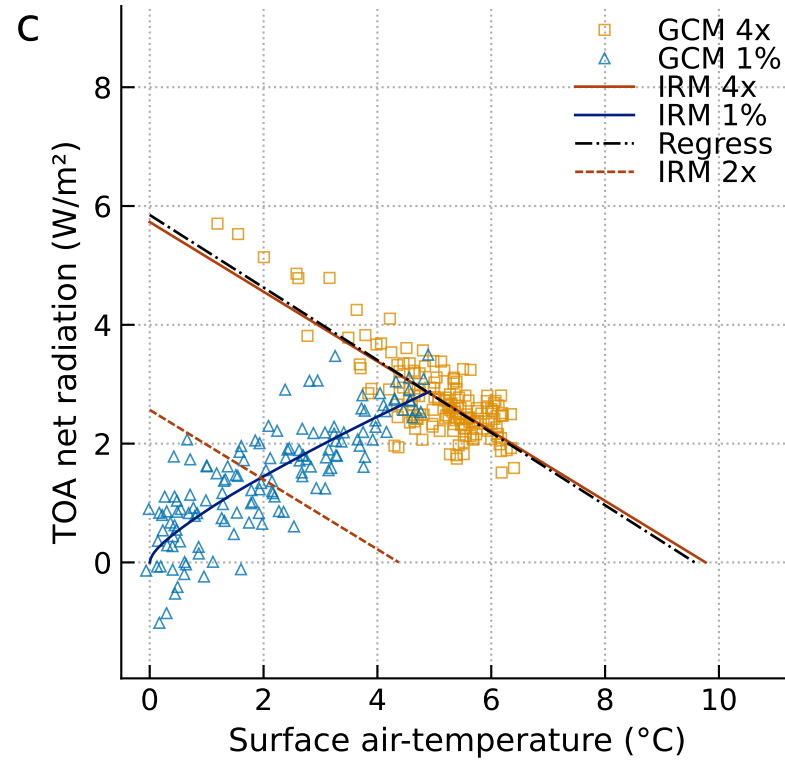
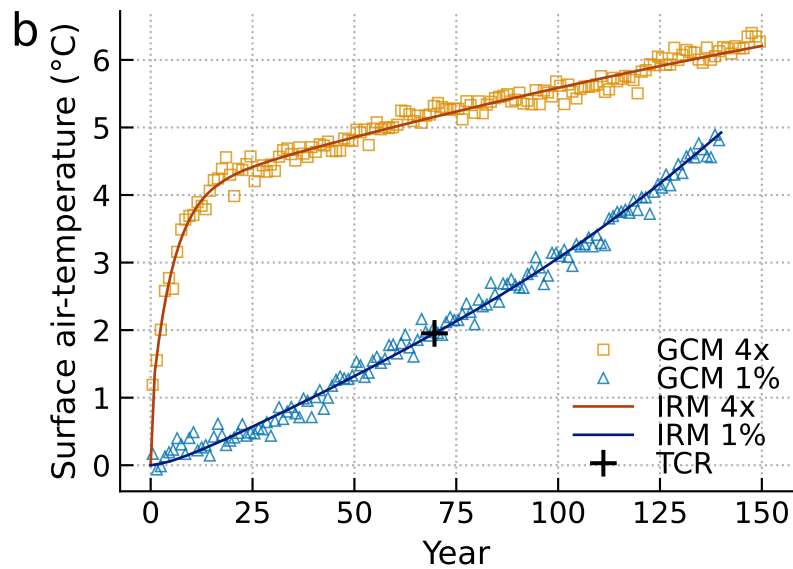
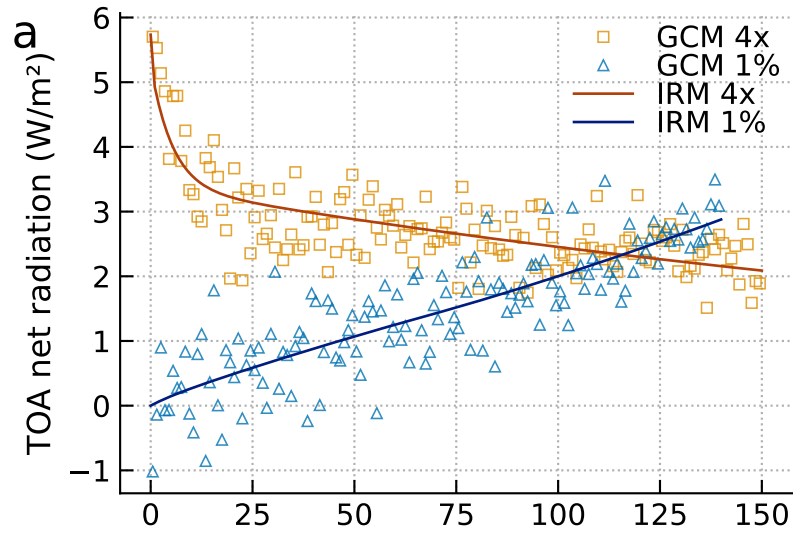
IRM-3 fitted to rtnt and tas of CESM2-FV2
 alpha: 3.41 W/m^2 , beta: 1.16
 tau0, tau1, tau2: 0.396, 5.77, 290 y
 a0, a1, a2: 0.11, 0.26, 0.62
 lambda, lambda(reg): $0.51, 0.56 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.60, 1.95 ^{\circ}\text{C}$, rwf: 0.42
 ecs(reg), tcr(gcm): $5.14, 2.05 ^{\circ}\text{C}$, rwf: 0.40

CMIP6, CESM2-WACCM



IRM-3 fitted to rtnt and tas of CESM2-WACCM
 alpha: 3.94 W/m^2 , beta: 1.22
 tau0, tau1, tau2: 0.269, 4.79, 224 y
 a0, a1, a2: 0.07, 0.37, 0.56
 lambda, lambda(reg): $0.71, 0.70 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.85, 1.91 ^{\circ}\text{C}$, rwf: 0.50
 ecs(reg), tcr(gcm): $4.70, 1.98 ^{\circ}\text{C}$, rwf: 0.42

CMIP6, CESM2-WACCM-FV2



IRM-3 fitted to rtnt and tas of CESM2-WACCM-FV2

α : 3.70 W/m^2 , β : 1.12

τ_0 , τ_1 , τ_2 : 0.00669 , 5.33 , 311 y

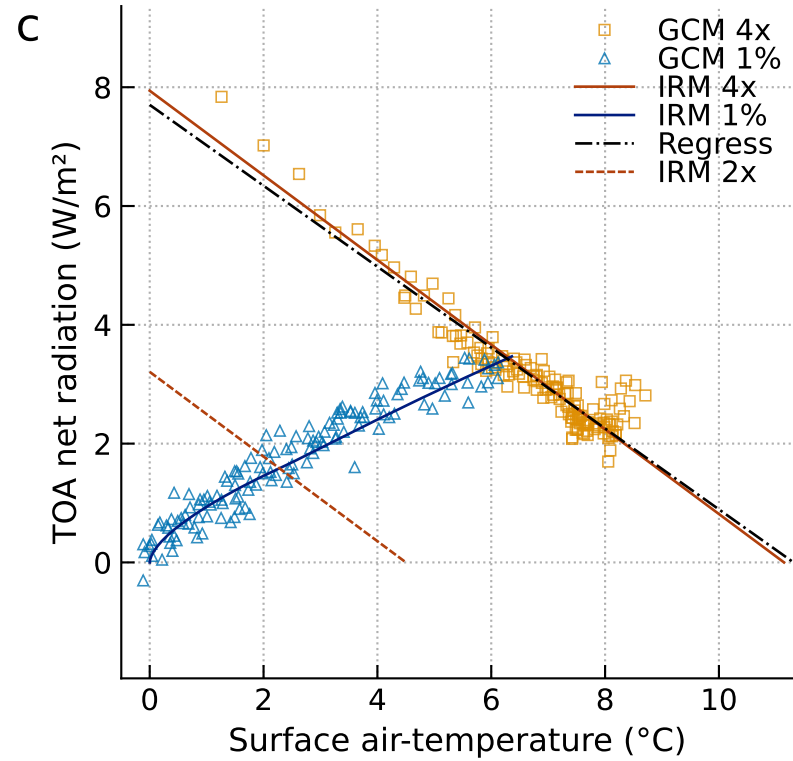
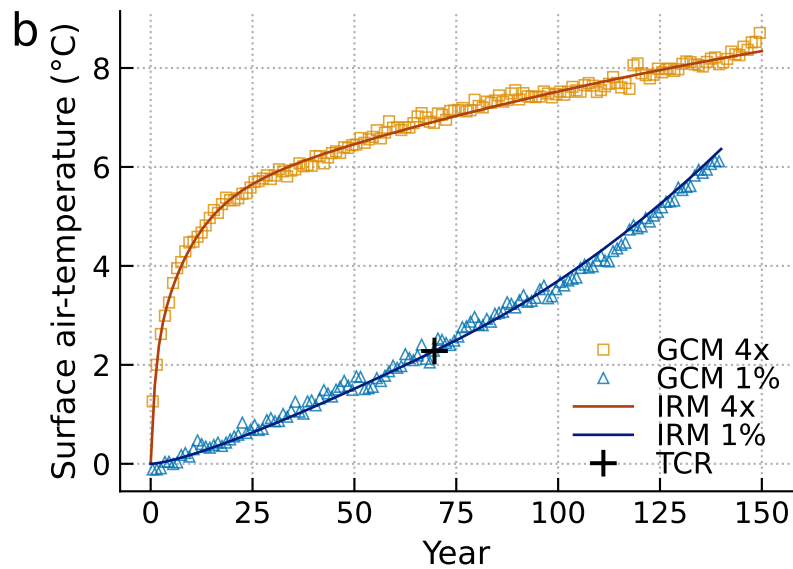
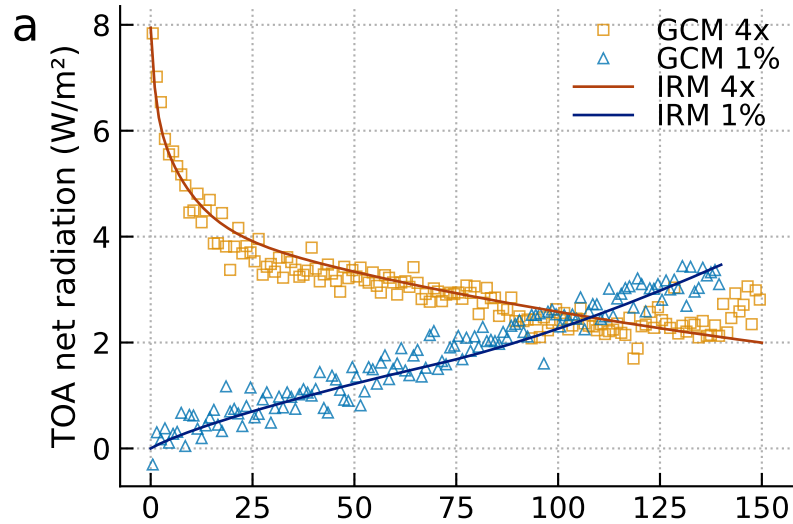
a_0 , a_1 , a_2 : 0.08 , 0.33 , 0.59

λ , $\lambda(\text{reg})$: 0.59 , $0.61 \text{ W/m}^2/^{\circ}\text{C}$

ecs , tcr : 4.38 , $1.95 \text{ }^{\circ}\text{C}$, rwf : 0.45

$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.79 , $2.01 \text{ }^{\circ}\text{C}$, rwf : 0.42

CMIP6, CIESM



IRM-3 fitted to $rtnt$ and tas of CIESM

α : 4.63 W/m^2 , β : 1.24

τ_0 , τ_1 , τ_2 : 1.05, 8.76, 196 y

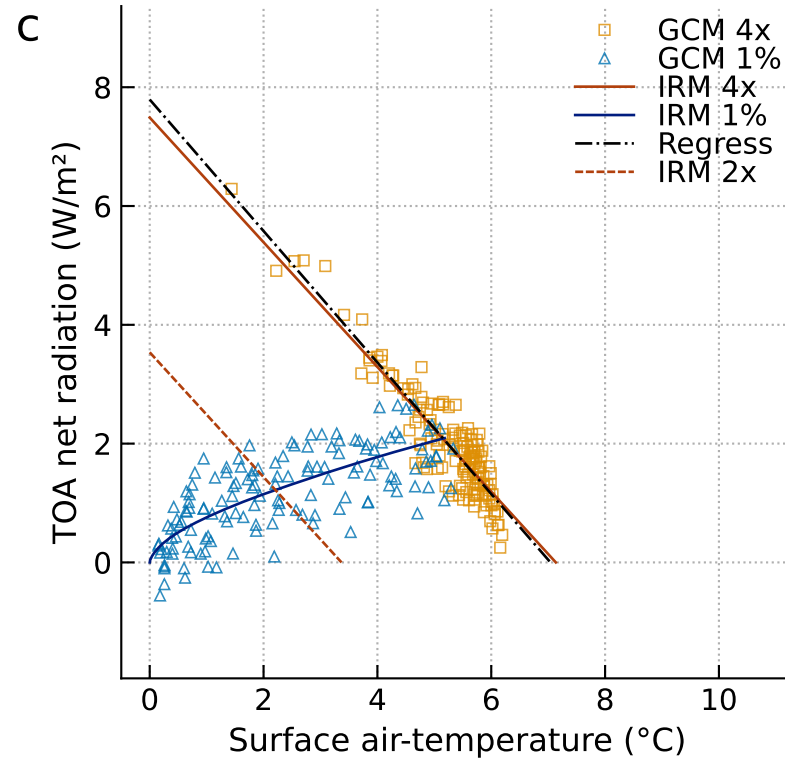
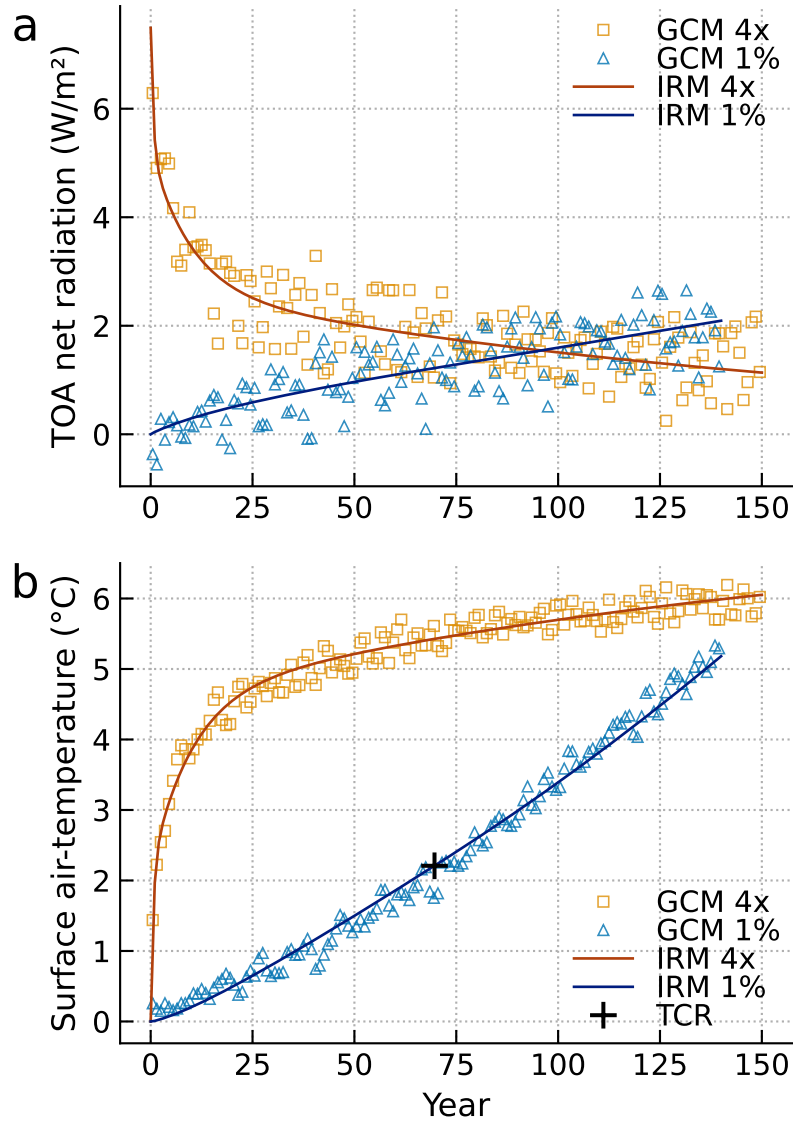
a_0 , a_1 , a_2 : 0.18, 0.28, 0.54

λ , $\lambda(\text{reg})$: 0.71, 0.68 $\text{W/m}^2/^{\circ}\text{C}$

ecs , tcr : 4.50, 2.28 $^{\circ}\text{C}$, rwf : 0.51

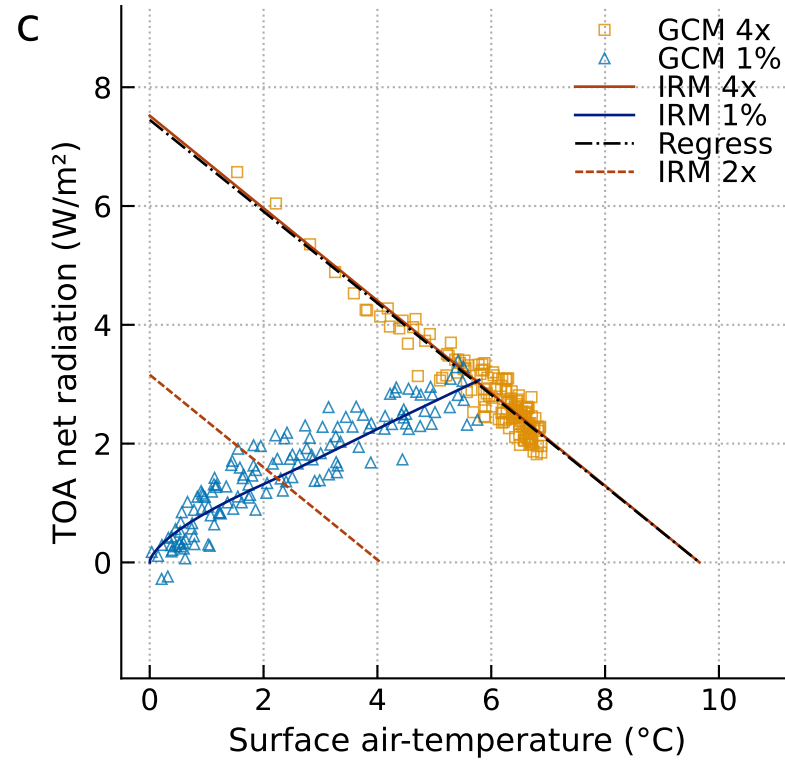
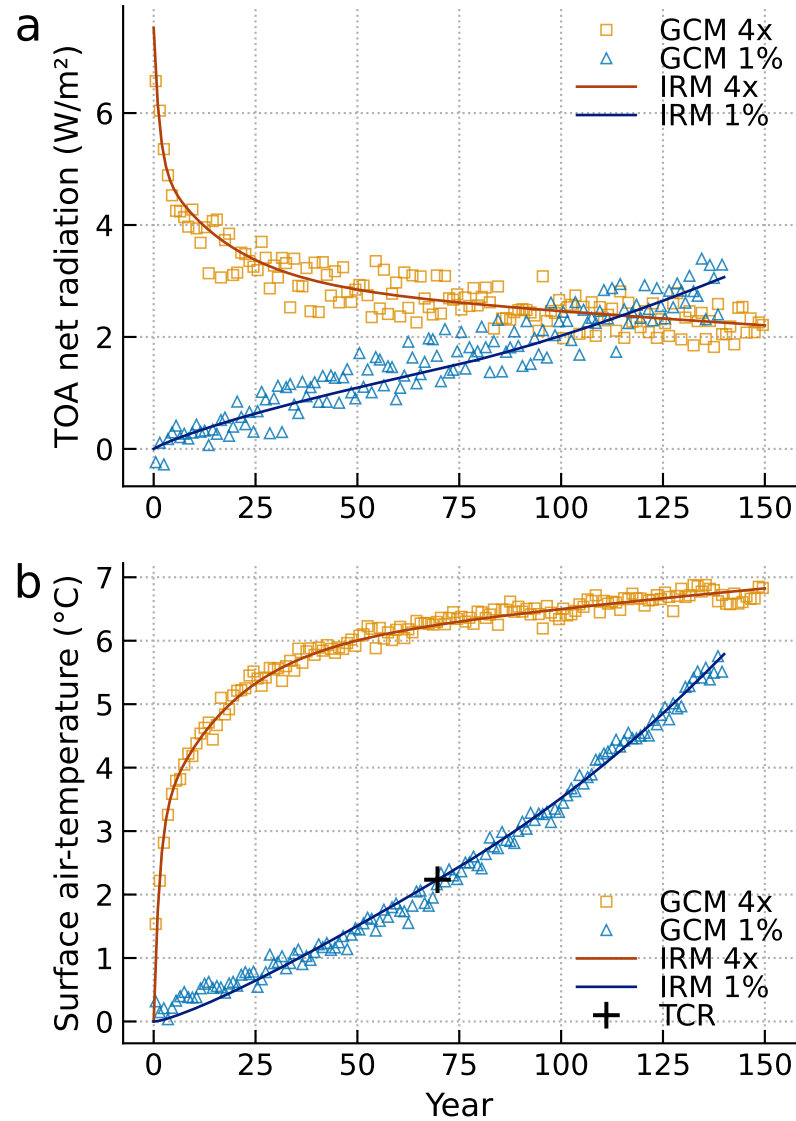
$ecs(\text{reg})$, $tcr(\text{gcm})$: 5.66, 2.39 $^{\circ}\text{C}$, rwf : 0.42

CMIP6, CMCC-CM2-SR5



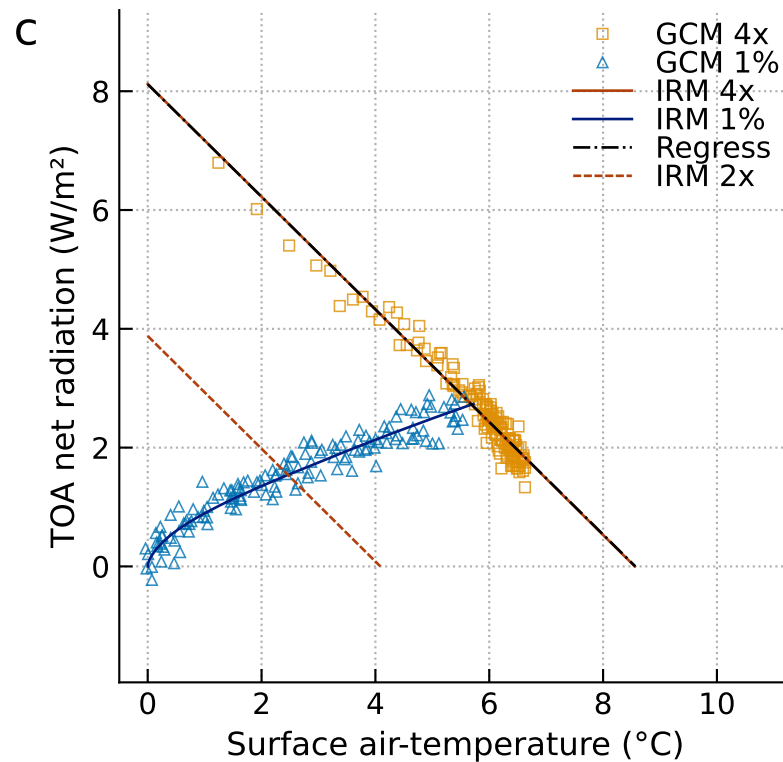
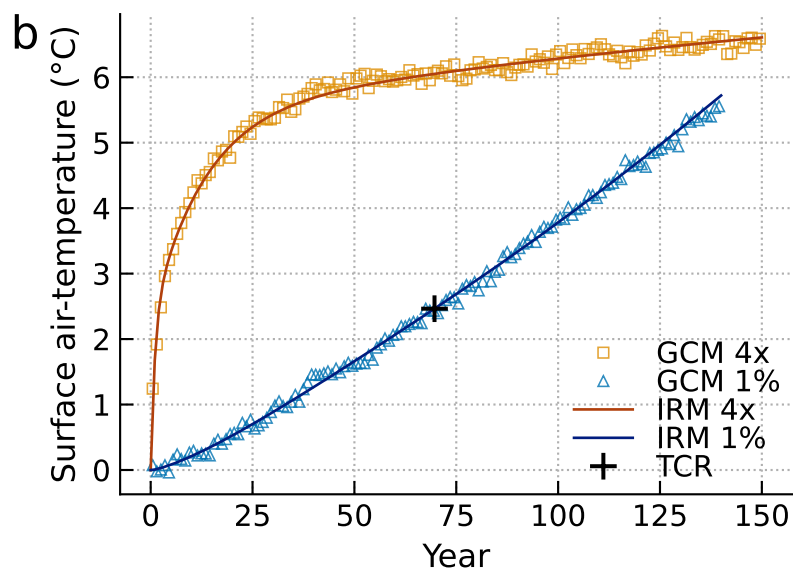
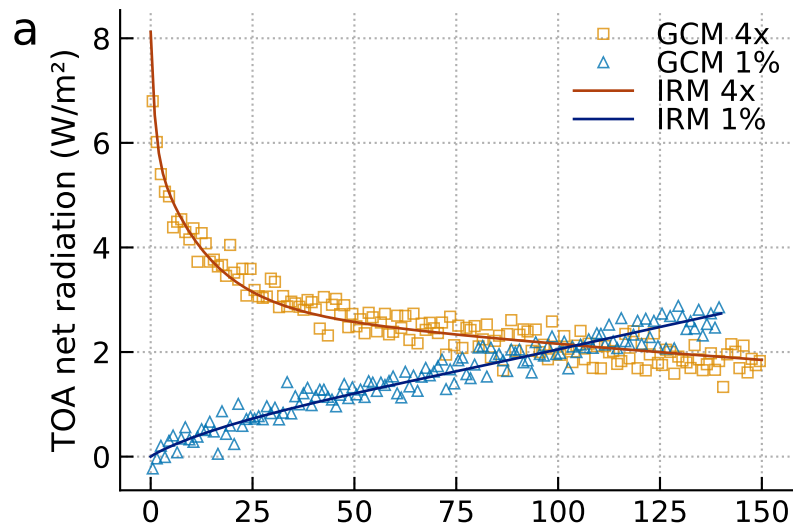
IRM-3 fitted to rtnt and tas of CMCC-CM2-SR5
 alpha: 5.10 W/m^2 , beta: 1.06
 tau0, tau1, tau2: 0.622, 9.94, 177 y
 a0, a1, a2: 0.30, 0.34, 0.35
 lambda, lambda(reg): $1.05, 1.11 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.37, 2.21 ^{\circ}\text{C}$, rwf: 0.66
 ecs(reg), tcr(gcm): $3.52, 2.08 ^{\circ}\text{C}$, rwf: 0.59

CMIP6, CNRM-CM6-1



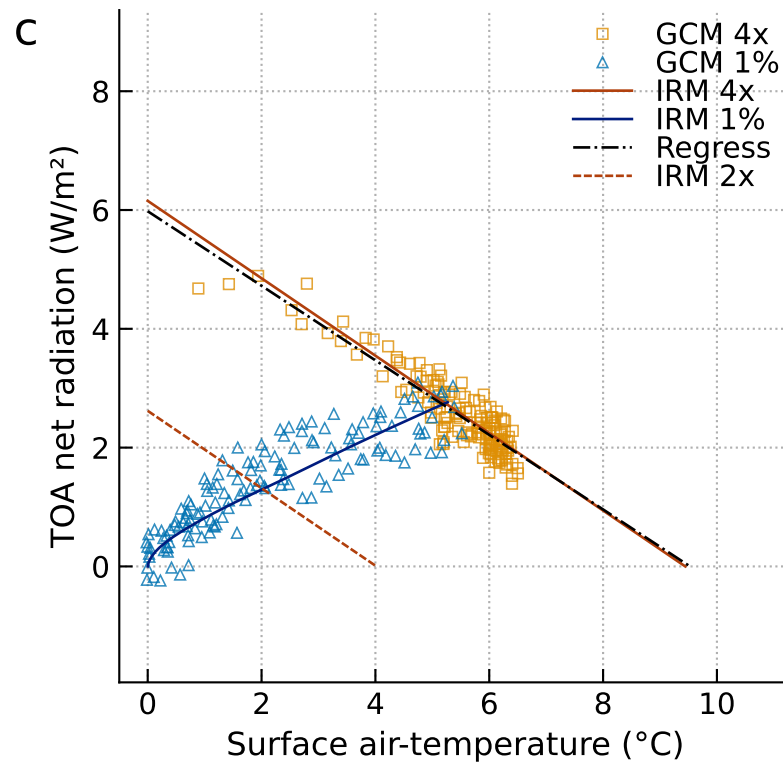
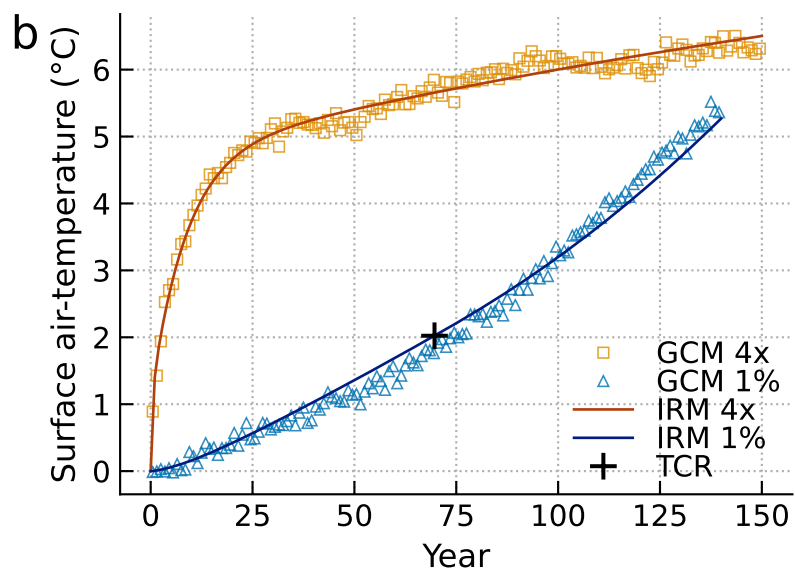
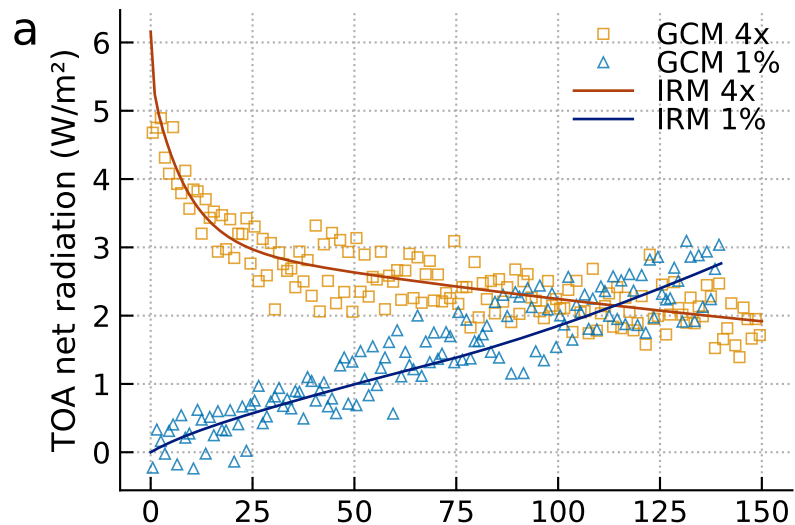
IRM-3 fitted to rtnt and tas of CNRM-CM6-1
 alpha: 4.56 W/m^2 , beta: 1.19
 tau0, tau1, tau2: 1.37, 17.3, 471 y
 a0, a1, a2: 0.32, 0.28, 0.40
 lambda, lambda(reg): $0.78, 0.77 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.06, 2.23 ^{\circ}\text{C}$, rwf: 0.55
 ecs(reg), tcr(gcm): $4.83, 2.13 ^{\circ}\text{C}$, rwf: 0.44

CMIP6, CNRM-CM6-1-HR



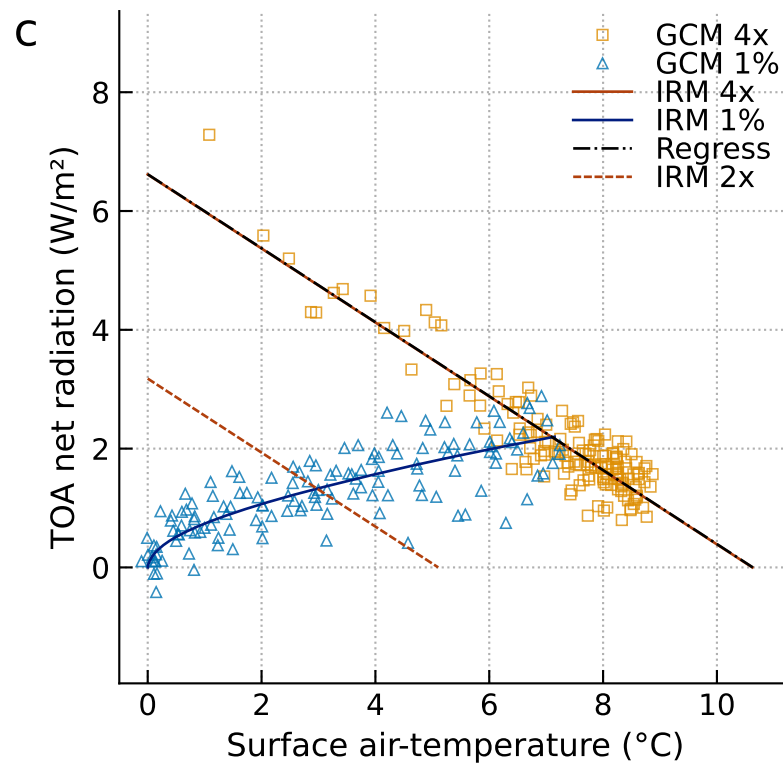
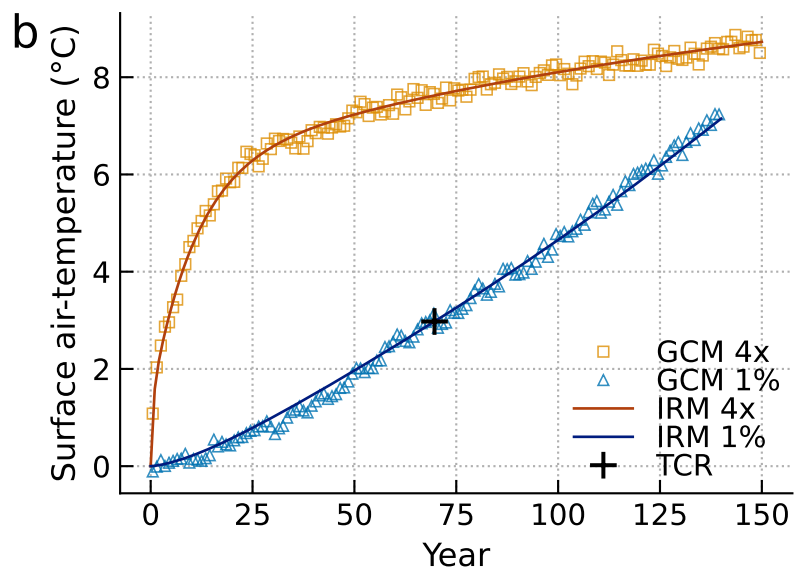
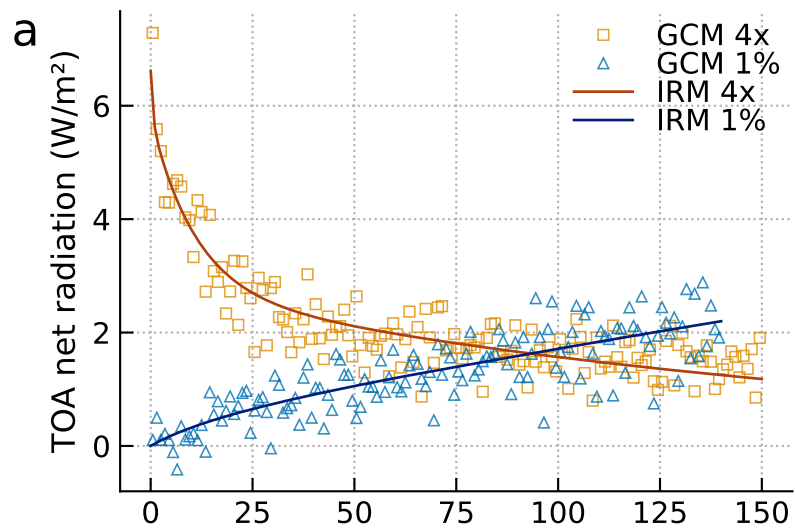
IRM-3 fitted to rtnt and tas of CNRM-CM6-1-HR
 alpha: 5.60 W/m^2 , beta: 1.05
 tau0, tau1, tau2: 1.02, 13, 328 y
 a0, a1, a2: 0.27, 0.37, 0.36
 lambda, lambda(reg): 0.95, 0.95 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 4.09, 2.46 $^{\circ}\text{C}$, rwf: 0.60
 ecs(reg), tcr(gcm): 4.28, 2.47 $^{\circ}\text{C}$, rwf: 0.58

CMIP6, CNRM-ESM2-1



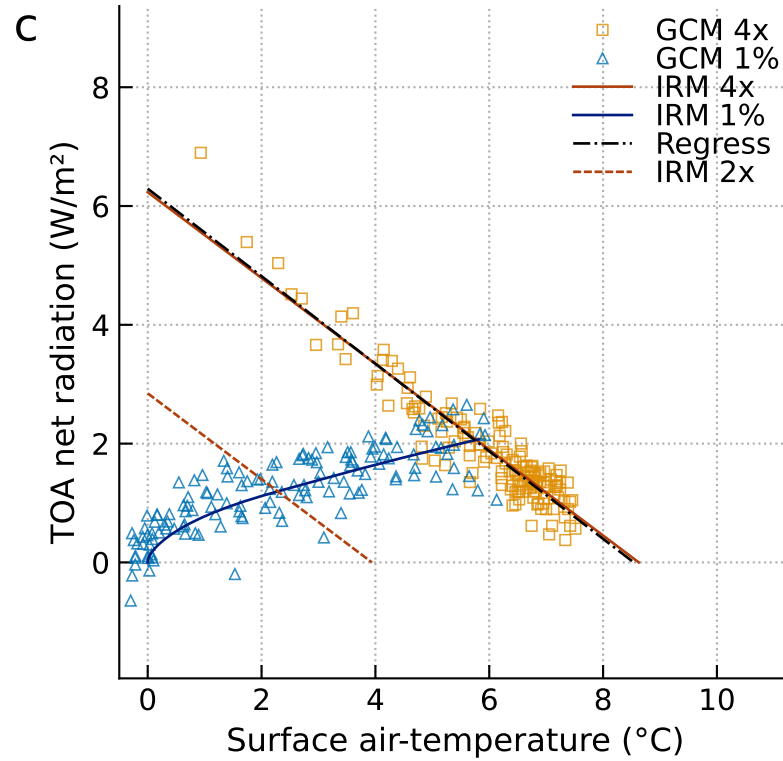
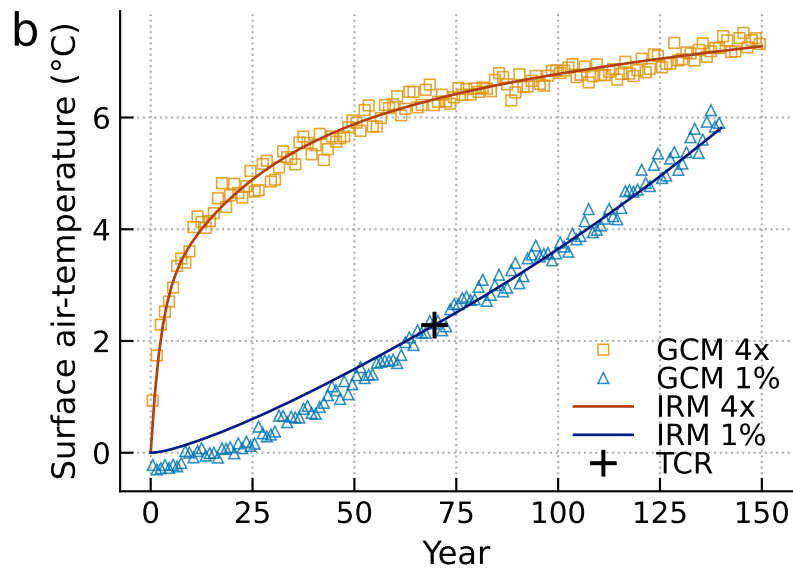
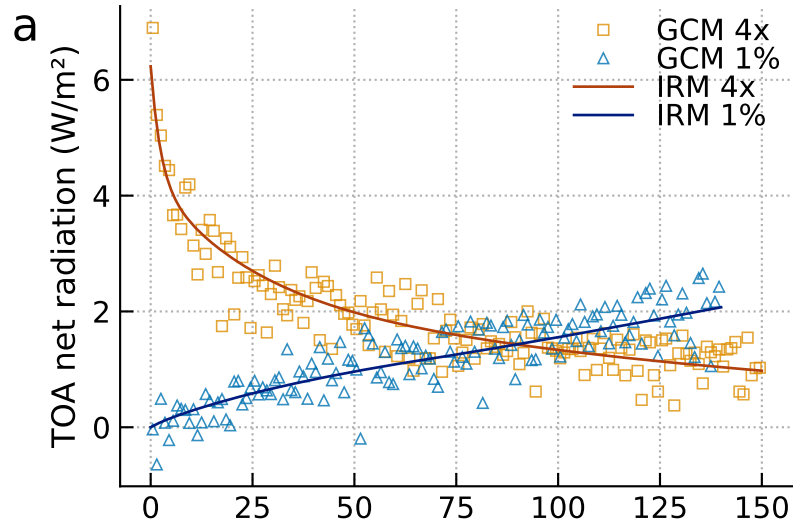
IRM-3 fitted to rtnt and tas of CNRM-ESM2-1
 alpha: 3.78 W/m^2 , beta: 1.17
 tau0, tau1, tau2: 0.413, 8.63, 318 y
 a0, a1, a2: 0.11, 0.39, 0.50
 lambda, lambda(reg): $0.65, 0.63 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.02, 2.02 \text{ }^{\circ}\text{C}$, rwf: 0.50
 ecs(reg), tcr(gcm): $4.76, 1.84 \text{ }^{\circ}\text{C}$, rwf: 0.39

CMIP6, E3SM-1-0



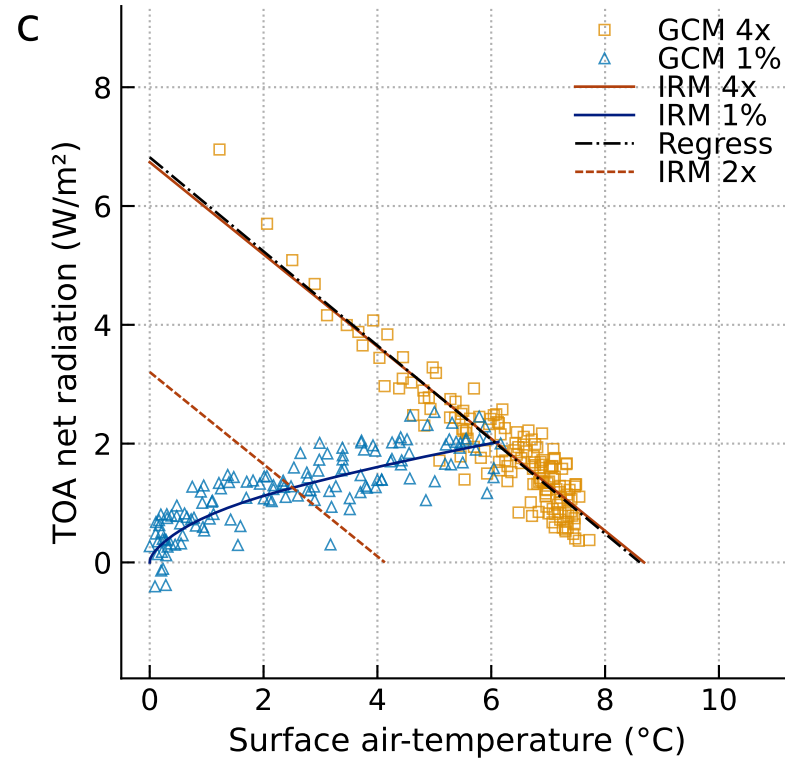
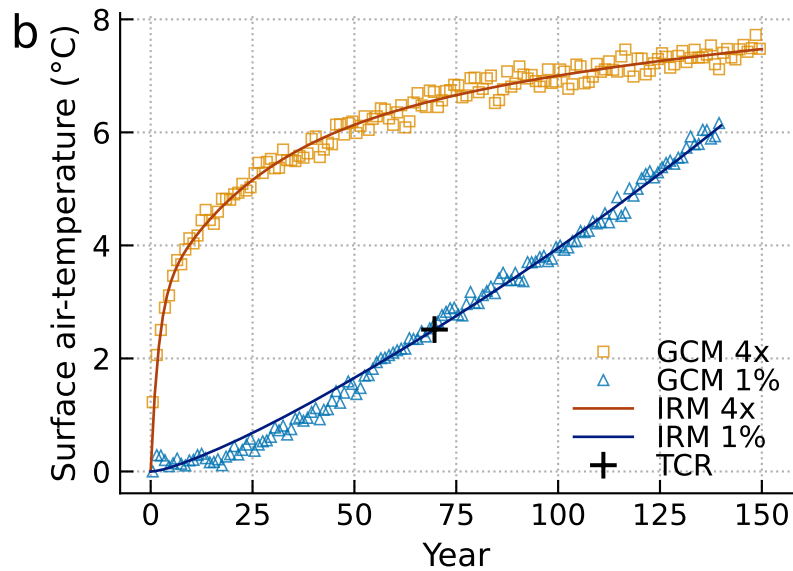
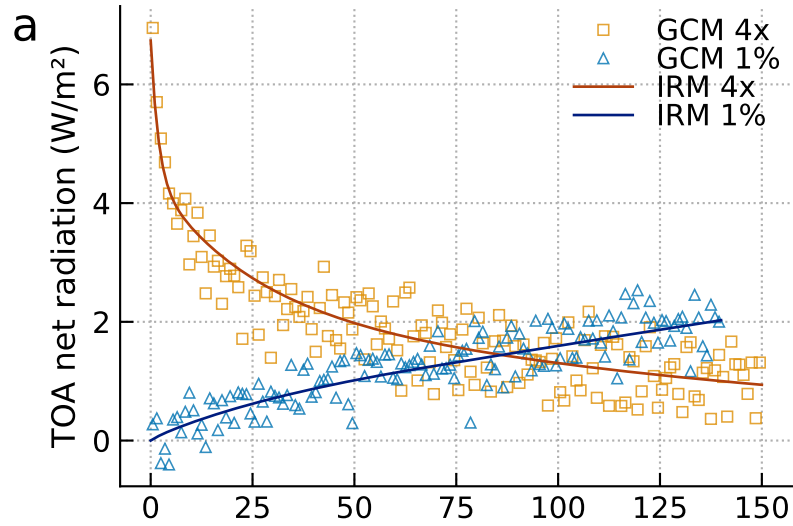
IRM-3 fitted to rtnt and tas of E3SM-1-0
 α : 4.59 W/m^2 , β : 1.04
 τ_0 , τ_1 , τ_2 : 0.504, 10.8, 177 y
 a_0 , a_1 , a_2 : 0.12, 0.46, 0.42
 λ , $\lambda(\text{reg})$: 0.62, 0.62 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 5.10, 2.98 $^{\circ}\text{C}$, rwf : 0.58
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 5.32, 2.99 $^{\circ}\text{C}$, rwf : 0.56

CMIP6, EC-Earth3



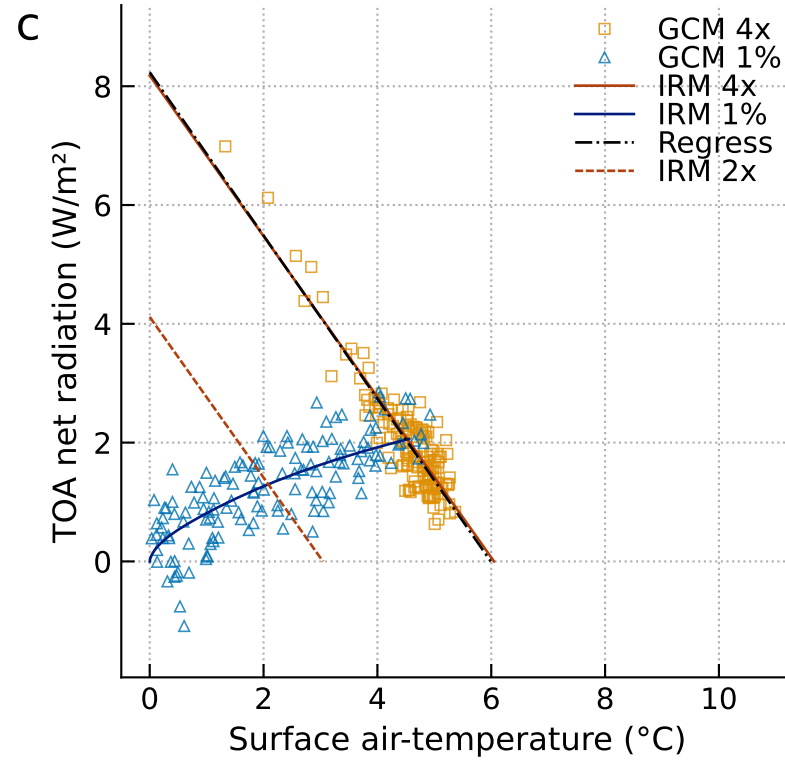
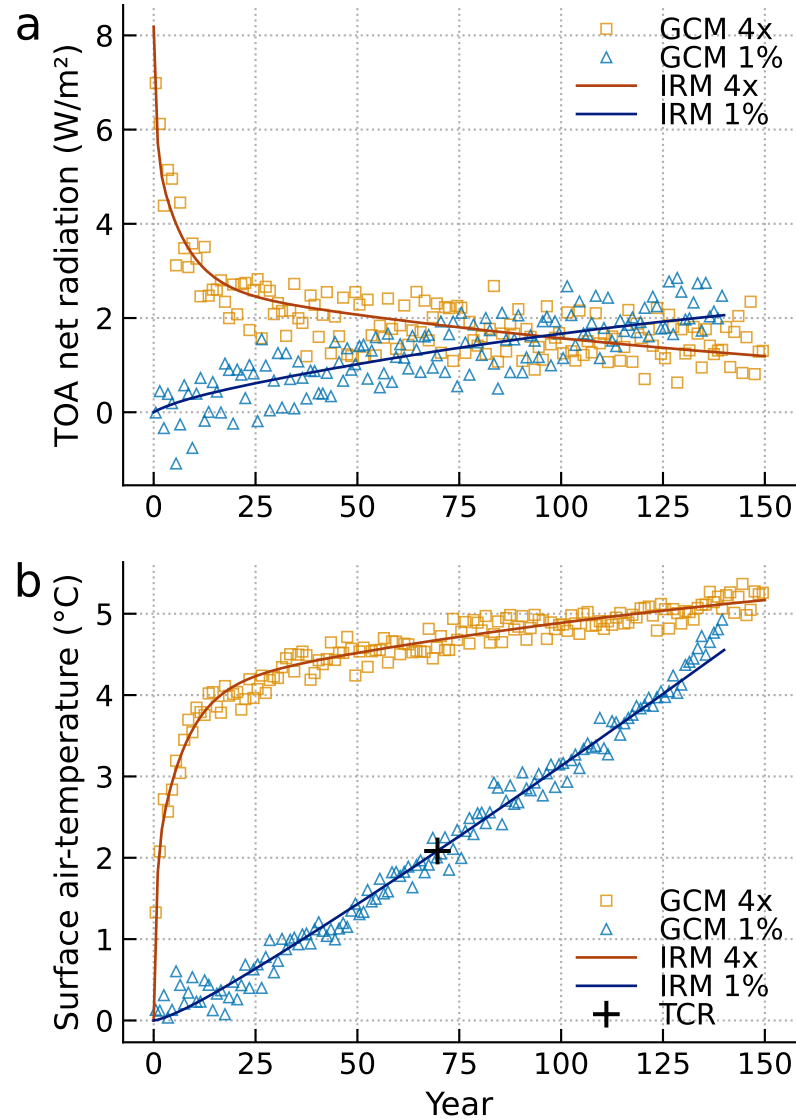
IRM-3 fitted to rtnt and tas of EC-Earth3
 α : 4.11 W/m^2 , β : 1.09
 τ_0 , τ_1 , τ_2 : 2.4, 23.1, 169 y
 a_0 , a_1 , a_2 : 0.31, 0.31, 0.38
 λ , $\lambda(\text{reg})$: 0.72, 0.74 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 3.94, 2.28 $^{\circ}\text{C}$, rwf : 0.58
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.27, 2.31 $^{\circ}\text{C}$, rwf : 0.54

CMIP6, EC-Earth3-Veg



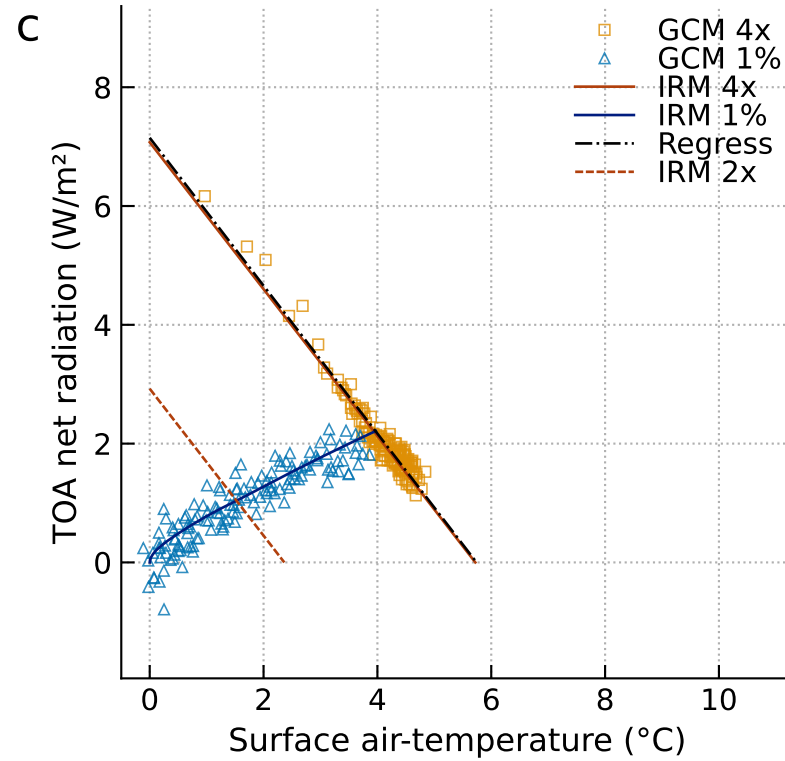
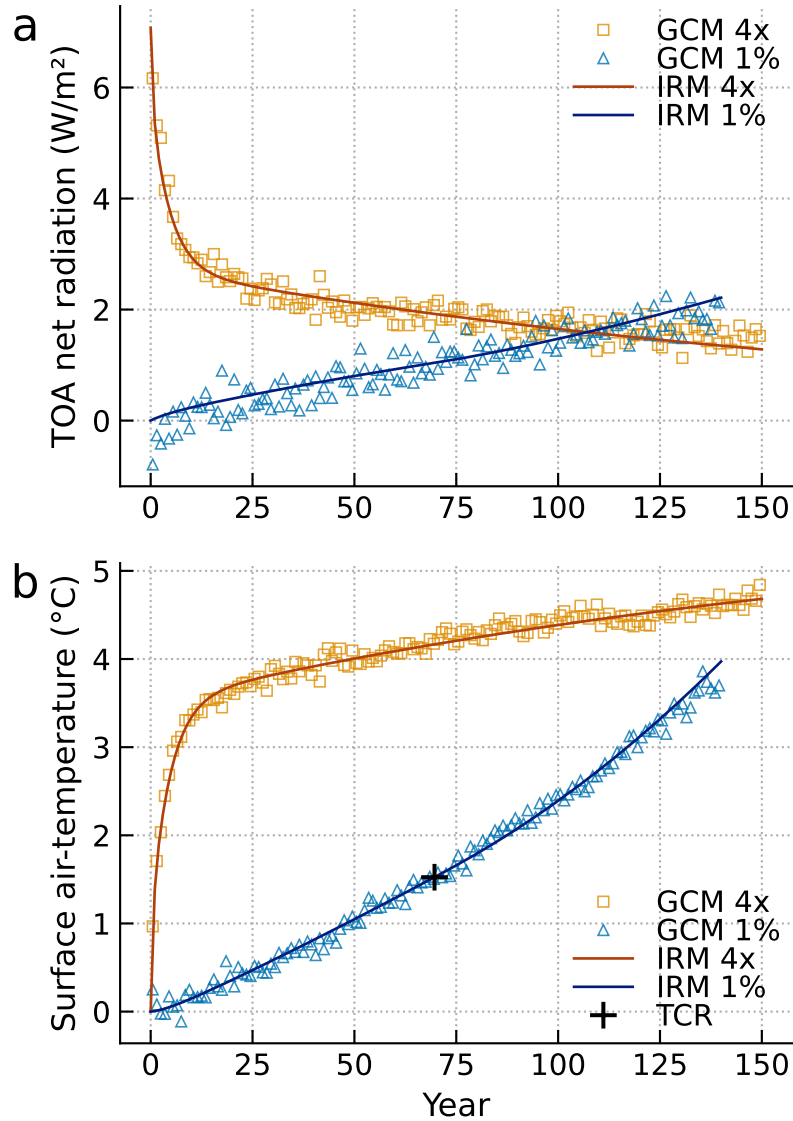
IRM-3 fitted to rtnt and tas of EC-Earth3-Veg
 α : 4.62 W/m^2 , β : 1.05
 τ_0 , τ_1 , τ_2 : 1.85, 23, 161 y
 a_0 , a_1 , a_2 : 0.34, 0.31, 0.35
 λ , $\lambda(\text{reg})$: 0.78, 0.79 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 4.13, 2.51 $^{\circ}\text{C}$, rwf : 0.61
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.31, 2.61 $^{\circ}\text{C}$, rwf : 0.61

CMIP6, FGOALS-f3-L



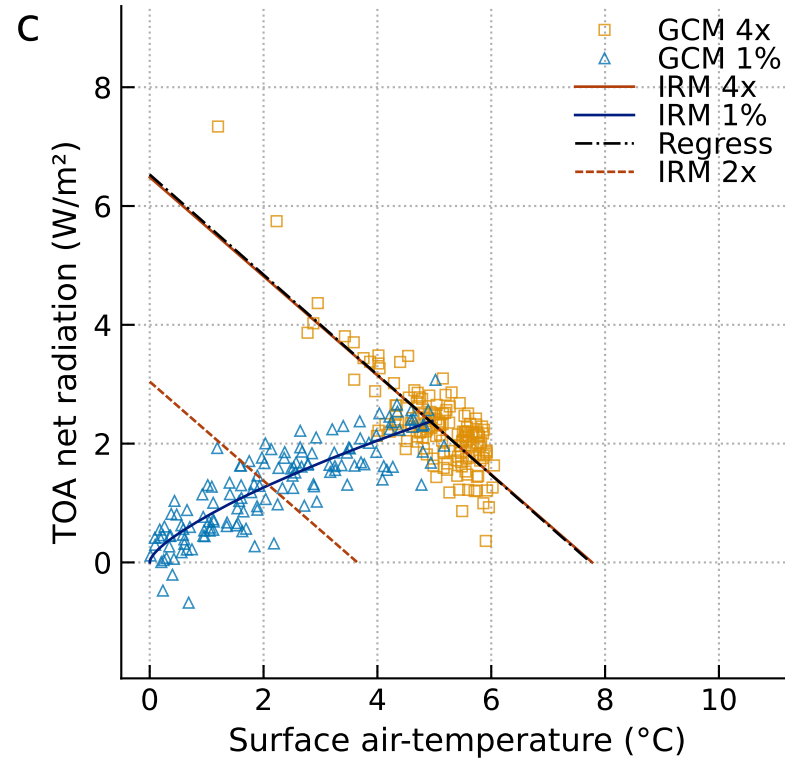
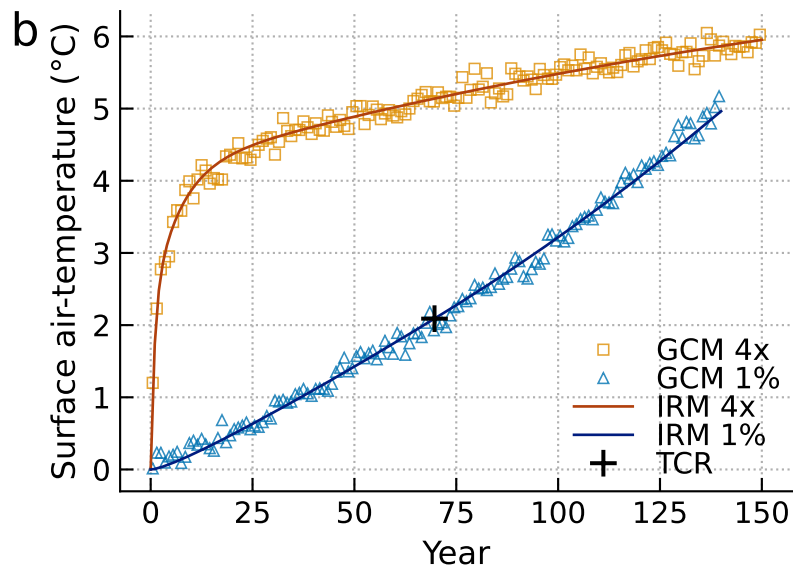
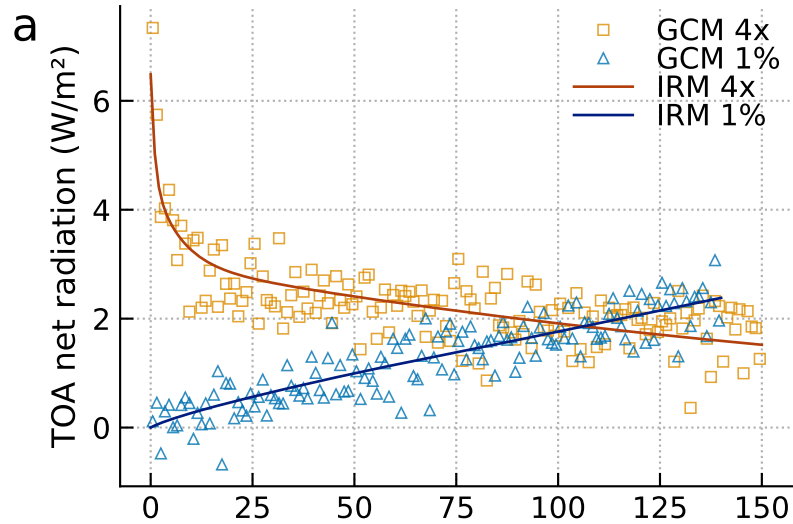
IRM-3 fitted to rtnt and tas of FGOALS-f3-L
 α : 5.94 W/m^2 , β : 0.99
 τ_0, τ_1, τ_2 : $0.571, 7.01, 181 \text{ y}$
 a_0, a_1, a_2 : $0.30, 0.36, 0.33$
 $\lambda, \lambda(\text{reg})$: $1.35, 1.37 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $3.04, 2.08 \text{ }^{\circ}\text{C}$, rwf : 0.68
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $3.00, 2.06 \text{ }^{\circ}\text{C}$, rwf : 0.69

CMIP6, FGOALS-g3



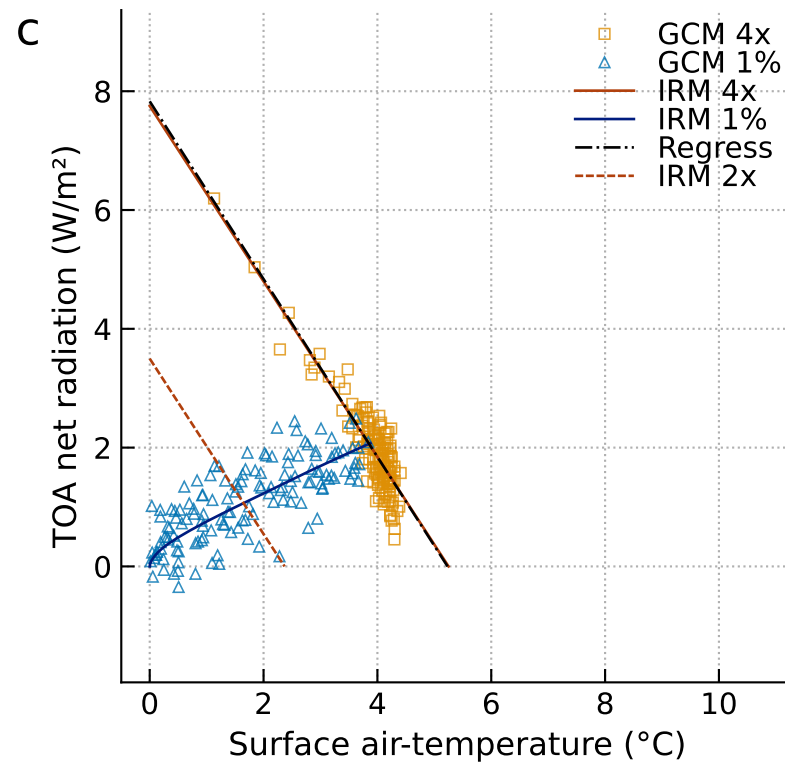
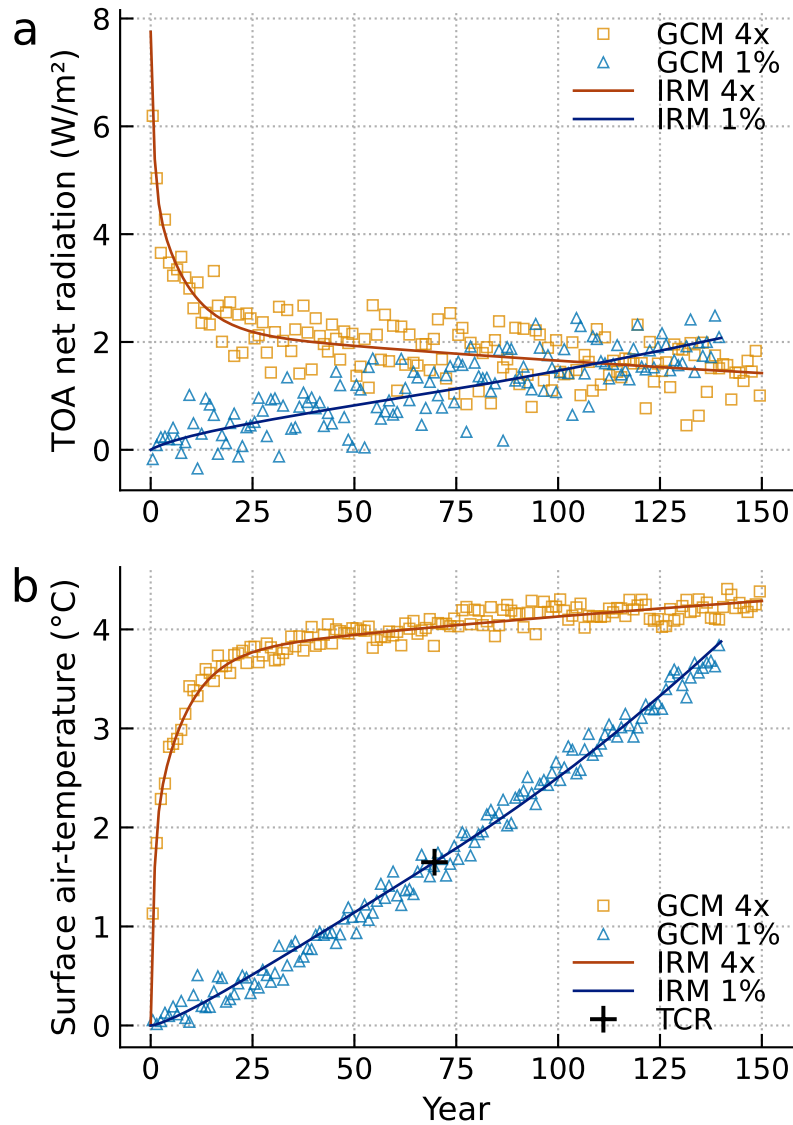
IRM-3 fitted to rtnt and tas of FGOALS-g3
 alpha: 4.22 W/m^2 , beta: 1.21
 tau0, tau1, tau2: 0.474, 4.6, 199 y
 a0, a1, a2: 0.18, 0.44, 0.39
 lambda, lambda(reg): $1.24, 1.25 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.36, 1.52 ^{\circ}\text{C}$, rwf: 0.64
 ecs(reg), tcr(gcm): $2.87, 1.54 ^{\circ}\text{C}$, rwf: 0.54

CMIP6, GFDL-CM4



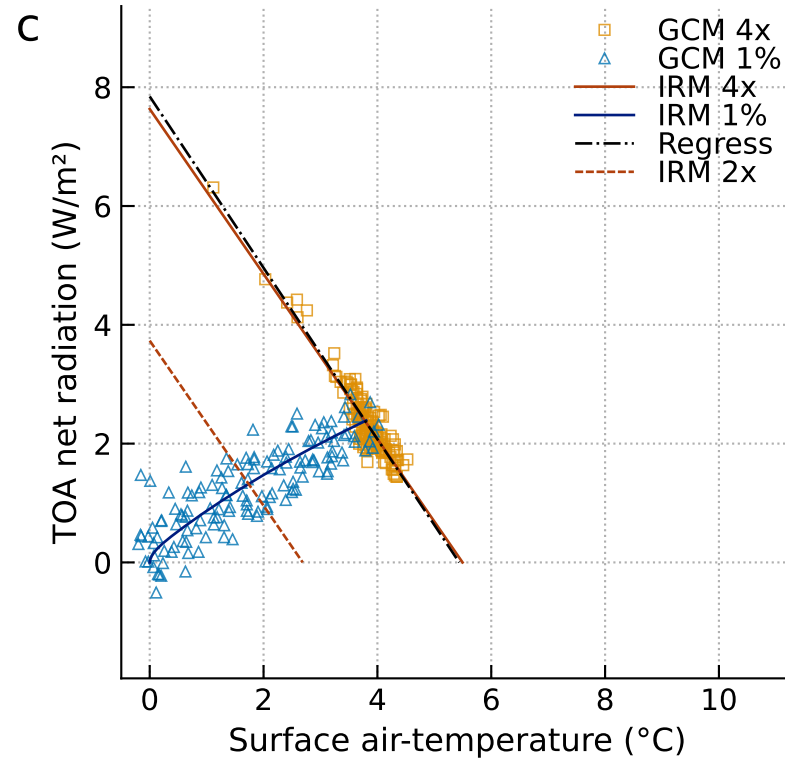
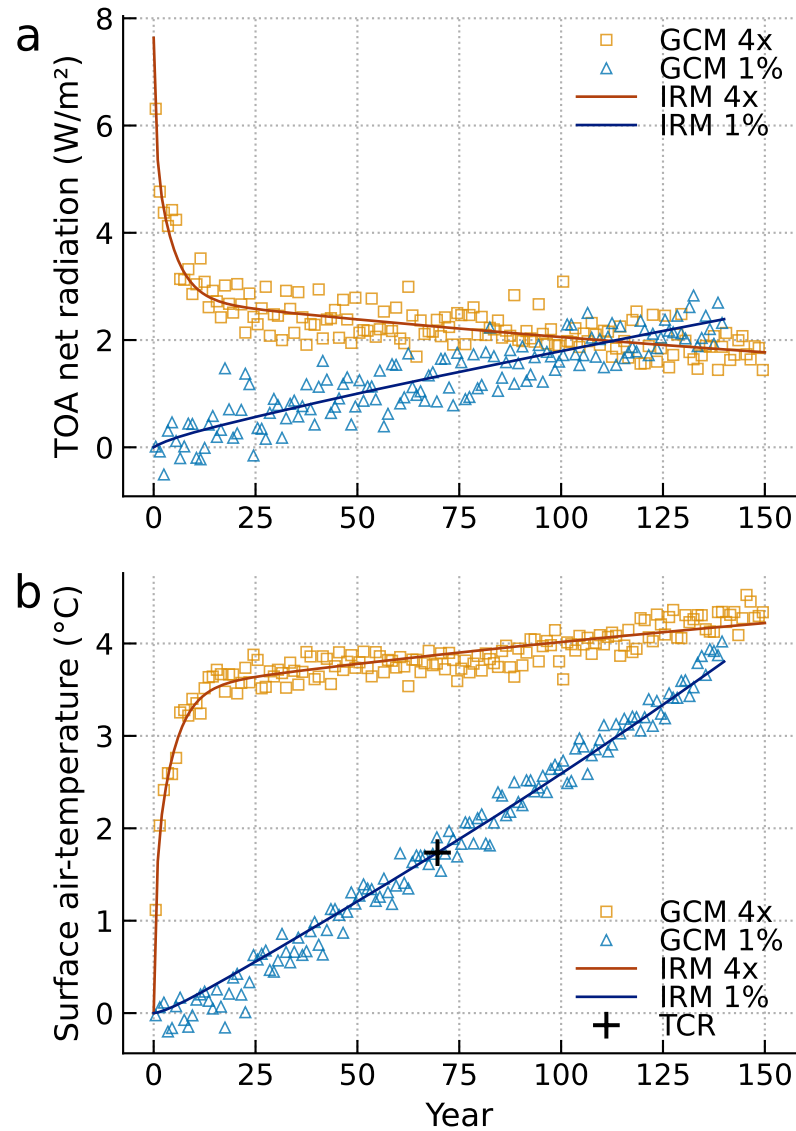
IRM-3 fitted to rtnt and tas of GFDL-CM4
 alpha: 4.39 W/m^2 , beta: 1.07
 tau0, tau1, tau2: 0.922, 6.69, 218 y
 a0, a1, a2: 0.28, 0.25, 0.47
 lambda, lambda(reg): $0.83, 0.84 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.65, 2.09 ^{\circ}\text{C}$, rwf: 0.57
 ecs(reg), tcr(gcm): $3.87, 2.06 ^{\circ}\text{C}$, rwf: 0.53

CMIP6, GFDL-ESM4



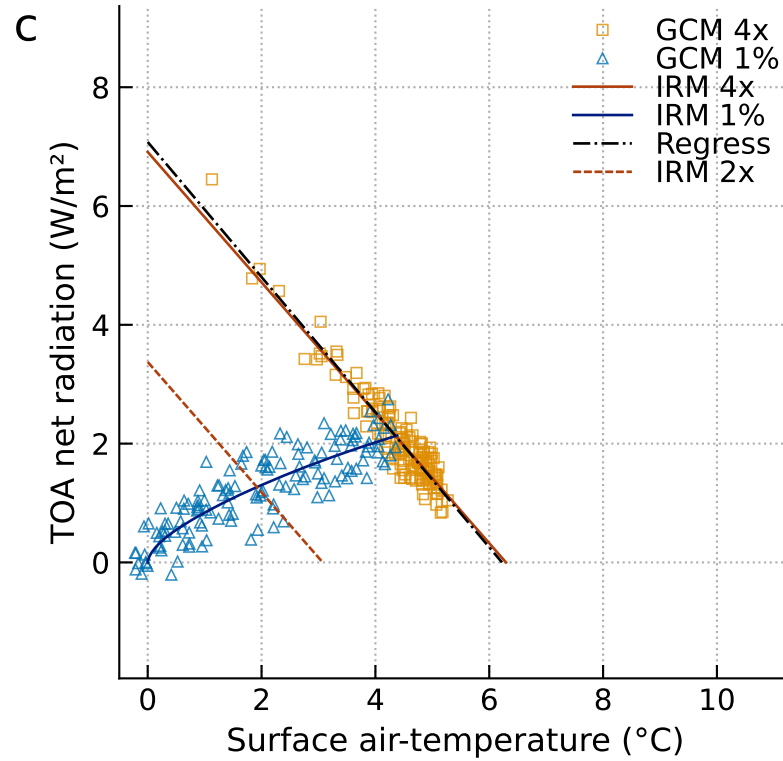
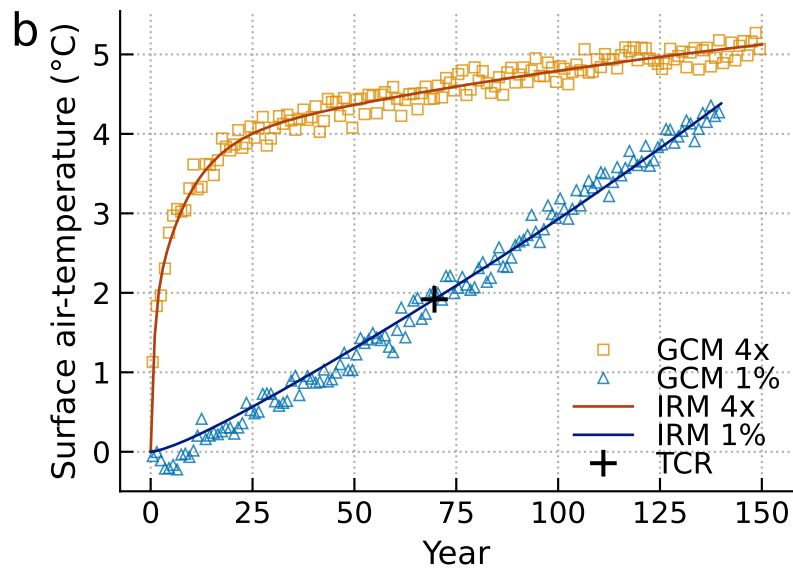
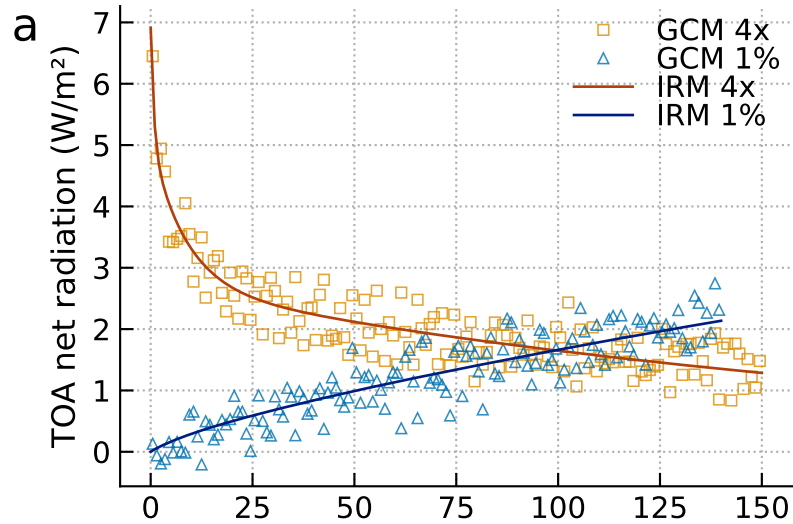
IRM-3 fitted to rtnt and tas of GFDL-ESM4
 α : 5.05 W/m^2 , β : 1.11
 τ_0, τ_1, τ_2 : $0.751, 7.84, 332 \text{ y}$
 a_0, a_1, a_2 : $0.35, 0.36, 0.29$
 $\lambda, \lambda(\text{reg})$: $1.48, 1.50 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $2.37, 1.65 \text{ }^{\circ}\text{C}$, rwf : 0.70
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $2.62, 1.61 \text{ }^{\circ}\text{C}$, rwf : 0.61

CMIP6, GISS-E2-1-G



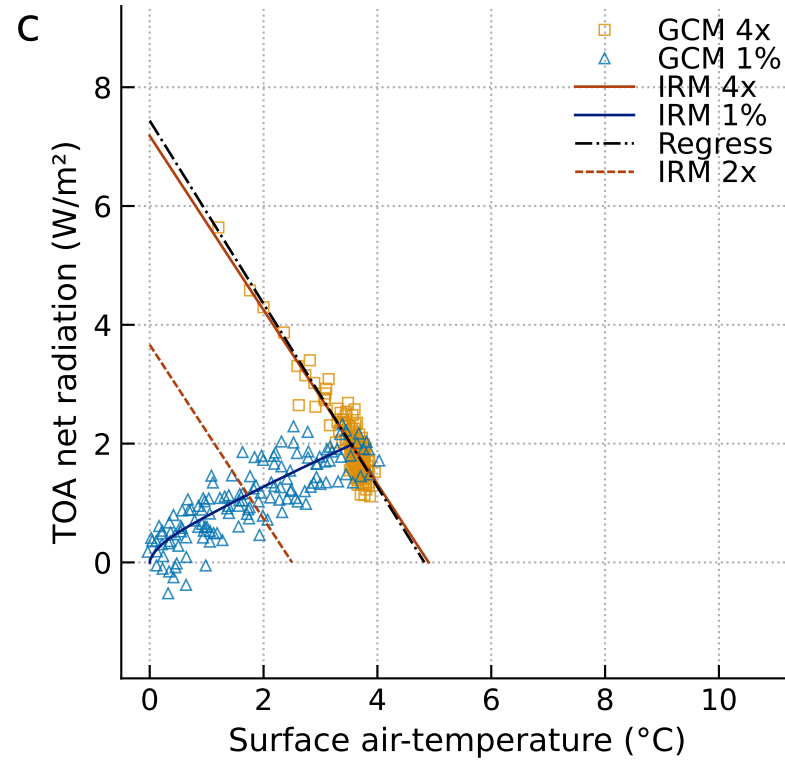
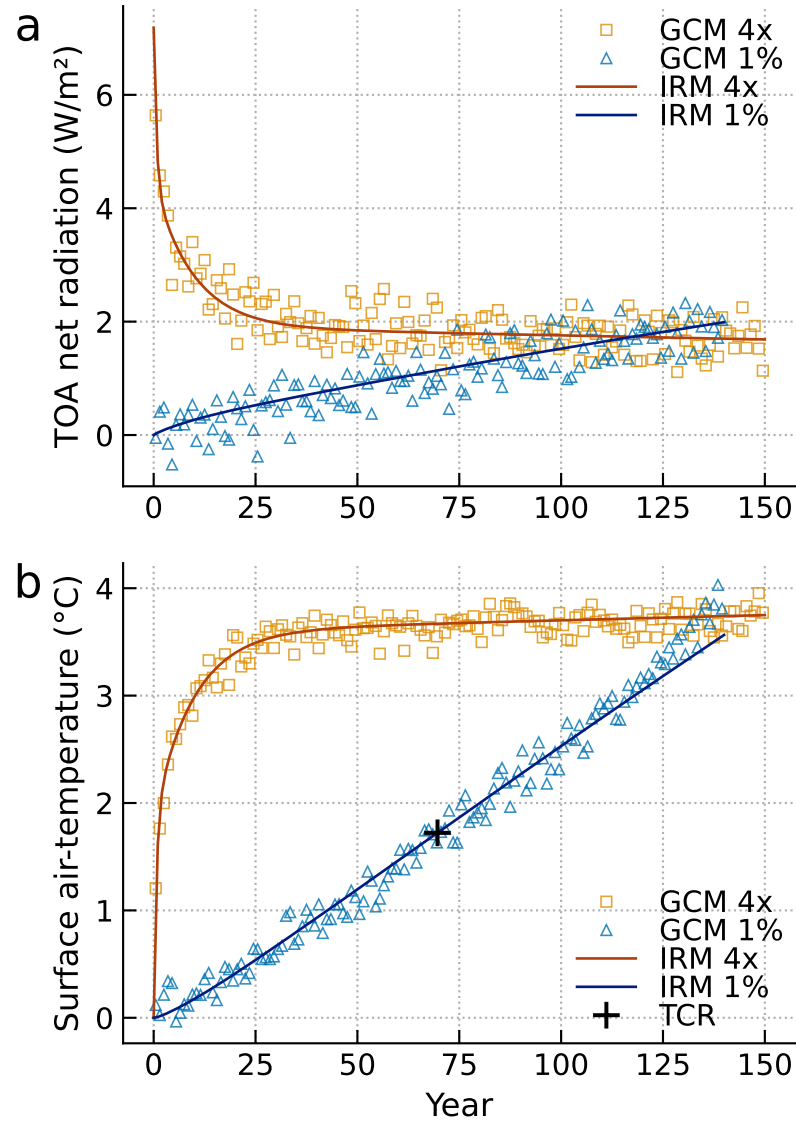
IRM-3 fitted to rtnt and tas of GISS-E2-1-G
 alpha: 5.39 W/m^2 , beta: 1.02
 tau0, tau1, tau2: 0.501, 4.51, 336 y
 a0, a1, a2: 0.26, 0.38, 0.36
 lambda, lambda(reg): $1.39, 1.44 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.69, 1.74 ^{\circ}\text{C}$, rwf: 0.65
 ecs(reg), tcr(gcm): $2.72, 1.76 ^{\circ}\text{C}$, rwf: 0.65

CMIP6, GISS-E2-1-H



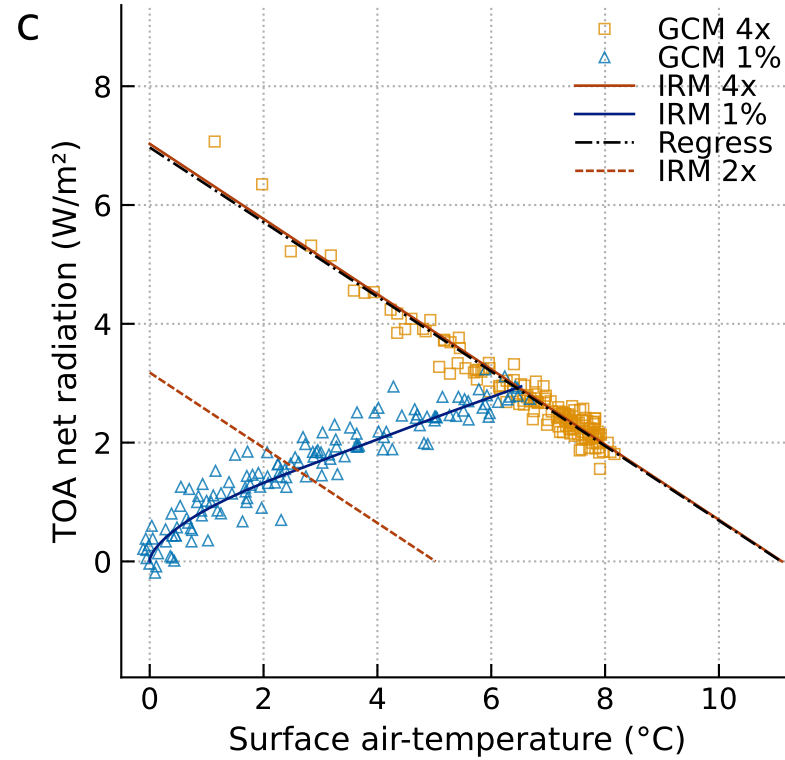
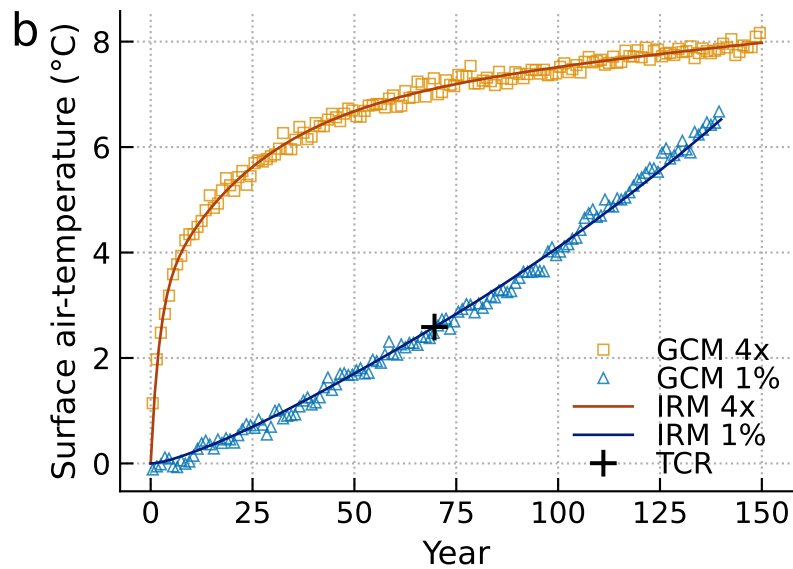
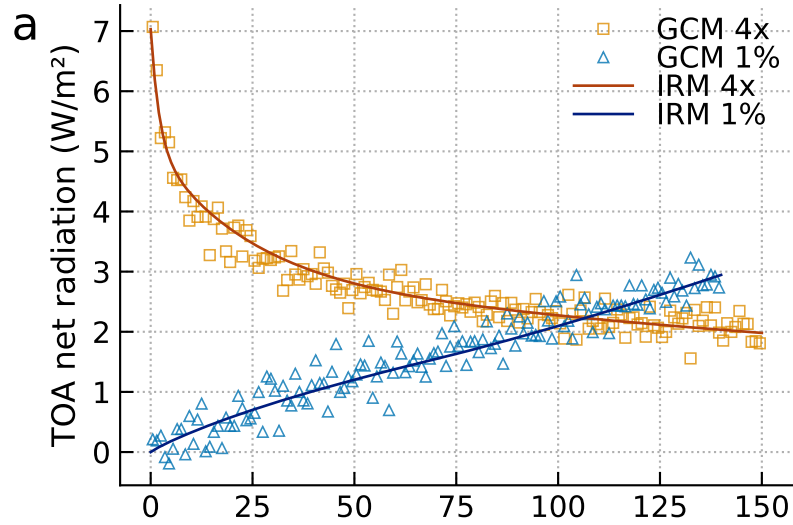
IRM-3 fitted to rtnt and tas of GISS-E2-1-H
 alpha: 4.87 W/m^2 , beta: 1.02
 tau0, tau1, tau2: 0.78, 8.54, 202 y
 a0, a1, a2: 0.27, 0.34, 0.39
 lambda, lambda(reg): $1.10, 1.14 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.07, 1.92^{\circ}\text{C}$, rwf: 0.62
 ecs(reg), tcr(gcm): $3.11, 1.92^{\circ}\text{C}$, rwf: 0.62

CMIP6, GISS-E2-2-G



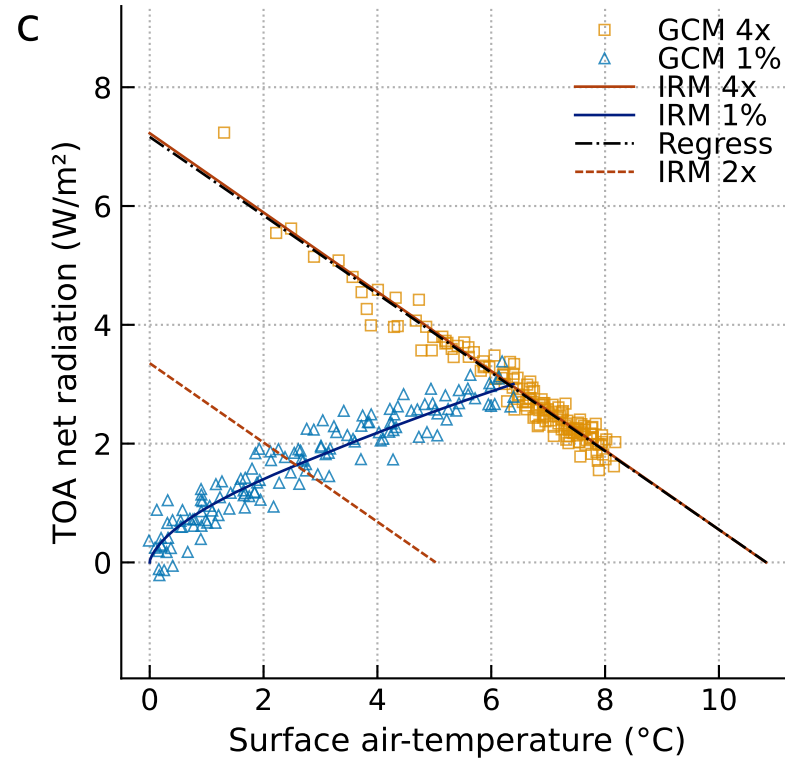
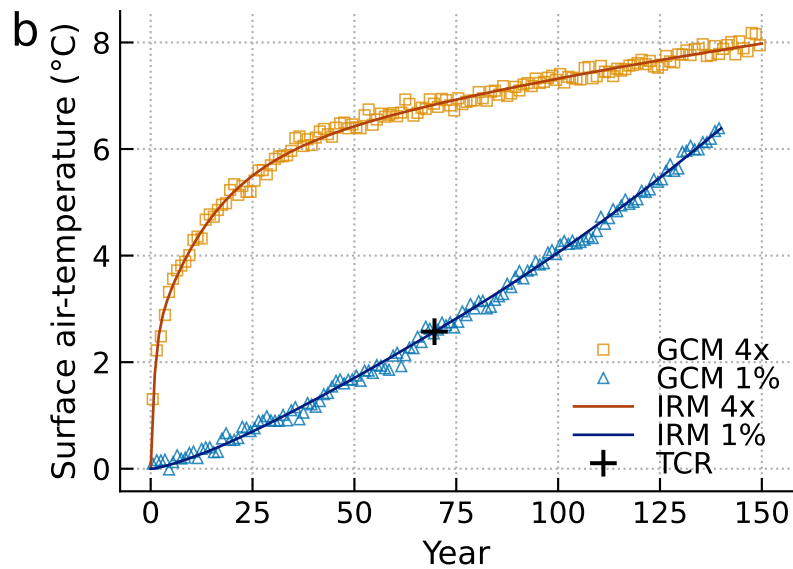
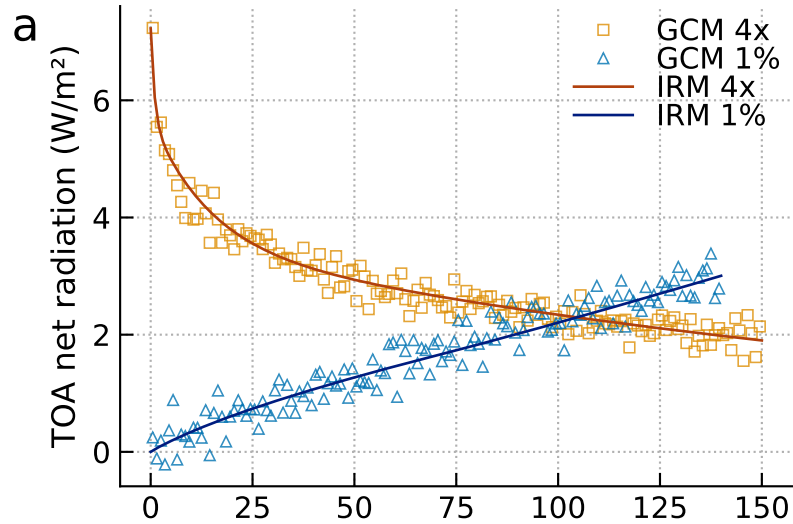
IRM-3 fitted to rtnt and tas of GISS-E2-2-G
 alpha: 5.29 W/m^2 , beta: 0.98
 tau0, tau1, tau2: 0.673, 9.72, $1.21 \times 10^3 \text{ y}$
 a0, a1, a2: 0.38, 0.35, 0.27
 lambda, lambda(reg): $1.47, 1.54 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.50, 1.72 \text{ }^{\circ}\text{C}$, rwf: 0.69
 ecs(reg), tcr(gcm): $2.41, 1.71 \text{ }^{\circ}\text{C}$, rwf: 0.71

CMIP6, HadGEM3-GC31-LL



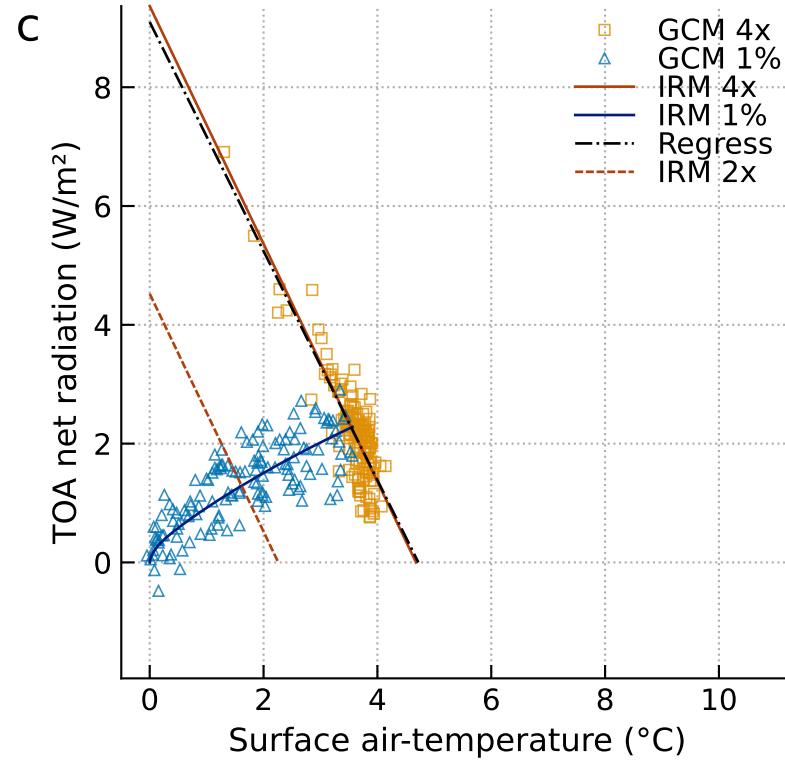
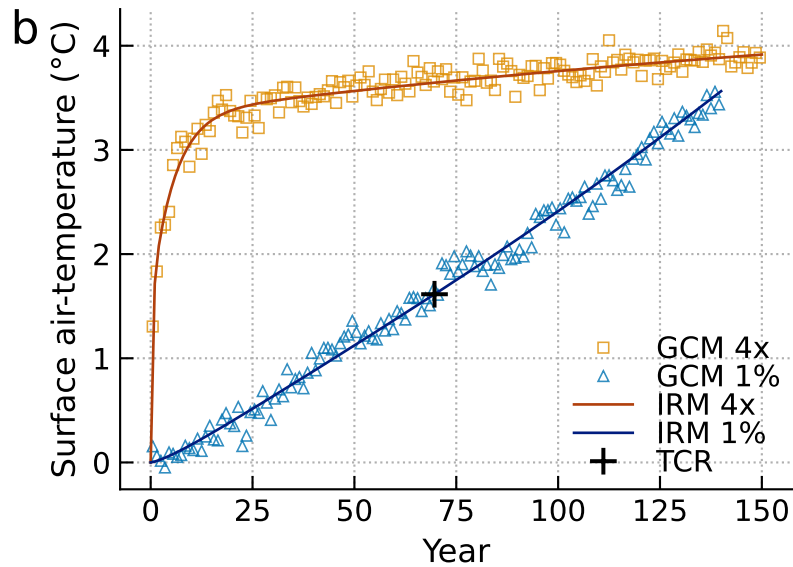
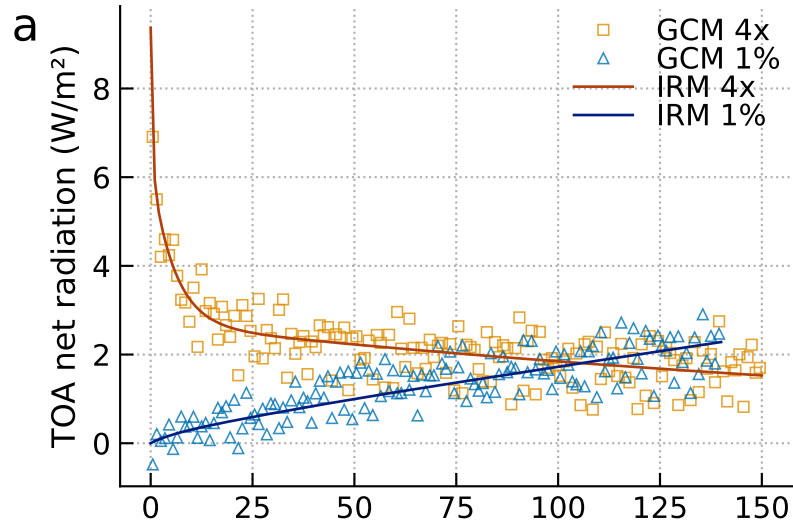
IRM-3 fitted to rtnt and tas of HadGEM3-GC31-LL
 alpha: 4.59 W/m^2 , beta: 1.11
 tau0, tau1, tau2: 2.06, 23.2, 397 y
 a0, a1, a2: 0.27, 0.32, 0.41
 lambda, lambda(reg): 0.63, 0.63 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 5.02, 2.59 $^{\circ}\text{C}$, rwf: 0.52
 ecs(reg), tcr(gcm): 5.55, 2.55 $^{\circ}\text{C}$, rwf: 0.46

CMIP6, HadGEM3-GC31-MM



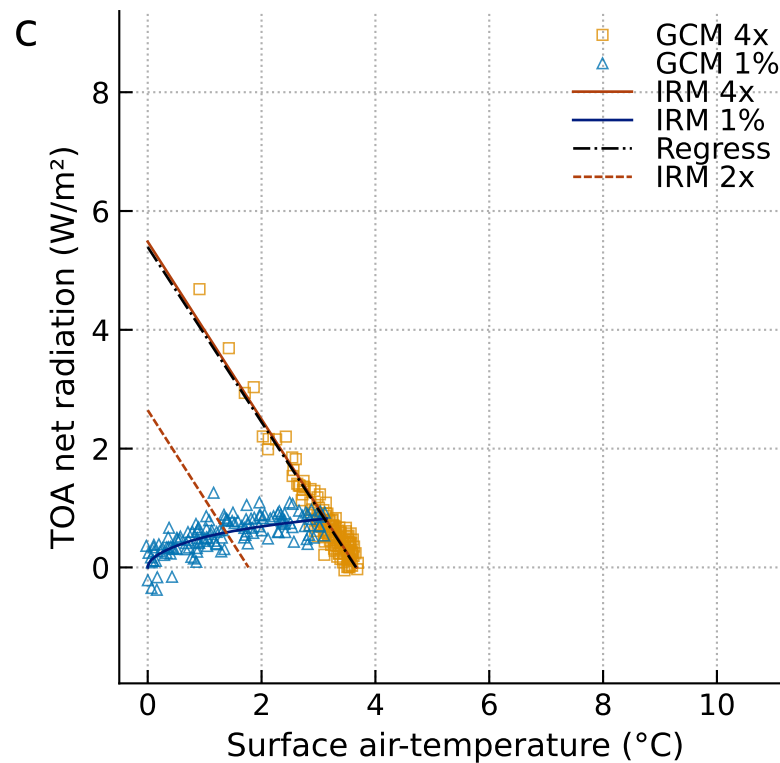
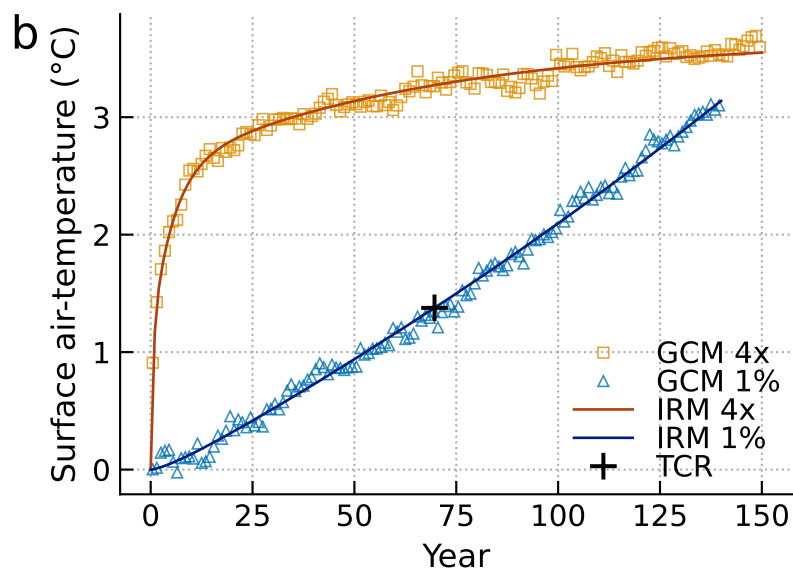
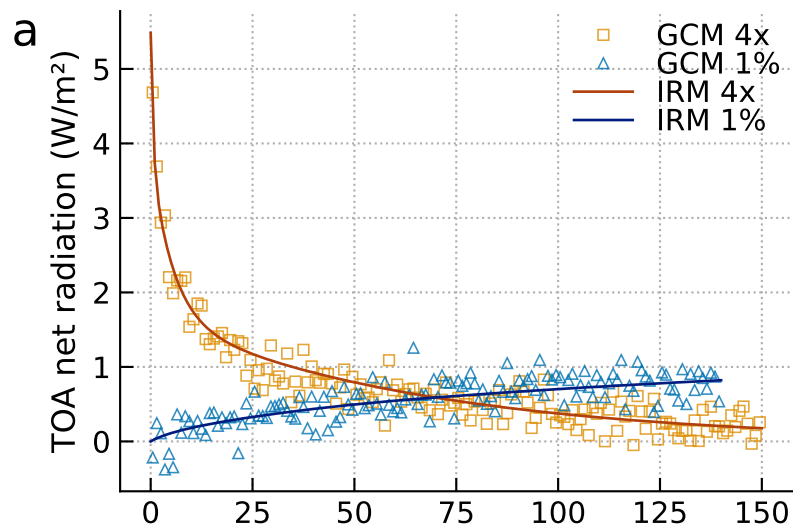
IRM-3 fitted to rtnt and tas of HadGEM3-GC31-MM
 α : 4.84 W/m^2 , β : 1.08
 τ_0 , τ_1 , τ_2 : 0.914, 14.2, 242 y
 a_0 , a_1 , a_2 : 0.21, 0.30, 0.49
 λ , $\lambda(\text{reg})$: 0.67, 0.66 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 5.02, 2.57 $^{\circ}\text{C}$, rwf : 0.51
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 5.42, 2.58 $^{\circ}\text{C}$, rwf : 0.48

CMIP6, IITM-ESM



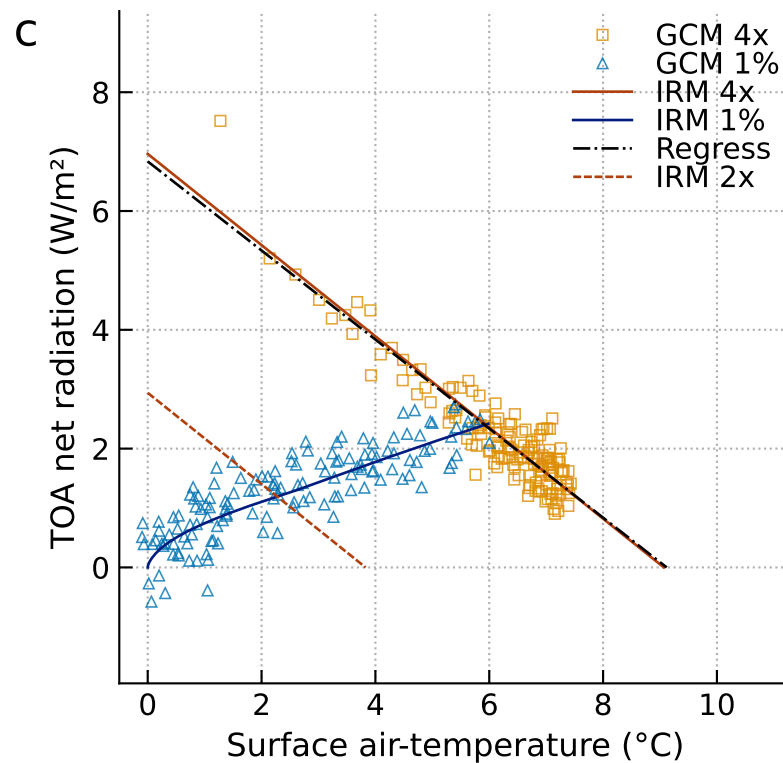
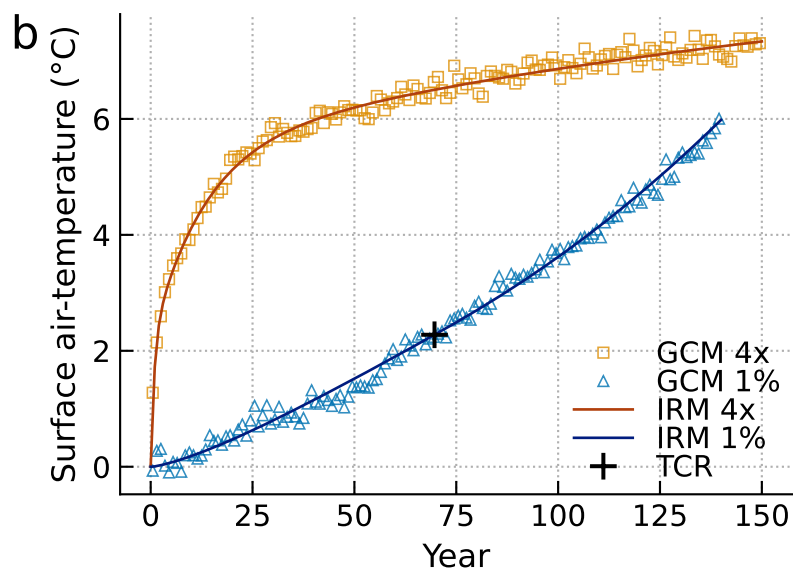
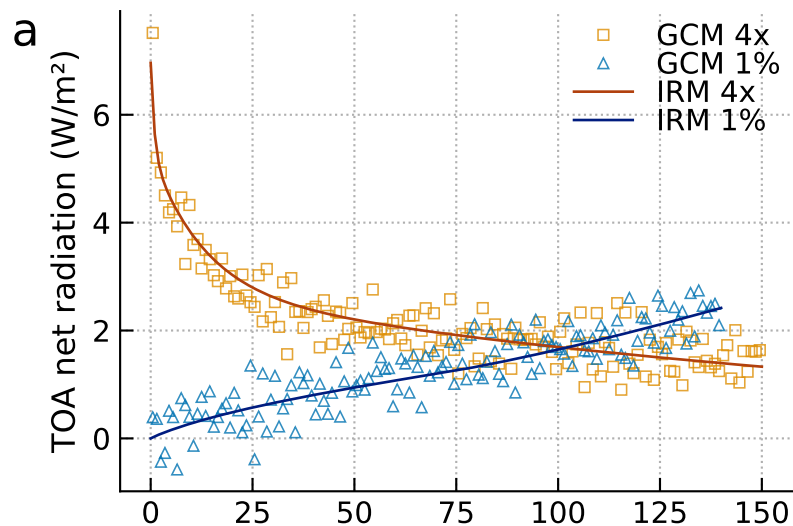
IRM-3 fitted to rtnt and tas of IITM-ESM
 alpha: 6.52 W/m^2 , beta: 1.04
 tau0, tau1, tau2: 0.397, 5.65, 266 y
 a0, a1, a2: 0.33, 0.38, 0.29
 lambda, lambda(reg): $2.00, 1.93 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.26, 1.61 ^{\circ}\text{C}$, rwf: 0.71
 ecs(reg), tcr(gcm): $2.36, 1.70 ^{\circ}\text{C}$, rwf: 0.72

CMIP6, INM-CM4-8



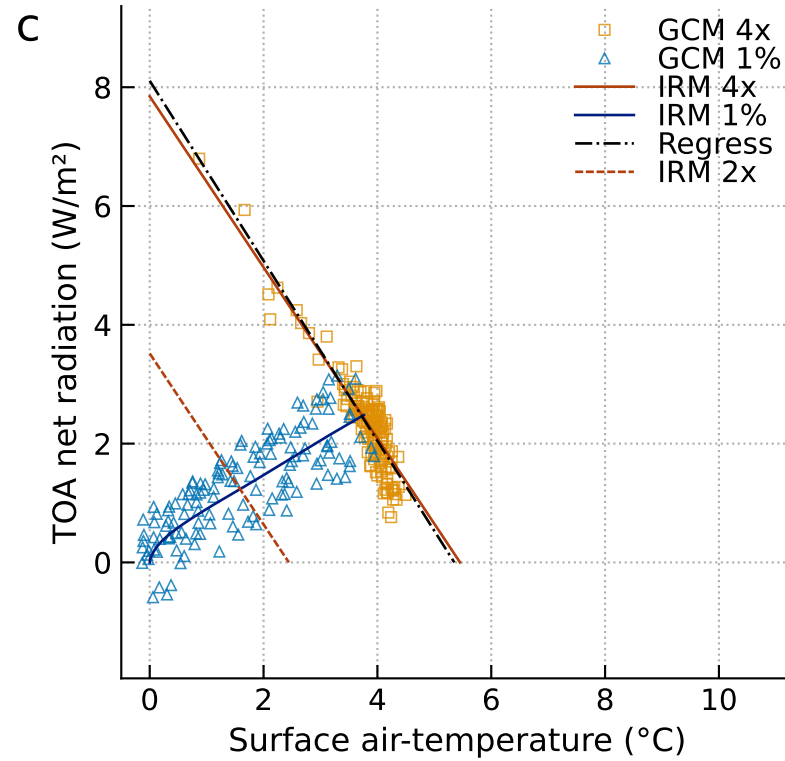
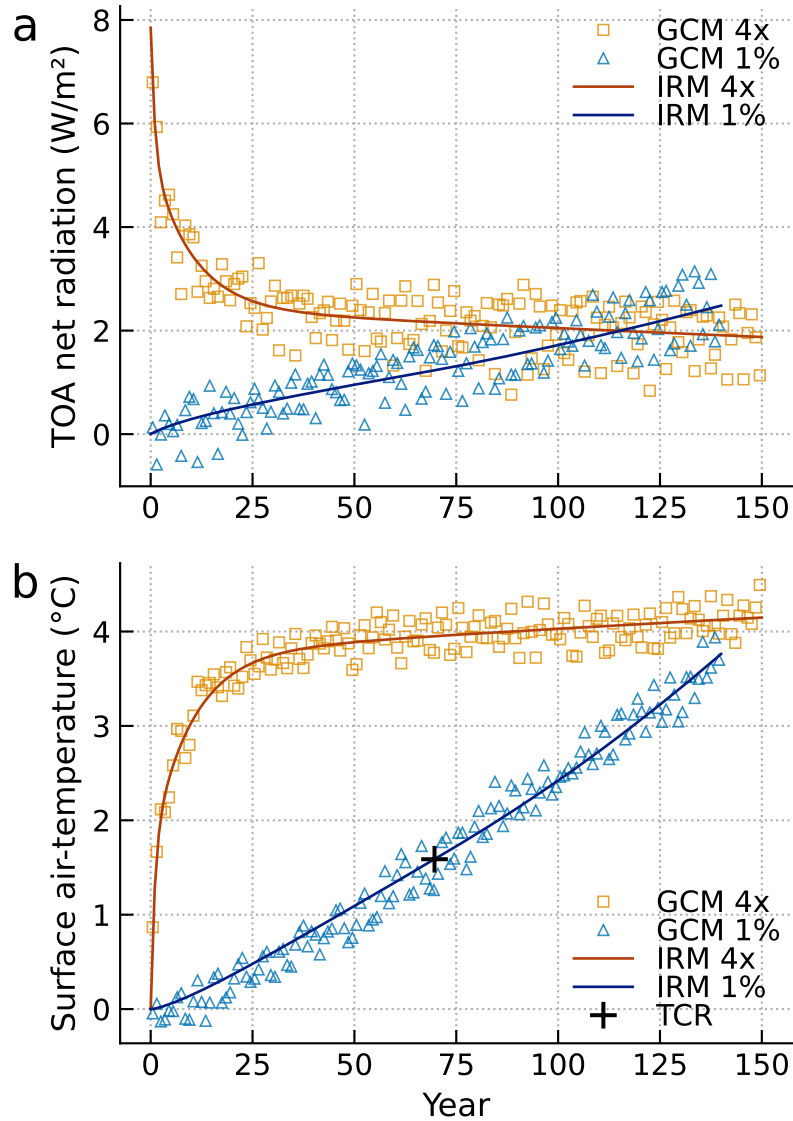
IRM-3 fitted to rtnt and tas of INM-CM4-8
 alpha: 3.82 W/m^2 , beta: 1.04
 tau0, tau1, tau2: 0.568, 5.28, 66.6 y
 a0, a1, a2: 0.30, 0.40, 0.31
 lambda, lambda(reg): $1.49, 1.47 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $1.77, 1.38 ^{\circ}\text{C}$, rwf: 0.78
 ecs(reg), tcr(gcm): $1.83, 1.32 ^{\circ}\text{C}$, rwf: 0.72

CMIP6, IPSL-CM6A-LR



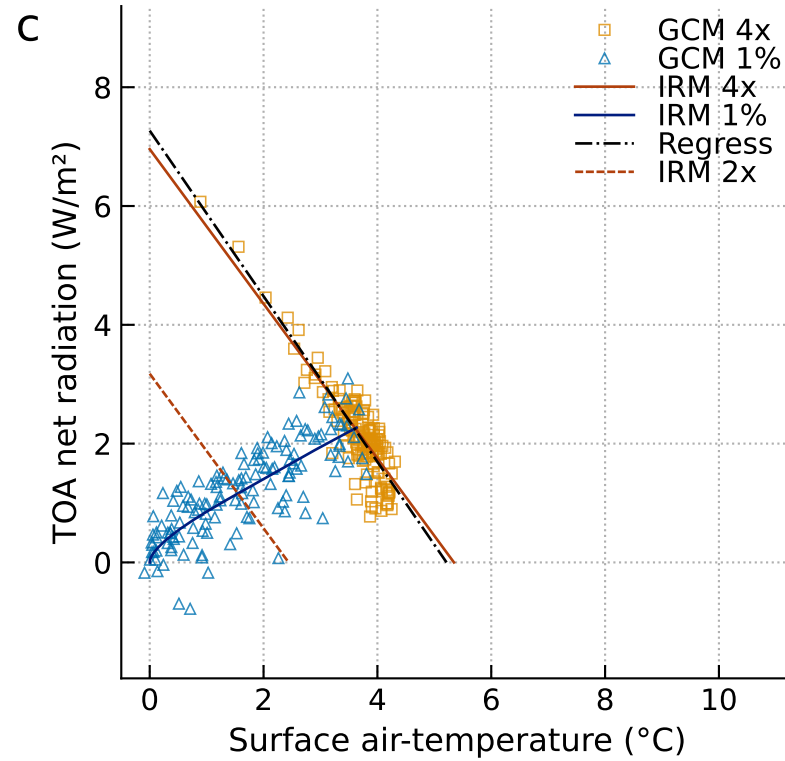
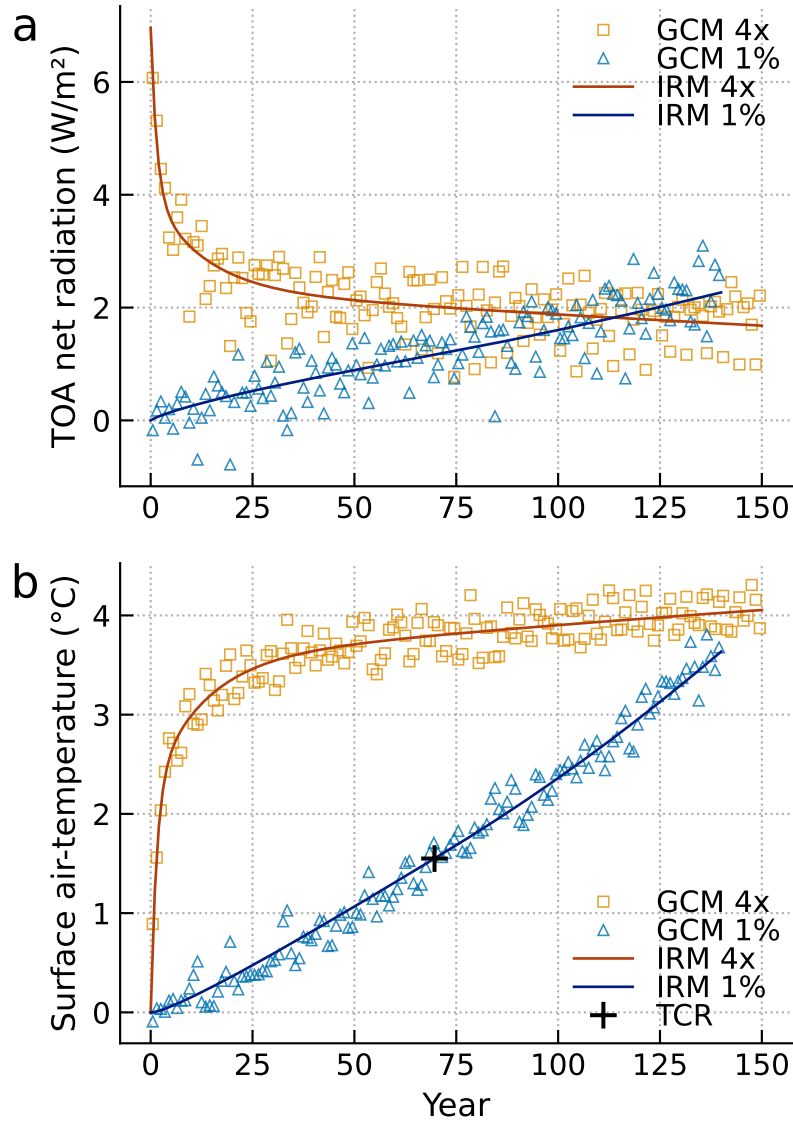
IRM-3 fitted to rtnt and tas of IPSL-CM6A-LR
 alpha: 4.24 W/m^2 , beta: 1.18
 tau0, tau1, tau2: 0.872, 12.8, 208 y
 a0, a1, a2: 0.23, 0.37, 0.39
 lambda, lambda(reg): $0.77, 0.75 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.83, 2.28 ^{\circ}\text{C}$, rwf: 0.59
 ecs(reg), tcr(gcm): $4.56, 2.31 ^{\circ}\text{C}$, rwf: 0.51

CMIP6, MIROC-ES2L



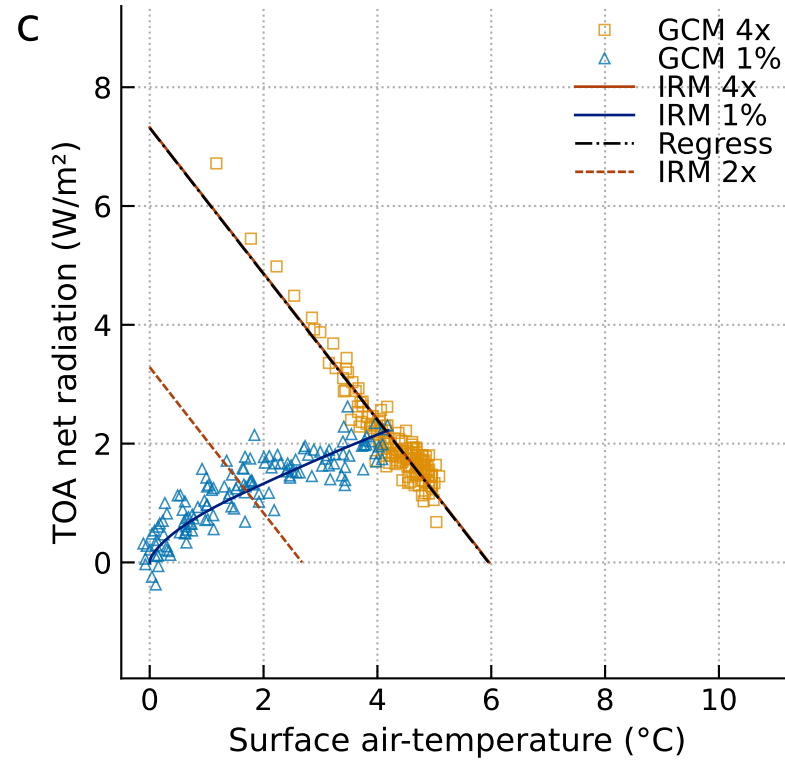
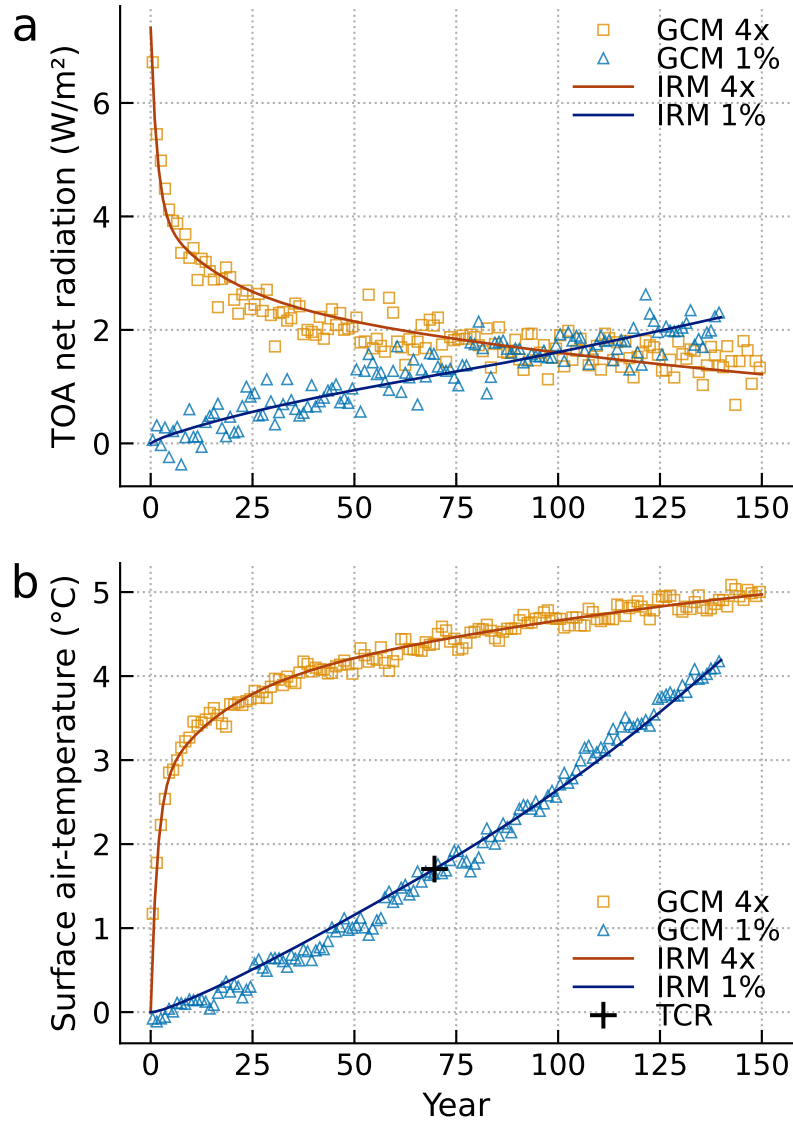
IRM-3 fitted to rtnt and tas of MIROC-ES2L
 α : 5.08 W/m^2 , β : 1.12
 τ_0, τ_1, τ_2 : $0.97, 9.82, 574 \text{ y}$
 a_0, a_1, a_2 : $0.31, 0.38, 0.31$
 $\lambda, \lambda(\text{reg})$: $1.44, 1.52 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $2.44, 1.59 ^{\circ}\text{C}$, rwf : 0.65
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $2.68, 1.55 ^{\circ}\text{C}$, rwf : 0.58

CMIP6, MIROC6



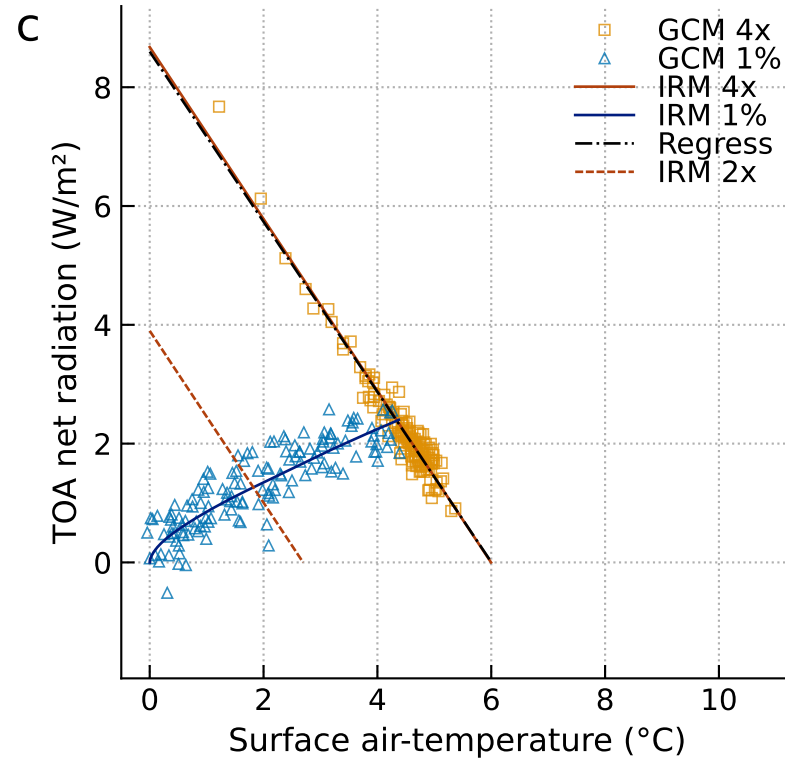
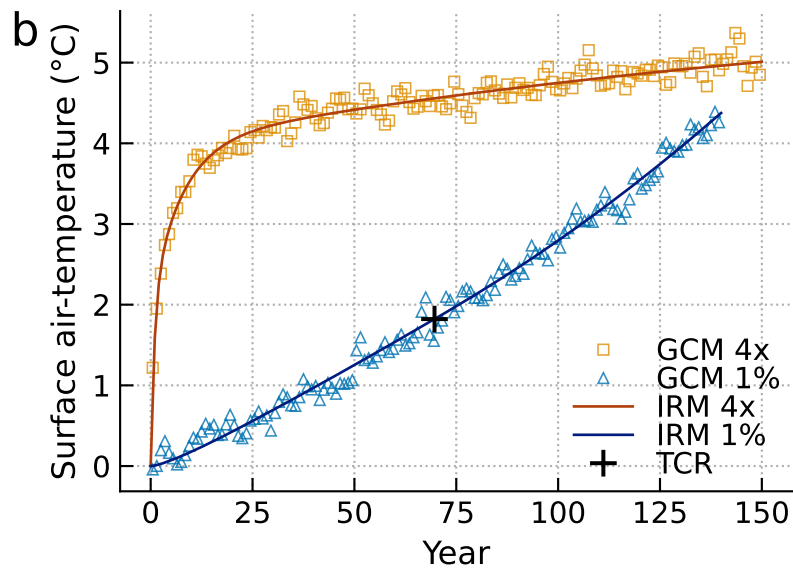
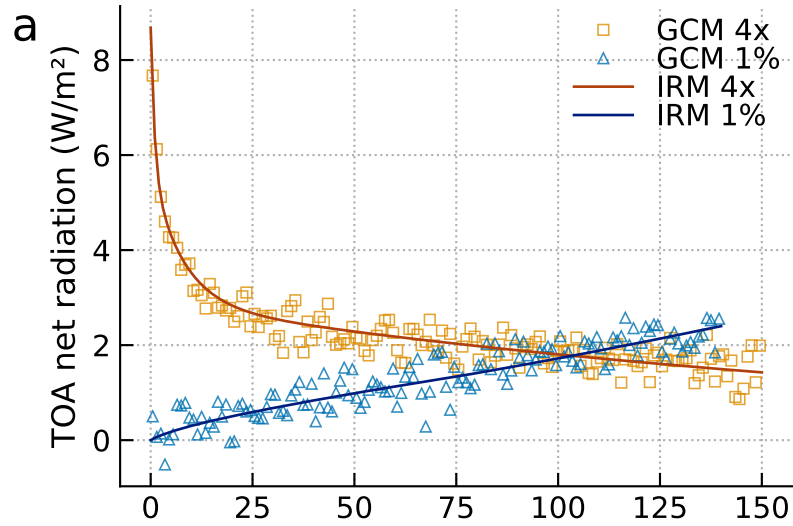
IRM-3 fitted to rtnt and tas of MIROC6
 alpha: 4.58 W/m^2 , beta: 1.09
 tau0, tau1, tau2: 1.47, 12.7, 450 y
 a0, a1, a2: 0.42, 0.24, 0.34
 lambda, lambda(reg): $1.30, 1.39 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.44, 1.55 ^{\circ}\text{C}$, rwf: 0.64
 ecs(reg), tcr(gcm): $2.61, 1.55 ^{\circ}\text{C}$, rwf: 0.60

CMIP6, MPI-ESM1-2-HR



IRM-3 fitted to rtnt and tas of MPI-ESM1-2-HR
 alpha: 4.74 W/m^2 , beta: 1.11
 tau0, tau1, tau2: 1.55, 15.3, 184 y
 a0, a1, a2: 0.43, 0.19, 0.38
 lambda, lambda(reg): $1.23, 1.23 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.68, 1.70 ^{\circ}\text{C}$, rwf: 0.64
 ecs(reg), tcr(gcm): $2.98, 1.66 ^{\circ}\text{C}$, rwf: 0.56

CMIP6, MPI-ESM1-2-LR



IRM-3 fitted to rtnt and tas of MPI-ESM1-2-LR

α : 5.63 W/m^2 , β : 1.11

τ_0 , τ_1 , τ_2 : 0.938, 7.61, 213 y

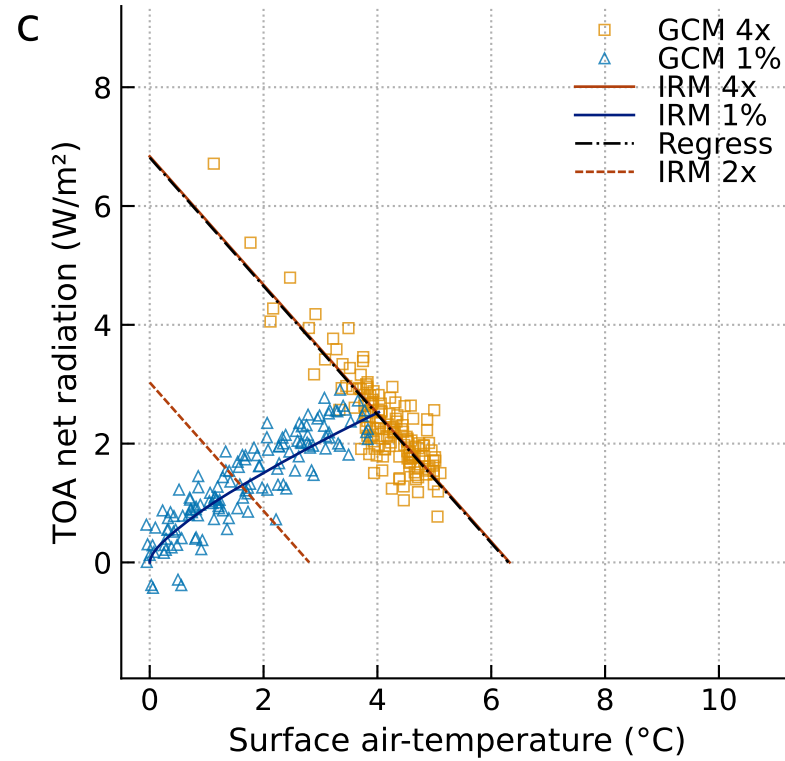
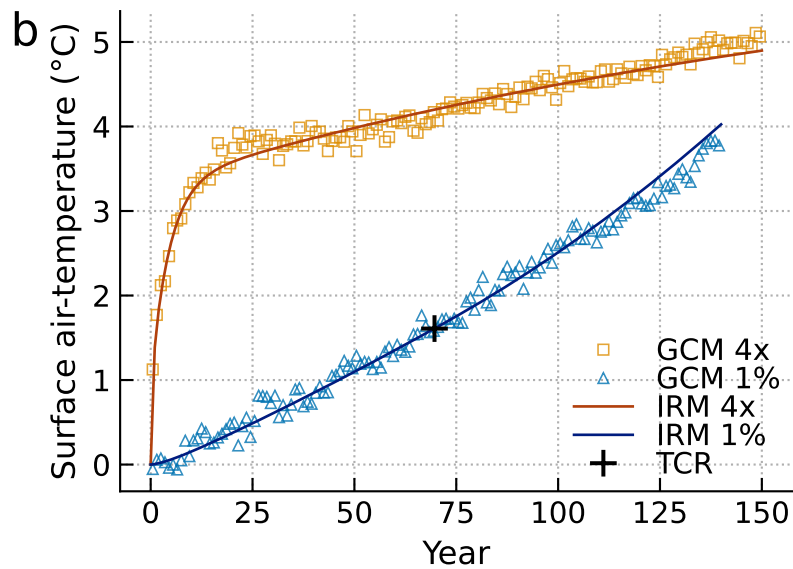
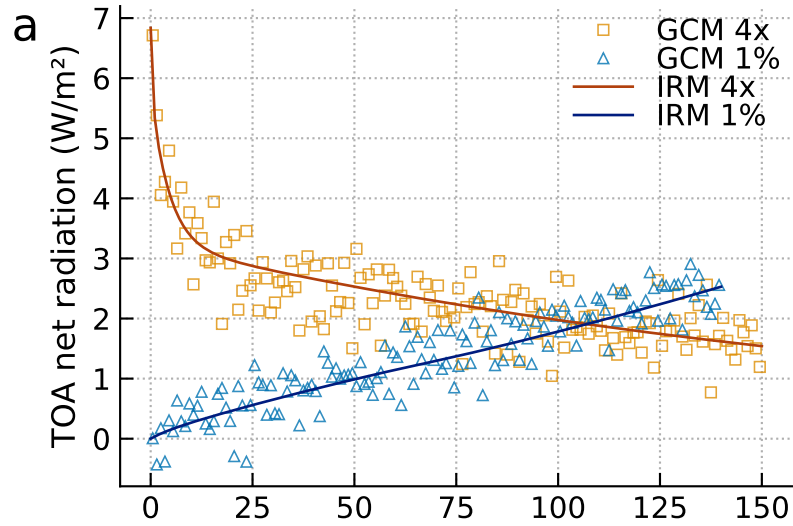
a_0 , a_1 , a_2 : 0.34, 0.33, 0.33

λ , $\lambda(\text{reg})$: 1.45, 1.43 $\text{W/m}^2/^{\circ}\text{C}$

ecs , tcr : 2.69, 1.82 $^{\circ}\text{C}$, rwf : 0.68

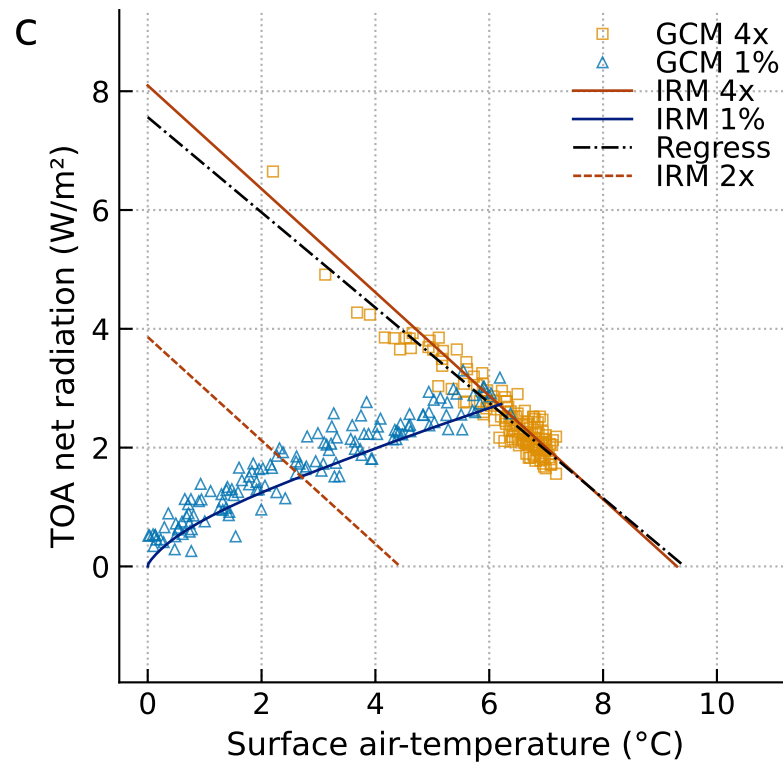
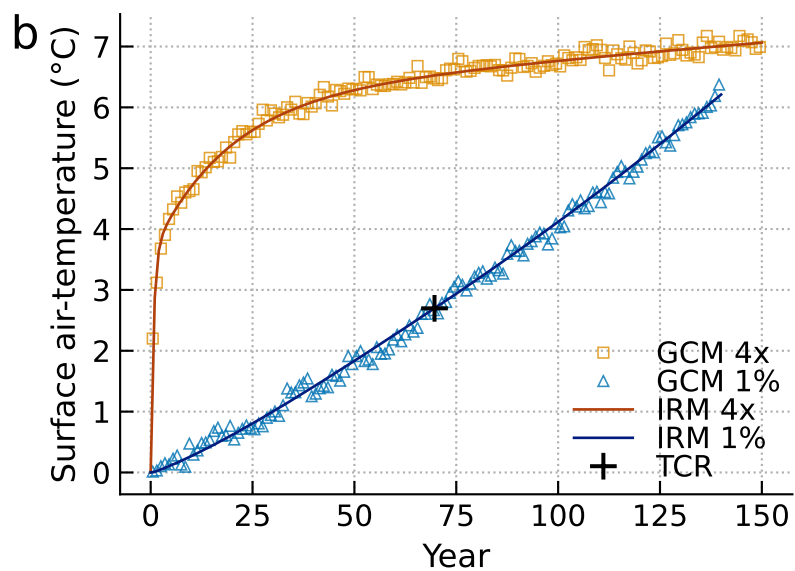
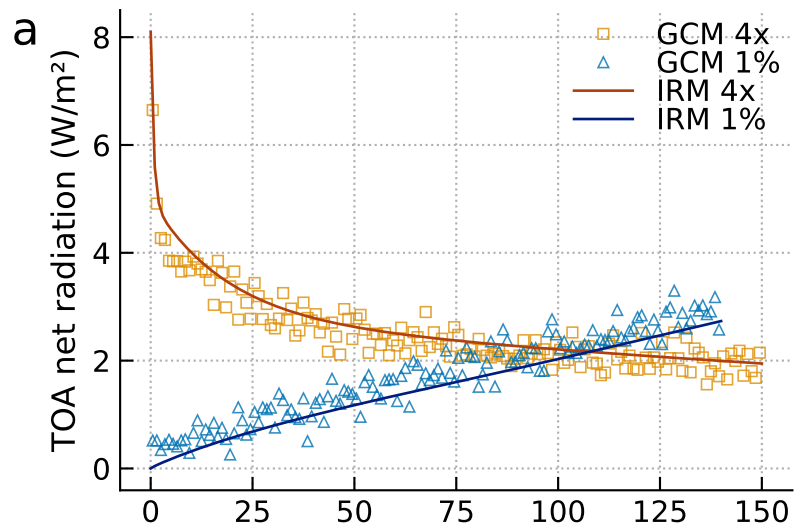
$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 3.00, 1.84 $^{\circ}\text{C}$, rwf : 0.61

CMIP6, MRI-ESM2-0



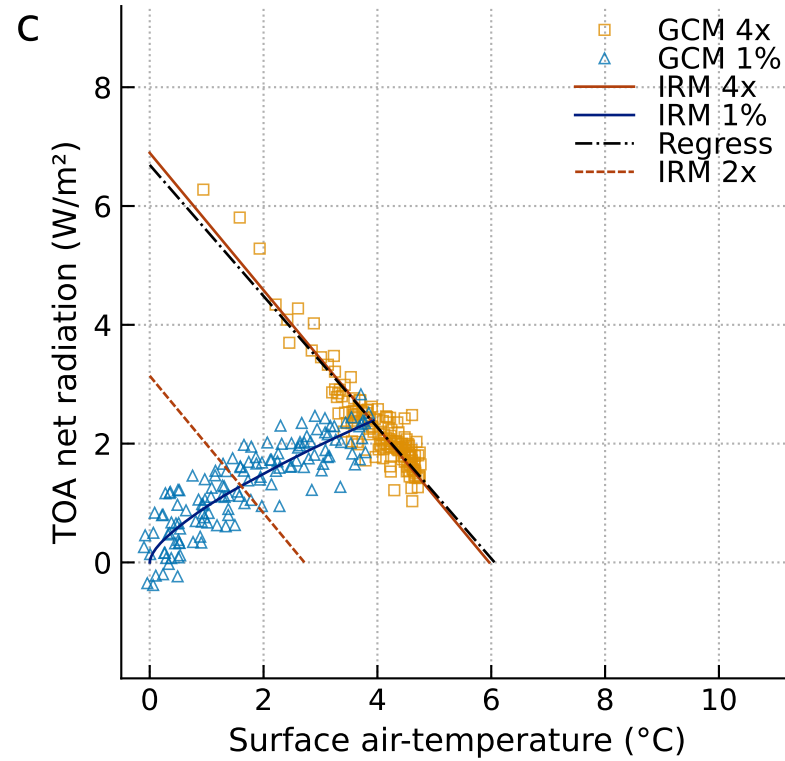
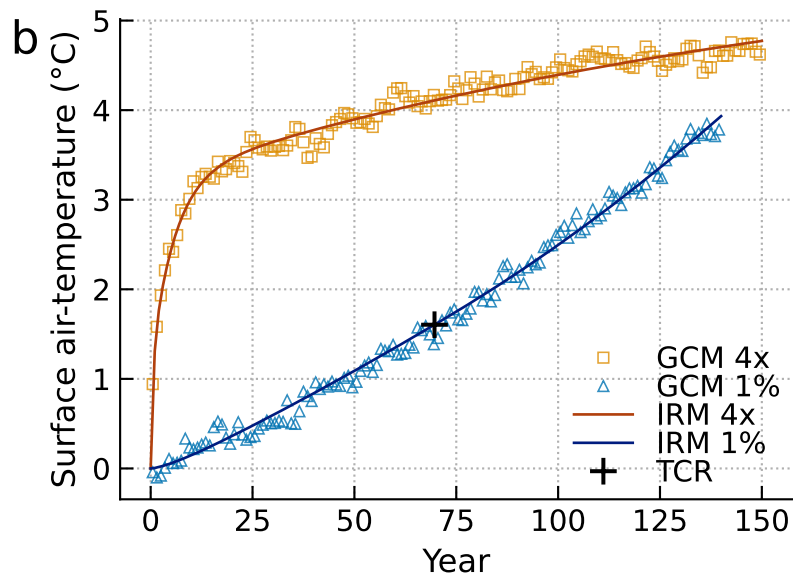
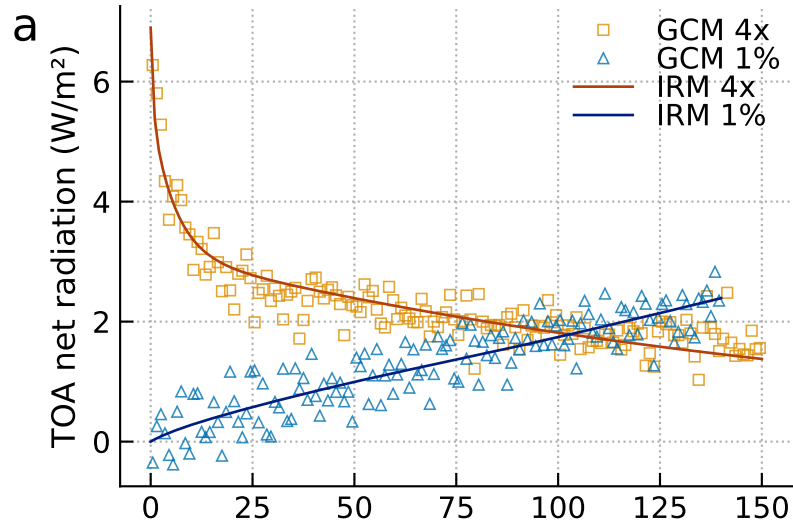
IRM-3 fitted to $rtnt$ and tas of MRI-ESM2-0
 α : 4.37 W/m^2 , β : 1.13
 τ_0 , τ_1 , τ_2 : 0.384, 4.5, 202 y
 a_0 , a_1 , a_2 : 0.15, 0.37, 0.47
 λ , $\lambda(\text{reg})$: 1.08, 1.08 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.80, 1.61 $^{\circ}\text{C}$, r_{wf} : 0.57
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 3.15, 1.64 $^{\circ}\text{C}$, r_{wf} : 0.52

CMIP6, NESM3



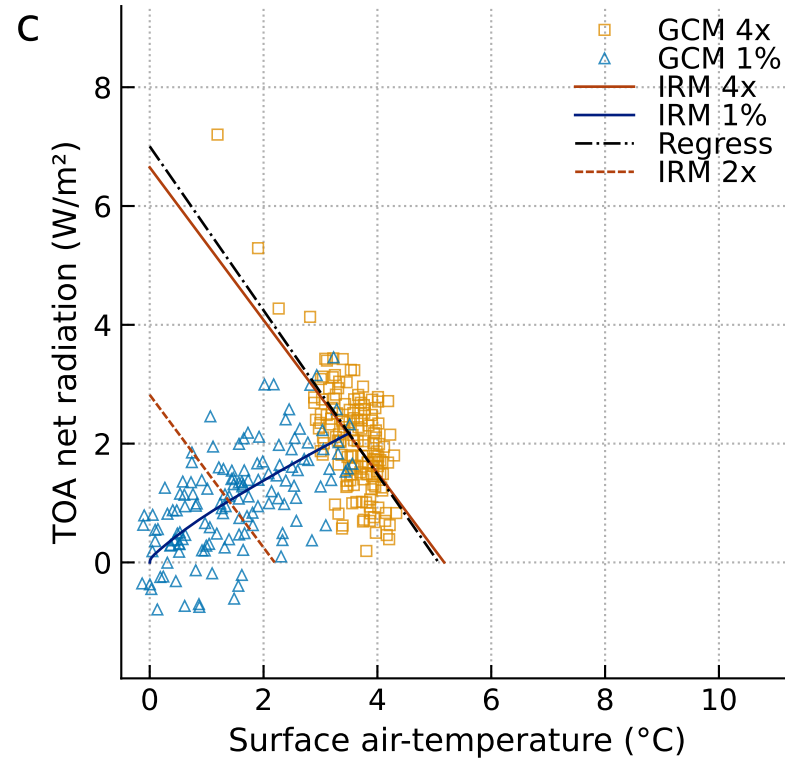
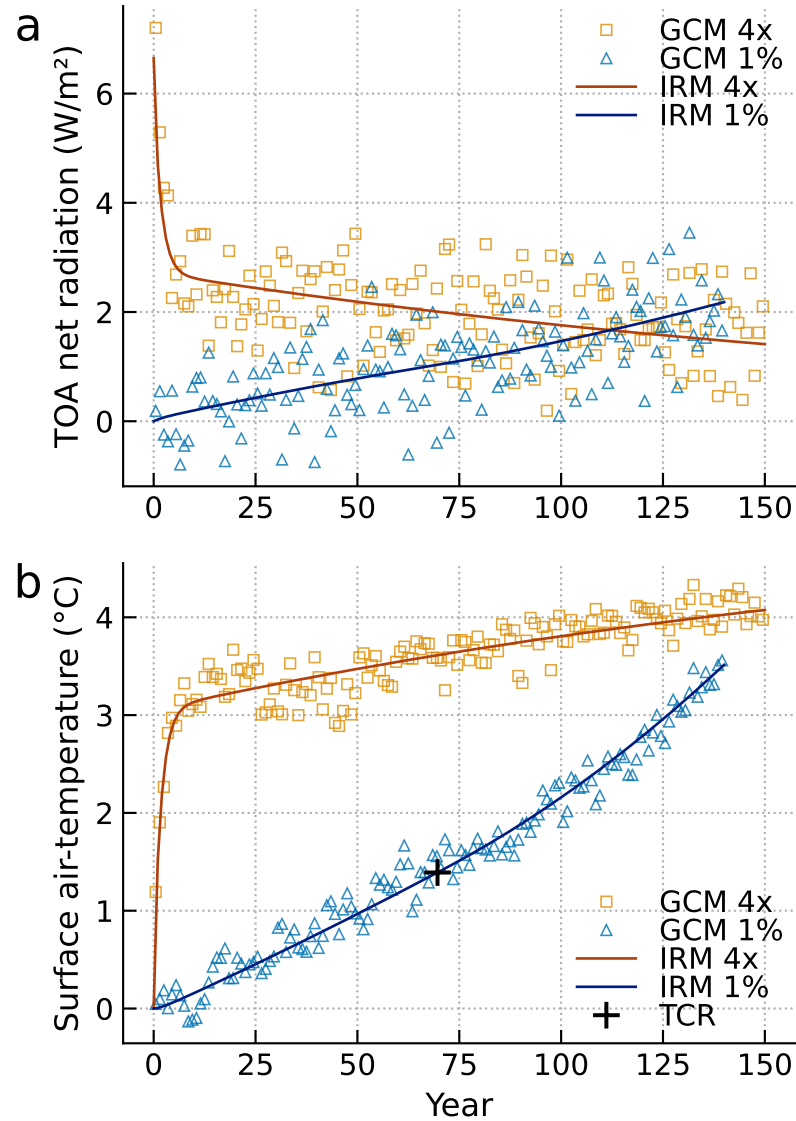
IRM-3 fitted to rtnt and tas of NESM3
 alpha: 5.57 W/m^2 , beta: 1.05
 tau0, tau1, tau2: 0.689, 18.4, 411 y
 a0, a1, a2: 0.38, 0.27, 0.35
 lambda, lambda(reg): $0.87, 0.80 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $4.43, 2.70^{\circ}\text{C}$, rwf: 0.61
 ecs(reg), tcr(gcm): $4.72, 2.71^{\circ}\text{C}$, rwf: 0.57

CMIP6, NorCPM1



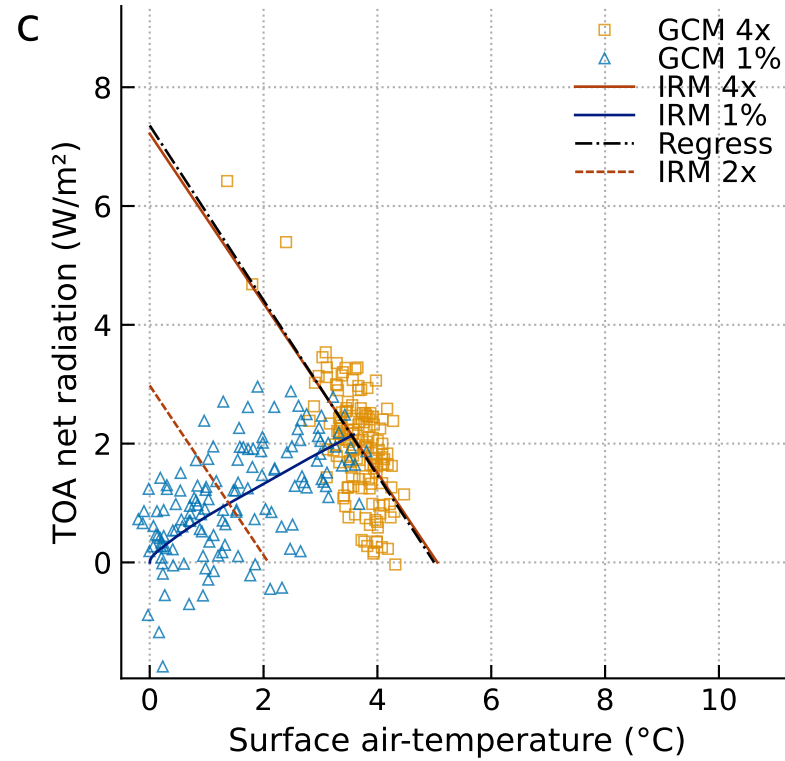
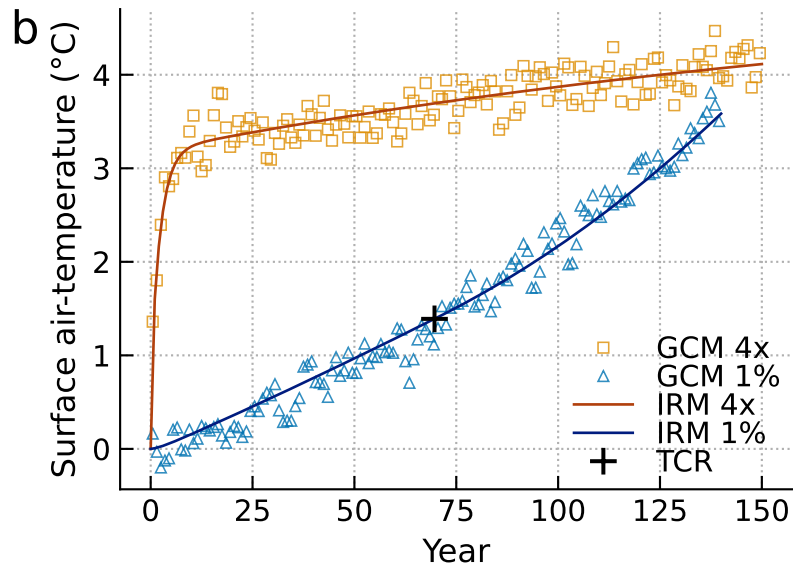
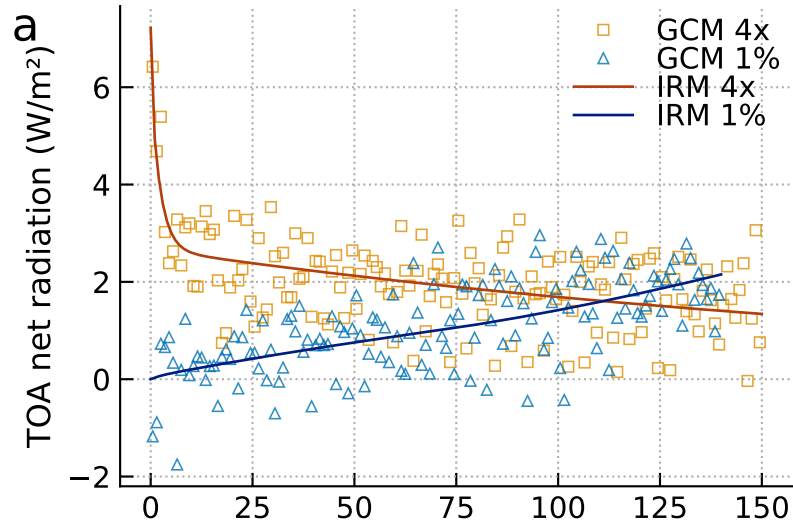
IRM-3 fitted to $rtnt$ and tas of NorCPM1
 α : 4.53 W/m^2 , β : 1.10
 τ_0 , τ_1 , τ_2 : 0.548, 5.73, 182 y
 a_0 , a_1 , a_2 : 0.19, 0.35, 0.46
 λ , $\lambda(\text{reg})$: 1.16, 1.10 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.72, 1.60 $^{\circ}\text{C}$, r_{wf} : 0.59
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 3.03, 1.56 $^{\circ}\text{C}$, r_{wf} : 0.51

CMIP6, NorESM2-LM



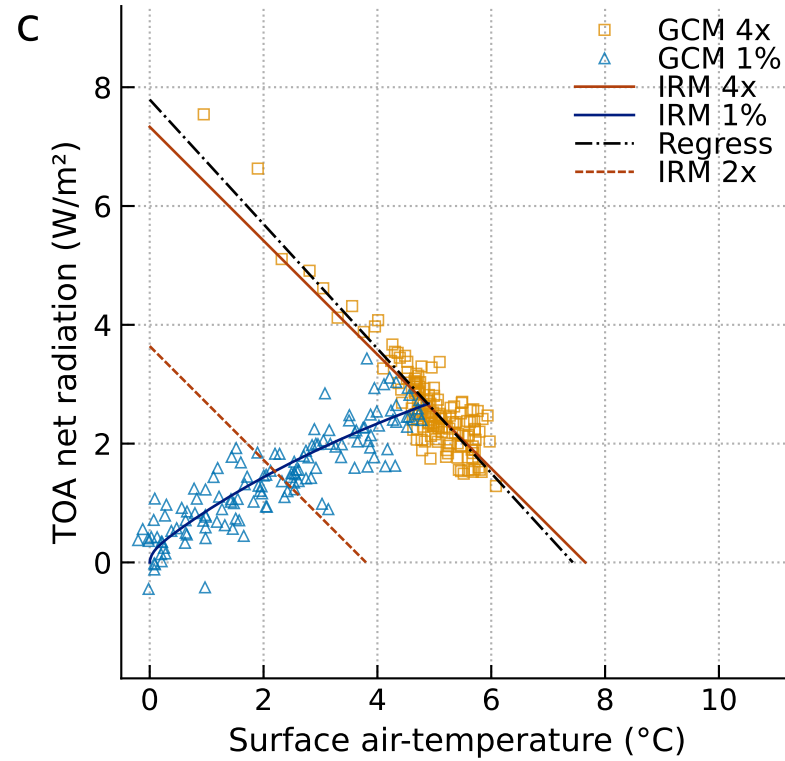
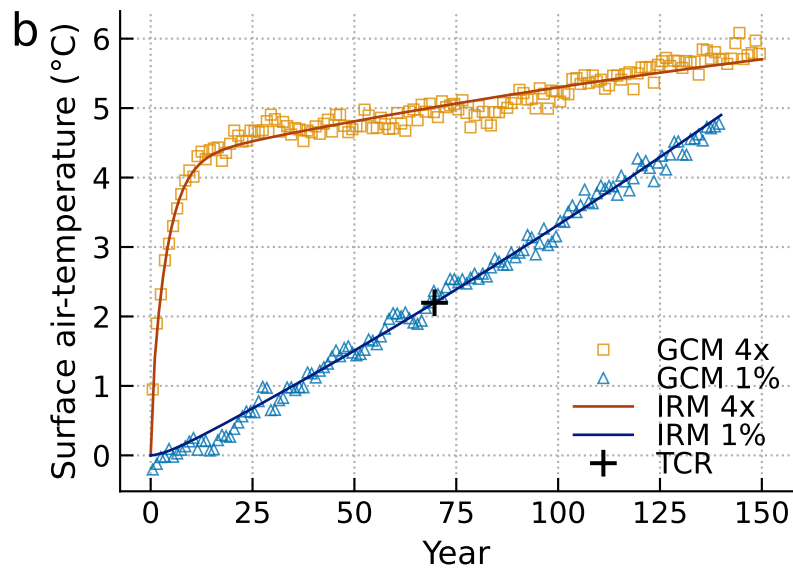
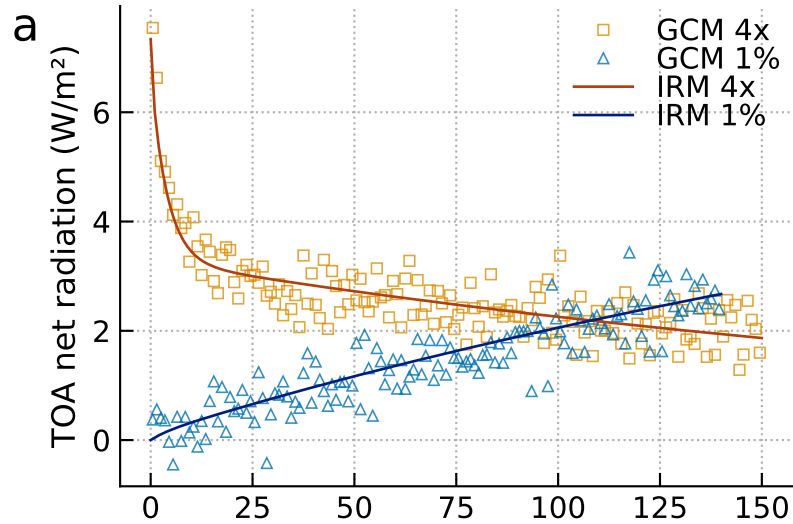
IRM-3 fitted to rtnt and tas of NorESM2-LM
 alpha: 4.07 W/m^2 , beta: 1.18
 tau0, tau1, tau2: $0.00914, 1.82, 228 \text{ y}$
 a0, a1, a2: $0.07, 0.52, 0.41$
 lambda, lambda(reg): $1.29, 1.38 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $2.19, 1.39 ^{\circ}\text{C}$, rwf: 0.63
 ecs(reg), tcr(gcm): $2.54, 1.48 ^{\circ}\text{C}$, rwf: 0.58

CMIP6, NorESM2-MM



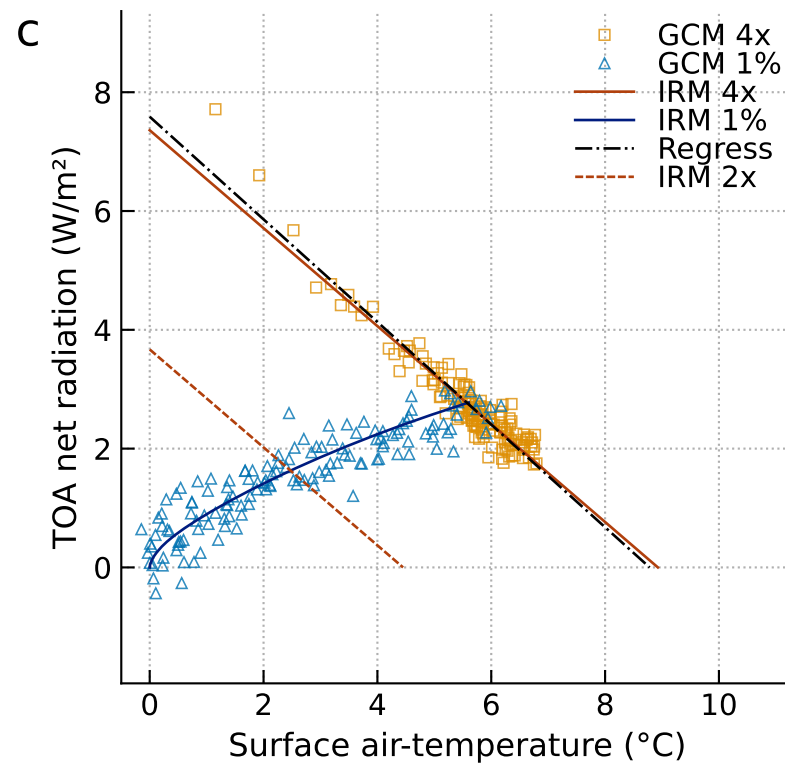
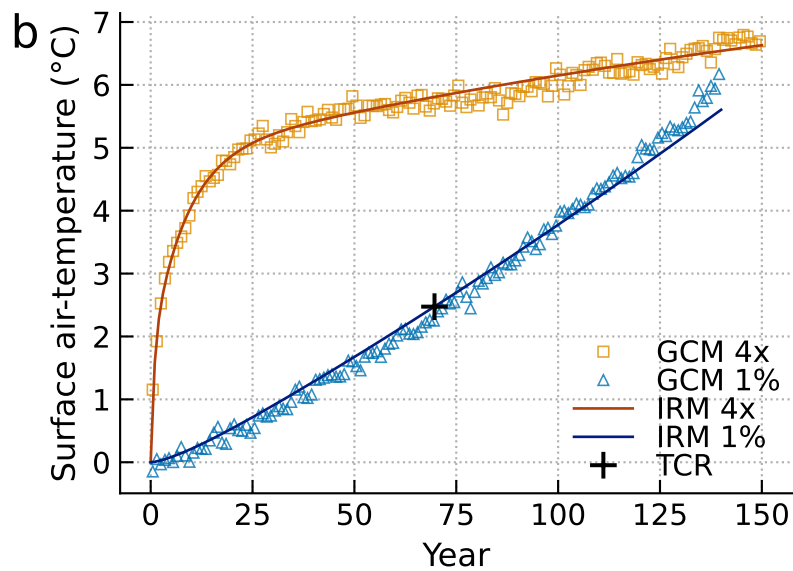
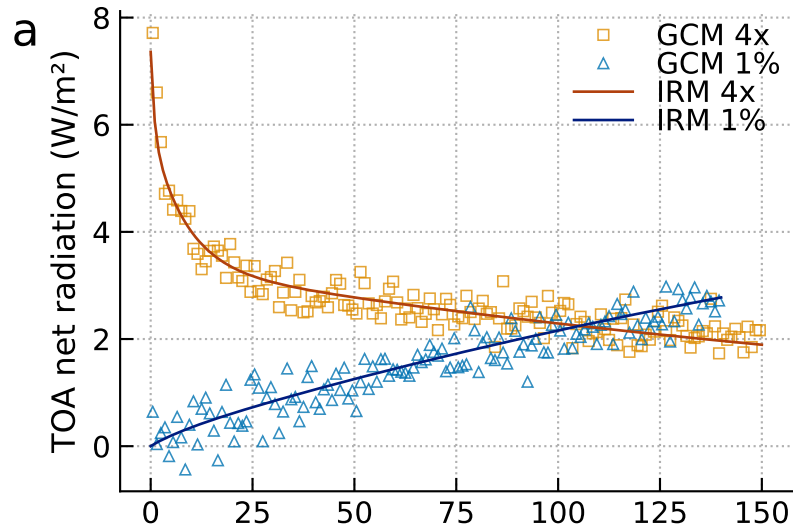
IRM-3 fitted to $rtnt$ and tas of NorESM2-MM
 α : 4.30 W/m^2 , β : 1.21
 τ_0 , τ_1 , τ_2 : 0.0657, 2.32, 218 y
 a_0 , a_1 , a_2 : 0.15, 0.48, 0.37
 λ , $\lambda(\text{reg})$: 1.43, 1.47 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.08, 1.39 $^{\circ}\text{C}$, rwf : 0.67
 $ecs(\text{reg})$, $tcr(\text{gcm})$: 2.50, 1.34 $^{\circ}\text{C}$, rwf : 0.53

CMIP6, SAM0-UNICON



IRM-3 fitted to $rtnt$ and tas of SAM0-UNICON
 alpha: 5.25 W/m^2 , beta: 1.01
 tau0, tau1, tau2: 0.35, 4, 265 y
 a0, a1, a2: 0.08, 0.47, 0.45
 lambda, lambda(reg): $0.96, 1.05 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $3.80, 2.20 ^{\circ}\text{C}$, rwf: 0.58
 ecs(reg), tcr(gcm): $3.72, 2.26 ^{\circ}\text{C}$, rwf: 0.61

CMIP6, TaiESM1



IRM-3 fitted to rtnt and tas of TaiESM1

alpha: 5.29 W/m^2 , beta: 1.00

tau0, tau1, tau2: 0.83, 8.35, 263 y

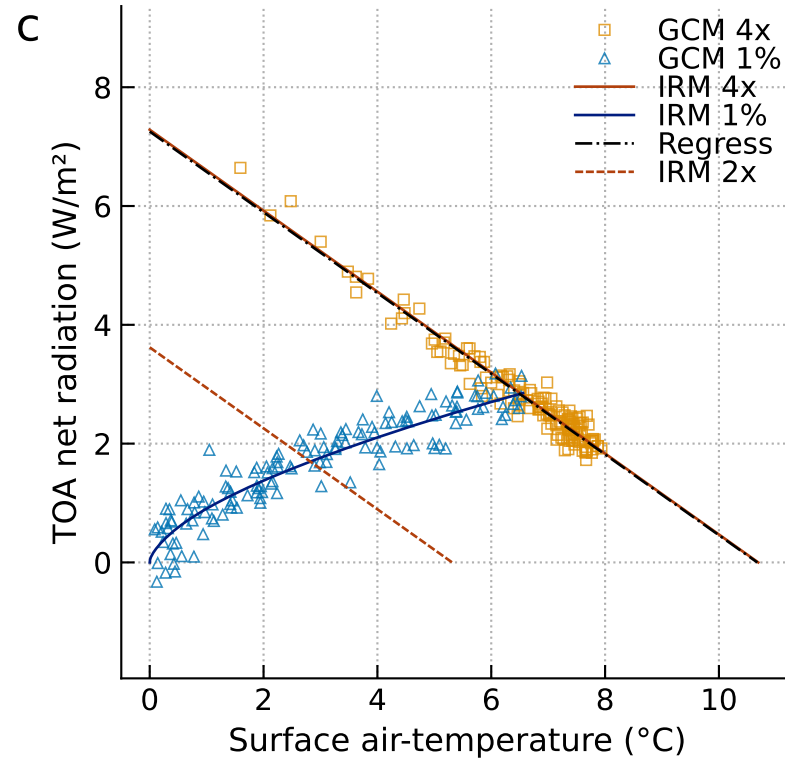
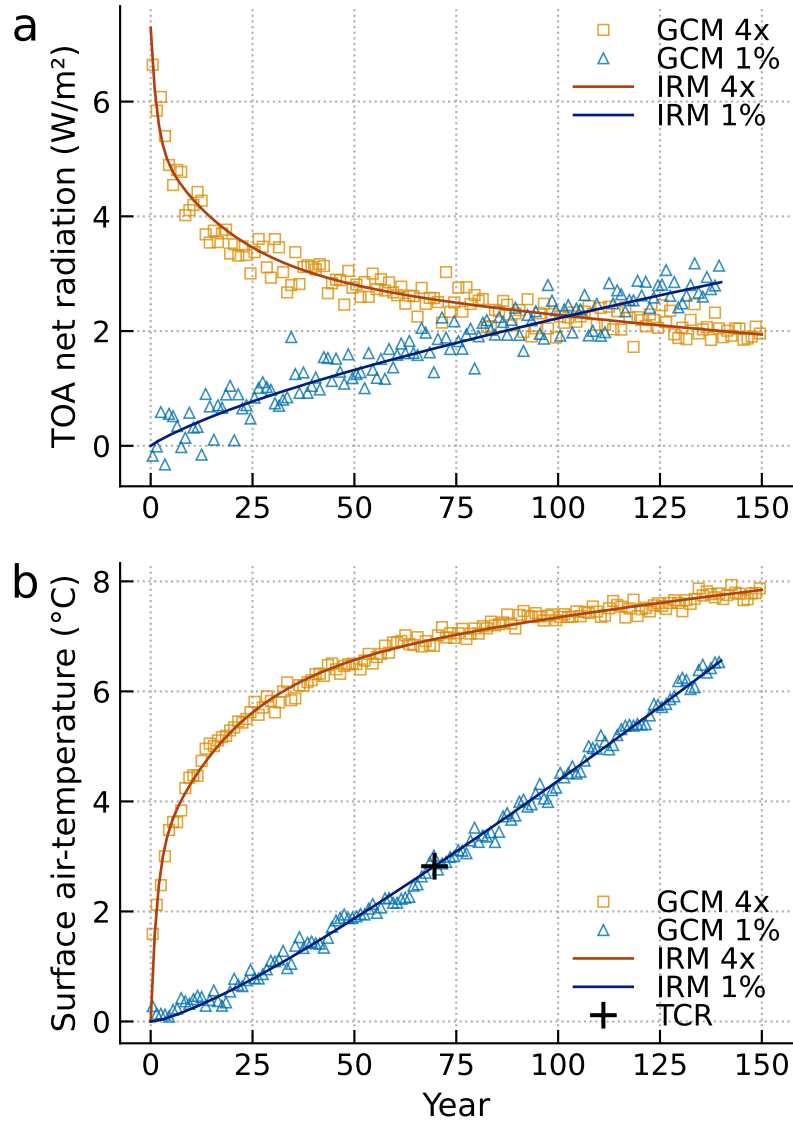
a0, a1, a2: 0.19, 0.35, 0.46

lambda, lambda(reg): $0.82, 0.86 \text{ W/m}^2/^{\circ}\text{C}$

ecs, tcr: $4.45, 2.47 \text{ }^{\circ}\text{C}$, rwf: 0.56

ecs(reg), tcr(gcm): $4.39, 2.36 \text{ }^{\circ}\text{C}$, rwf: 0.54

CMIP6, UKESM1-0-LL



IRM-3 fitted to rtnt and tas of UKESM1-0-LL
 alpha: 5.22 W/m^2 , beta: 1.01
 tau0, tau1, tau2: 1.47, 18.6, 318 y
 a0, a1, a2: 0.26, 0.31, 0.43
 lambda, lambda(reg): $0.68, 0.68 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr: $5.31, 2.82 ^{\circ}\text{C}$, rwf: 0.53
 ecs(reg), tcr(gcm): $5.34, 2.79 ^{\circ}\text{C}$, rwf: 0.52