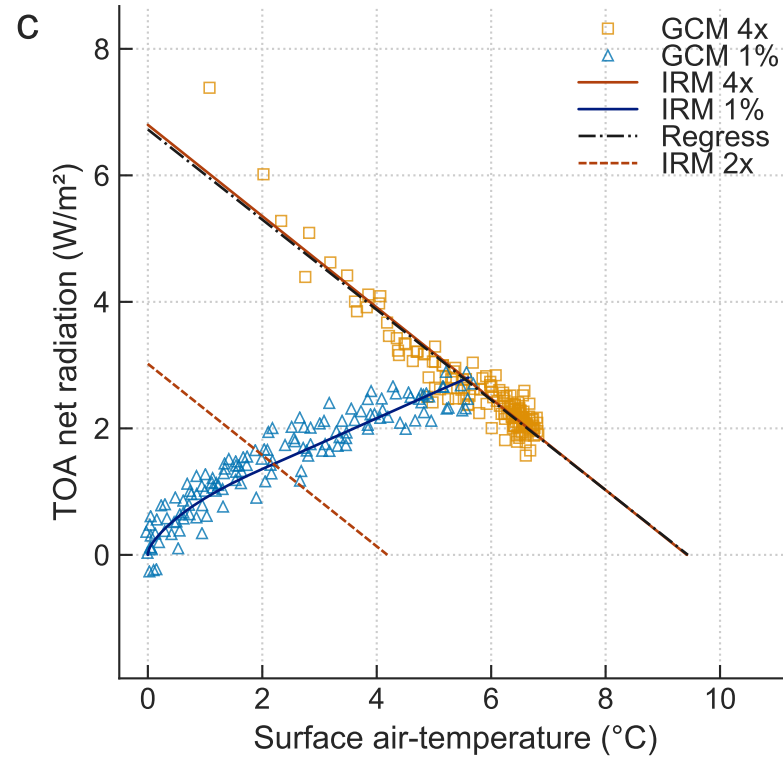
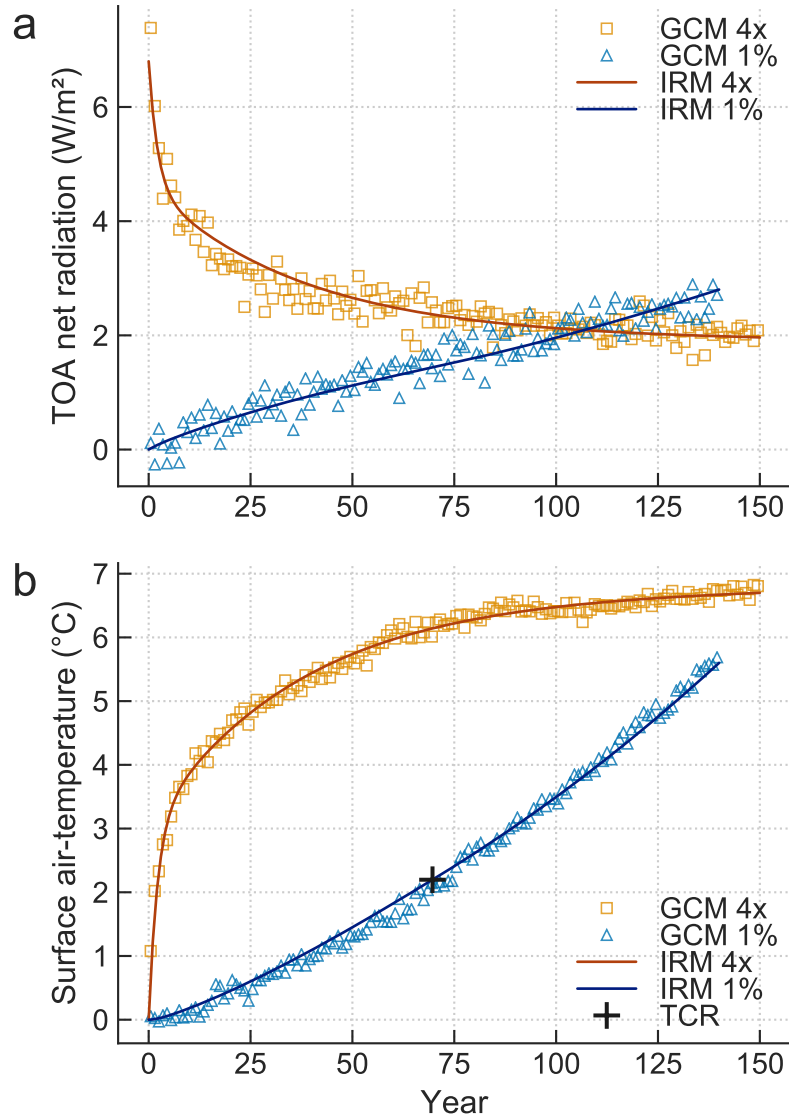
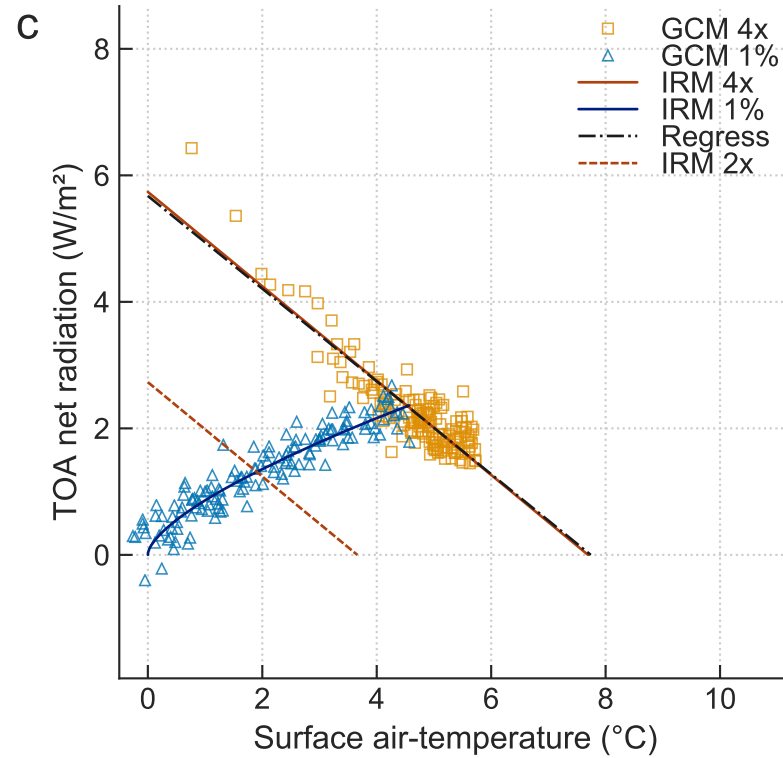
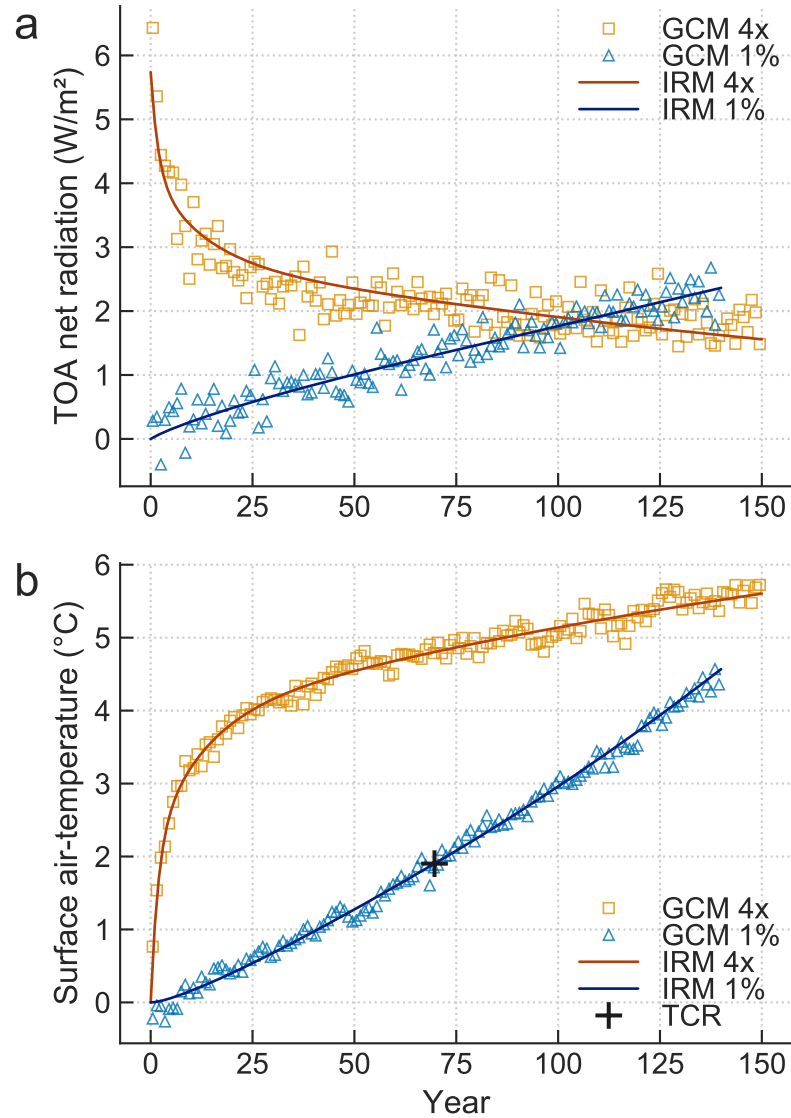


ACCESS-CM2



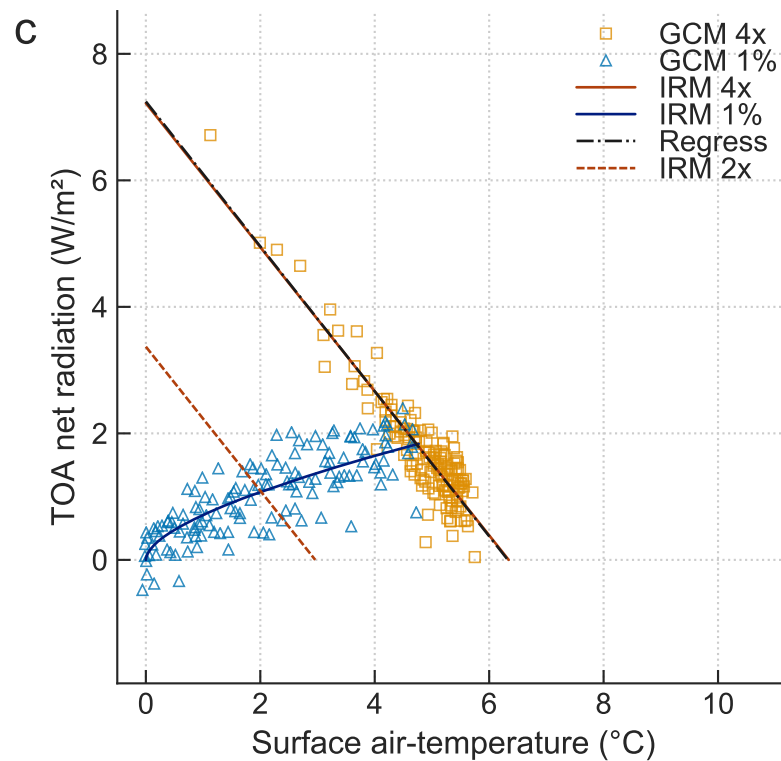
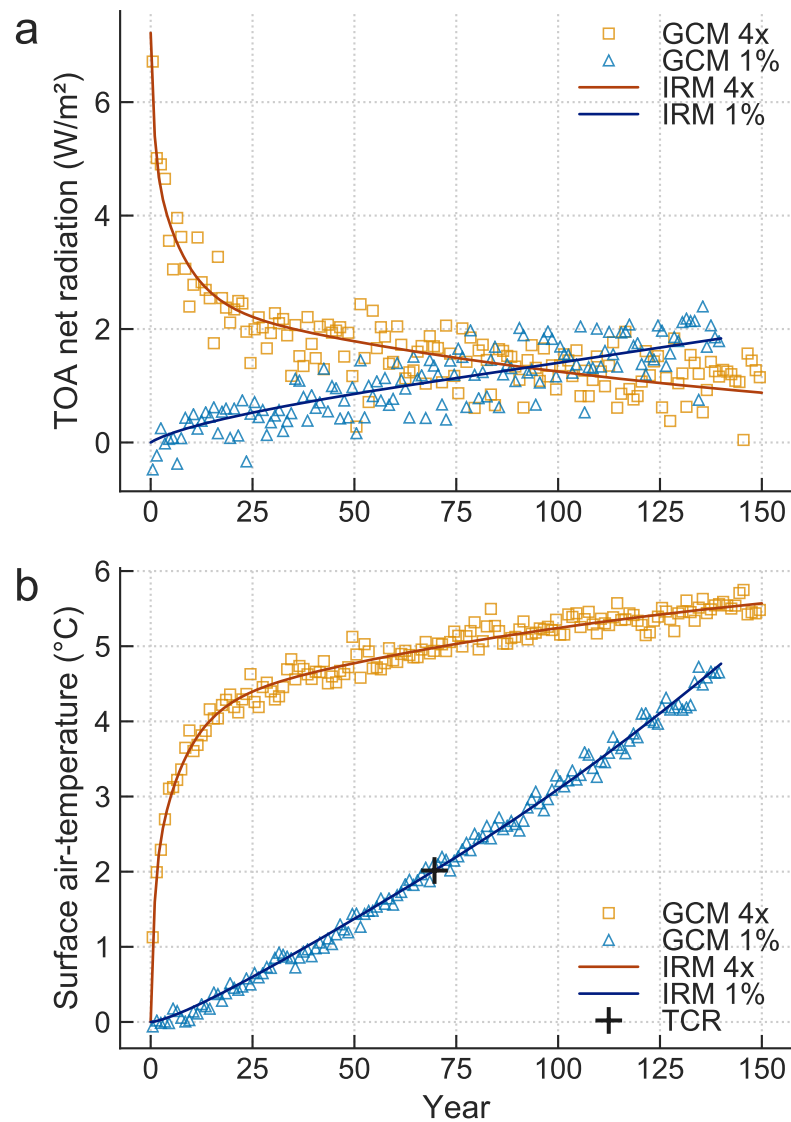
IRM-3 fitted to rtnt and tas of ACCESS-CM2
 α : 4.36 W/m^2 , β : 1.13
 τ_0 , τ_1 , τ_2 : 2.16, 37.5, 3.64×10^3 y
 a_0 , a_1 , a_2 : 0.32, 0.38, 0.29
 λ , $\lambda(\text{reg})$: 0.72, 0.71 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 4.19, 2.20 $^{\circ}\text{C}$, rwf : 0.52
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.72, 2.11 $^{\circ}\text{C}$, rwf : 0.45

ACCESS-ESM1-5



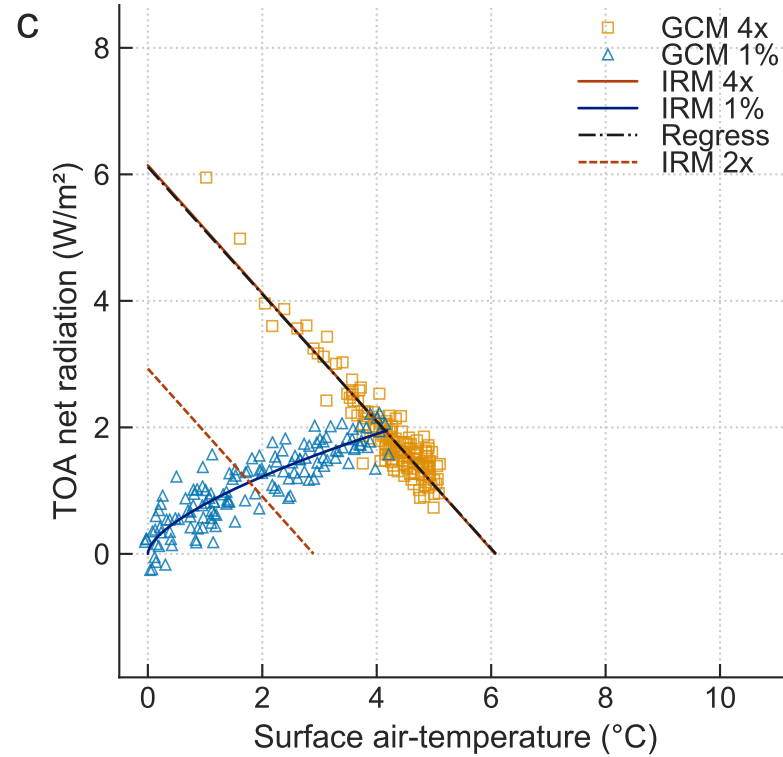
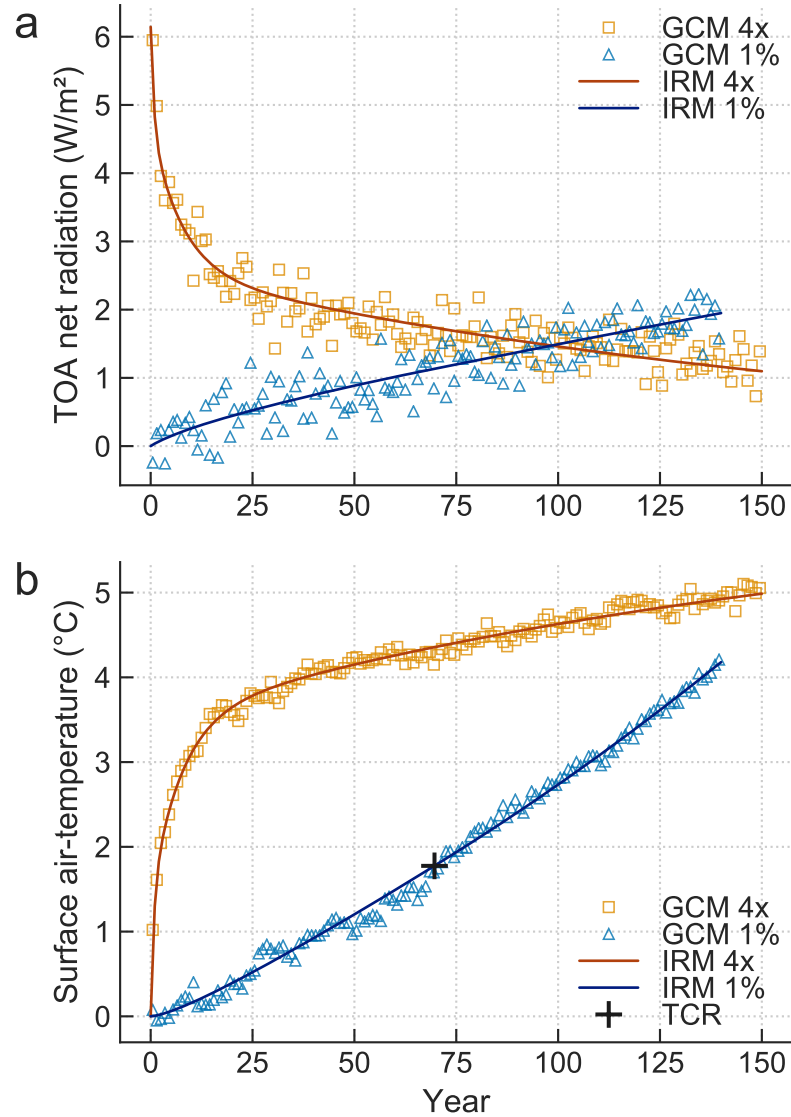
IRM-3 fitted to rtnt and tas of ACCESS-ESM1-5
 α : 3.94 W/m^2 , β : 1.05
 τ_0, τ_1, τ_2 : $1.8, 12.3, 249 \text{ y}$
 a_0, a_1, a_2 : $0.27, 0.23, 0.50$
 $\lambda, \lambda(\text{reg})$: $0.75, 0.73 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $3.66, 1.90 ^{\circ}\text{C}$, rwf : 0.52
 $\text{ecs}(\text{reg}),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

AWI-CM-1-1-MR



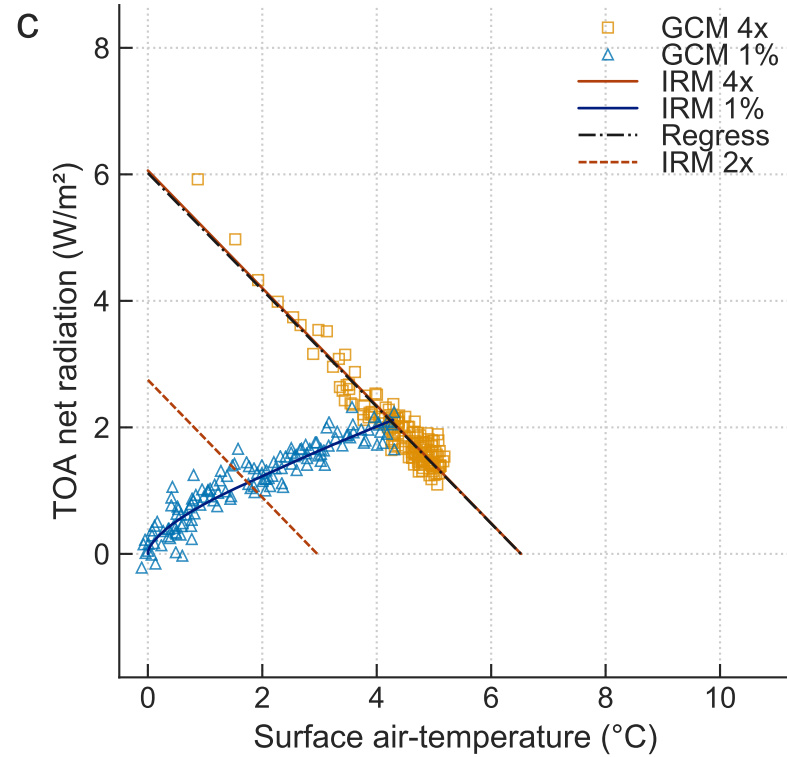
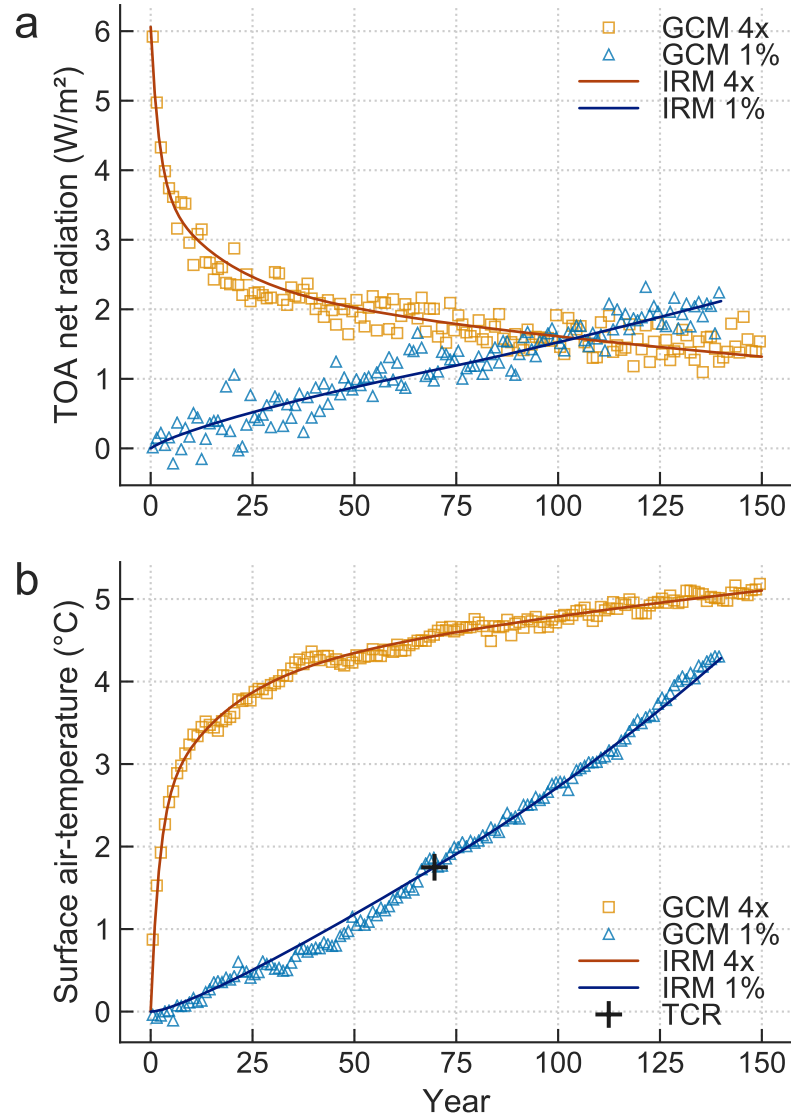
IRM-3 fitted to rtnt and tas of AWI-CM-1-1-MR
 α : 4.86 W/m^2 , β : 1.07
 τ_0, τ_1, τ_2 : 0.8, 7.4, 141 y
 a_0, a_1, a_2 : 0.28, 0.36, 0.35
 $\lambda, \lambda(\text{reg})$: 1.14, 1.15 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 2.96, 2.02 $^{\circ}\text{C}$, rwf : 0.68
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: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

BCC-CSM2-MR



IRM-3 fitted to rtnt and tas of BCC-CSM2-MR
 α : 4.23 W/m^2 , β : 1.05
 τ_0, τ_1, τ_2 : 0.769, 7.51, 175 y
 a_0, a_1, a_2 : 0.23, 0.35, 0.42
 $\lambda, \lambda(\text{reg})$: 1.01, 1.01 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 2.90, 1.78 $^{\circ}\text{C}$, rwf : 0.61
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: 3.04, 1.73 $^{\circ}\text{C}$, rwf : 0.57

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

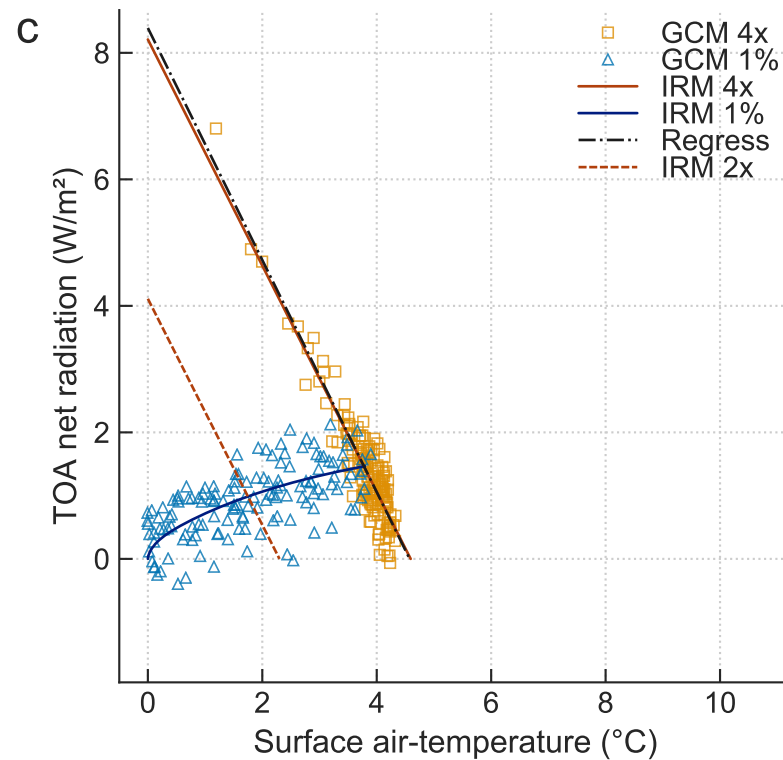
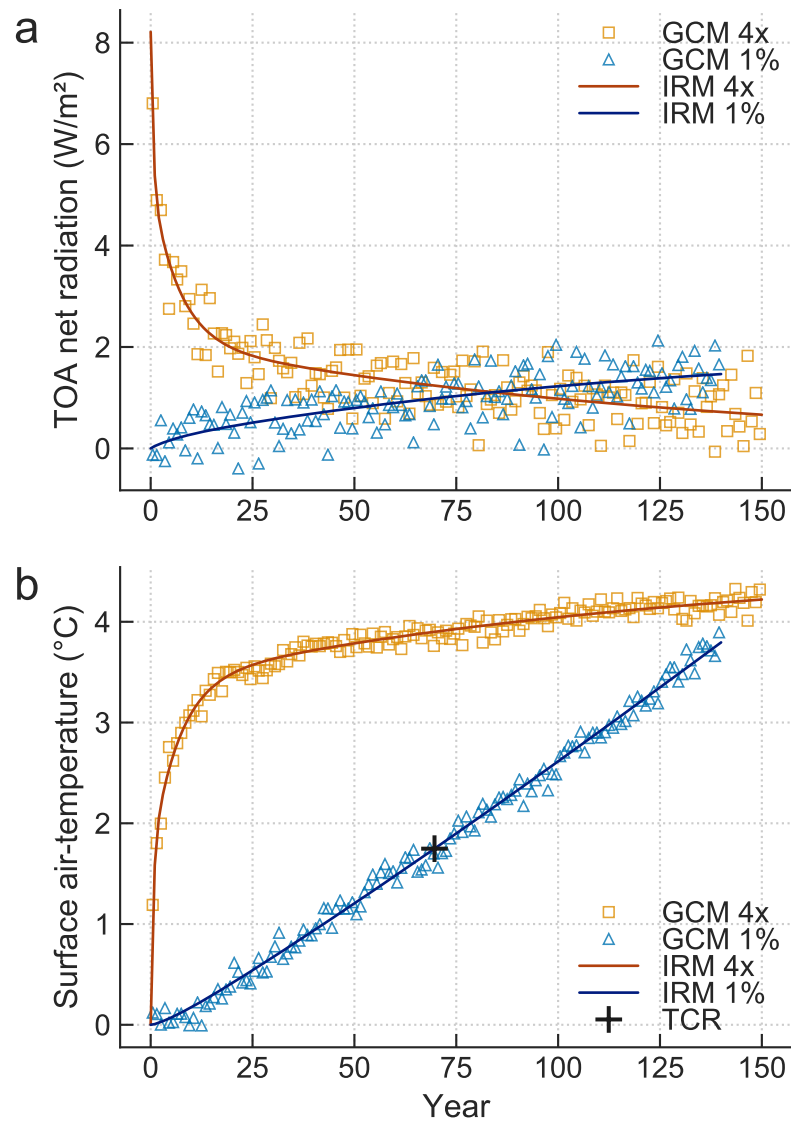
a_0 , a_1 , a_2 : 0.37, 0.24, 0.39

λ , $\lambda(\text{reg})$: 0.93, 0.92 $\text{W/m}^2/^{\circ}\text{C}$

ecs , tcr : 2.96, 1.75 $^{\circ}\text{C}$, rwf : 0.59

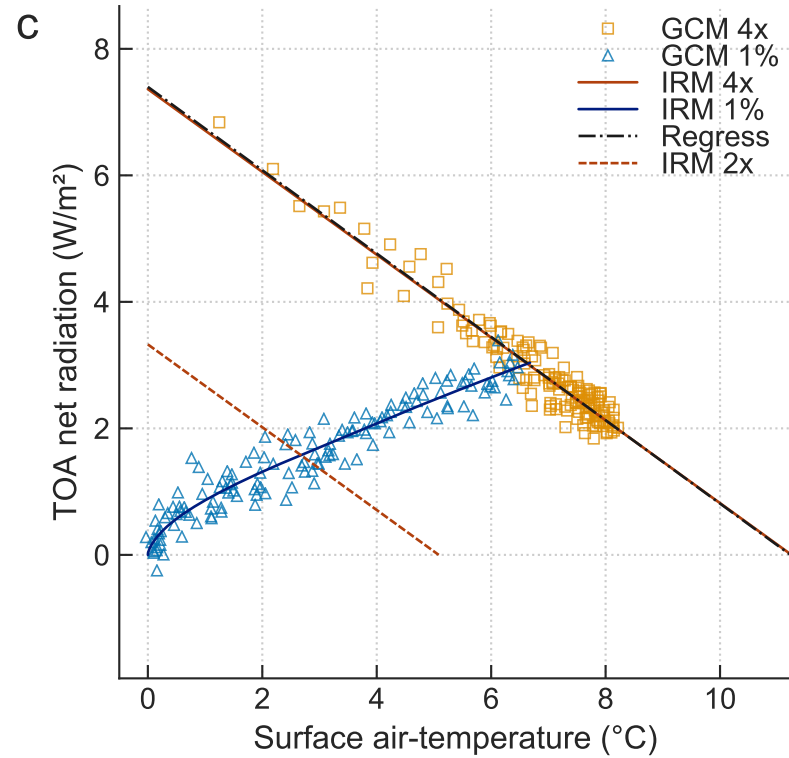
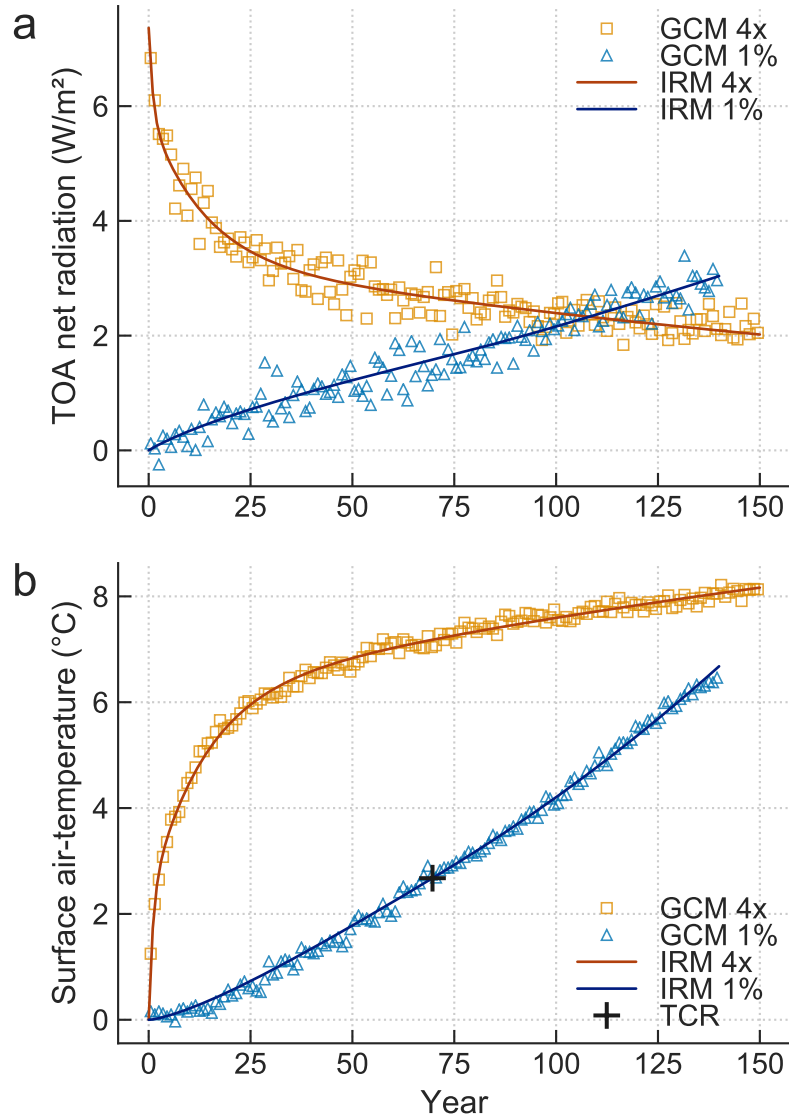
$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 3.26, 1.78 $^{\circ}\text{C}$, rwf : 0.55

CAMS-CSM1-0



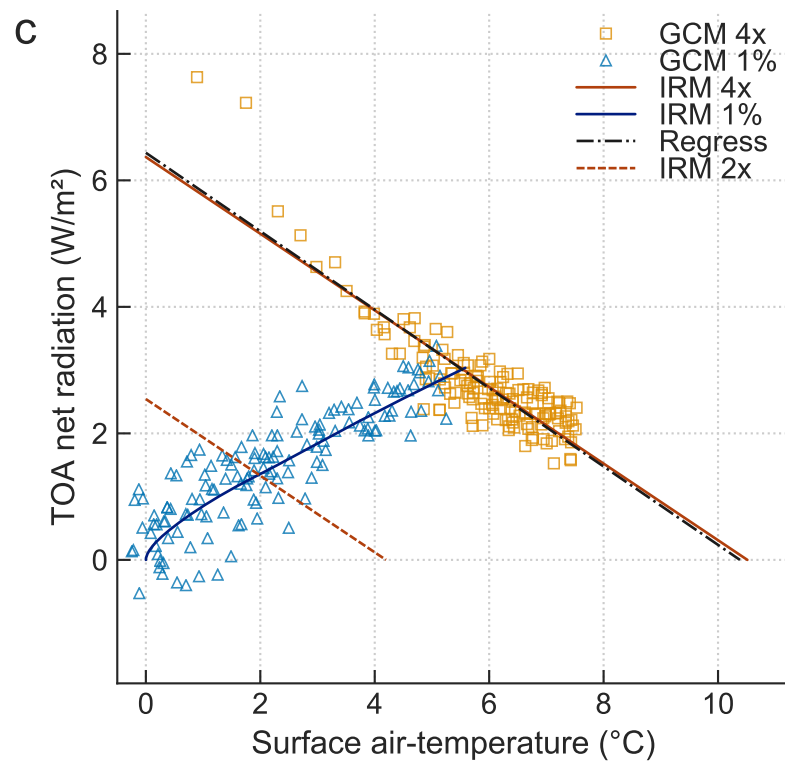
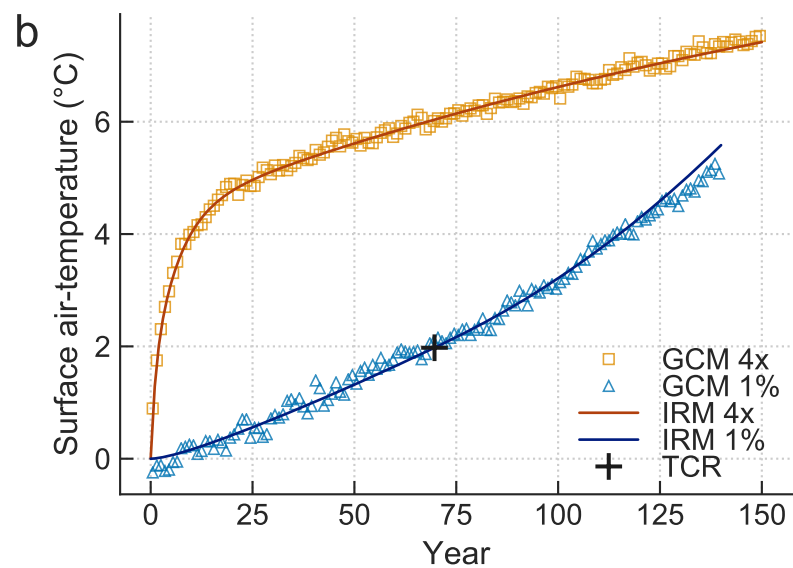
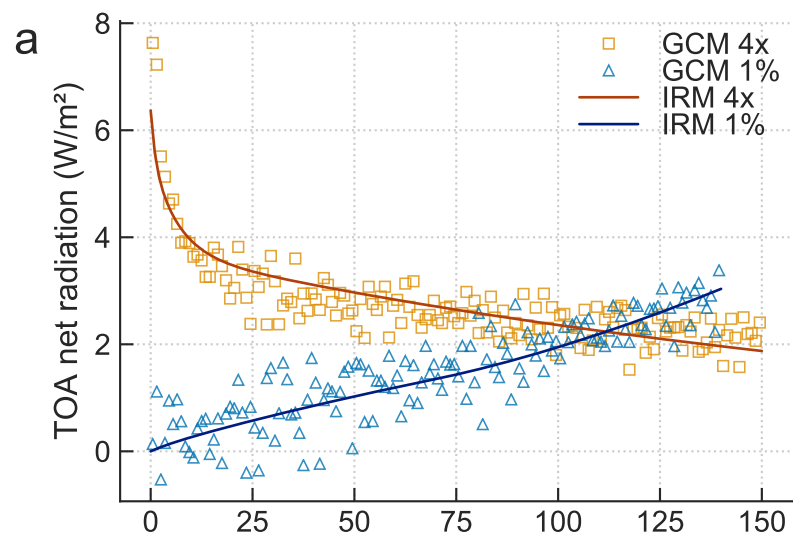
IRM-3 fitted to rtnt and tas of CAMS-CSM1-0
 α : 5.93 W/m^2 , β : 1.00
 τ_0, τ_1, τ_2 : 0.588, 6.71, 129 y
 a_0, a_1, a_2 : 0.35, 0.39, 0.26
 $\lambda, \lambda(\text{reg})$: 1.79, 1.83 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 2.30, 1.75 $^{\circ}\text{C}$, rwf : 0.76
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: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

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 : $0.999, 13.3, 296 \text{ y}$
 a_0, a_1, a_2 : $0.20, 0.34, 0.46$
 $\lambda, \lambda(\text{reg})$: $0.65, 0.66 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $5.08, 2.67^{\circ}\text{C}$, rwf : 0.53
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $5.62, 2.74^{\circ}\text{C}$, rwf : 0.49

CESM2



IRM-3 fitted to rtnt and tas of CESM2

α : 3.67 W/m^2 , β : 1.25

τ_0 , τ_1 , τ_2 : 1.06 , 6.26 , 218 y

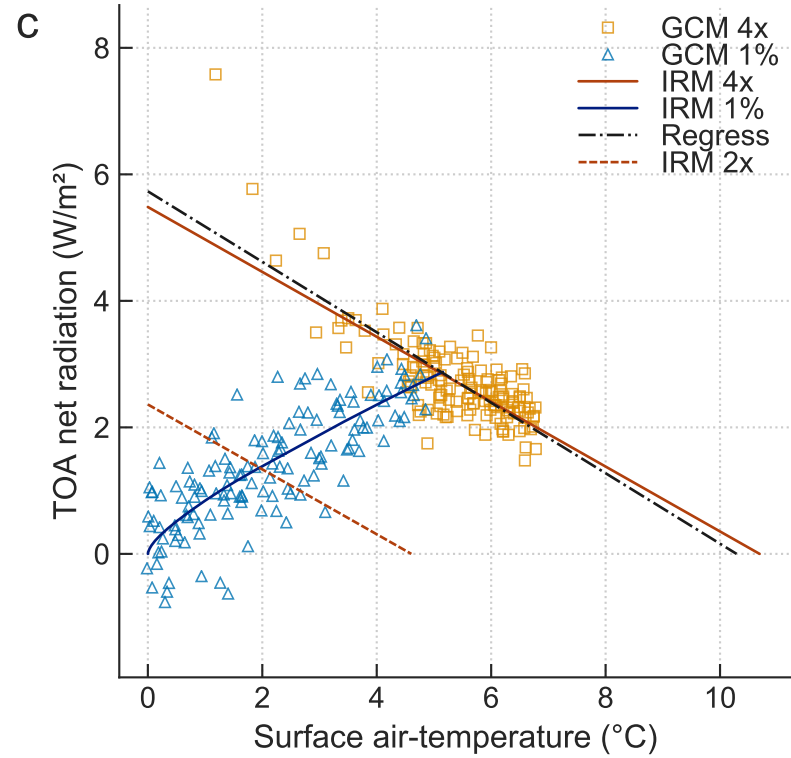
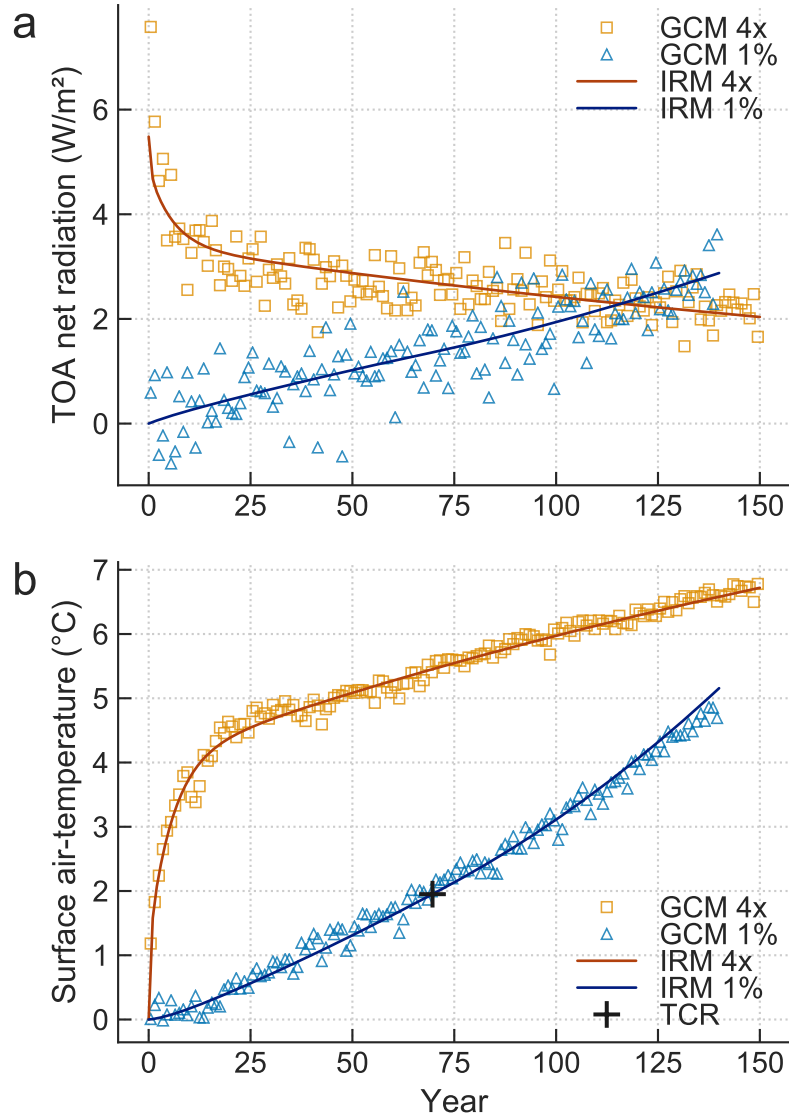
a_0 , a_1 , a_2 : 0.13 , 0.29 , 0.59

λ , $\lambda(\text{reg})$: 0.61 , $0.62 \text{ W/m}^2/^{\circ}\text{C}$

ecs , tcr : 4.20 , $1.98 \text{ }^{\circ}\text{C}$, rwf : 0.47

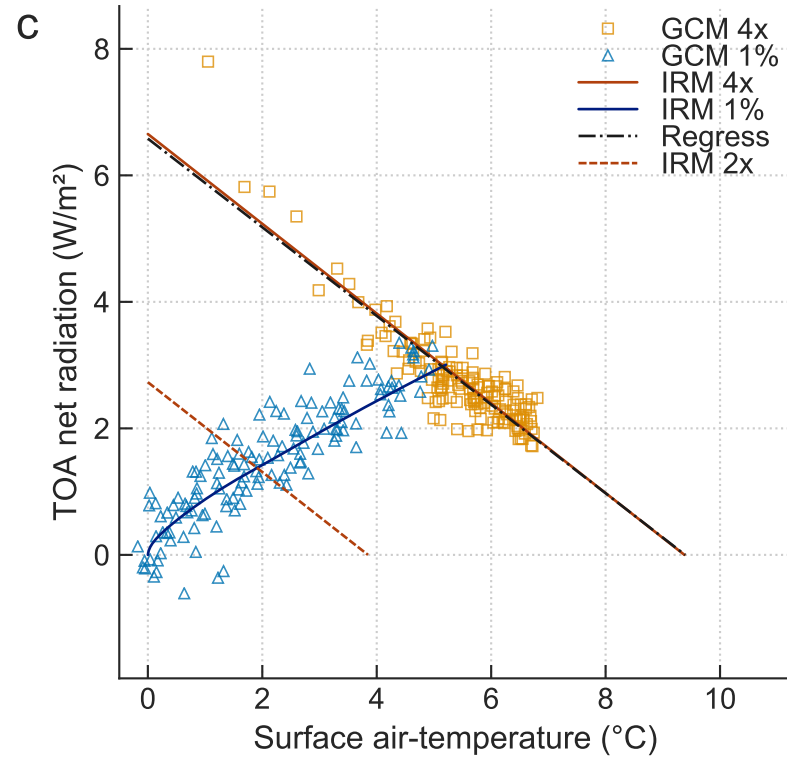
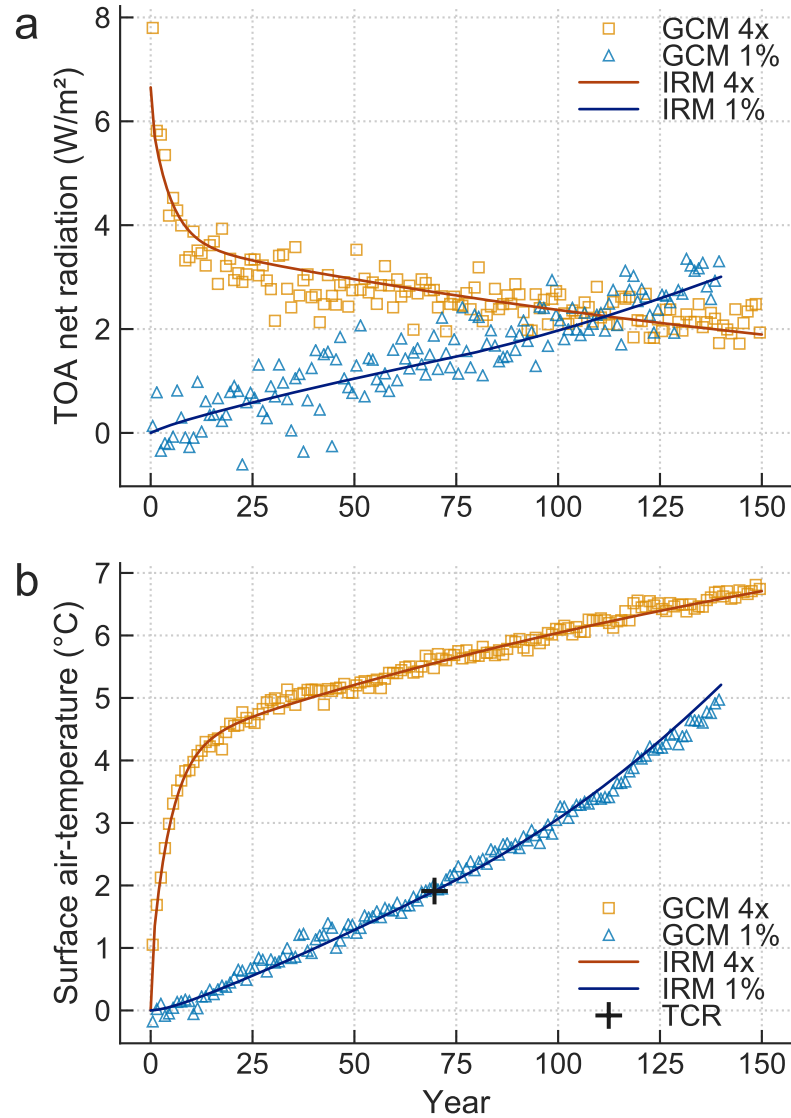
$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 5.19 , $2.06 \text{ }^{\circ}\text{C}$, rwf : 0.40

CESM2-FV2



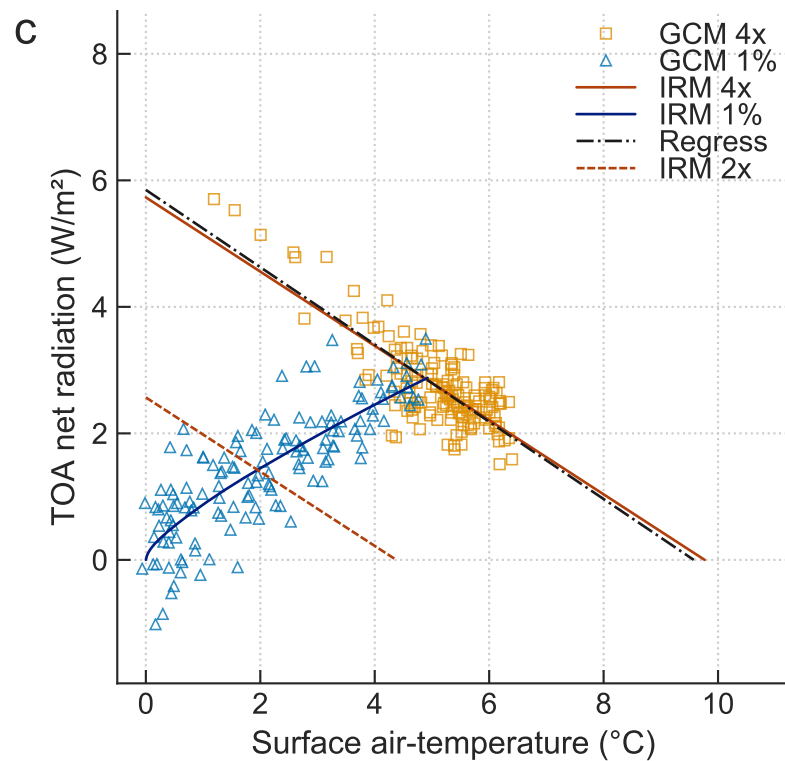
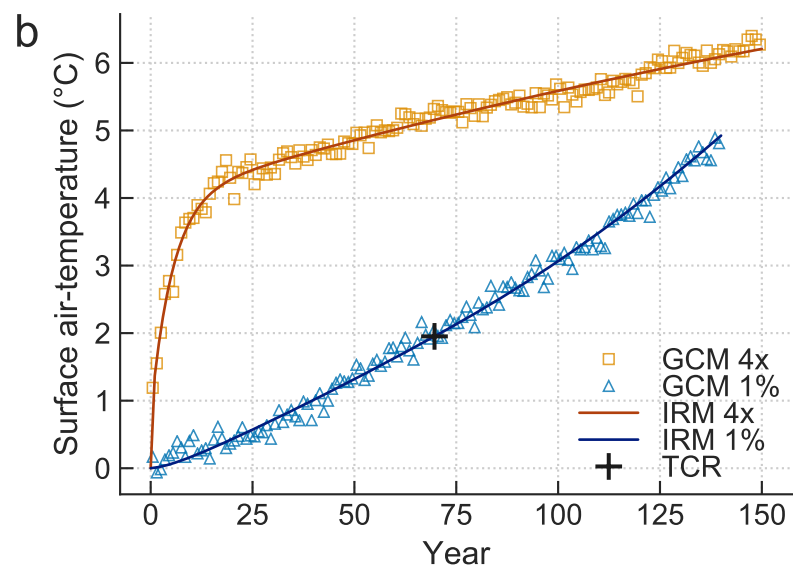
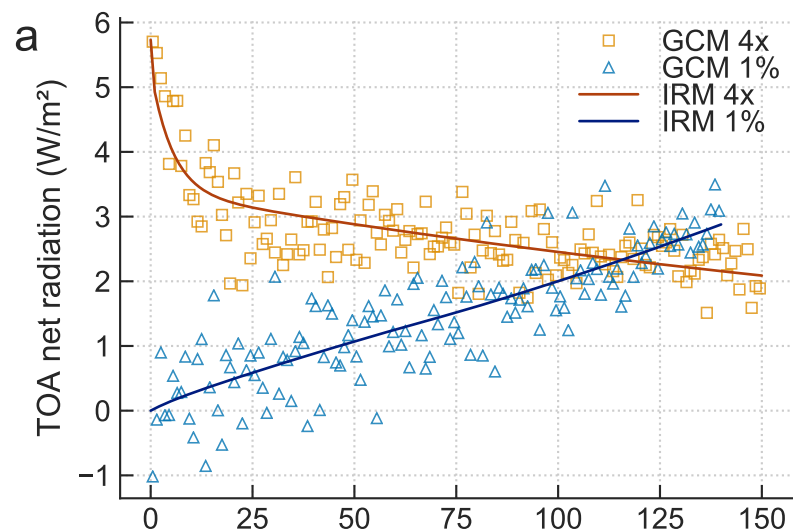
IRM-3 fitted to rtnt and tas of CESM2-FV2
 α : 3.41 W/m^2 , β : 1.16
 τ_0, τ_1, τ_2 : $0.397, 5.77, 290 \text{ y}$
 a_0, a_1, a_2 : $0.11, 0.26, 0.62$
 $\lambda, \lambda(\text{reg})$: $0.51, 0.56 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $4.60, 1.95 \text{ }^{\circ}\text{C}$, rwf : 0.42
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $5.14, 2.05 \text{ }^{\circ}\text{C}$, rwf : 0.40

CESM2-WACCM



IRM-3 fitted to rtnt and tas of CESM2-WACCM
 α : 3.94 W/m^2 , β : 1.22
 τ_0, τ_1, τ_2 : $0.269, 4.79, 224 \text{ y}$
 a_0, a_1, a_2 : $0.07, 0.37, 0.56$
 $\lambda, \lambda(\text{reg})$: $0.71, 0.70 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $3.85, 1.91 \text{ }^{\circ}\text{C}$, rwf : 0.50
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $4.70, 1.98 \text{ }^{\circ}\text{C}$, rwf : 0.42

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 : 0.0252 , 5.33 , 311 y

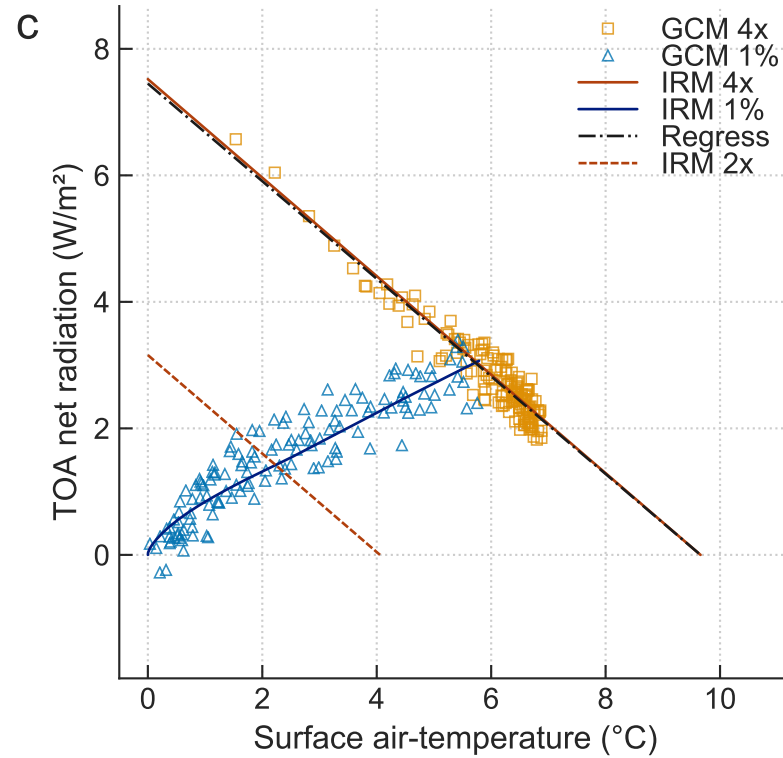
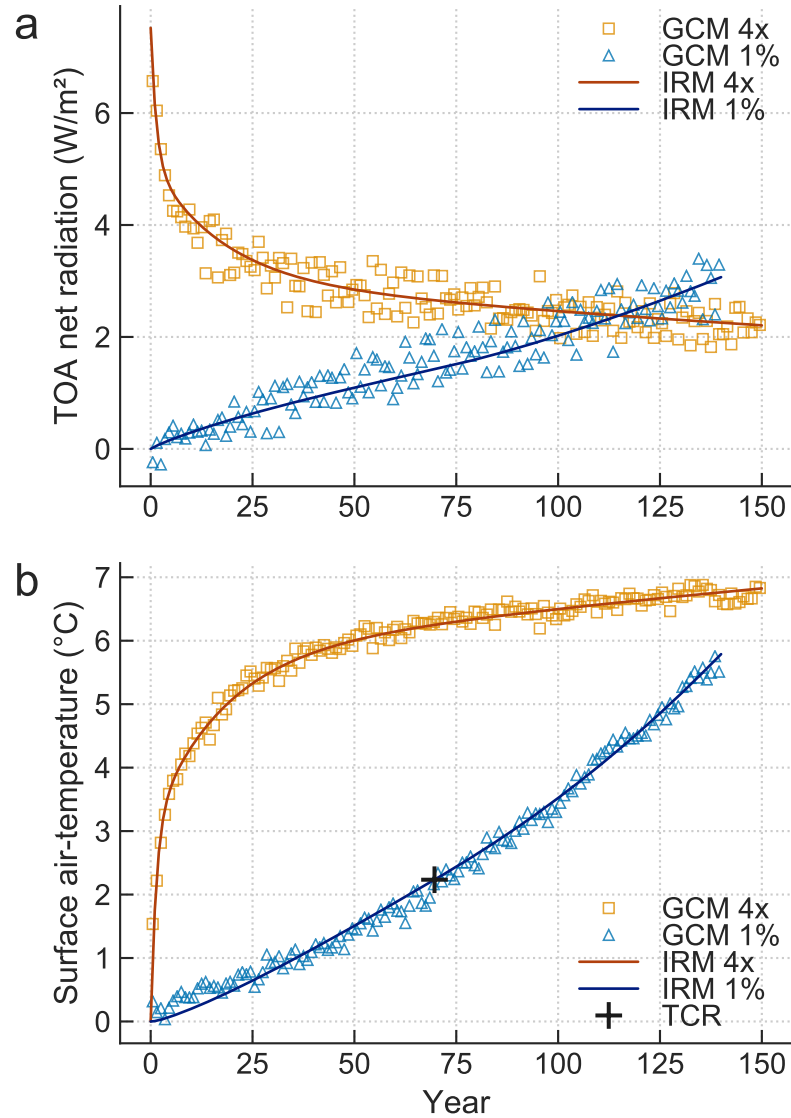
a_0 , a_1 , a_2 : 0.08 , 0.33 , 0.59

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

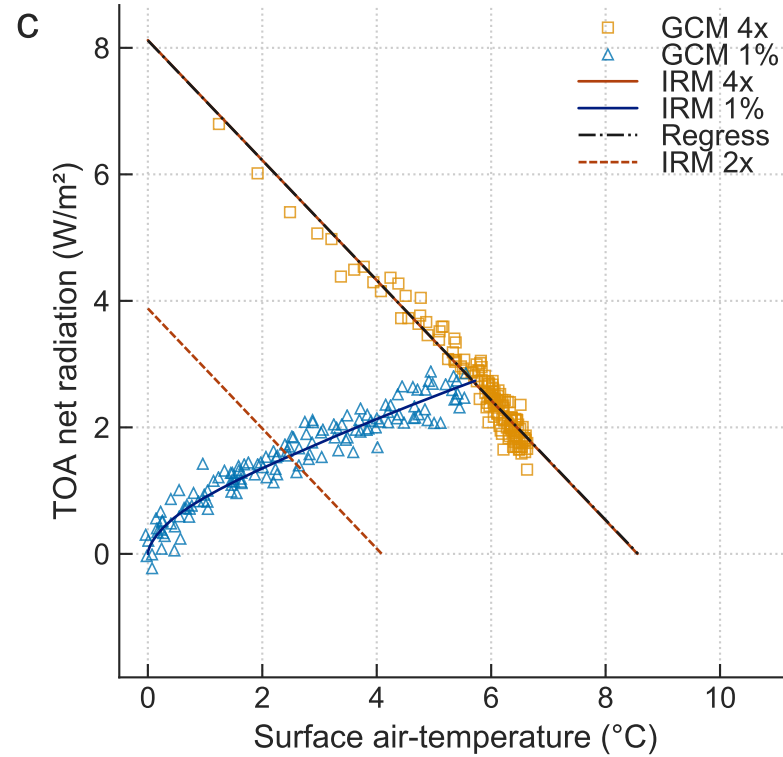
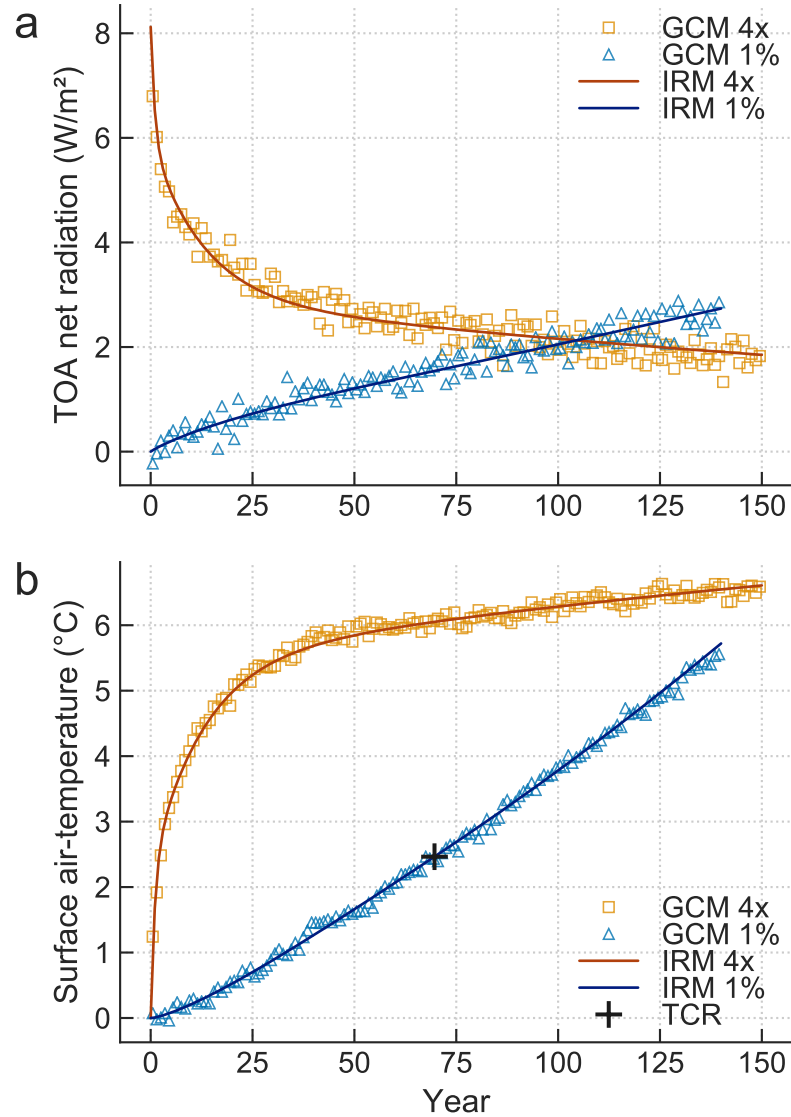
$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.79 , $2.01 \text{ }^{\circ}\text{C}$, rwf : 0.42

CNRM-CM6-1



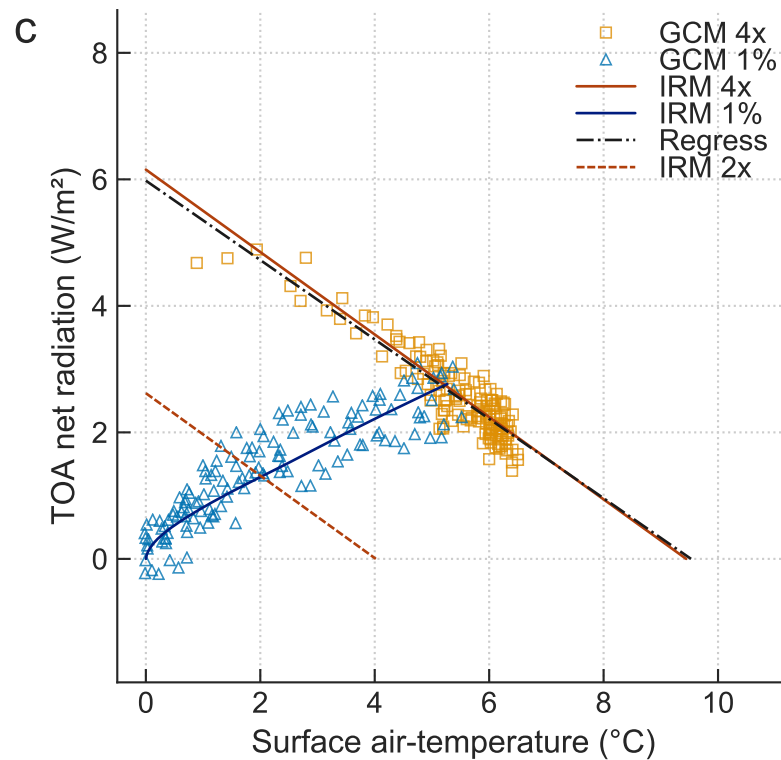
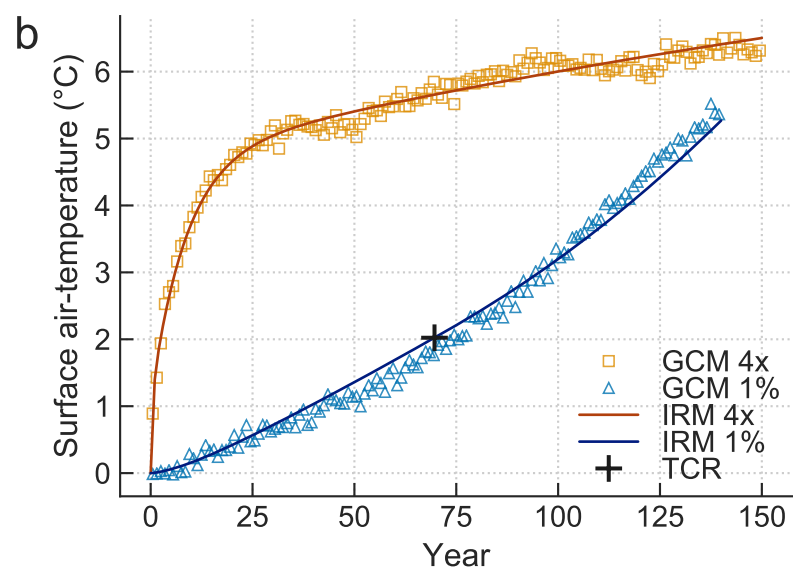
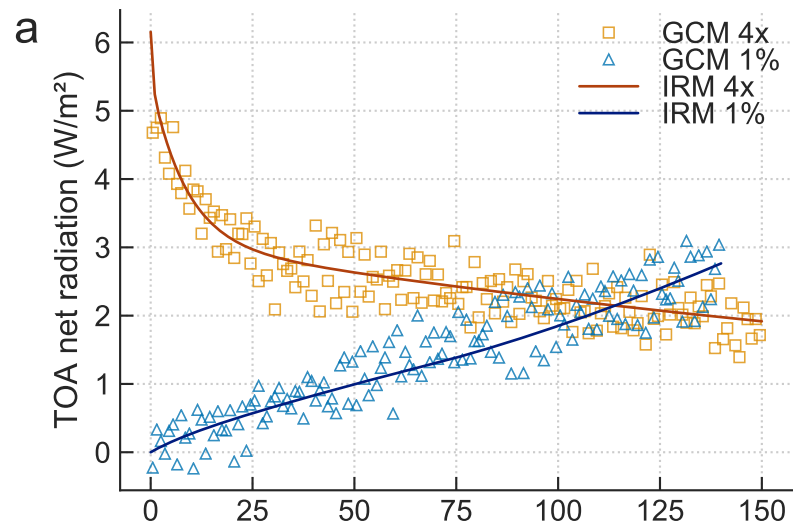
IRM-3 fitted to rtnt and tas of CNRM-CM6-1
 α : 4.56 W/m^2 , β : 1.19
 τ_0 , τ_1 , τ_2 : 1.37, 17.3, 471 y
 a_0 , a_1 , a_2 : 0.32, 0.28, 0.40
 λ , $\lambda(\text{reg})$: 0.78, 0.77 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 4.06, 2.23 $^{\circ}\text{C}$, rwf : 0.55
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.83, 2.13 $^{\circ}\text{C}$, rwf : 0.44

CNRM-CM6-1-HR



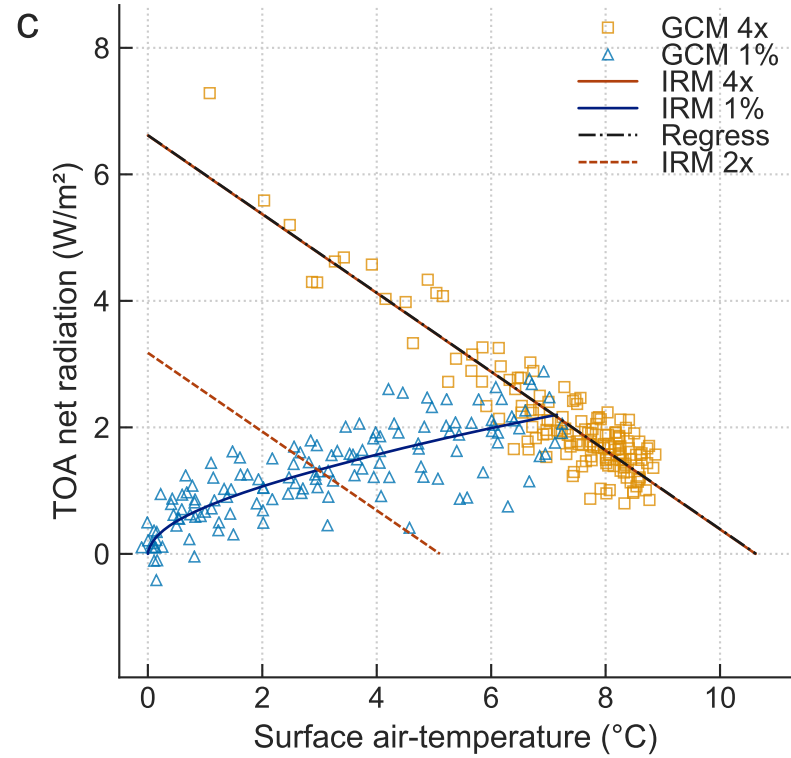
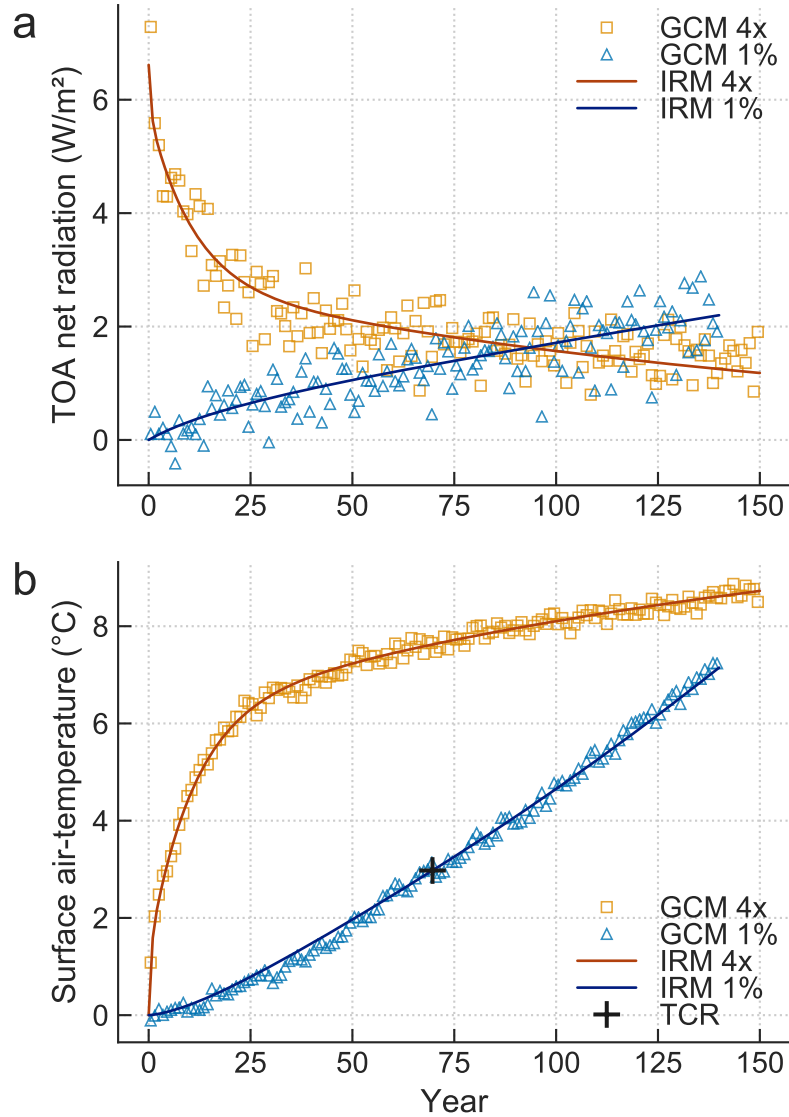
IRM-3 fitted to rtnt and tas of CNRM-CM6-1-HR
 α : 5.60 W/m^2 , β : 1.05
 τ_0 , τ_1 , τ_2 : 1.02, 13, 328 y
 a_0 , a_1 , a_2 : 0.27, 0.37, 0.36
 λ , $\lambda(\text{reg})$: 0.95, 0.95 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 4.09, 2.46 $^{\circ}\text{C}$, rwf : 0.60
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.28, 2.47 $^{\circ}\text{C}$, rwf : 0.58

CNRM-ESM2-1



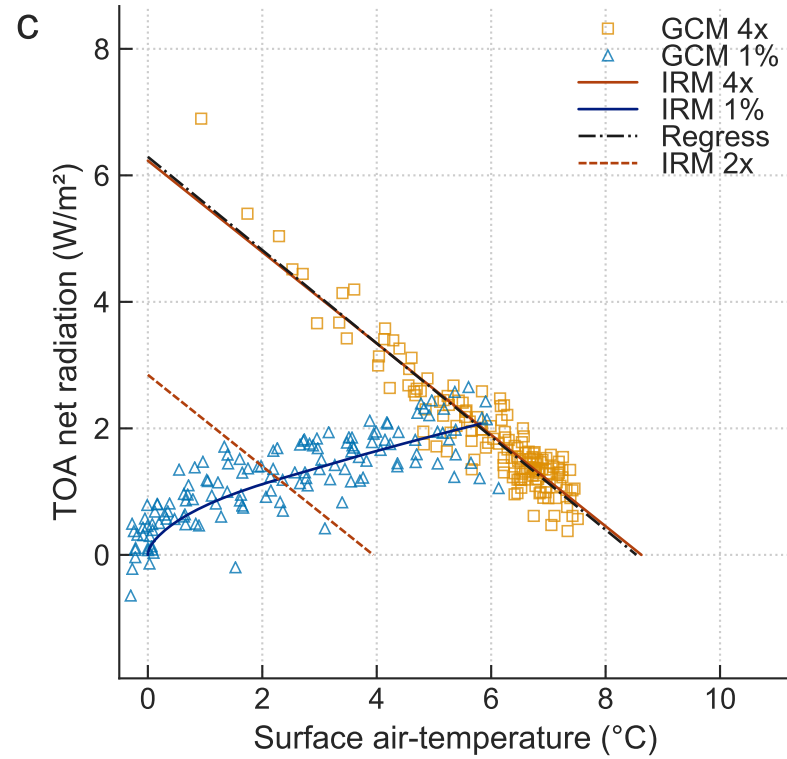
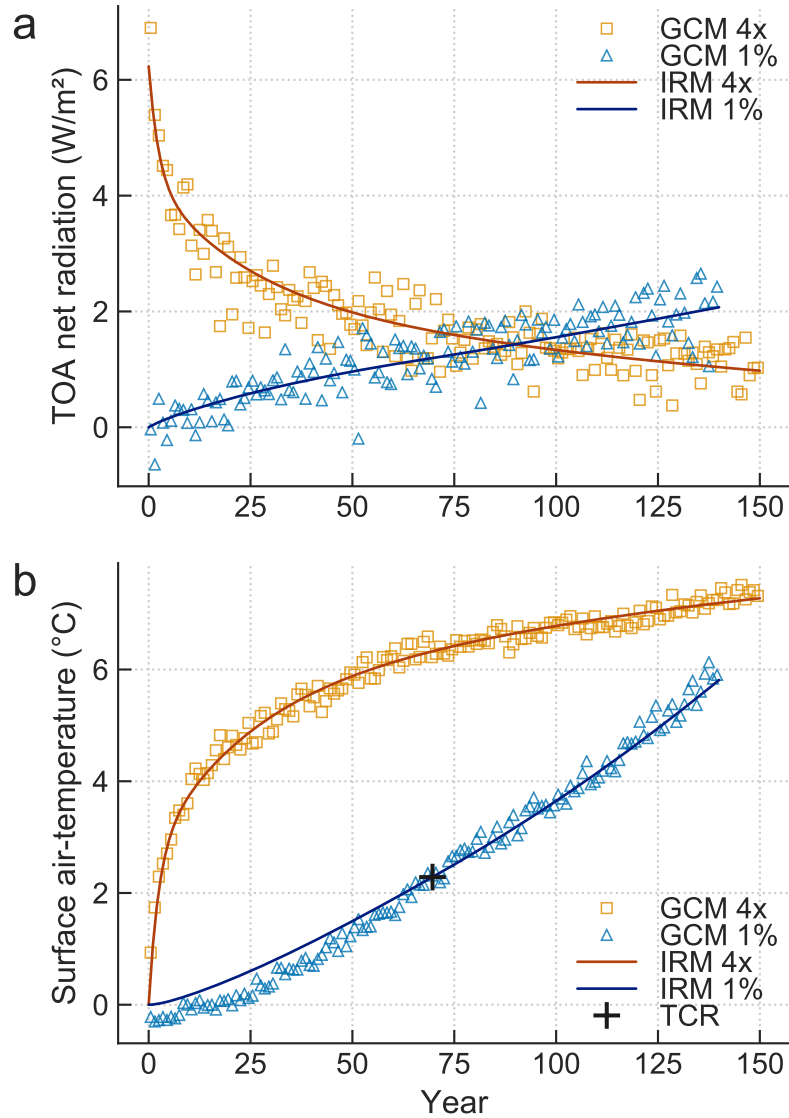
IRM-3 fitted to rtnt and tas of CNRM-ESM2-1
 α : 3.78 W/m^2 , β : 1.17
 τ_0 , τ_1 , τ_2 : 0.414, 8.63, 318 y
 a_0 , a_1 , a_2 : 0.11, 0.39, 0.50
 λ , $\lambda(\text{reg})$: 0.65, 0.63 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 4.02, 2.02 $^{\circ}\text{C}$, rwf : 0.50
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.76, 1.84 $^{\circ}\text{C}$, rwf : 0.39

E3SM-1-0



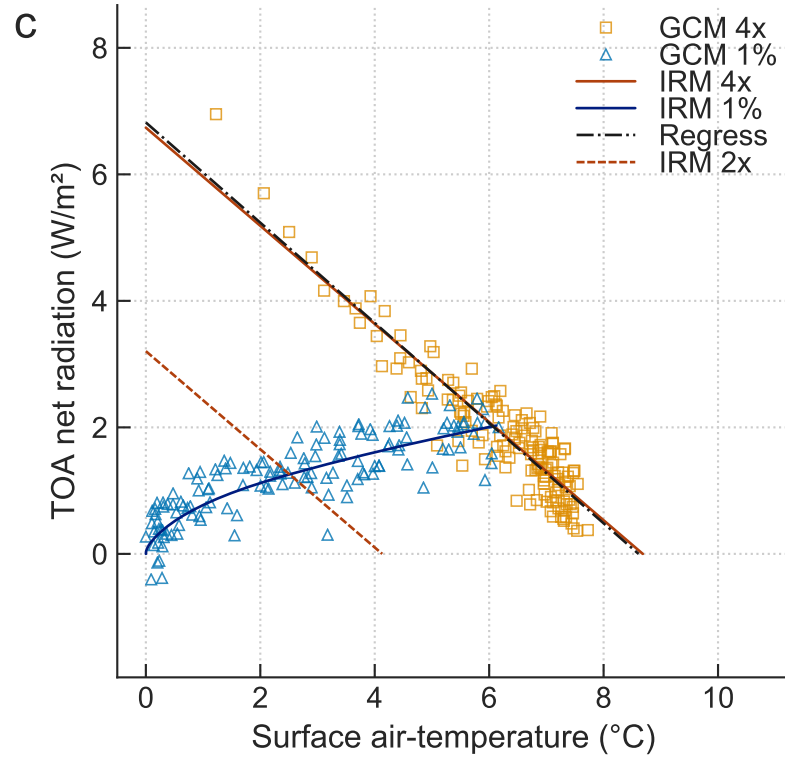
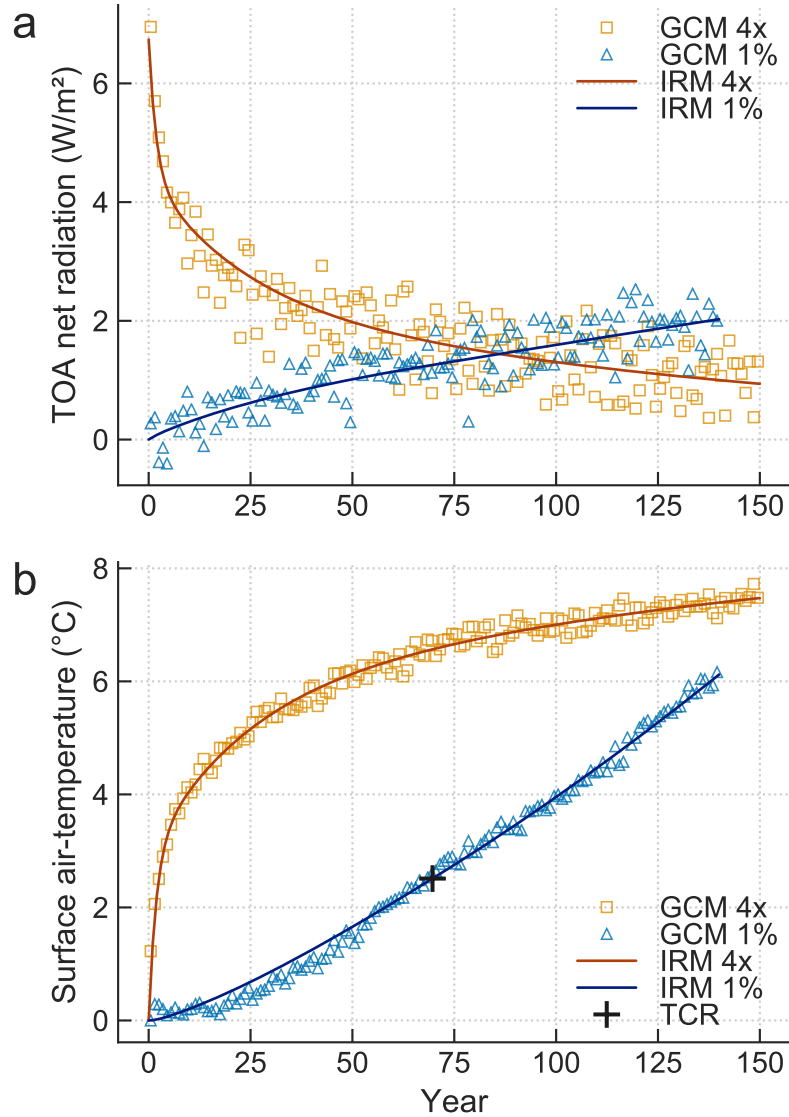
IRM-3 fitted to rtnt and tas of E3SM-1-0
 α : 4.59 W/m^2 , β : 1.04
 τ_0 , τ_1 , τ_2 : 0.504, 10.8, 177 y
 a_0 , a_1 , a_2 : 0.12, 0.46, 0.42
 λ , $\lambda(\text{reg})$: 0.62, 0.62 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 5.10, 2.98 $^{\circ}\text{C}$, rwf : 0.58
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: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

EC-Earth3



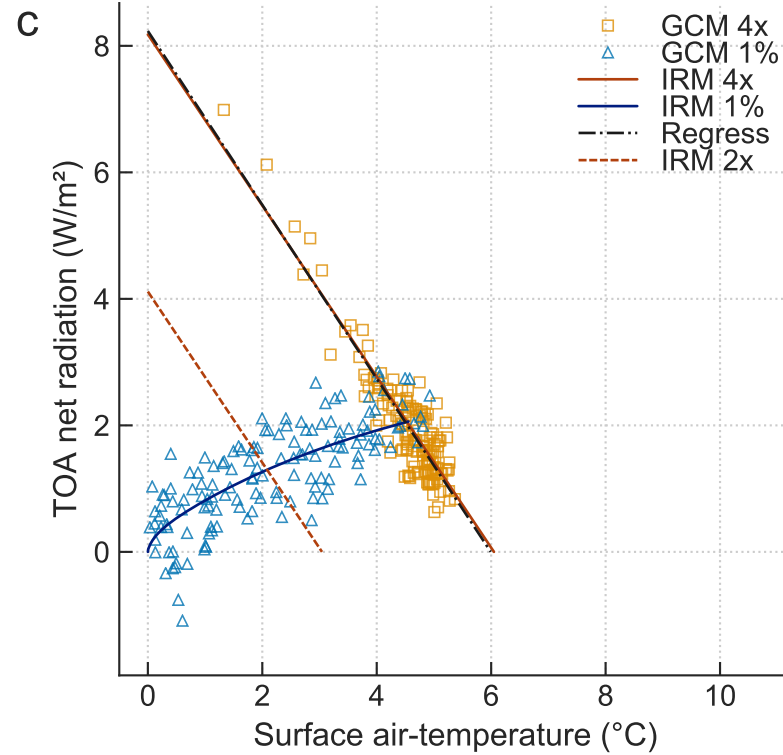
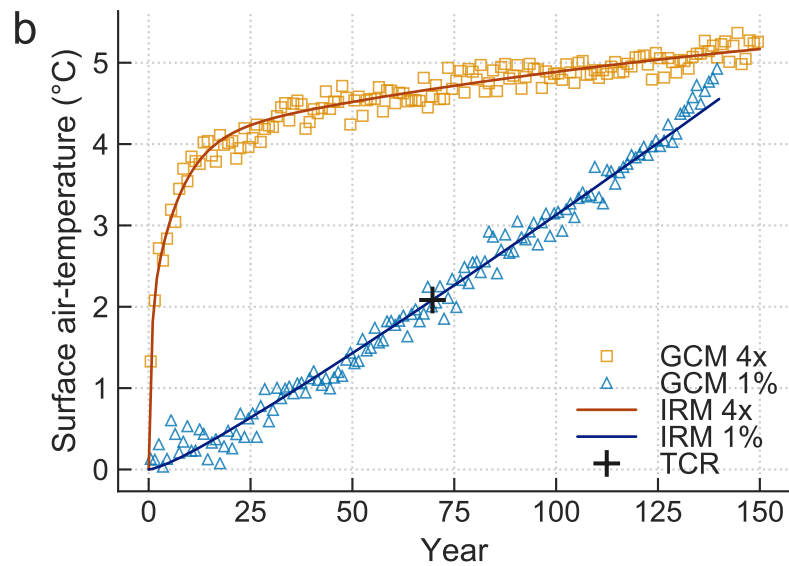
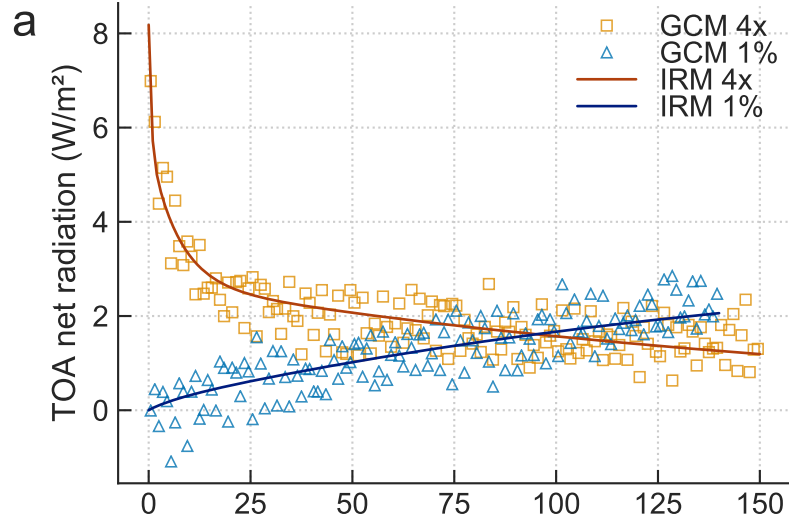
IRM-3 fitted to rtnt and tas of EC-Earth3
 α : 4.11 W/m^2 , β : 1.09
 τ_0, τ_1, τ_2 : 2.4, 23.1, 169 y
 a_0, a_1, a_2 : 0.31, 0.31, 0.38
 $\lambda, \lambda(\text{reg})$: 0.72, 0.74 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 3.94, 2.28 $^{\circ}\text{C}$, rwf : 0.58
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: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

EC-Earth3-Veg



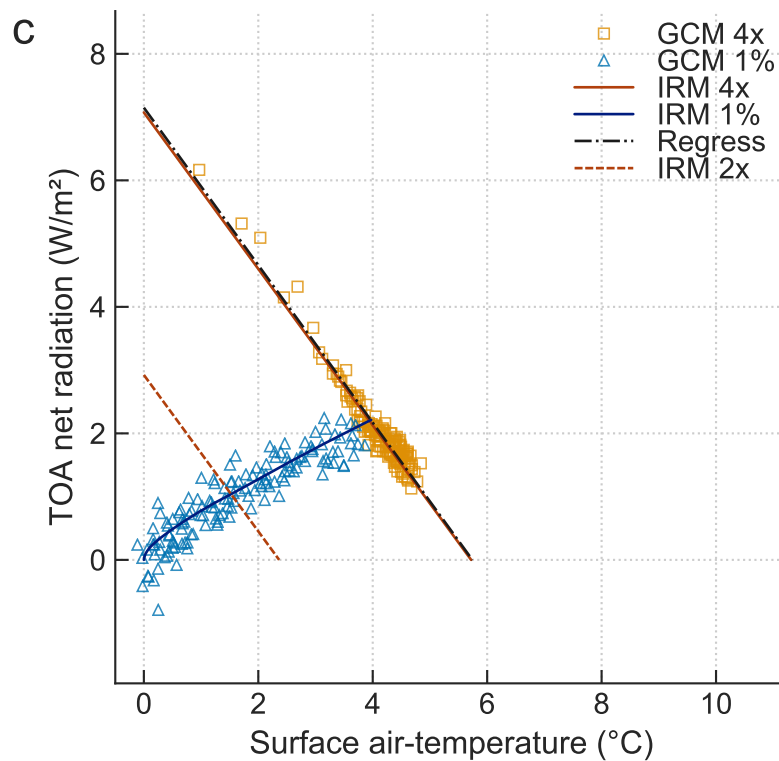
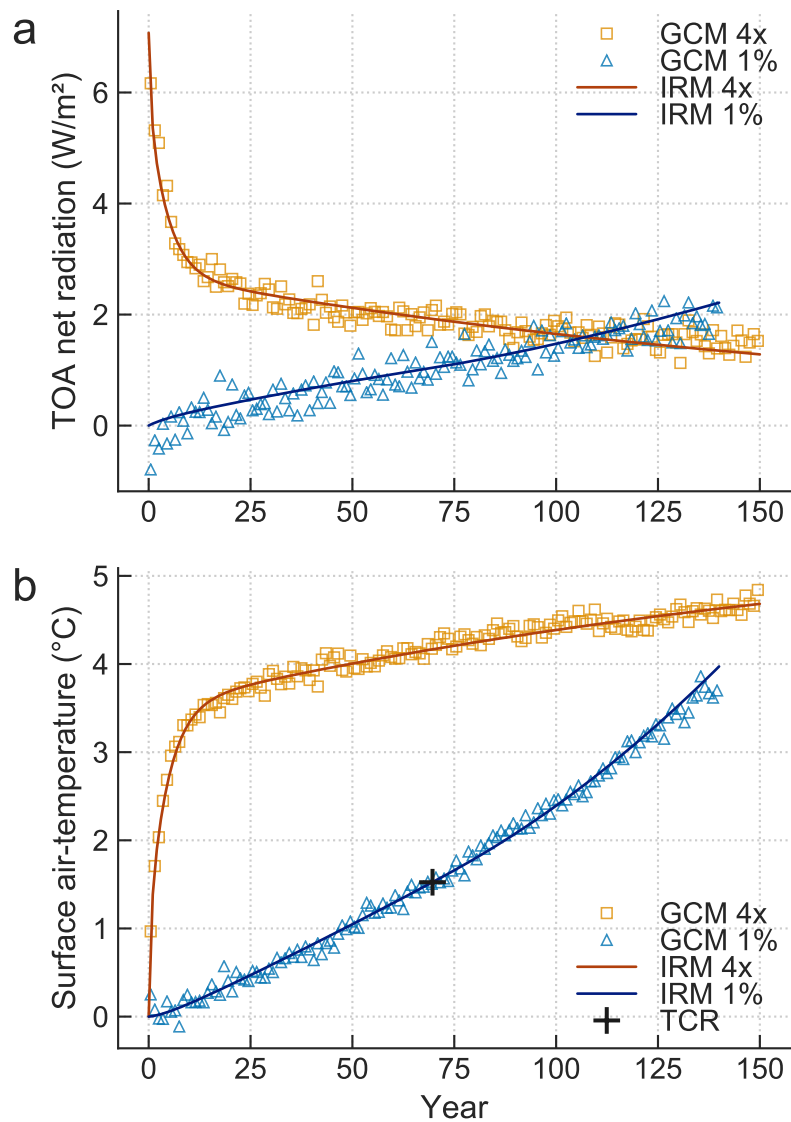
IRM-3 fitted to r_{nt} and t_{as} of EC-Earth3-Veg
 α : 4.62 W/m^2 , β : 1.05
 τ_0 , τ_1 , τ_2 : 1.85, 23, 161 y
 a_0 , a_1 , a_2 : 0.34, 0.31, 0.35
 λ , $\lambda(\text{reg})$: 0.78, 0.79 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 4.13, 2.51 $^{\circ}\text{C}$, rwf : 0.61
 $\text{ecs}(\text{reg})$,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

FGOALS-f3-L



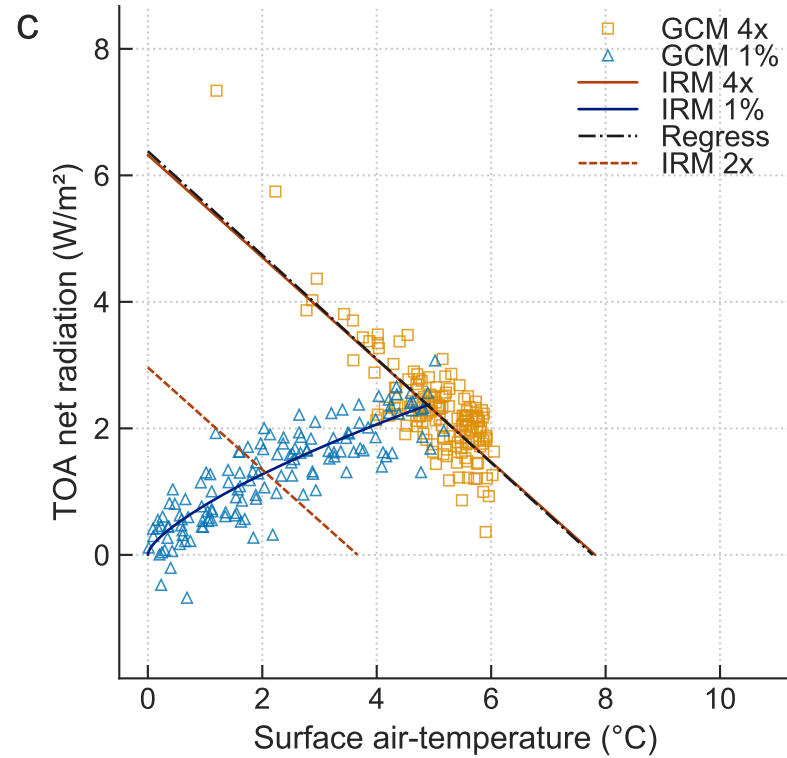
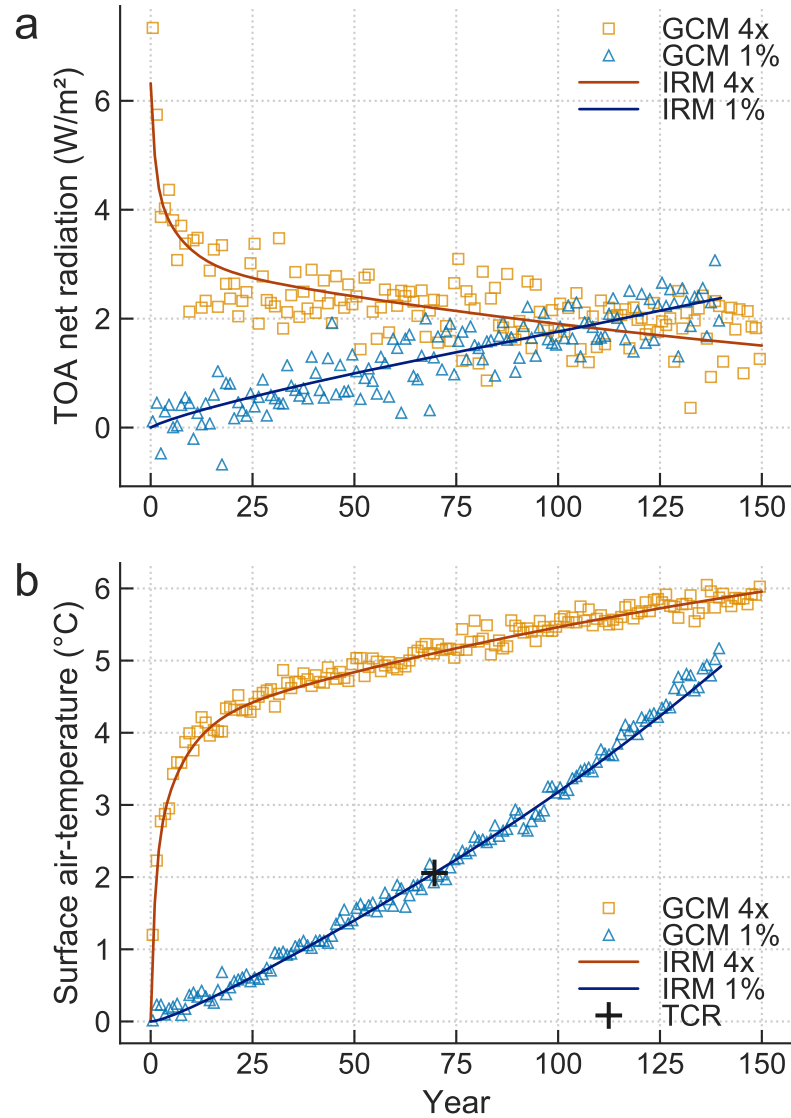
IRM-3 fitted to rtnt and tas of FGOALS-f3-L
 α : 5.94 W/m^2 , β : 0.99
 τ_0, τ_1, τ_2 : $0.571, 7.01, 181 \text{ y}$
 a_0, a_1, a_2 : $0.30, 0.36, 0.33$
 $\lambda, \lambda(\text{reg})$: $1.35, 1.37 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $3.04, 2.08 \text{ }^{\circ}\text{C}$, rwf : 0.68
 $\text{ecs}(\text{reg}),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

FGOALS-g3



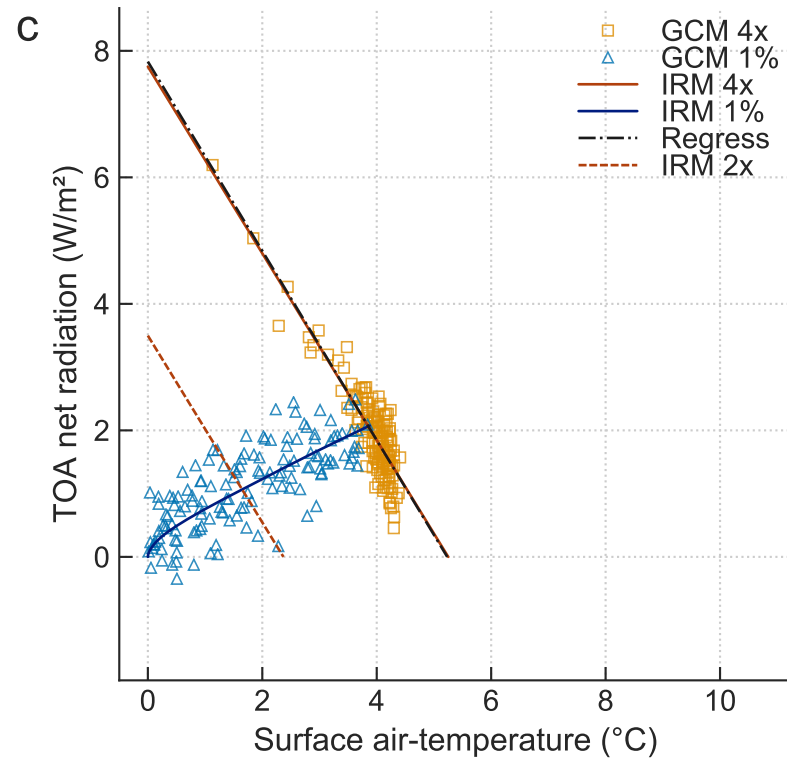
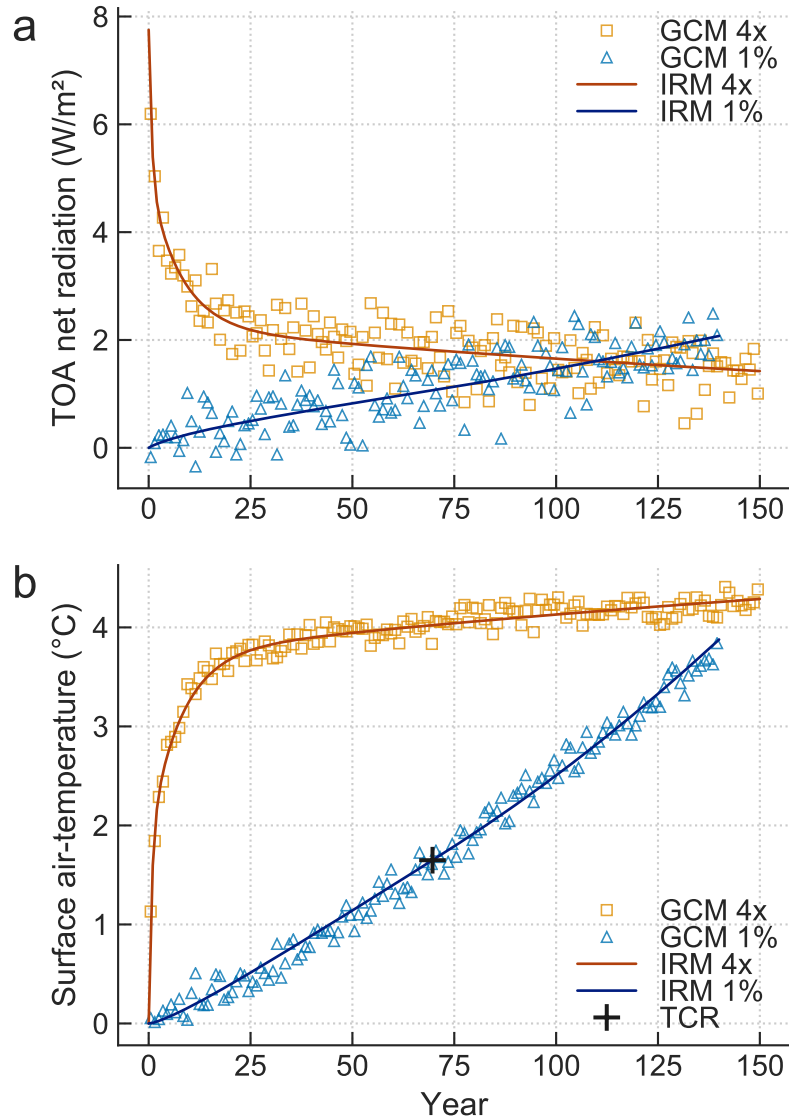
IRM-3 fitted to rtnt and tas of FGOALS-g3
 α : 4.22 W/m^2 , β : 1.21
 τ_0, τ_1, τ_2 : $0.475, 4.6, 199 \text{ y}$
 a_0, a_1, a_2 : $0.18, 0.44, 0.39$
 $\lambda, \lambda(\text{reg})$: $1.24, 1.25 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $2.36, 1.52 \text{ }^{\circ}\text{C}$, rwf : 0.64
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $2.87, 1.54 \text{ }^{\circ}\text{C}$, rwf : 0.54

GFDL-CM4



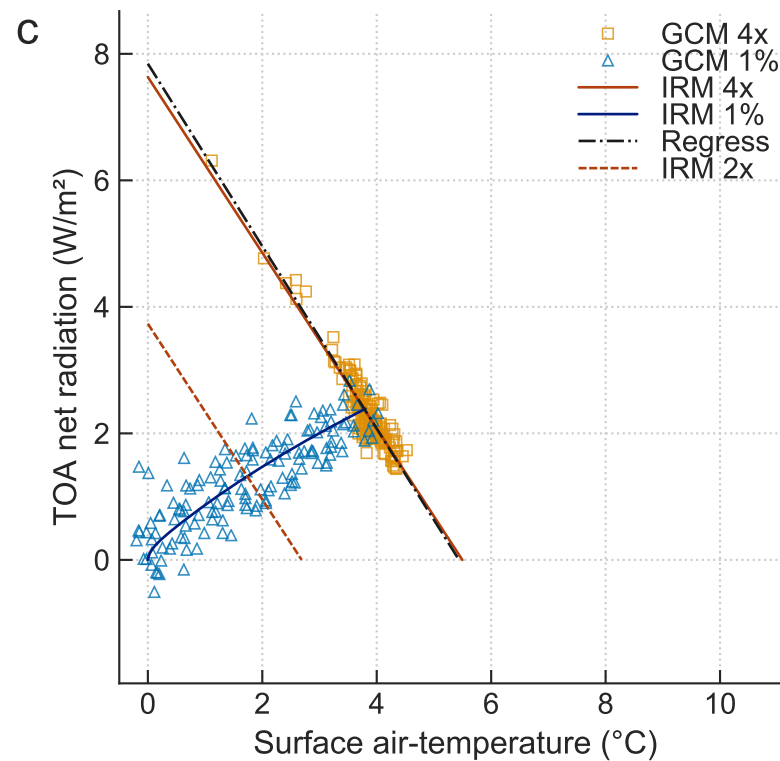
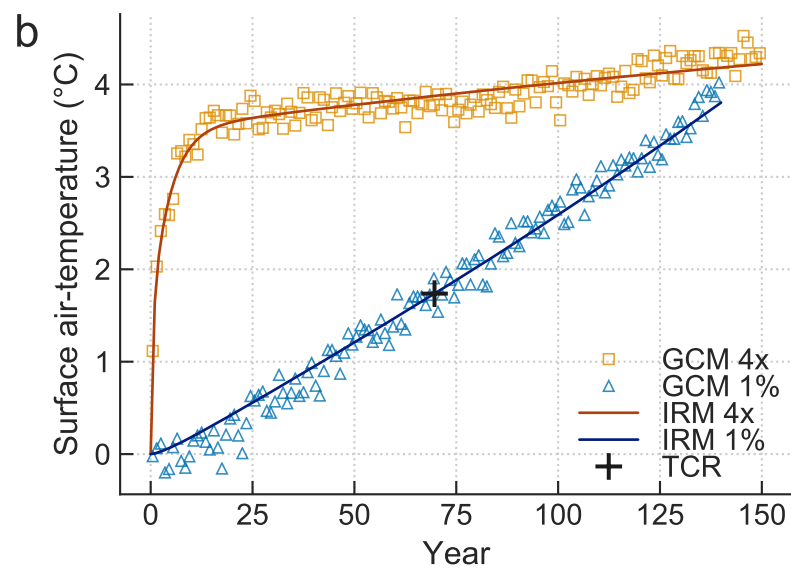
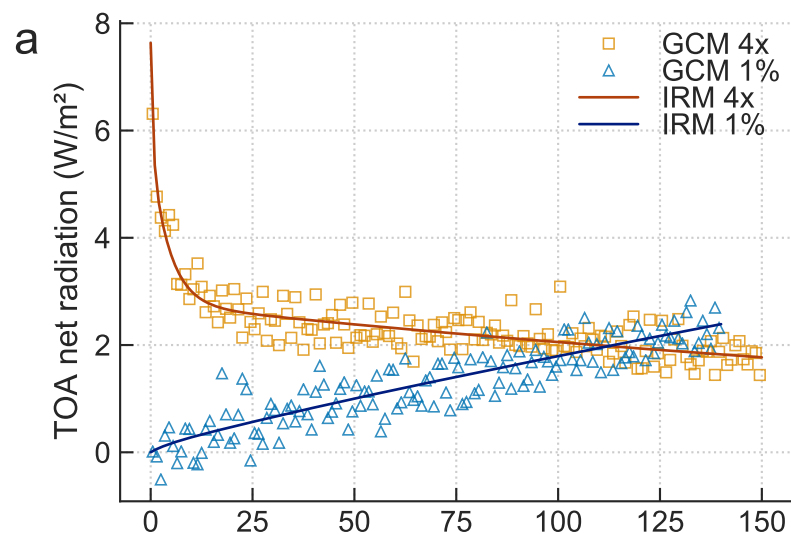
IRM-3 fitted to rtnt and tas of GFDL-CM4
 α : 4.28 W/m^2 , β : 1.07
 τ_0, τ_1, τ_2 : $1.01, 6.92, 213 \text{ y}$
 a_0, a_1, a_2 : $0.28, 0.24, 0.48$
 $\lambda, \lambda(\text{reg})$: $0.81, 0.82 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $3.66, 2.06 \text{ }^{\circ}\text{C}$, rwf : 0.56
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $3.89, 2.01 \text{ }^{\circ}\text{C}$, rwf : 0.52

GFDL-ESM4



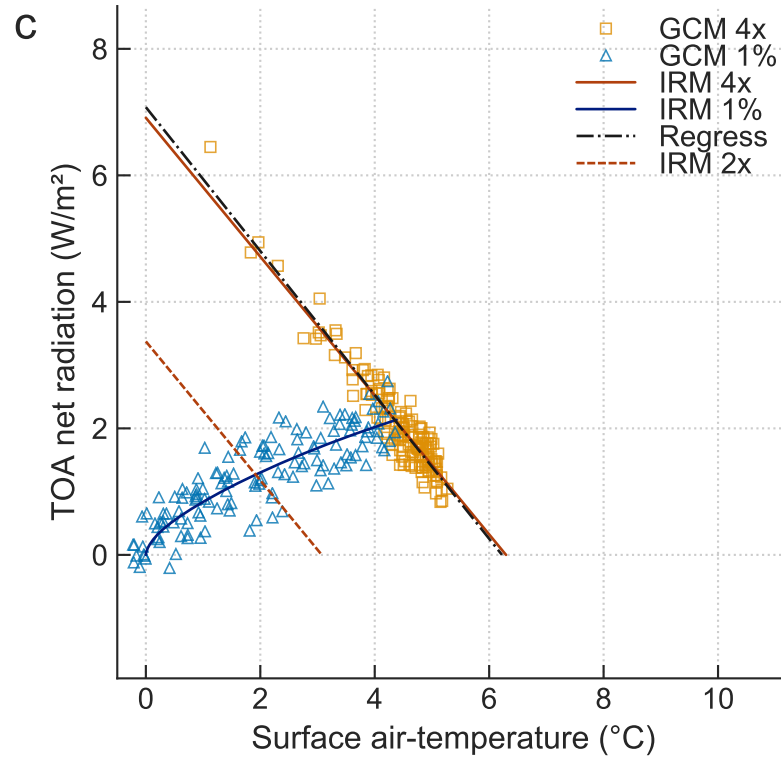
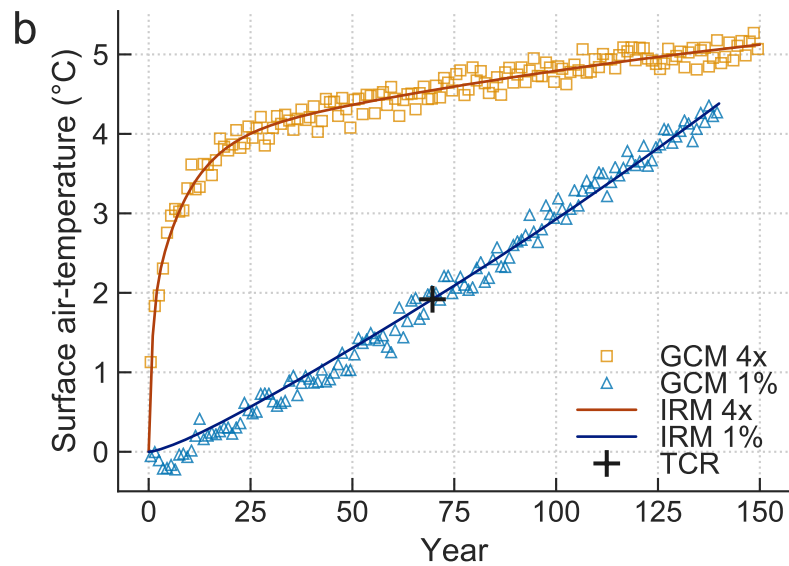
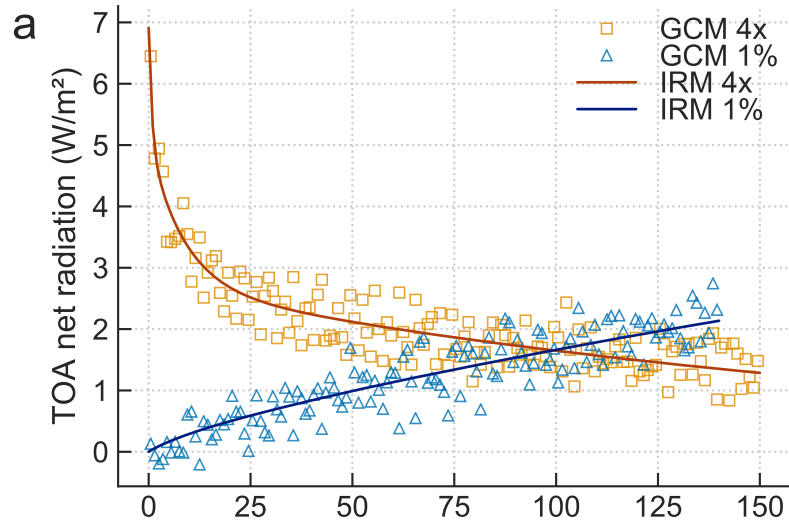
IRM-3 fitted to rtnt and tas of GFDL-ESM4
 α : 5.05 W/m^2 , β : 1.11
 τ_0, τ_1, τ_2 : 0.751, 7.84, 332 y
 a_0, a_1, a_2 : 0.35, 0.36, 0.29
 $\lambda, \lambda(\text{reg})$: 1.48, 1.50 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 2.37, 1.65 $^{\circ}\text{C}$, rwf : 0.70
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: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

GISS-E2-1-G



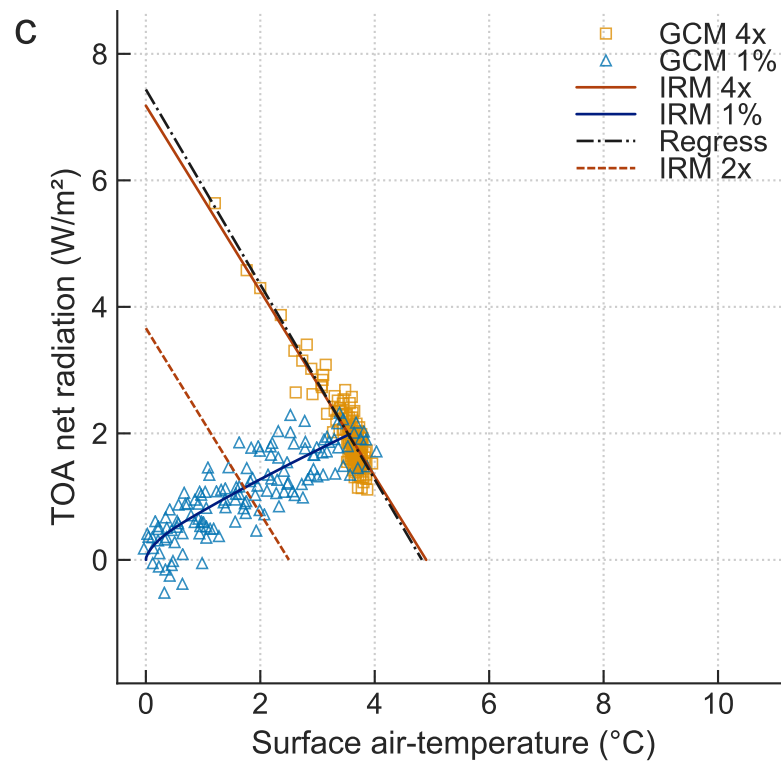
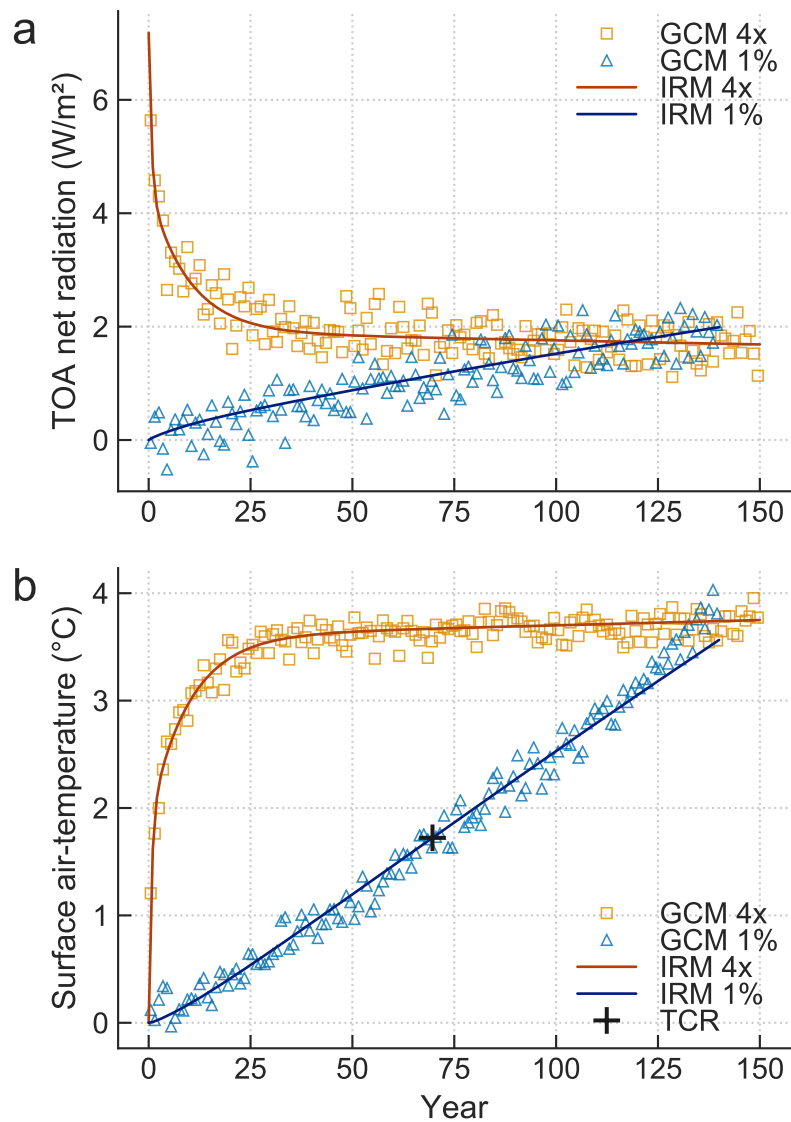
IRM-3 fitted to rtnt and tas of GISS-E2-1-G
 α : 5.39 W/m^2 , β : 1.02
 τ_0 , τ_1 , τ_2 : 0.501, 4.51, 336 y
 a_0 , a_1 , a_2 : 0.26, 0.38, 0.36
 λ , $\lambda(\text{reg})$: 1.39, 1.44 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.69, 1.74 $^{\circ}\text{C}$, rwf : 0.65
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.72, 1.76 $^{\circ}\text{C}$, rwf : 0.65

GISS-E2-1-H



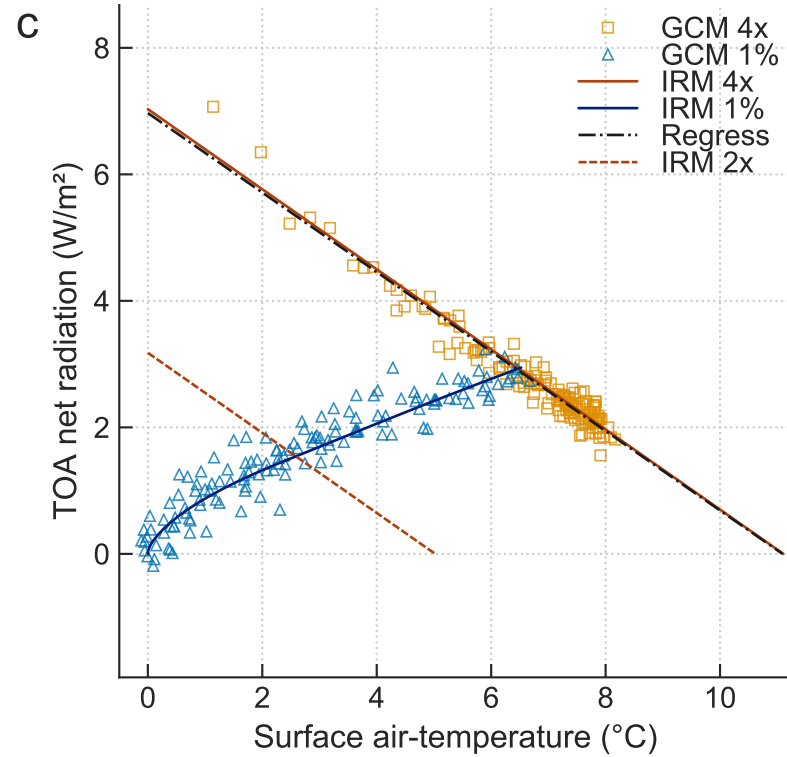
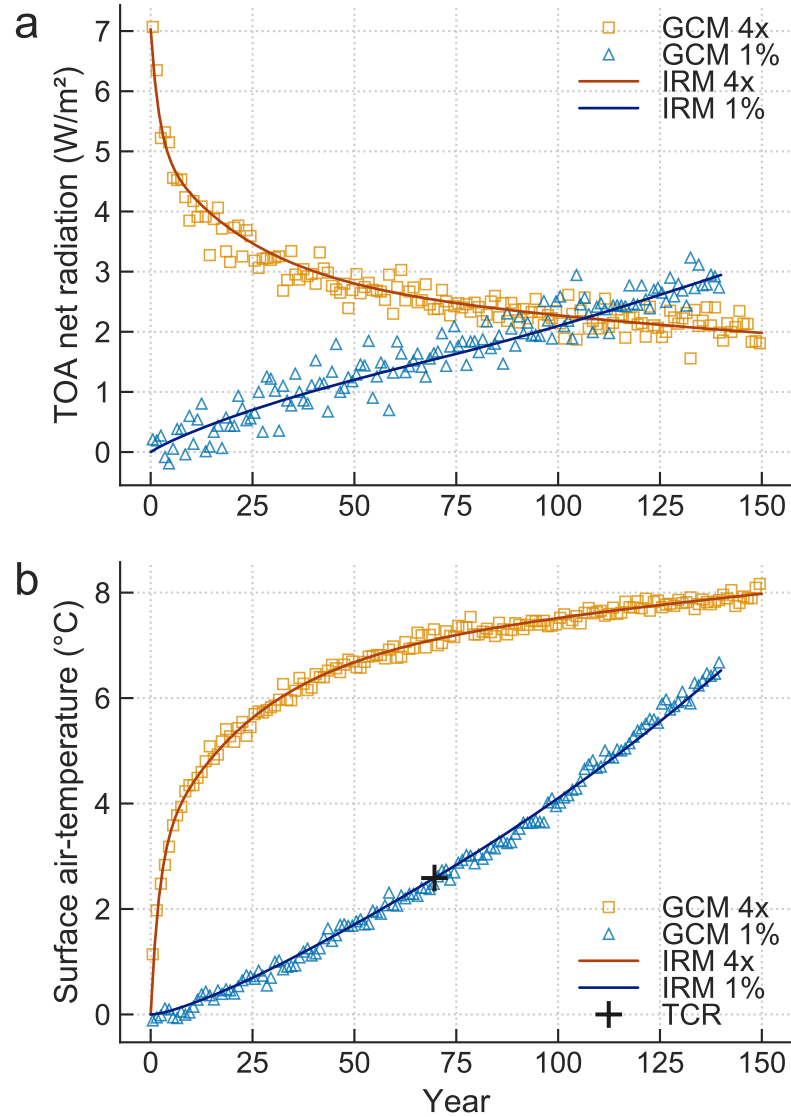
IRM-3 fitted to rtnt and tas of GISS-E2-1-H
 alpha: 4.87 W/m^2 , beta: 1.02
 tau0, tau1, tau2: 0.781, 8.54, 202 y
 a0, a1, a2: 0.27, 0.34, 0.39
 lambda, lambda(reg): 1.10, 1.14 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr: 3.07, 1.92 $^{\circ}\text{C}$, rwf: 0.62
 ecs(reg), tcr(gcm): 3.11, 1.92 $^{\circ}\text{C}$, rwf: 0.62

GISS-E2-2-G



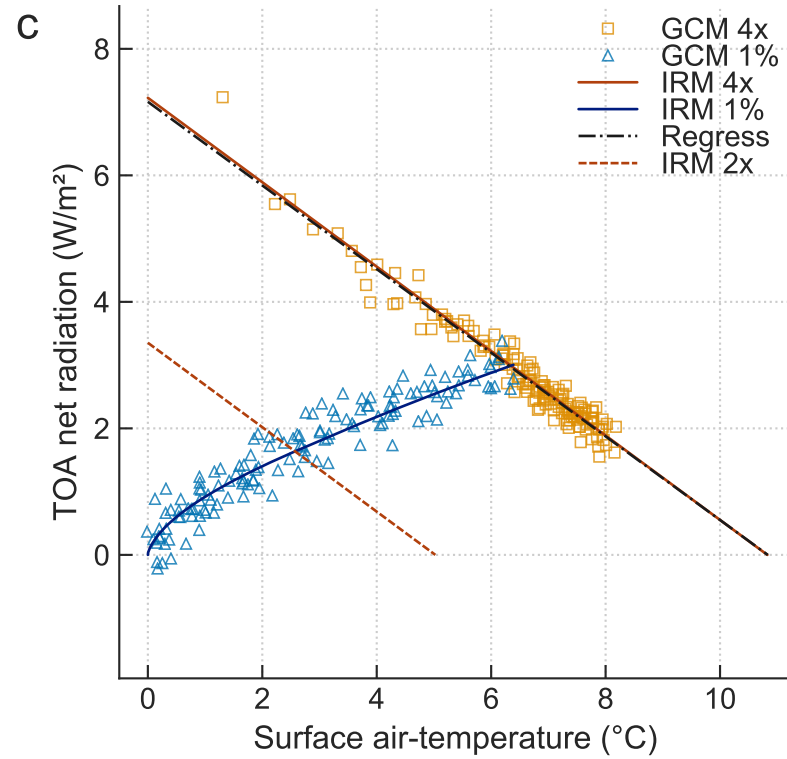
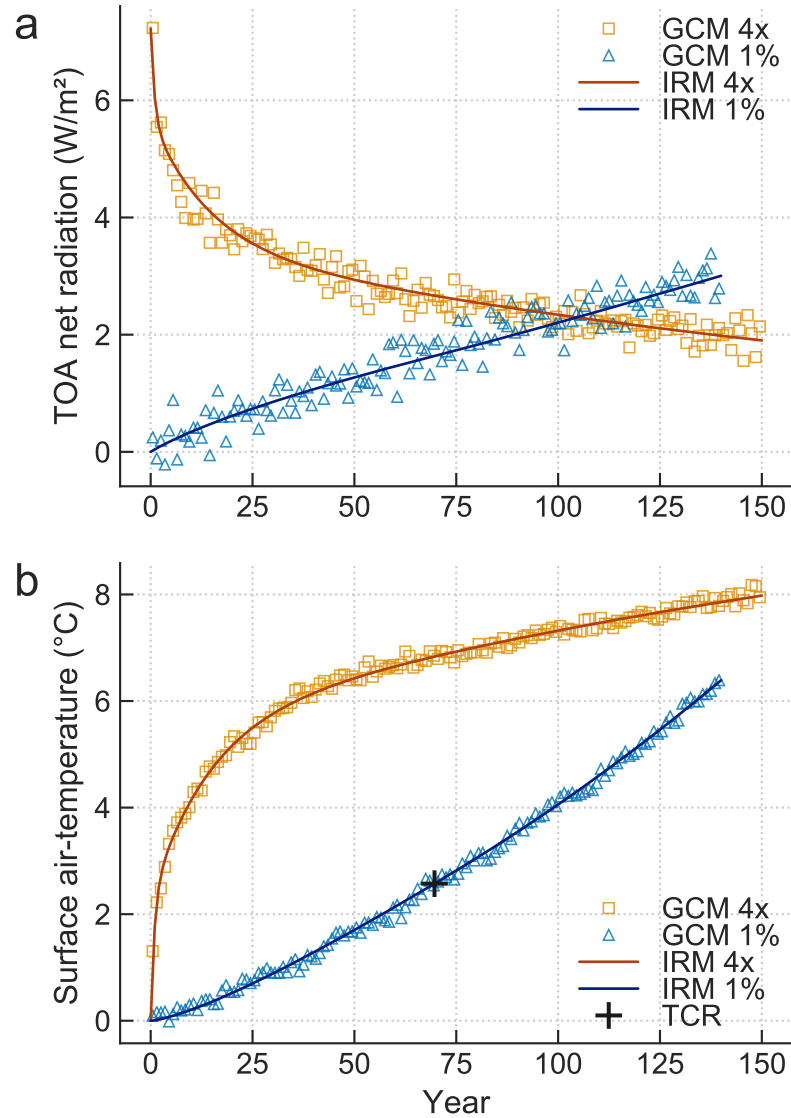
IRM-3 fitted to rtnt and tas of GISS-E2-2-G
 α : 5.29 W/m^2 , β : 0.98
 τ_0, τ_1, τ_2 : 0.673, 9.72, $1.22\text{e}+03$ y
 a_0, a_1, a_2 : 0.38, 0.35, 0.27
 $\lambda, \lambda(\text{reg})$: 1.47, 1.54 $\text{W/m}^2/^{\circ}\text{C}$
 ecs, tcr : 2.50, 1.72 $^{\circ}\text{C}$, rwf : 0.69
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: 2.41, 1.71 $^{\circ}\text{C}$, rwf : 0.71

HadGEM3-GC31-LL



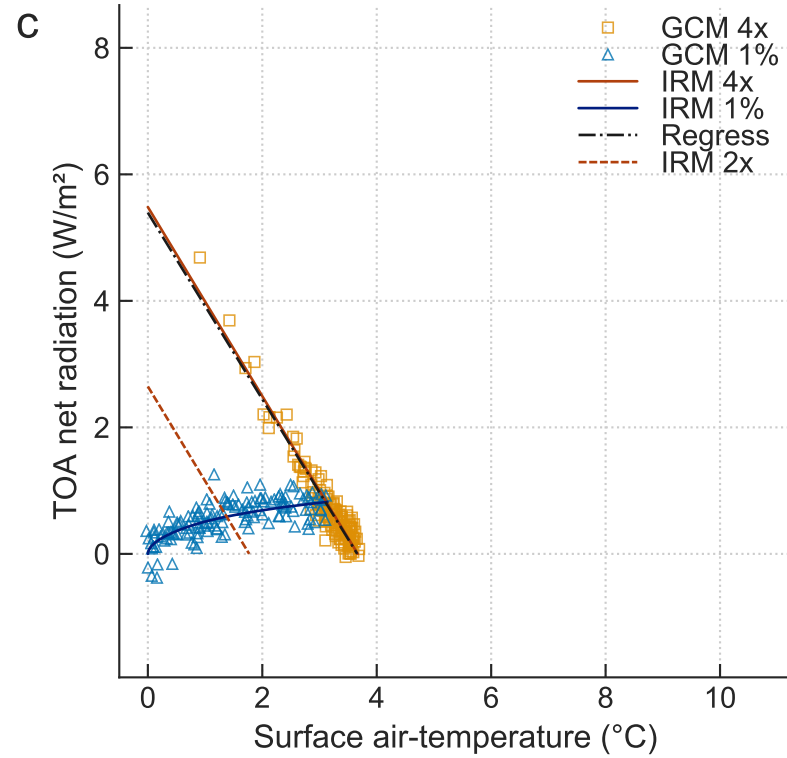
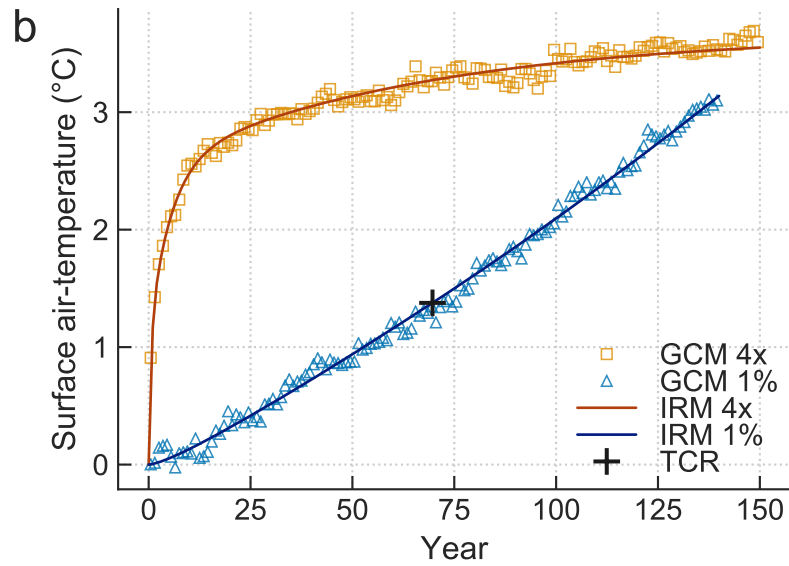
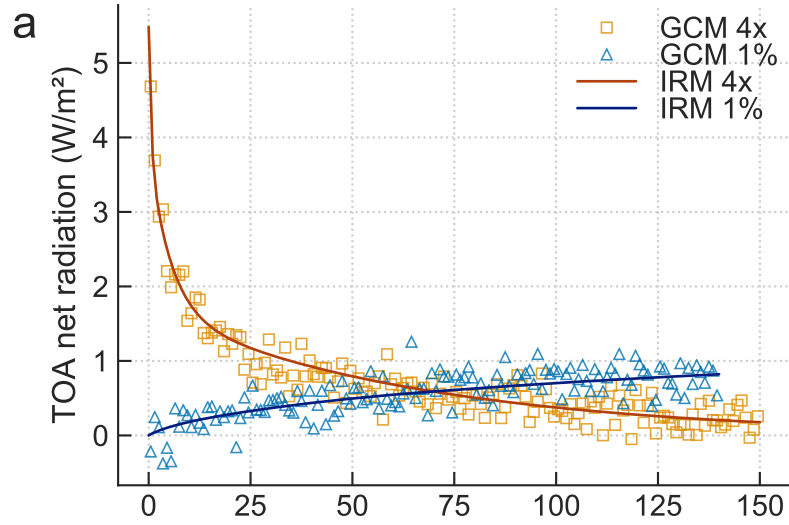
IRM-3 fitted to rtnt and tas of HadGEM3-GC31-LL
 α : 4.59 W/m^2 , β : 1.11
 τ_0 , τ_1 , τ_2 : 2.06, 23.2, 397 y
 a_0 , a_1 , a_2 : 0.27, 0.32, 0.41
 λ , $\lambda(\text{reg})$: 0.63, 0.63 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 5.02, 2.59 $^{\circ}\text{C}$, rwf : 0.52
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 5.55, 2.55 $^{\circ}\text{C}$, rwf : 0.46

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

INM-CM4-8



IRM-3 fitted to rtnt and tas of INM-CM4-8

α : 3.82 W/m^2 , β : 1.04

τ_0 , τ_1 , τ_2 : 0.568 , 5.28 , 66.6 y

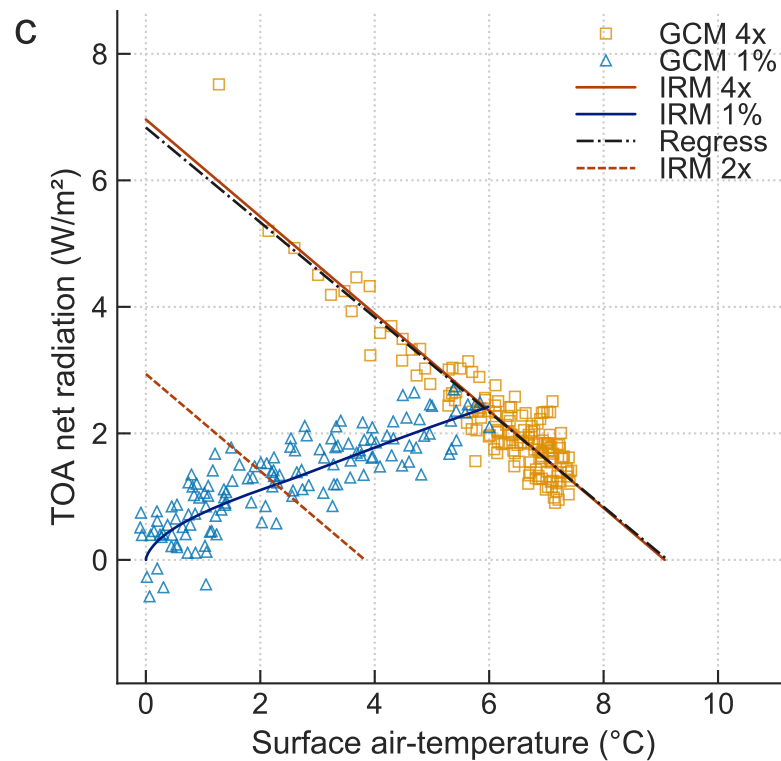
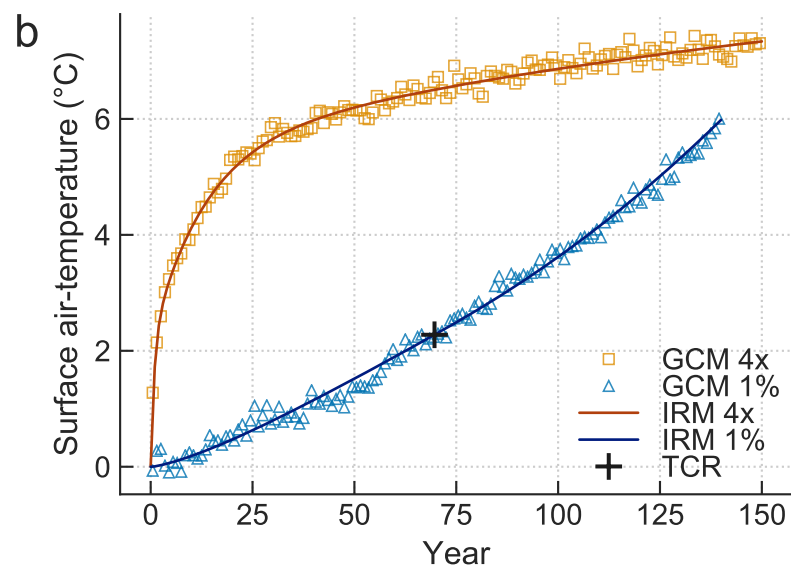
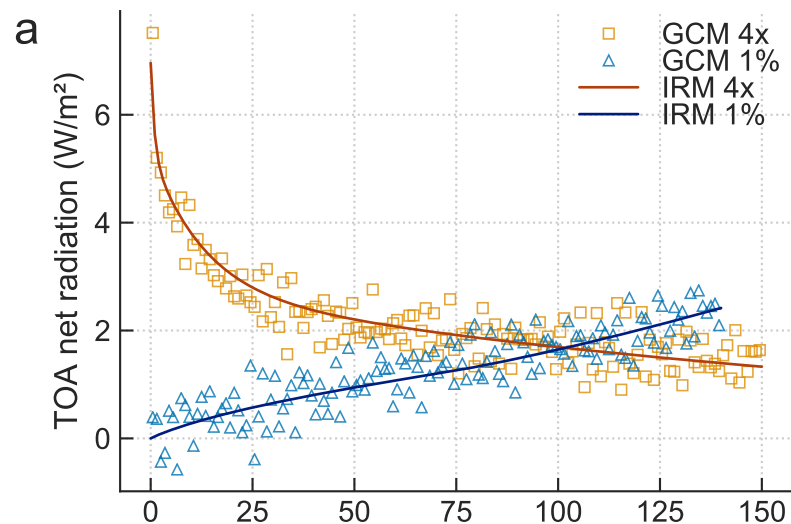
a_0 , a_1 , a_2 : 0.30 , 0.40 , 0.31

λ , $\lambda(\text{reg})$: 1.49 , $1.47 \text{ W/m}^2/^{\circ}\text{C}$

ecs , tcr : 1.77 , $1.38 \text{ }^{\circ}\text{C}$, rwf : 0.78

$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 1.83 , $1.32 \text{ }^{\circ}\text{C}$, rwf : 0.72

IPSL-CM6A-LR



IRM-3 fitted to rtnt and tas of IPSL-CM6A-LR

α : 4.24 W/m^2 , β : 1.18

τ_0 , τ_1 , τ_2 : 0.872, 12.8, 208 y

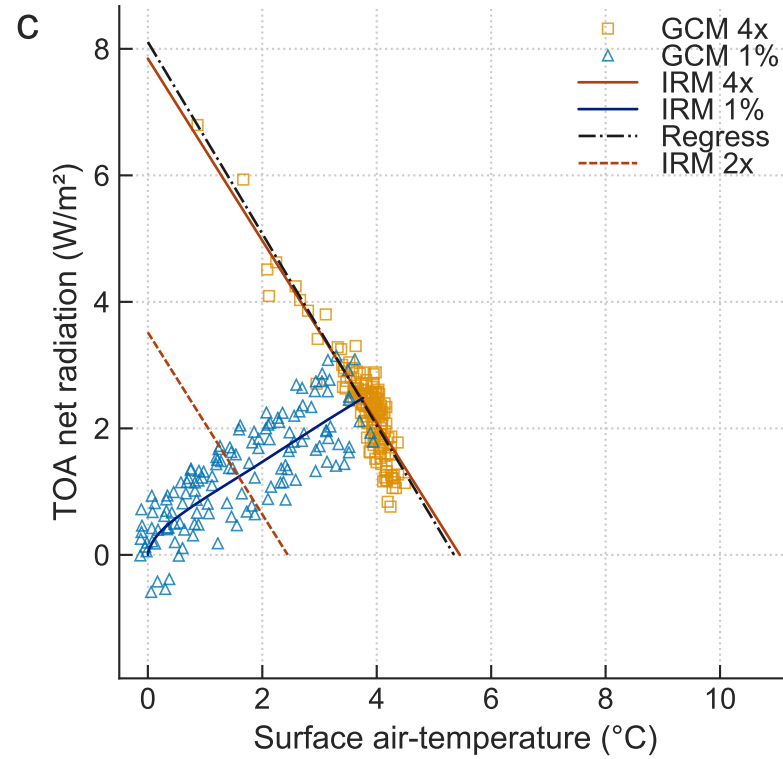
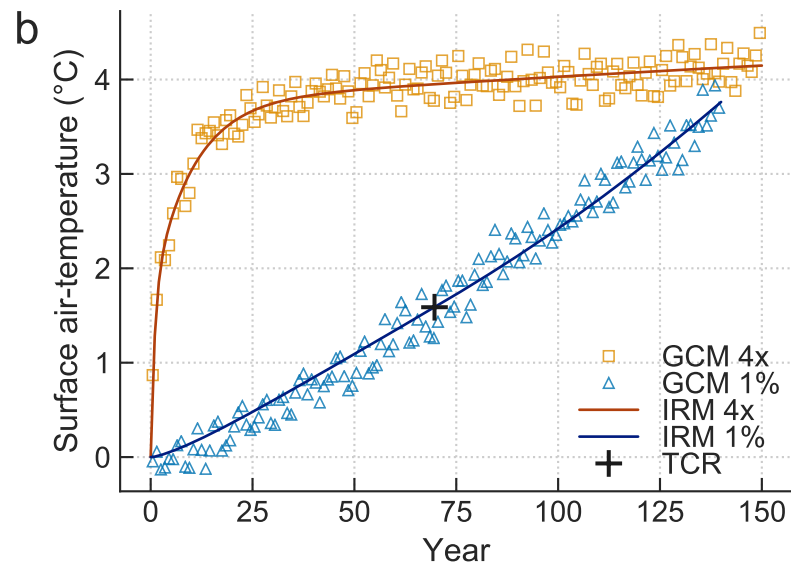
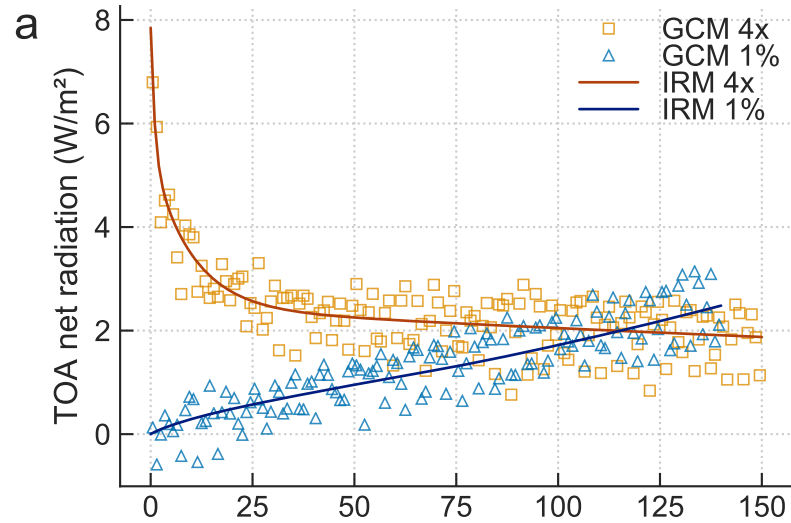
a_0 , a_1 , a_2 : 0.23, 0.37, 0.39

λ , $\lambda(\text{reg})$: 0.77, 0.75 $\text{W/m}^2/^{\circ}\text{C}$

ecs , tcr : 3.83, 2.28 $^{\circ}\text{C}$, rwf : 0.59

$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.56, 2.31 $^{\circ}\text{C}$, rwf : 0.51

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 y

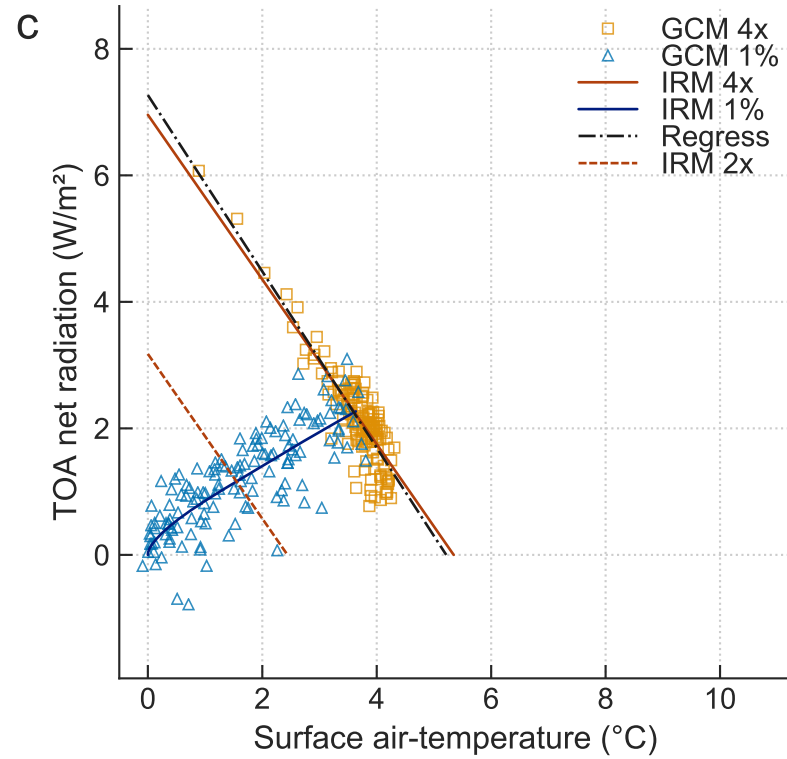
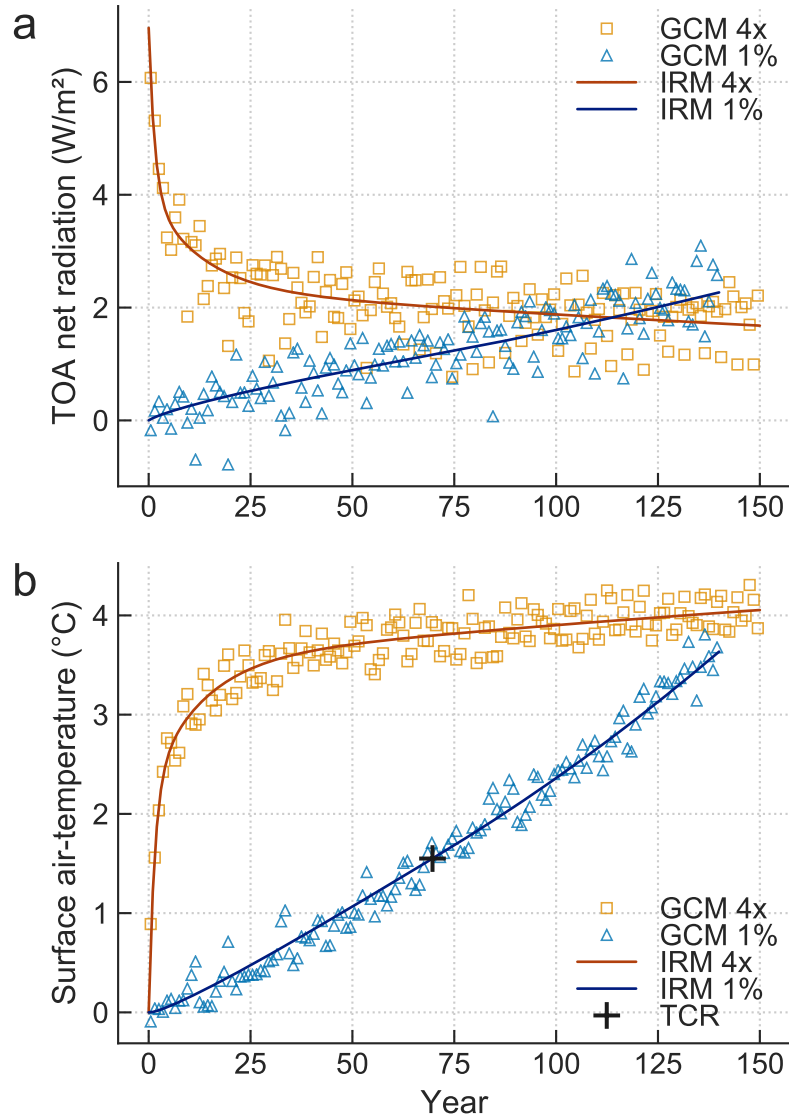
a_0 , a_1 , a_2 : 0.31, 0.38, 0.31

λ , $\lambda(\text{reg})$: 1.44, 1.52 $\text{W/m}^2/^{\circ}\text{C}$

ecs , tcr : 2.44, 1.59 $^{\circ}\text{C}$, rwf : 0.65

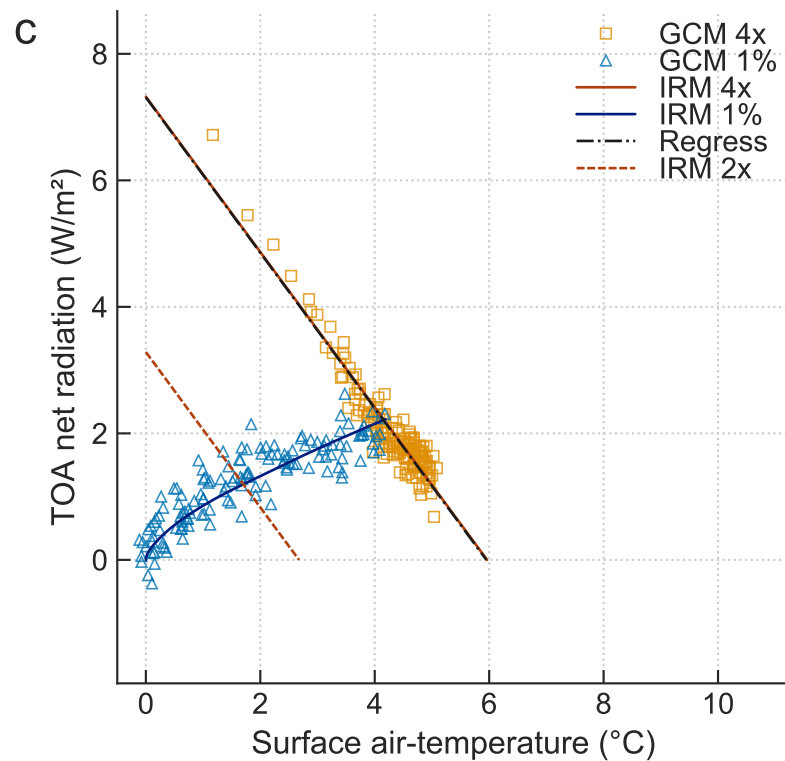
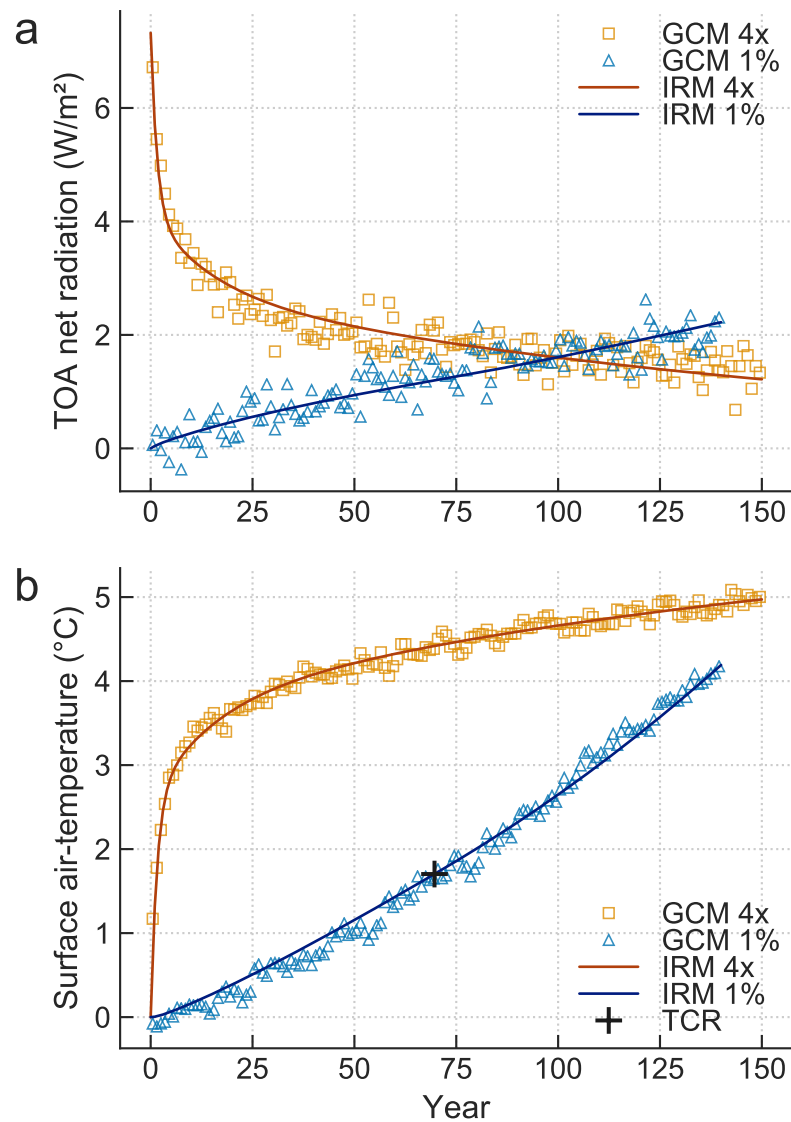
$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.68, 1.55 $^{\circ}\text{C}$, rwf : 0.58

MIROC6



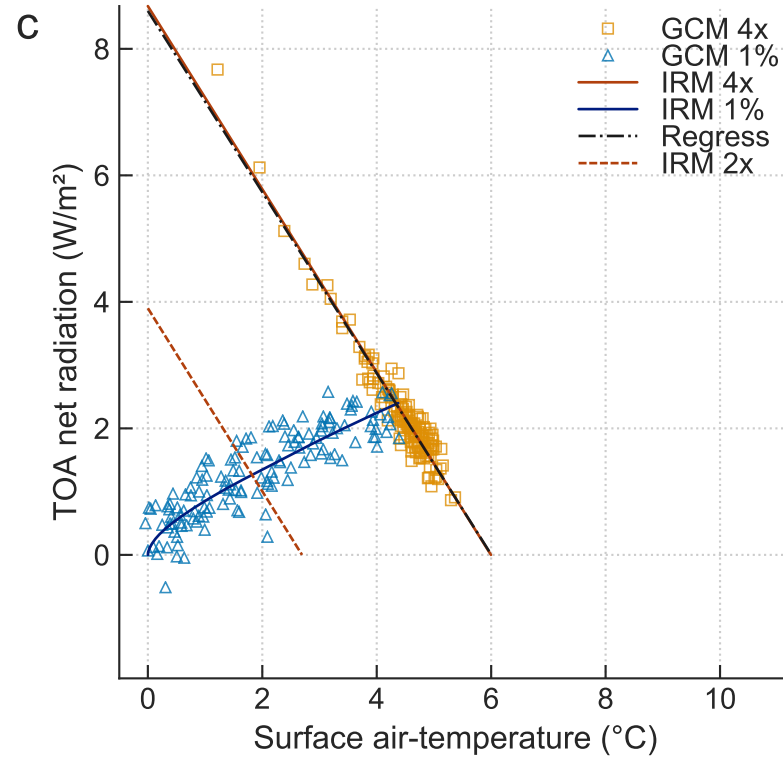
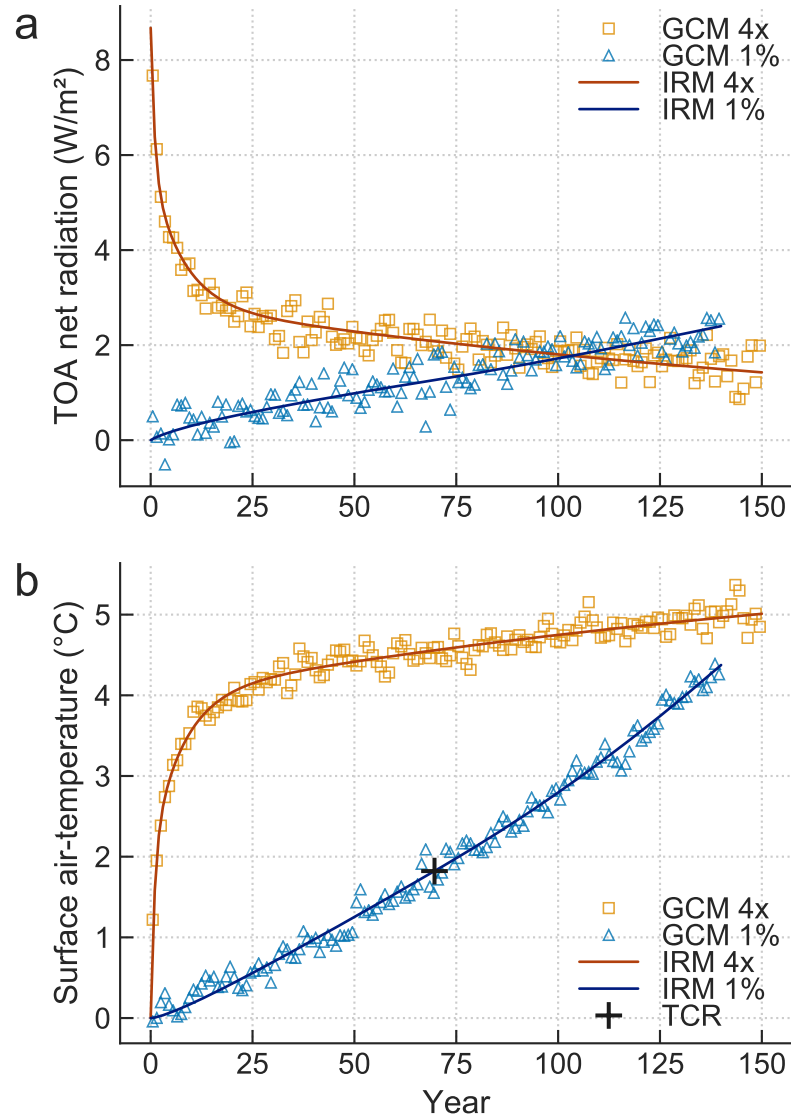
IRM-3 fitted to rtnt and tas of MIROC6
 α : 4.58 W/m^2 , β : 1.09
 τ_0 , τ_1 , τ_2 : 1.47, 12.7, 450 y
 a_0 , a_1 , a_2 : 0.42, 0.24, 0.34
 λ , $\lambda(\text{reg})$: 1.30, 1.39 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.44, 1.55 $^{\circ}\text{C}$, rwf : 0.64
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.61, 1.55 $^{\circ}\text{C}$, rwf : 0.60

MPI-ESM1-2-HR



IRM-3 fitted to rtnt and tas of MPI-ESM1-2-HR
 α : 4.74 W/m^2 , β : 1.11
 τ_0 , τ_1 , τ_2 : 1.55, 15.3, 184 y
 a_0 , a_1 , a_2 : 0.43, 0.19, 0.38
 λ , $\lambda(\text{reg})$: 1.23, 1.23 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.68, 1.70 $^{\circ}\text{C}$, rwf : 0.64
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.98, 1.66 $^{\circ}\text{C}$, rwf : 0.56

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 : 0.939, 7.61, 213 y

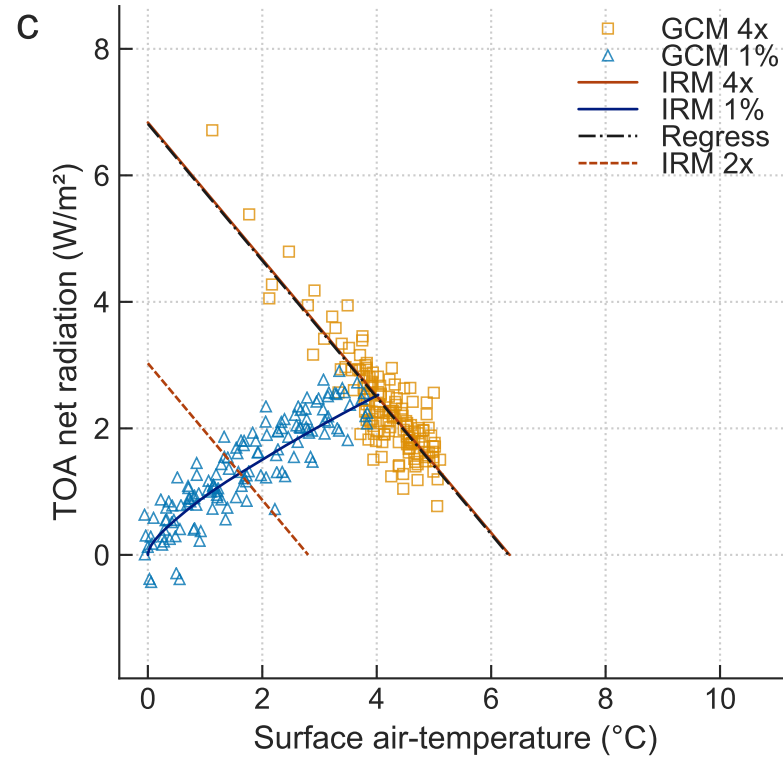
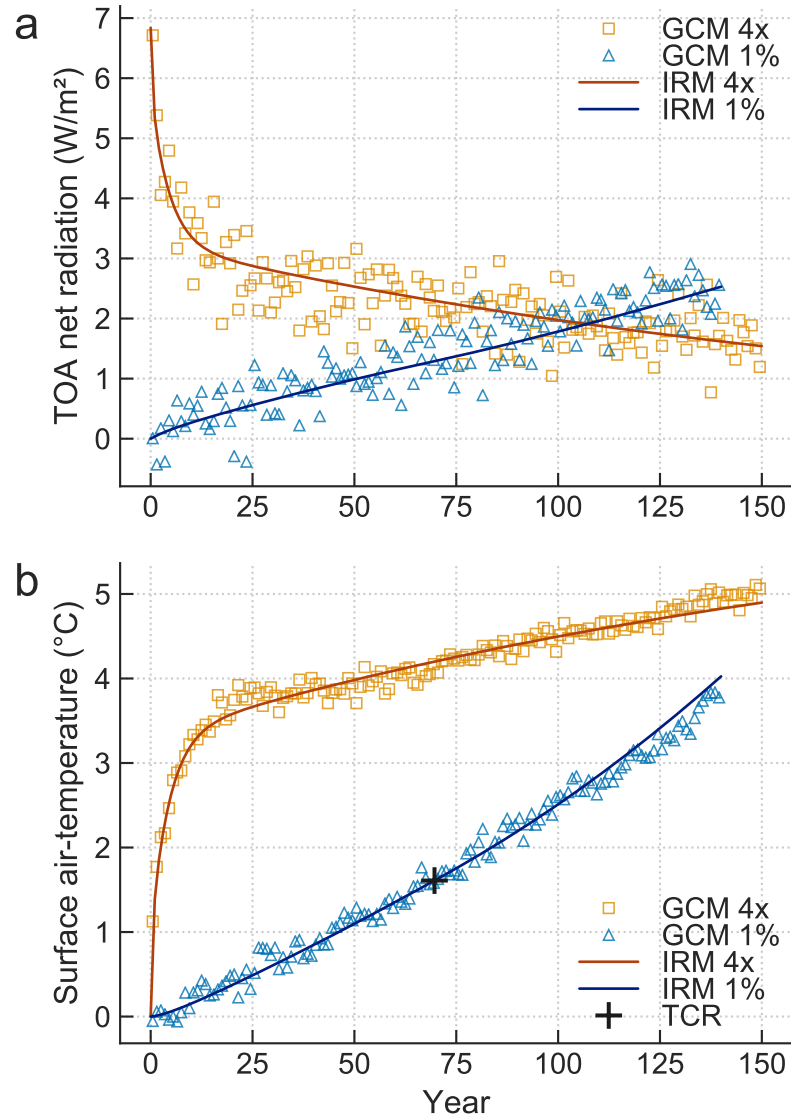
a_0 , a_1 , a_2 : 0.34, 0.33, 0.33

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

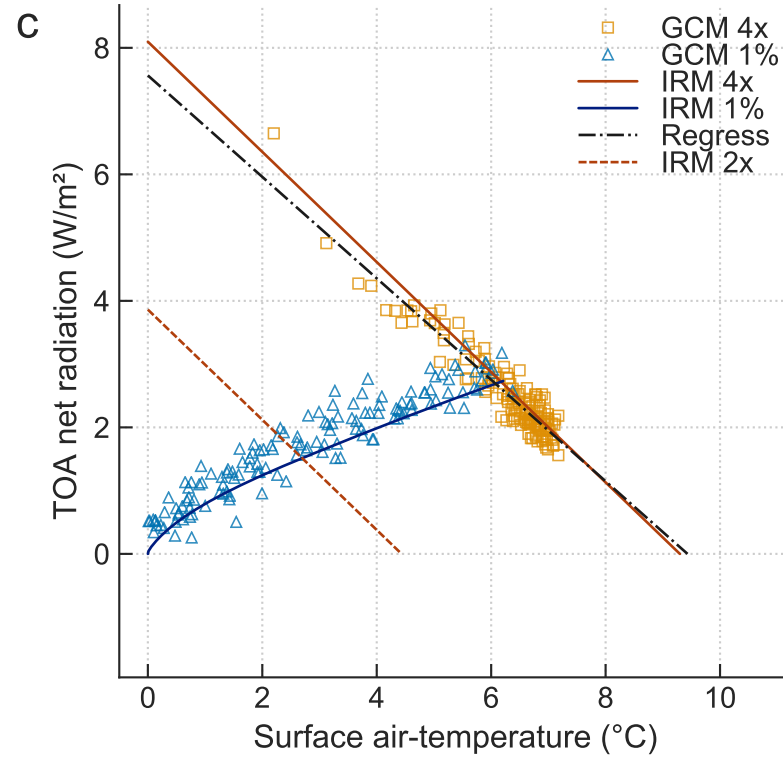
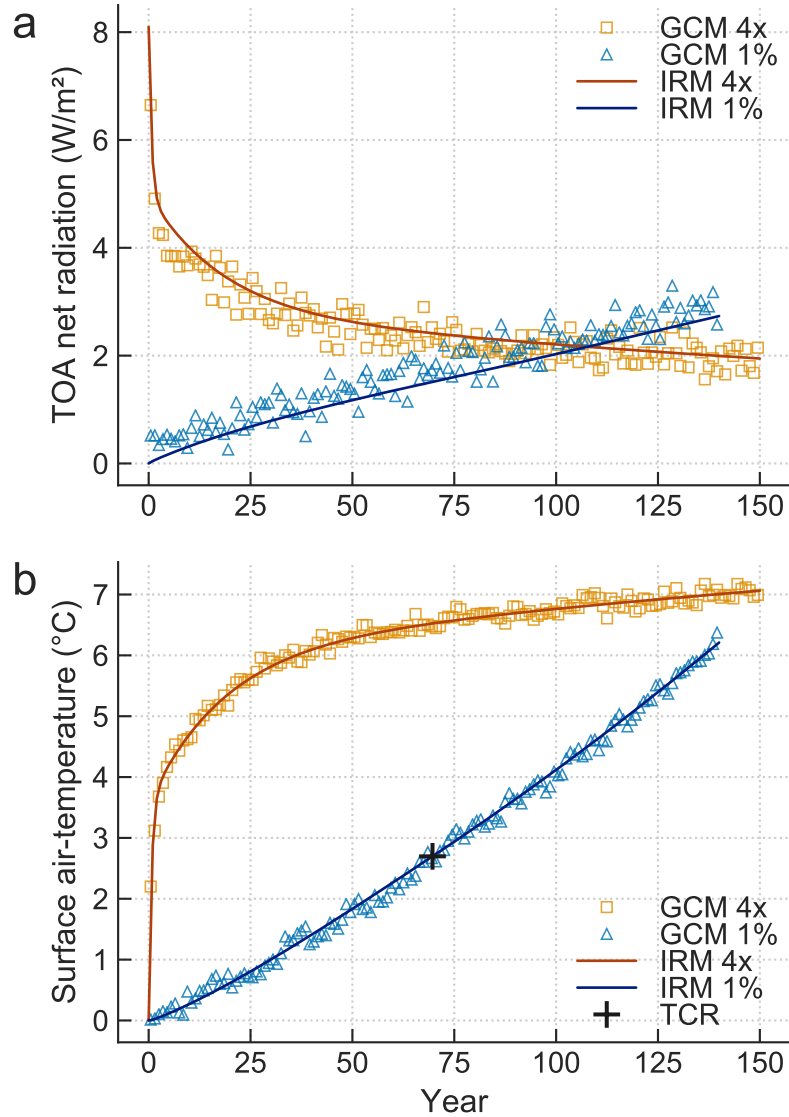
$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 3.00, 1.84 $^{\circ}\text{C}$, rwf : 0.61

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 : $0.384, 4.5, 202 \text{ y}$
 a_0, a_1, a_2 : $0.15, 0.37, 0.47$
 $\lambda, \lambda(\text{reg})$: $1.08, 1.08 \text{ W/m}^2/^{\circ}\text{C}$
 ecs, tcr : $2.80, 1.61 \text{ }^{\circ}\text{C}$, rwf : 0.57
 $\text{ecs}(\text{reg}), \text{tcr}(\text{gcm})$: $3.15, 1.64 \text{ }^{\circ}\text{C}$, rwf : 0.52

NESM3



IRM-3 fitted to rtnt and tas of NESM3

α : 5.57 W/m^2 , β : 1.05

τ_0 , τ_1 , τ_2 : 0.689 , 18.4 , 411 y

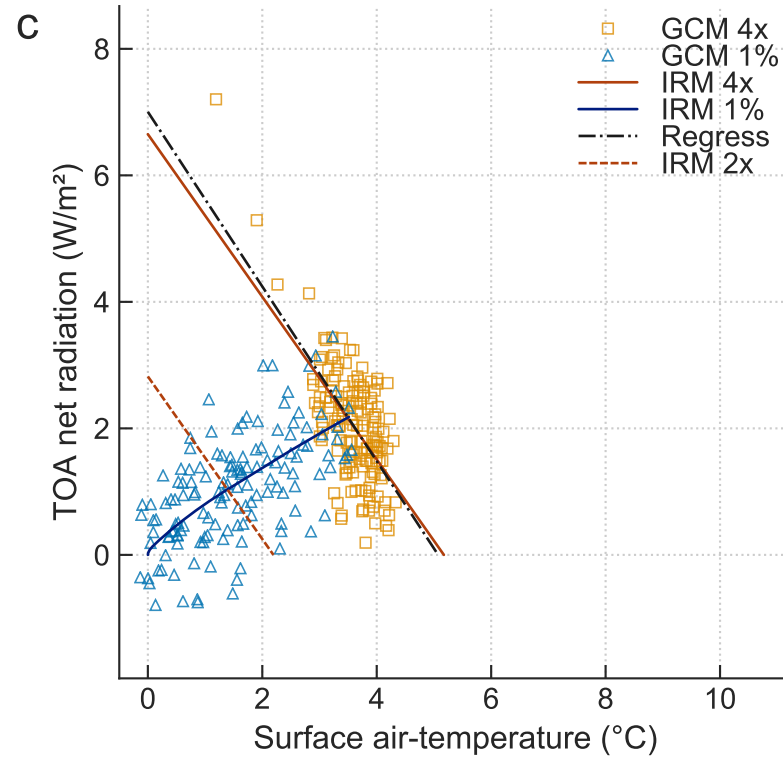
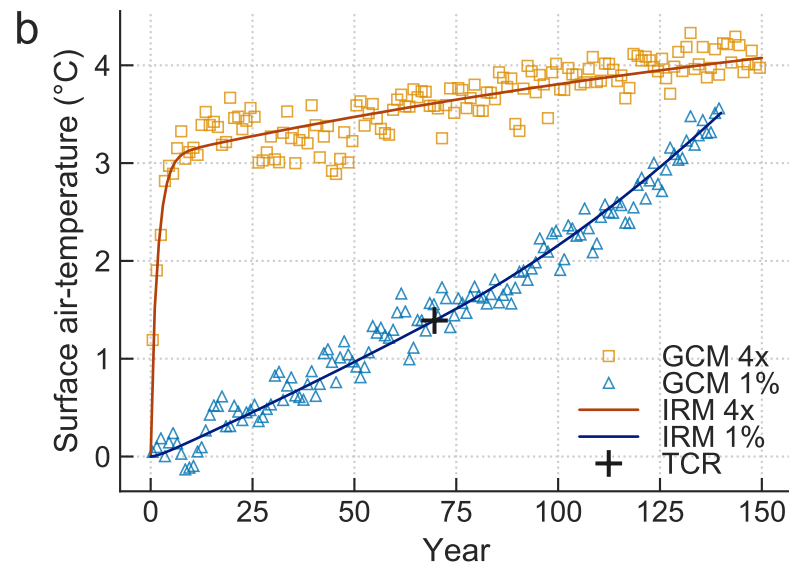
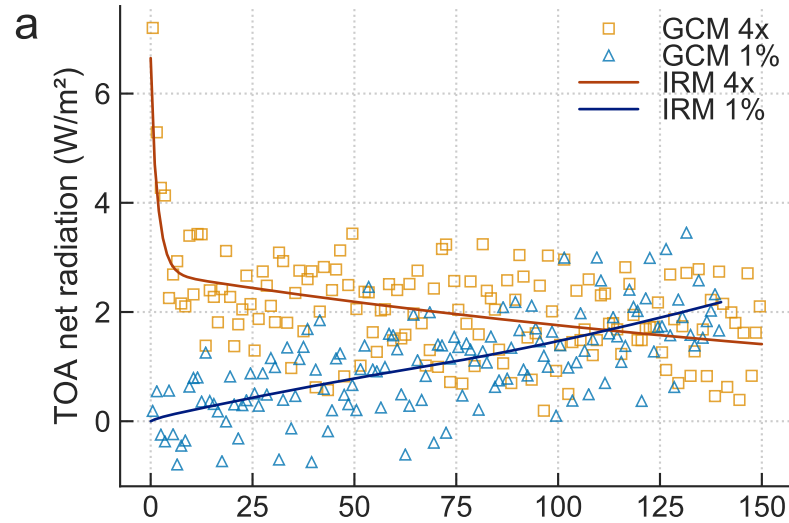
a_0 , a_1 , a_2 : 0.38 , 0.27 , 0.35

λ , $\lambda(\text{reg})$: 0.87 , $0.80 \text{ W/m}^2/^{\circ}\text{C}$

ecs , tcr : 4.43 , $2.70 \text{ }^{\circ}\text{C}$, rwf : 0.61

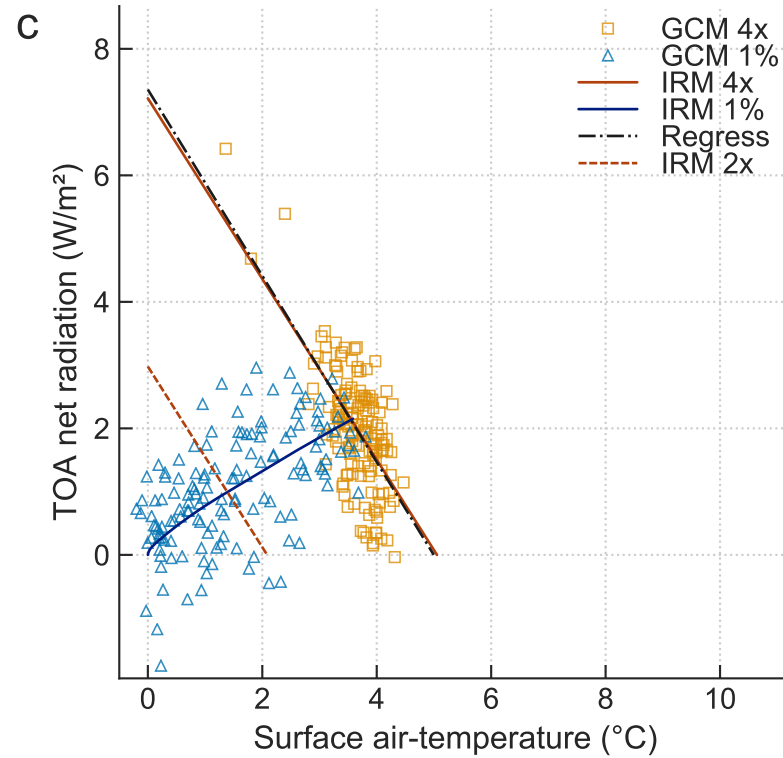
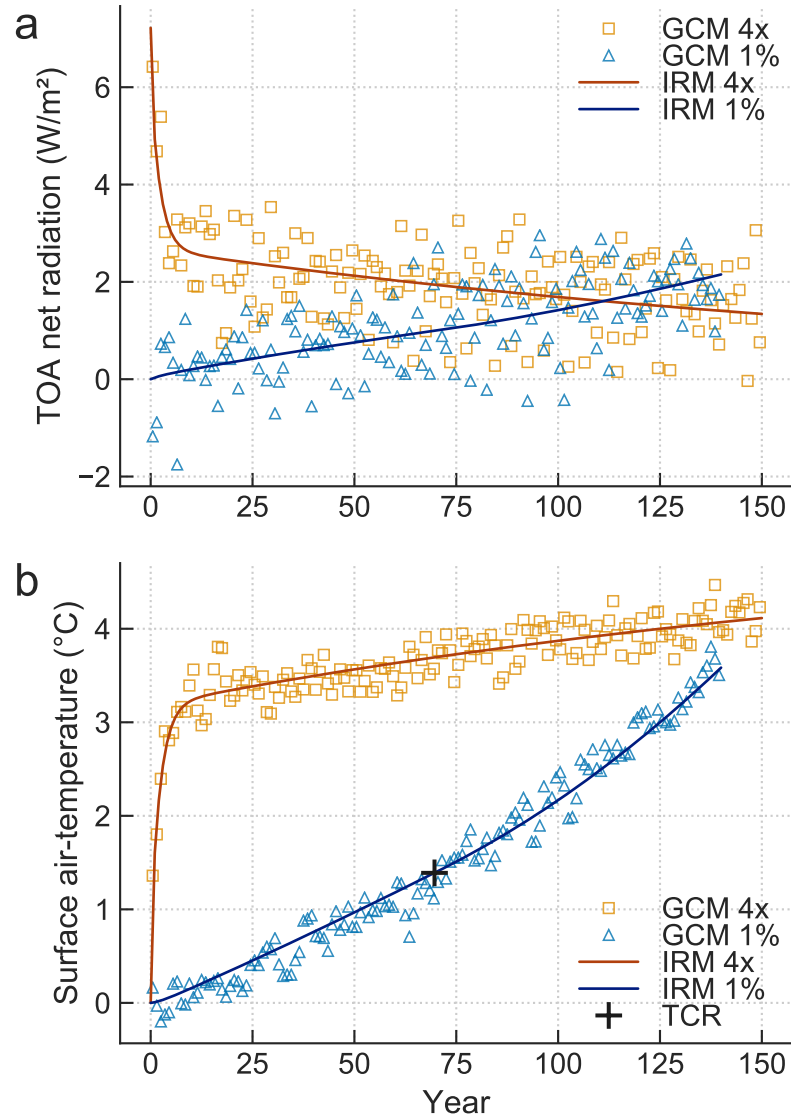
$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 4.72 , $2.71 \text{ }^{\circ}\text{C}$, rwf : 0.57

NorESM2-LM



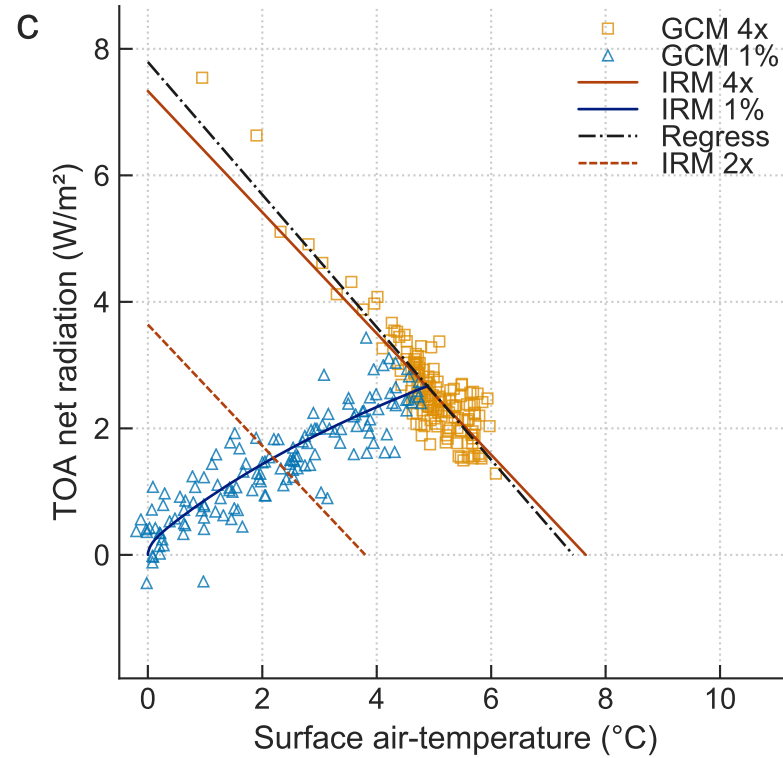
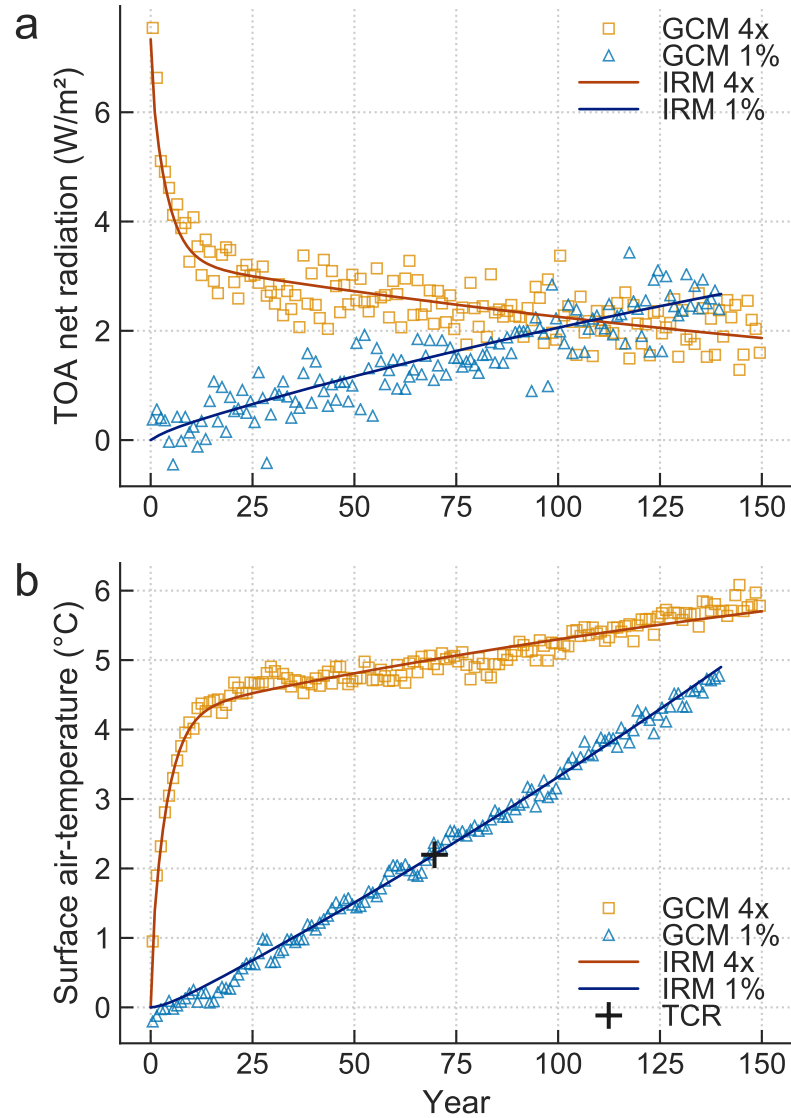
IRM-3 fitted to r_{nt} and t_{as} of NorESM2-LM
 α : 4.07 W/m^2 , β : 1.18
 τ_0 , τ_1 , τ_2 : 0.0432, 1.82, 228 y
 a_0 , a_1 , a_2 : 0.07, 0.52, 0.41
 λ , $\lambda(\text{reg})$: 1.29, 1.38 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 2.19, 1.39 $^{\circ}\text{C}$, rwf : 0.63
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.54, 1.48 $^{\circ}\text{C}$, rwf : 0.58

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 : 0.0669, 2.32, 217 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
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 2.50, 1.34 $^{\circ}\text{C}$, rwf : 0.53

SAM0-UNICON



IRM-3 fitted to rtnt and tas of SAM0-UNICON

α : 5.25 W/m^2 , β : 1.01

τ_0 , τ_1 , τ_2 : 0.349, 4, 265 y

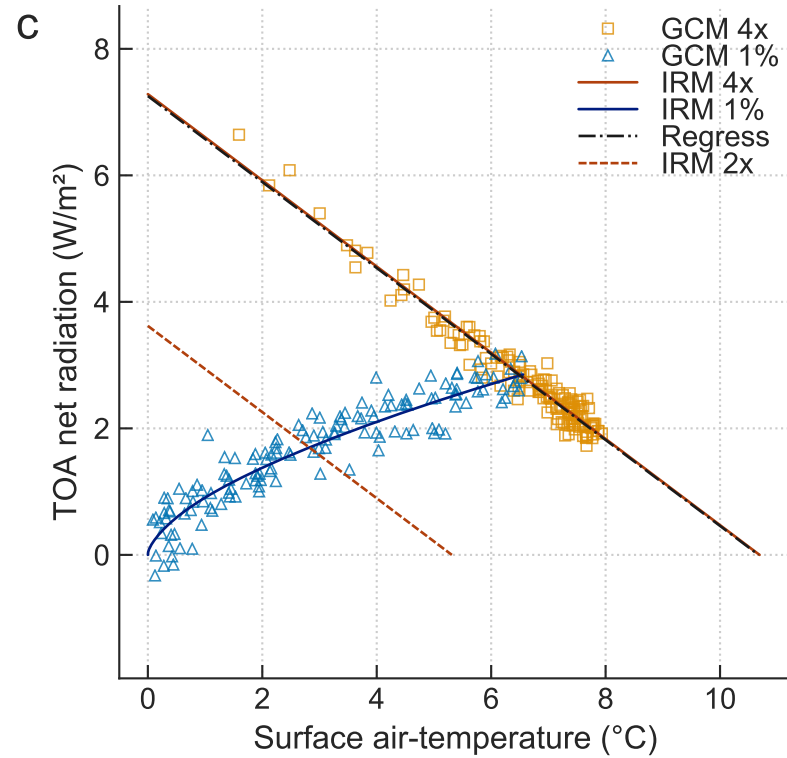
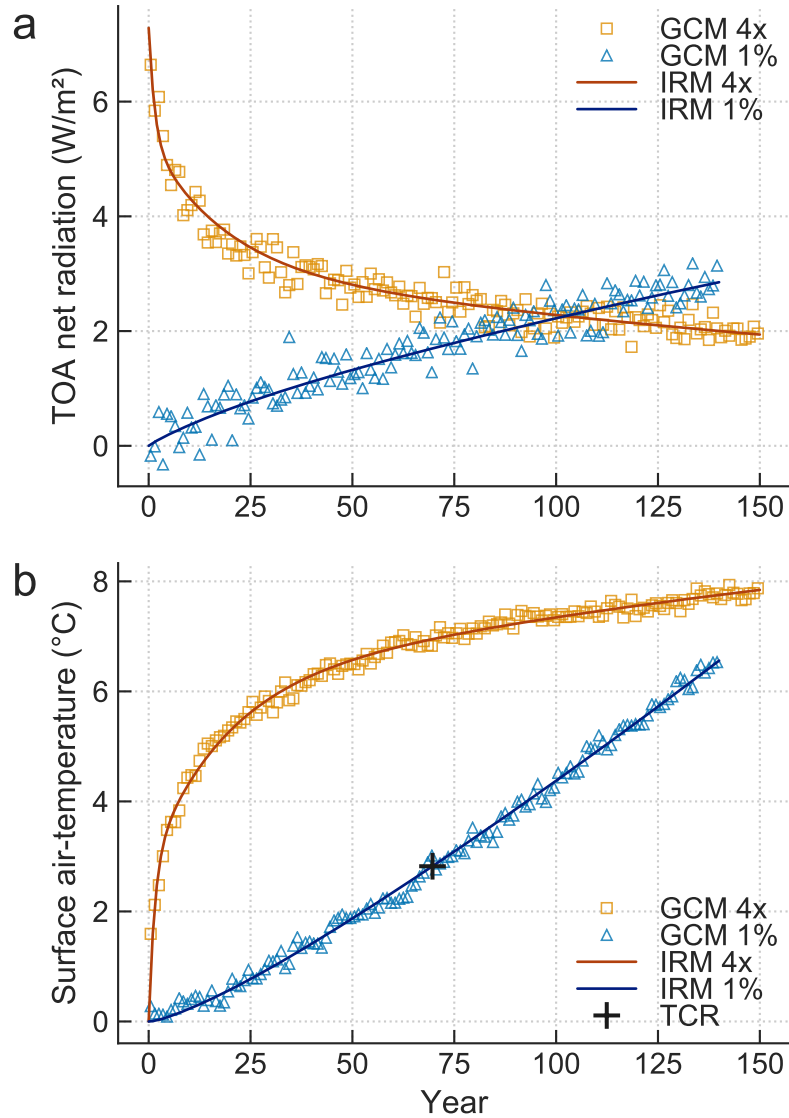
a_0 , a_1 , a_2 : 0.08, 0.47, 0.45

λ , $\lambda(\text{reg})$: 0.96, 1.05 $\text{W/m}^2/^{\circ}\text{C}$

ecs , tcr : 3.80, 2.20 $^{\circ}\text{C}$, rwf : 0.58

$\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 3.72, 2.26 $^{\circ}\text{C}$, rwf : 0.61

UKESM1-0-LL



IRM-3 fitted to rtnt and tas of UKESM1-0-LL
 α : 5.22 W/m^2 , β : 1.01
 τ_0 , τ_1 , τ_2 : 1.46, 18.5, 318 y
 a_0 , a_1 , a_2 : 0.26, 0.31, 0.43
 λ , $\lambda(\text{reg})$: 0.68, 0.68 $\text{W/m}^2/^{\circ}\text{C}$
 ecs , tcr : 5.31, 2.82 $^{\circ}\text{C}$, rwf : 0.53
 $\text{ecs}(\text{reg})$, $\text{tcr}(\text{gcm})$: 5.34, 2.79 $^{\circ}\text{C}$, rwf : 0.52