(a) Relationship between TCR and warming in the SSP scenarios

\[ \Delta T \text{(K)} \] [SSP5-8.5-SSP2-4.5]

- TCR (K)
  - 1.5
  - 2
  - 2.5
  - 3

- T (K)
  - 1.5
  - 2
  - 2.5
  - 3

\[ \text{m} = 1.07 \]
\[ R^2 = 0.91 \]

(b) Relationship between ECS and warming in the SSP scenarios

\[ \Delta T \text{(K)} \] [SSP5-8.5-SSP2-4.5]

- ECS (K)
  - 1.5
  - 2
  - 2.5
  - 3

- T (K)
  - 1.5
  - 2
  - 2.5
  - 3

\[ \text{m} = 0.52 \]
\[ R^2 = 0.94 \]

(c) Relationship between warming and solar reduction

\[ \Delta T \text{(K)} \] [SSP5-8.5-SSP2-4.5]

- Solar reduction (%)
  - 1
  - 1.5
  - 2
  - 2.5

- Global SAOD
  - 0.2
  - 0.25
  - 0.3
  - 0.35

\[ \text{m} = 0.69 \]
\[ R^2 = 0.67 \]

(d) Relationship between warming and global SAOD

\[ \Delta T \text{(K)} \] [SSP5-8.5-SSP2-4.5]

- Global SAOD
  - 0.2
  - 0.25
  - 0.3
  - 0.35

\[ \text{m} = 0.07 \]
\[ R^2 = 0.00 \]

(e) Relationship between solar dimming and global SAOD

\[ \Delta T \text{(K)} \] [SSP5-8.5-SSP2-4.5]

- Solar reduction (%)
  - 1
  - 1.5
  - 2
  - 2.5

- Global SAOD
  - 0.2
  - 0.25
  - 0.3
  - 0.35

\[ \text{m} = -0.09 \]
\[ R^2 = 0.72 \]

(f) Intervention needed to cool 1 K

- % K⁻¹
- Models
  - CNRM-ESM2-1
  - IPSL-CM6A-LR
  - CESM2-WACCM
  - UKESM1-0-LL
  - MPI-ESM1-2-LR
  - MPI-ESM1-2-HR

- Average

\[ 0.21 \]
\[ 0.18 \]
\[ 0.15 \]