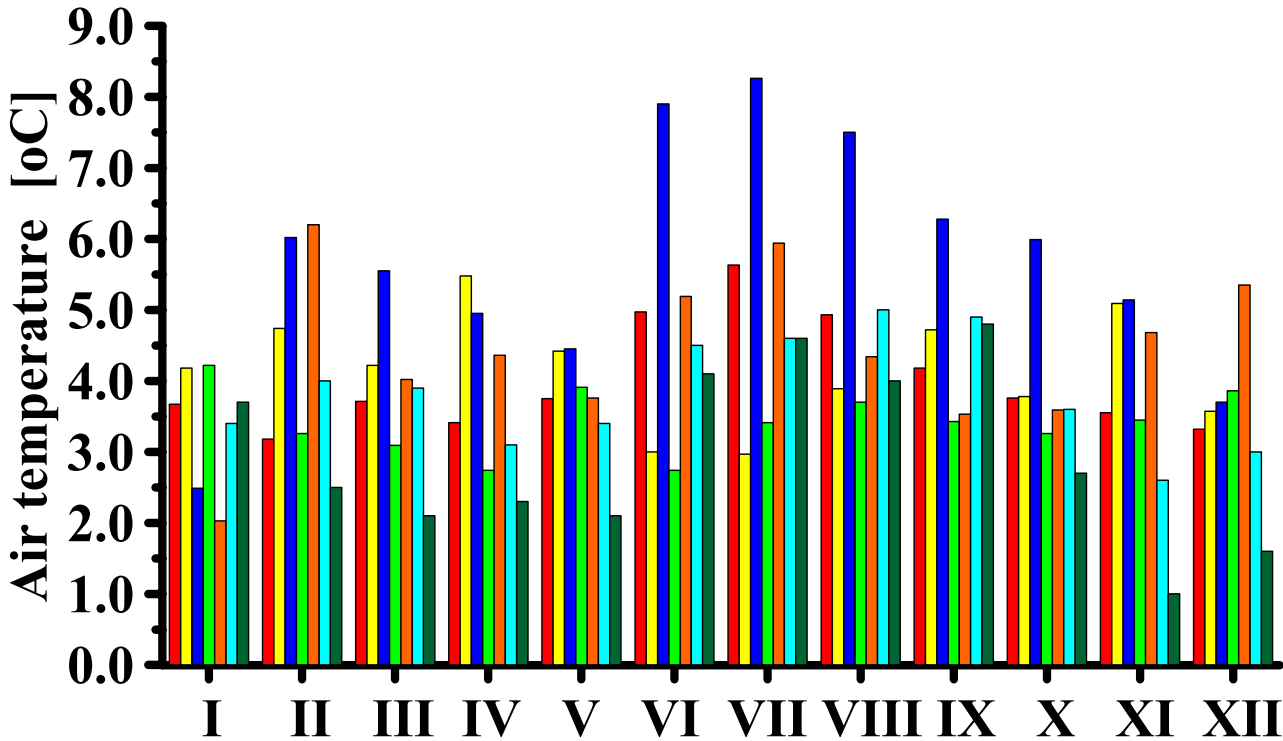


RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

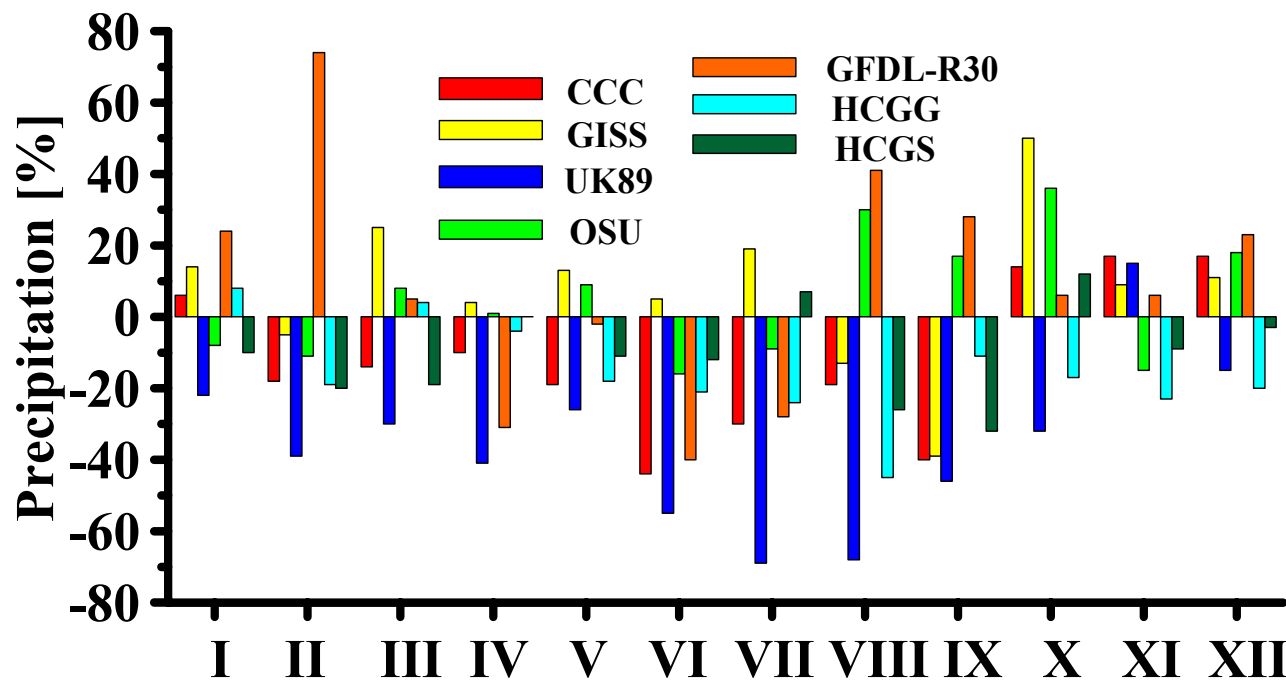
- Moving towards to a future consensus on regional climate change over SEE
 - Warming
 - Increase the frequency of extreme climate events
 - Drier climate in summer



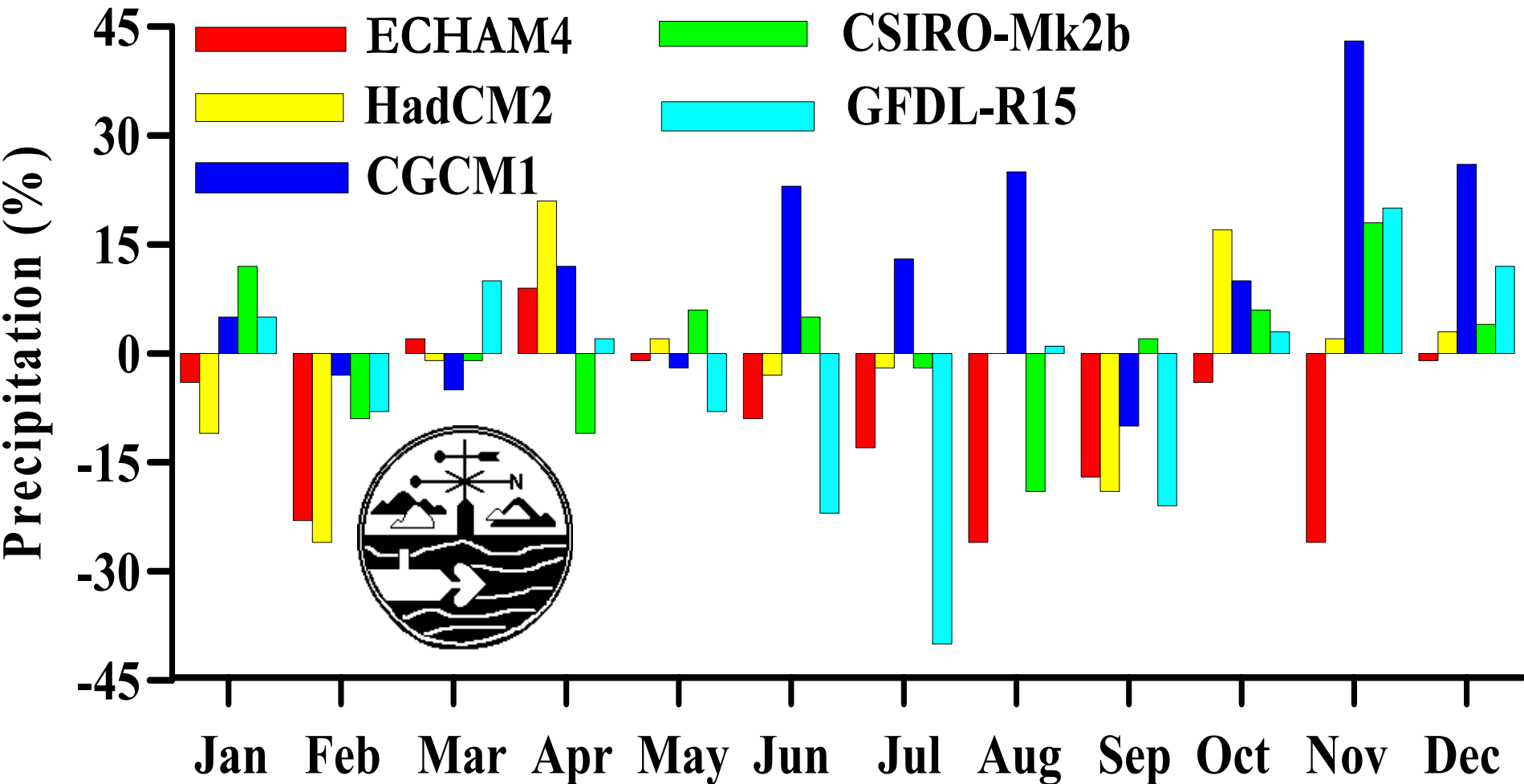
Climate Scenarios for Bulgaria



**2xCO₂ GCM
climate change
scenarios -
monthly air
temperature
and
precipitation**

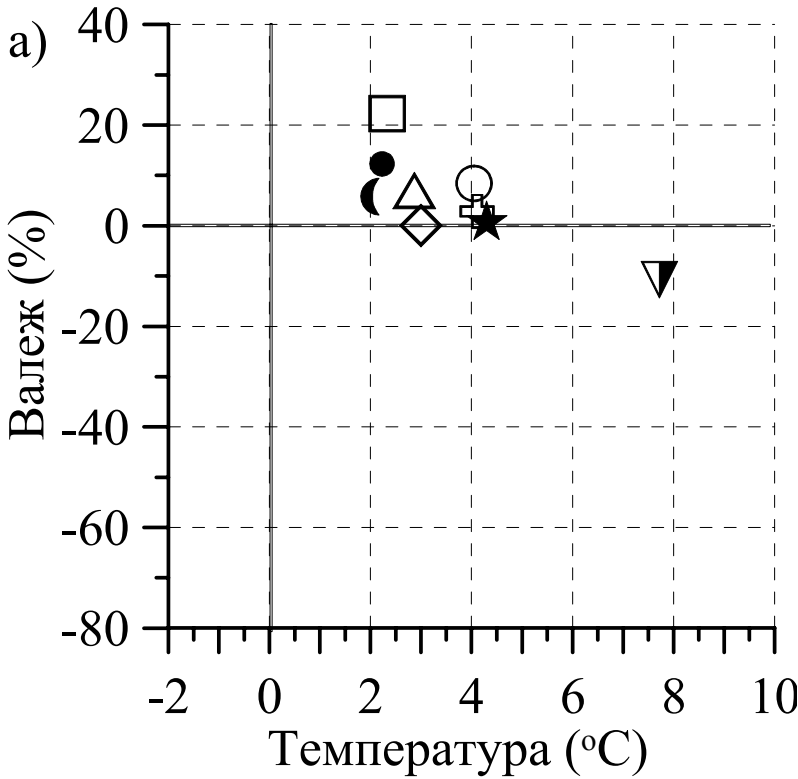


Climate Change Scenarios for Bulgaria

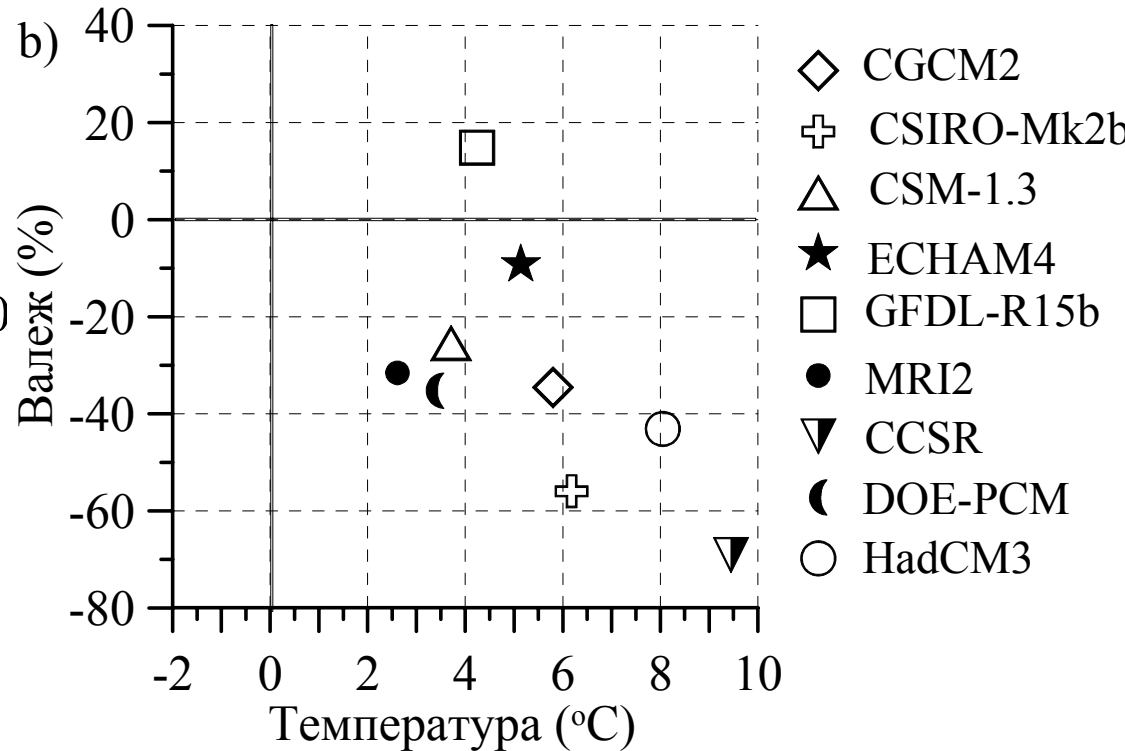


GCM simulated changes in monthly precipitation in Bulgaria for the 2050s, relative to 1961-1990

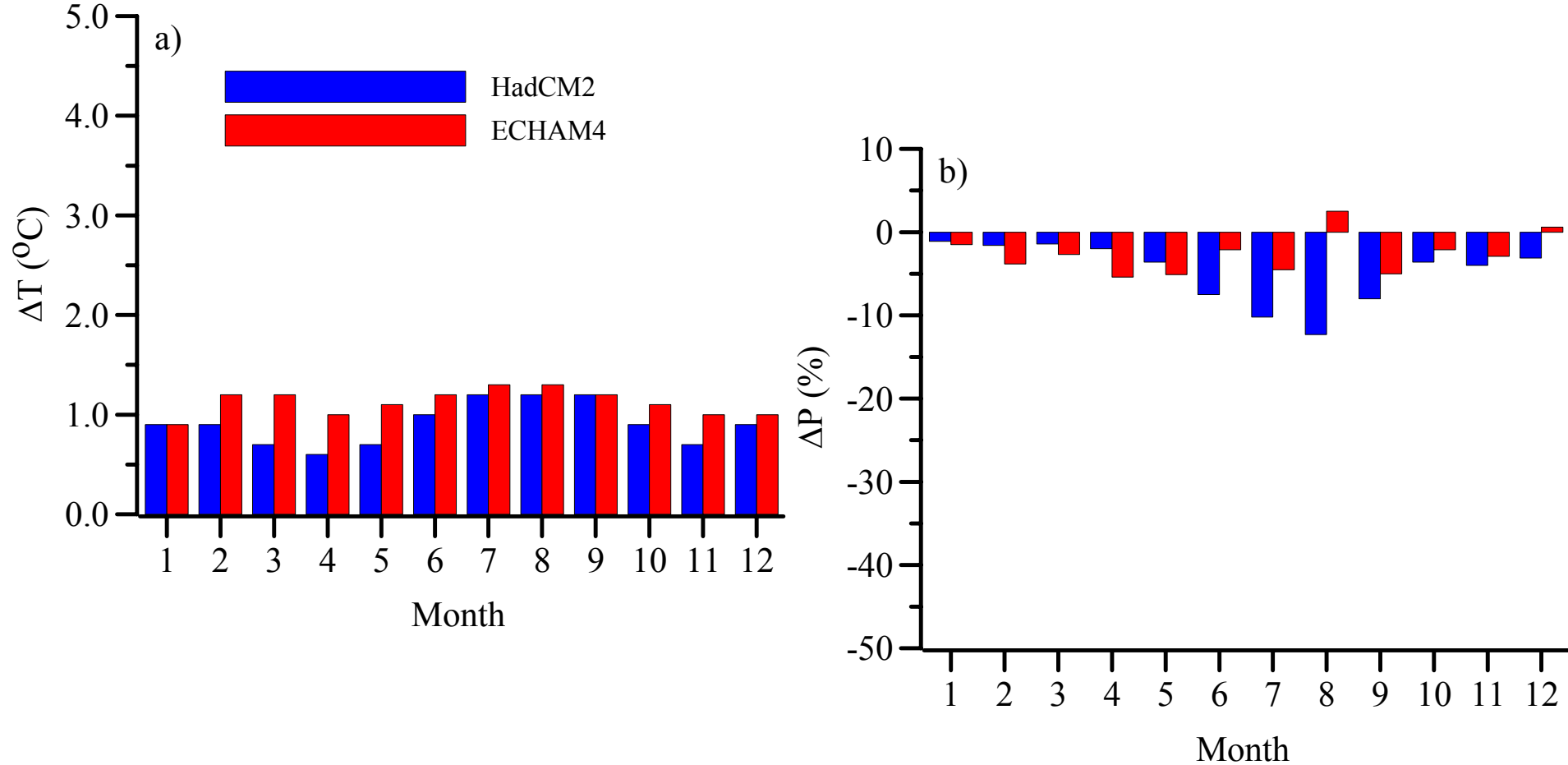
Climate Change Scenarios for Bulgaria



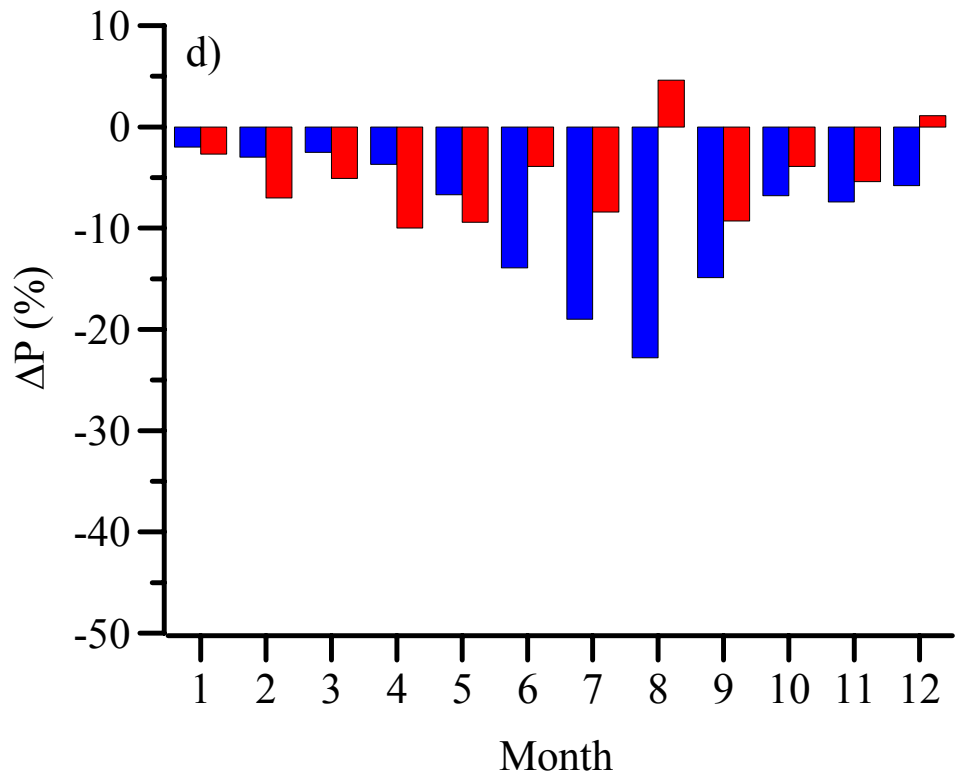
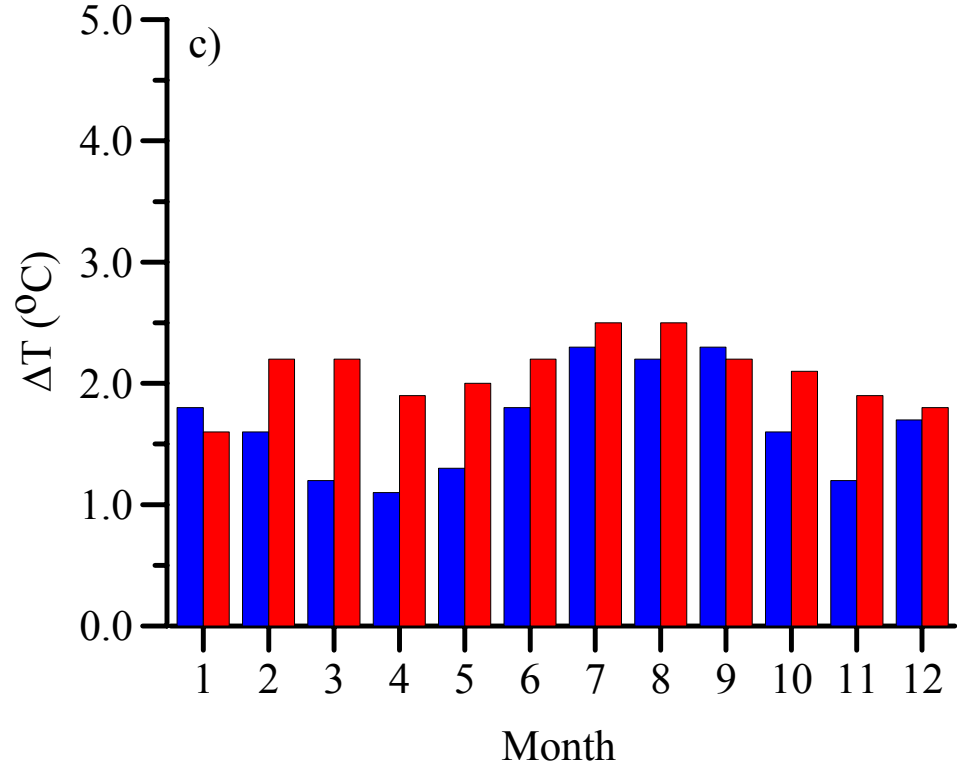
**IPCC A2
emission
scenario**



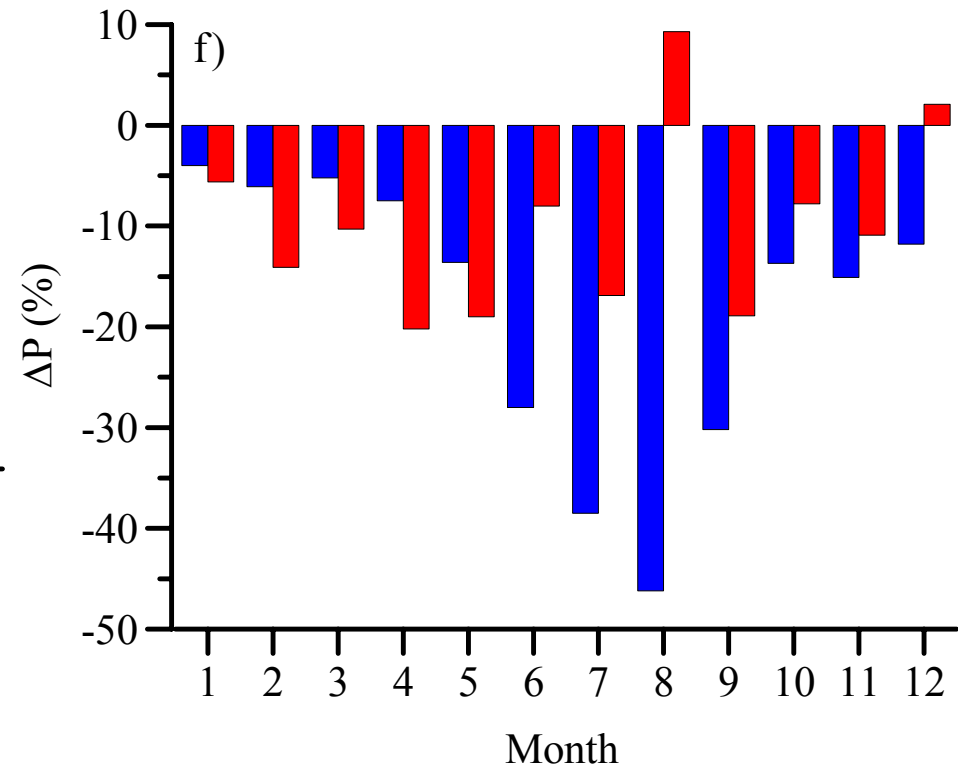
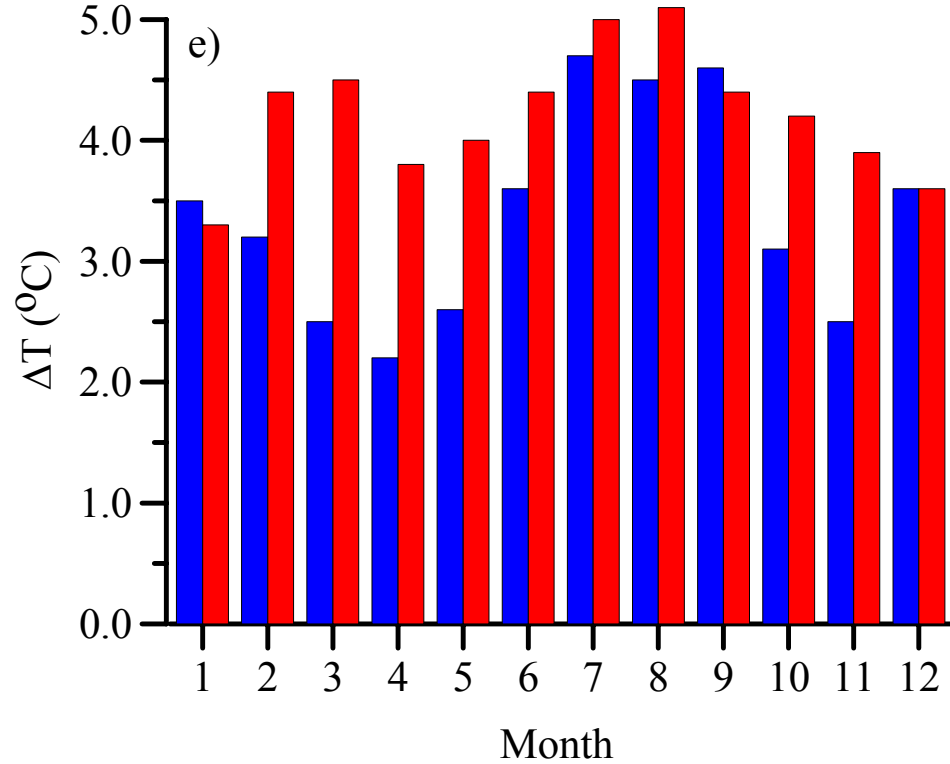
GCM simulated change change of air temperature (X) and precipitation (Y) for winter (a) and summer (b) in Bulgaria for the 2100, relative to 1961-1990



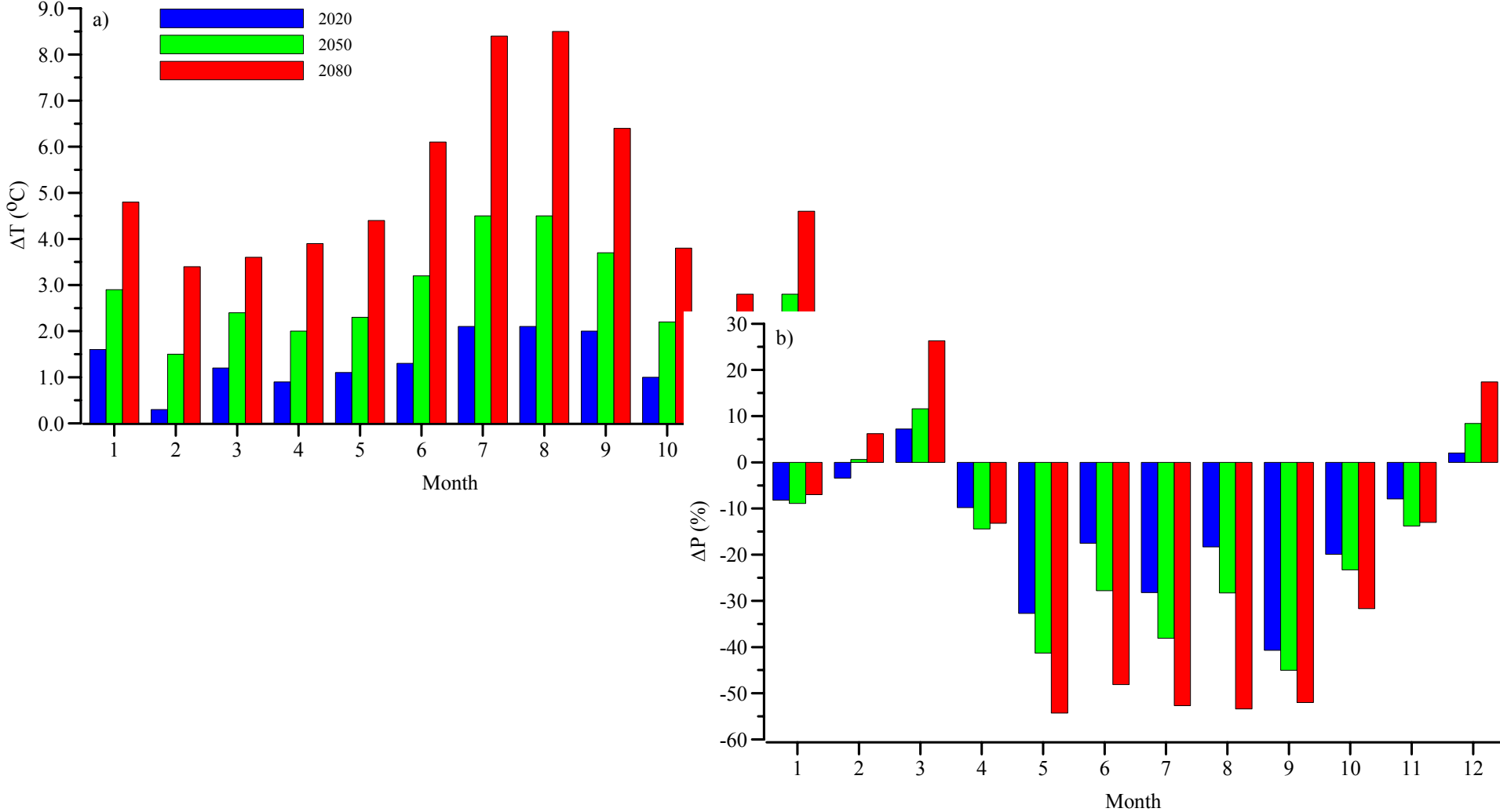
HaDCM2 and ECHAM4 climate change scenarios of monthly air temperature (left) and precipitation (right) in Sandanski (south Bulgaria) during the 2025s (A2 emission scenario)



HaDCM2 and ECHAM4 climate change scenarios of monthly air temperature (left) and precipitation (right) in Sandanski (south Bulgaria) during the 2050s (A2 emission scenario)



HaDCM2 and ECHAM4 climate change scenarios of monthly air temperature (left) and precipitation (right) in Sandanski (south Bulgaria) during the 2100s (A2 emission scenario)



HaDCM3 climate change scenarios of monthly air temperature (left) and precipitation (right) in Novachene, 2020, 2050, 2080 (A2 emission scenario)

RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- Generating country-level information on climate change
 - UNFCCC national reports
 - Climate change related projects - outputs
 - NMHS statements on climate in particular year, period, decade, century
 - Literature survey

RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- Gaps in current knowledge and ways to address them

Figure 2: Cascade of Uncertainty (Adapted from Mearns et al., 2001.)

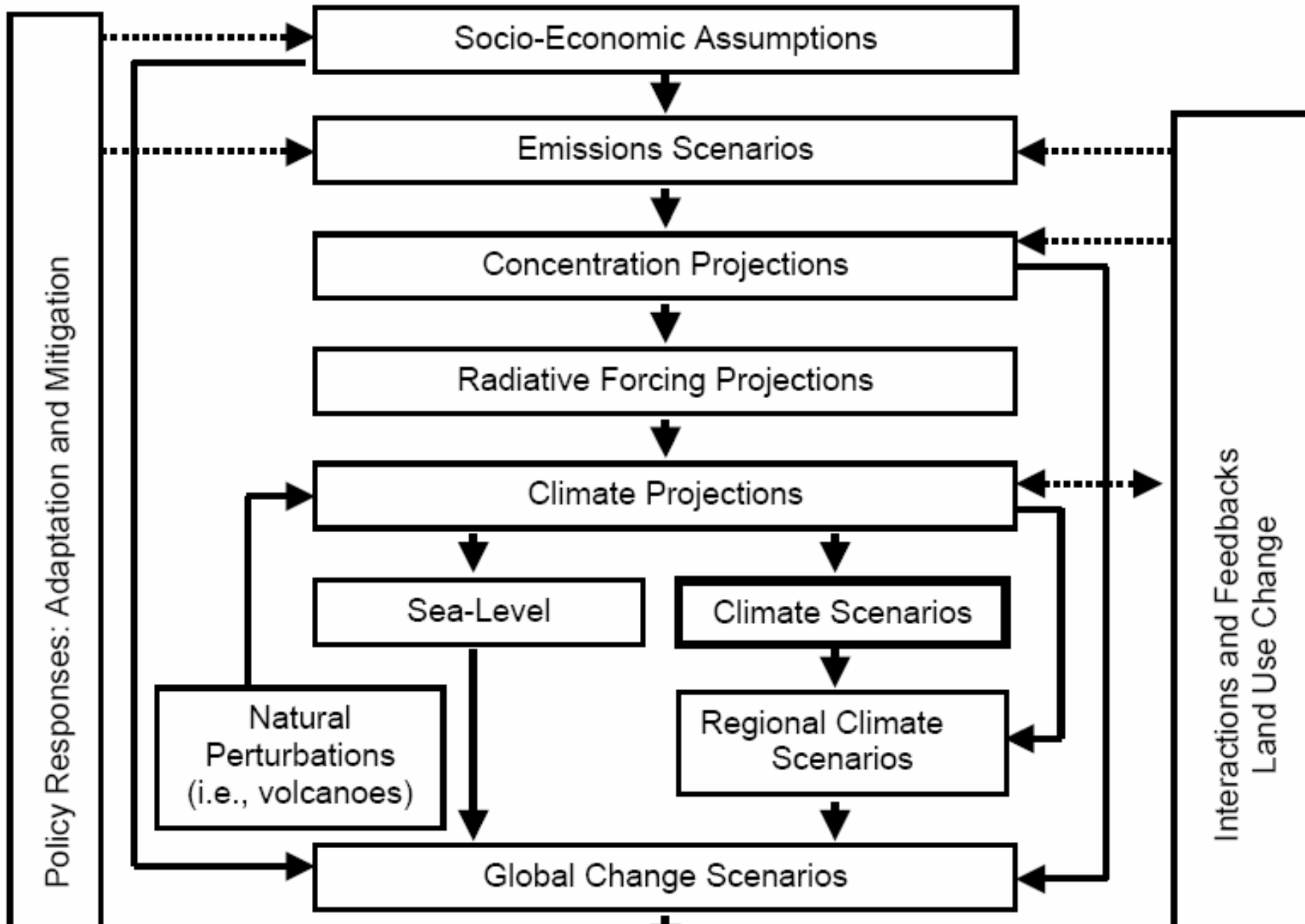
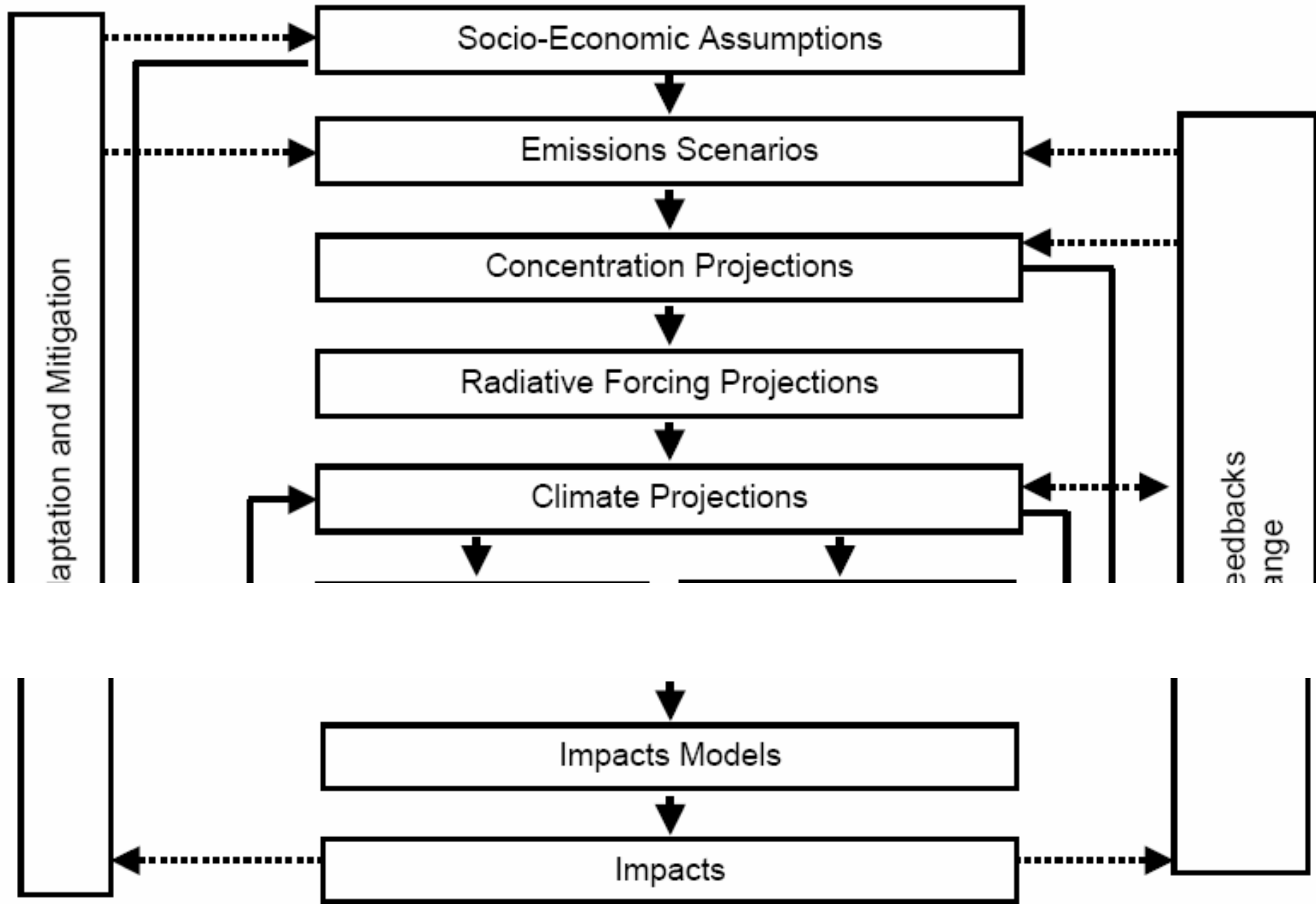


Figure 2: Cascade of Uncertainty (Adapted from Mearns et al., 2001.)



RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- A framework to use RCOF platform to generate regional climate change information products

RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- Capacity building of climate providers and users in SEE

RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- User liaison and integrating user feedback

RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- User perspective of the value of the climate change products in decision making for adaptation planning in SEE

RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- Needs for infrastructure development, role of sub-regional entities and NIMHs in contributing to coordinated development of regional climate change products

RCOF PROCESSES FOR REGIONAL CLIMATE CHANGE

- Adequacy of existing information on regional climate change over SEE