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Data and
information

sharing as a
confidence
building
measure (?)

The future is... uncertain

- Anthropogenic climate change is now **undisputed fact**
- But, '**natural**' climate variability is here to stay
- **Attribution is a difficult problem**, and will stay that way for some time...
- Emission reduction is a dream
Adaptation is (almost the only) solution!

What is at stake?

- Climate (change) → (changes in) ecosystem services
- Direct impacts
 - Extreme weather events: hurricanes, storms, storm surges, etc.
 - Health: hot/cold spells
- 'Indirect' impacts:
Natural and managed ecosystem services failing:
 - Food production: uncertain/insufficient
 - Health: Endemics and epidemics
 - Environmental (bad) synergies (air pollution, etc,)

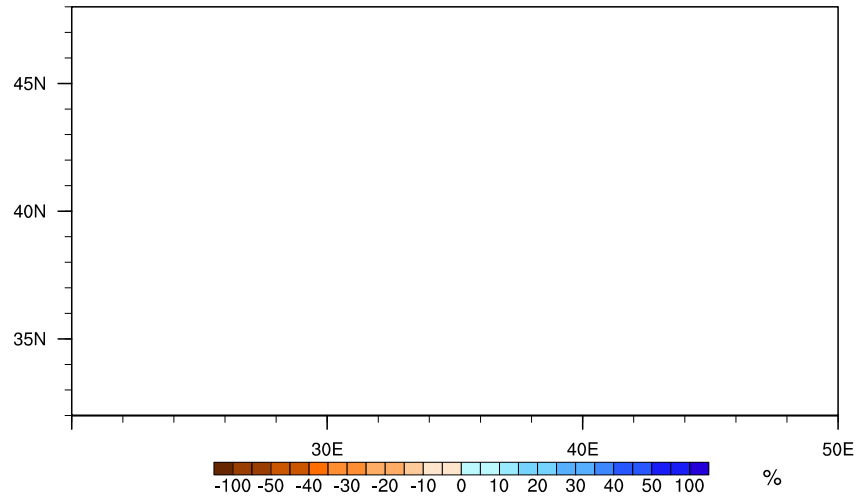
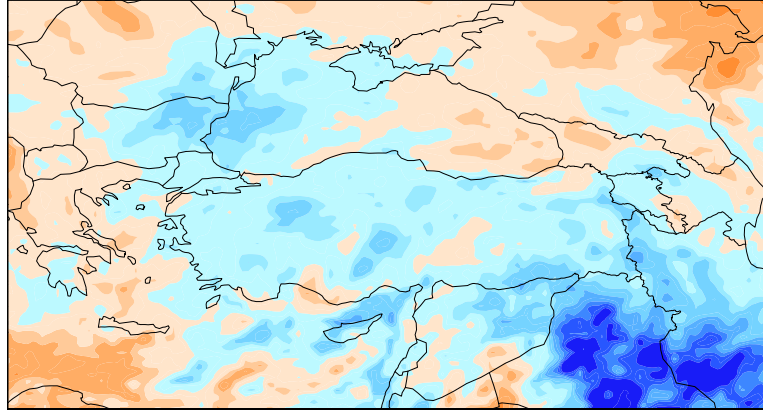
Human security?

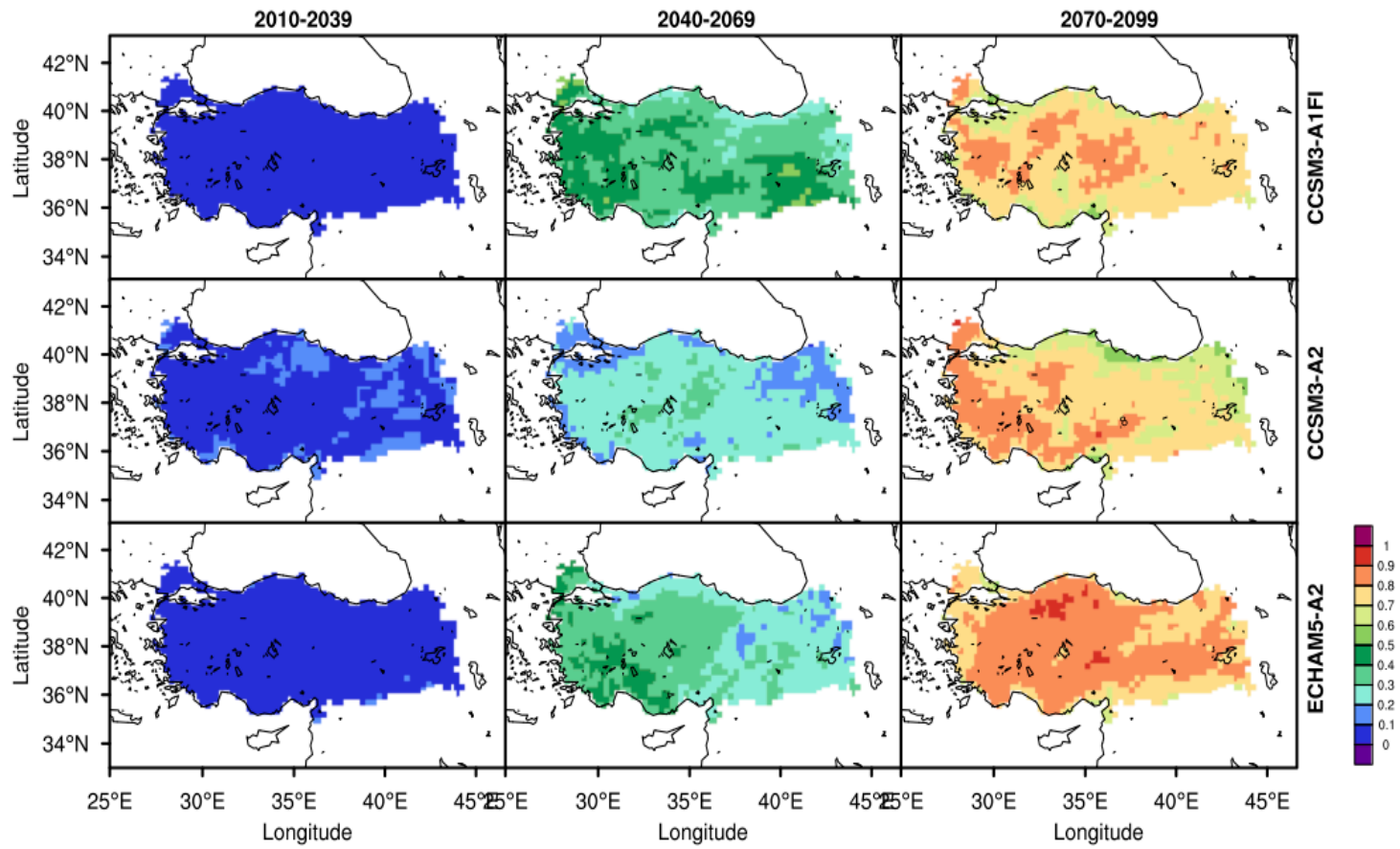
- Unsustainable livelihoods:
- Access to resources
 - How to get it?
 - Invade/control the land that has the resources!
- “It is getting impossible to live here; let’s move”
(= environmental refugees)
nobody likes refugees → conflicts → ???

The future is... uncertain

- Adapt to what?
- Diversity of earth system models (global and regional) are in turn leading to a diversity of projections (= answers)
- (Uncertainties in emissions)
X
(uncertainties in our understanding of earth systems)
- → a future full of surprises!

SRES A2 scenario





Data sharing...

- Eliminate surprise elements for the future of shared resources
- Know your neighbor's state, and all negotiations will be more honest/realistic
- Trans boundary resources/threats:
 - Water
 - Fisheries
 - Endemics/epidemics

(de facto) Joint monitoring

Boundaries of 'nation-states' often meaningless for natural systems

Near real time (?) data sharing on trans boundary ecosystems → joint monitoring

Information sharing...

- Appreciation of the uncertain nature of projections
 - *Do not trust models, but never live without them!*
 - Regional climate modeling will accentuate facts about an uncertain, but threatening future...

DARECLIMED

- **D**ata **R**epositories and Computational Infrastructure for Environmental and **C**limate Studies in the Eastern **M**editerranean
- A regional-scale sharing initiative:
 - Data
 - Model results
 - Regional (computational) capabilities
- Countries with diverse science communities and data/information management attitudes/histories
 - Partners: Greece, Turkey, Cyprus, Israel, Jordan
 - Indirectly: Lebanon + Syria (?)

Public perception is everything!

- Data/information sharing/merging prior to public announcements will help develop **'we are all in the same boat'** perception
- Scientists should share their national-level experiences in communicating with
 - Decision/policy makers
 - Public at large thru mass media/new media
- Networks: regional + 'north'/'south'
- Israeli success story (in opening met data)

Obstacles (to data sharing)

- Cost recovery concerns of technobureaucrats
 - Even from their own citizens!
- Concern about the quality of data (being revealed!)
- Liability concerns
 - Trans boundary waters/ecosystems
 - Pollutant transport

Not all data are equal

- Some 'climate' data' ends up being broadcast
- Critical:
 - Hydrological data
 - Water and air pollution level data
 - Pollution sources..

Conclusions:

- Data and information sharing will contribute to **reducing surprise elements** and develop **common perceptions**
- Regional efforts are not in competition with global projects such as WMO's Climate Services
- Networking beyond national borders among
 - Science communities
 - Environmental NGOs
 - Media workers