The Global Adaptation Atlas

Establishing Priorities for Research, Policy and Action on Adaptation

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Illustrated Summary – November 19, 2009

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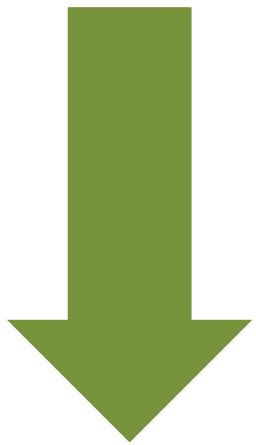
The Challenge of Adapting Well

- Adaptation is gaining prominence in the research, policy and development fields.
- Emissions reductions anywhere "count" everywhere, but adaptations must be locally relevant *and* broadly coordinated
  - Complementary, not competing objectives
  - Growing push to set priorities for adaptation funding

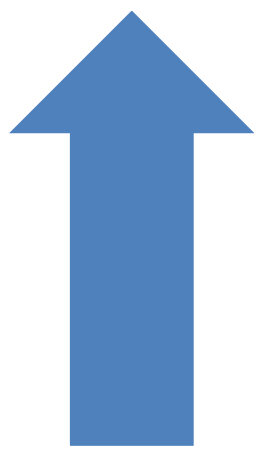


Mitigation

Reducing GHG emissions to avoid the worst potential impacts of climate change

Adaptation

Planning for and adjusting to environmental changes already underway



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Mapping is the Missing Link

- **Geography and spatial information are common threads connecting impact science and policy**
  - Climate impacts are site and population-specific
  - Populations in greatest need are often least able to adapt
- **Need for coordination of scientific research, policy and on-the-ground activity**
  - Maps showing current and projected climate impacts and adaptation activity can help in setting strategy for interventions and investments.
    - This is the aim of the Adaptation Atlas.

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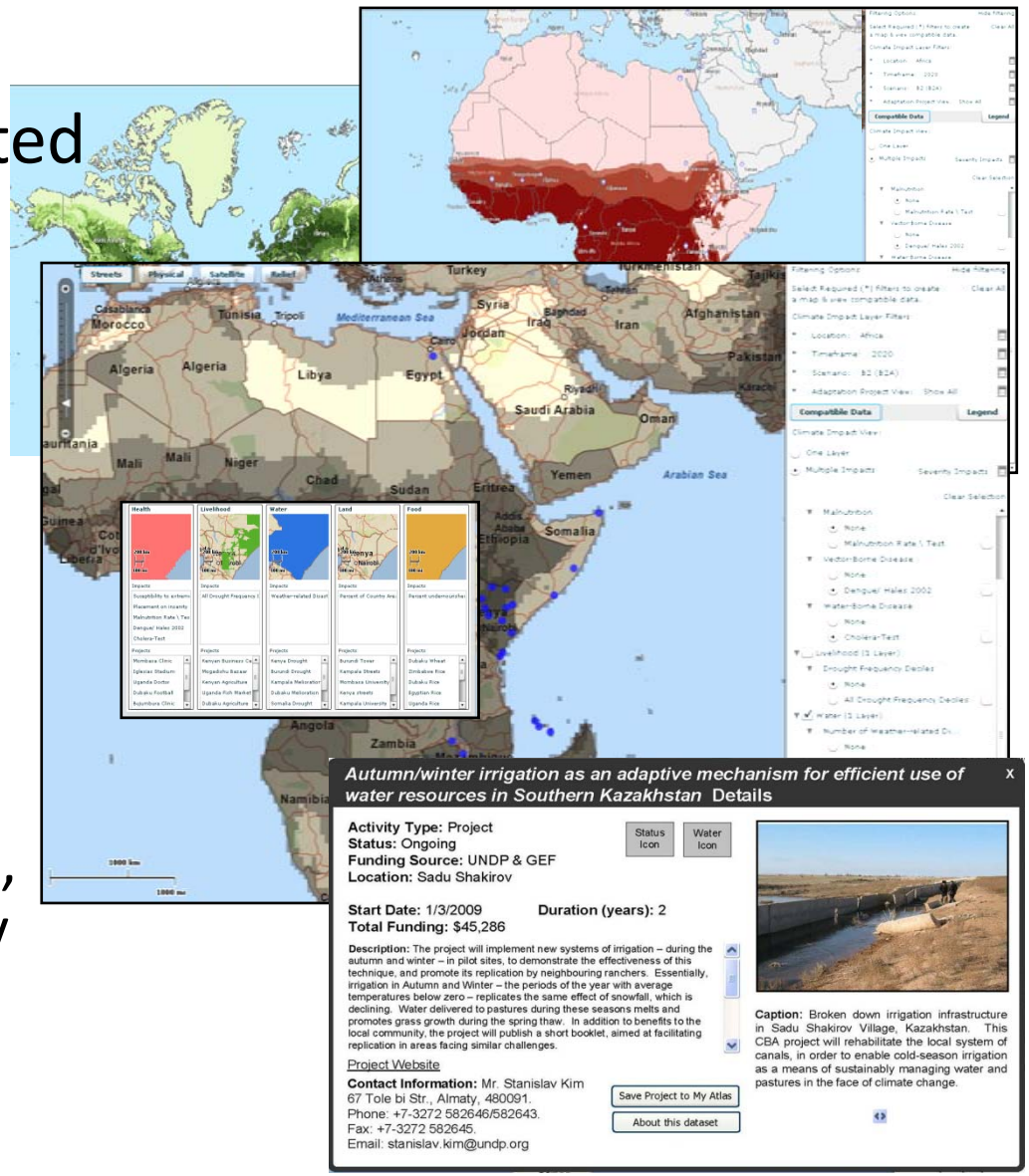
What is the Adaptation Atlas?

- Web-based application enables user driven, dynamically generated maps of climate impacts and adaptation activities:
  - Database of impacts from peer reviewed climate studies
  - Repository of adaptation projects
  - Data available for download and uploads of new data supported
  - User can select different locations, timeframes, scenarios and overlay resulting data across sectors



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Who Will Use the Atlas and for what purpose?

Policymakers & Leaders: Visualize impacts affecting their regions, view portfolios of projects underway, and identify gaps that need to be filled

- Policymakers
- Ministers and Agency Directors
- Philanthropic Foundations
- Multi-lateral donors
- United Nations
- International climate negotiators

Scientists: Enter new impact data, download data and develop finer-grained integrated models and new data, further multidisciplinary collaboration

- Natural Scientists
- Social Scientists

Citizens: Learn and contribute

Enable civil society leaders, advocates, corporations, and others to identify impacts, adaptation options being implemented by others in the area, & opportunities for coordination

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Building Blocks

1 Consolidating science on impacts	• Identify gaps in science across disciplines, regions, scales • Highlight areas for new integrated analysis
2 Mapping on-the-ground adaptations	• Facilitate continuous data collection on adaptation funding • Create a comprehensive, searchable project database
3 Creating a tailored outreach vehicle	• Create key user profiles and provide recommendations • Collect and exchange local lessons and global best practices
4 Sustaining long-term evaluation	• Develop a spatial data archive on impacts and activities • Track changes in projected impacts & adaptations over time

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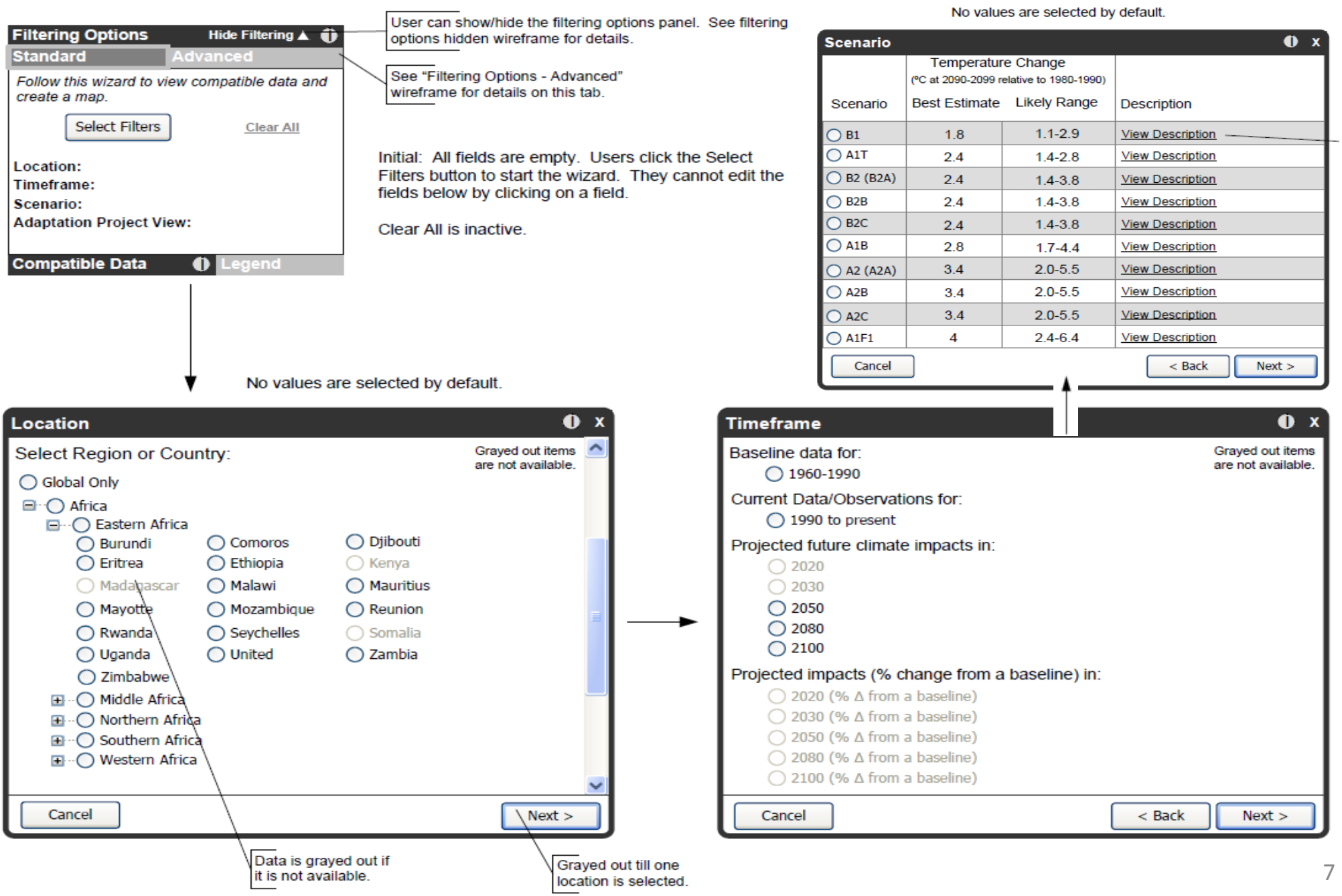
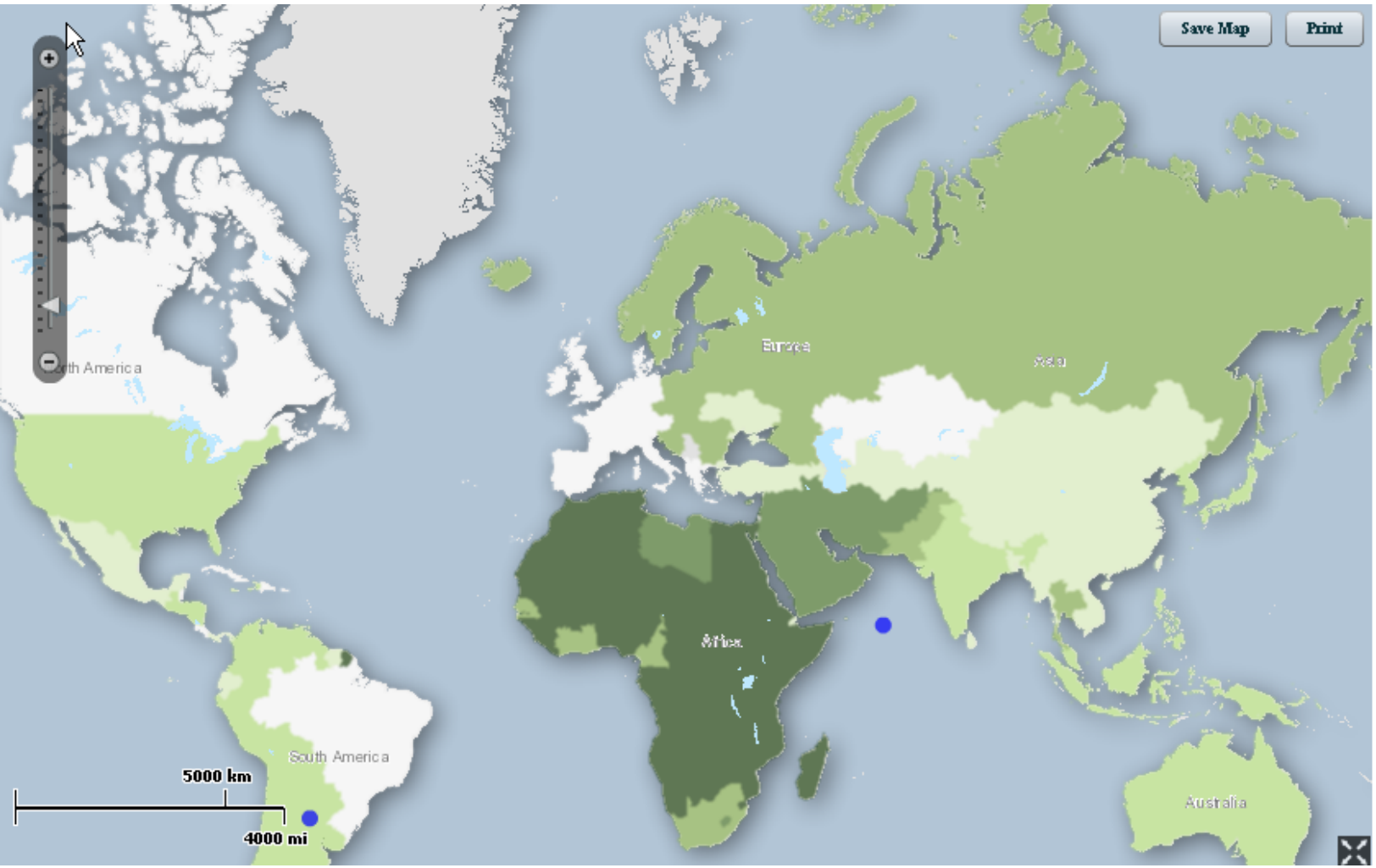
Creating maps: Three mouse clicks to find data!



Projected Change in Maize Production by 2080



Filtering Options — Hide Filtering Options

Climate Impact Filters

Location: Global

Timeframe: 2080 (% change from a basel...

Projection Scenario: A1F1

Adaptation Activity Filters

Activity Type: Development
Population Served: Community
Funding Source: Foundation

Impacts | Activities | Legend

Climate Impact View: Clear Sel

- One Layer
- Multiple Impacts — Filter by Severity

- Food (3 Impacts)
  - Maize/Corn
    - Change from 1970-2000 AVG, T/ha...
  - Rice
    - Change from 1970-2000 AVG, T/ha...
    - Change from 1990 Baseline,T/ha, ...
  - Wheat
    - Change from 1990 Baseline,T/ha, ...
    - Change from 1970-2000 AVG, T/ha...
- Land (1 Layer)

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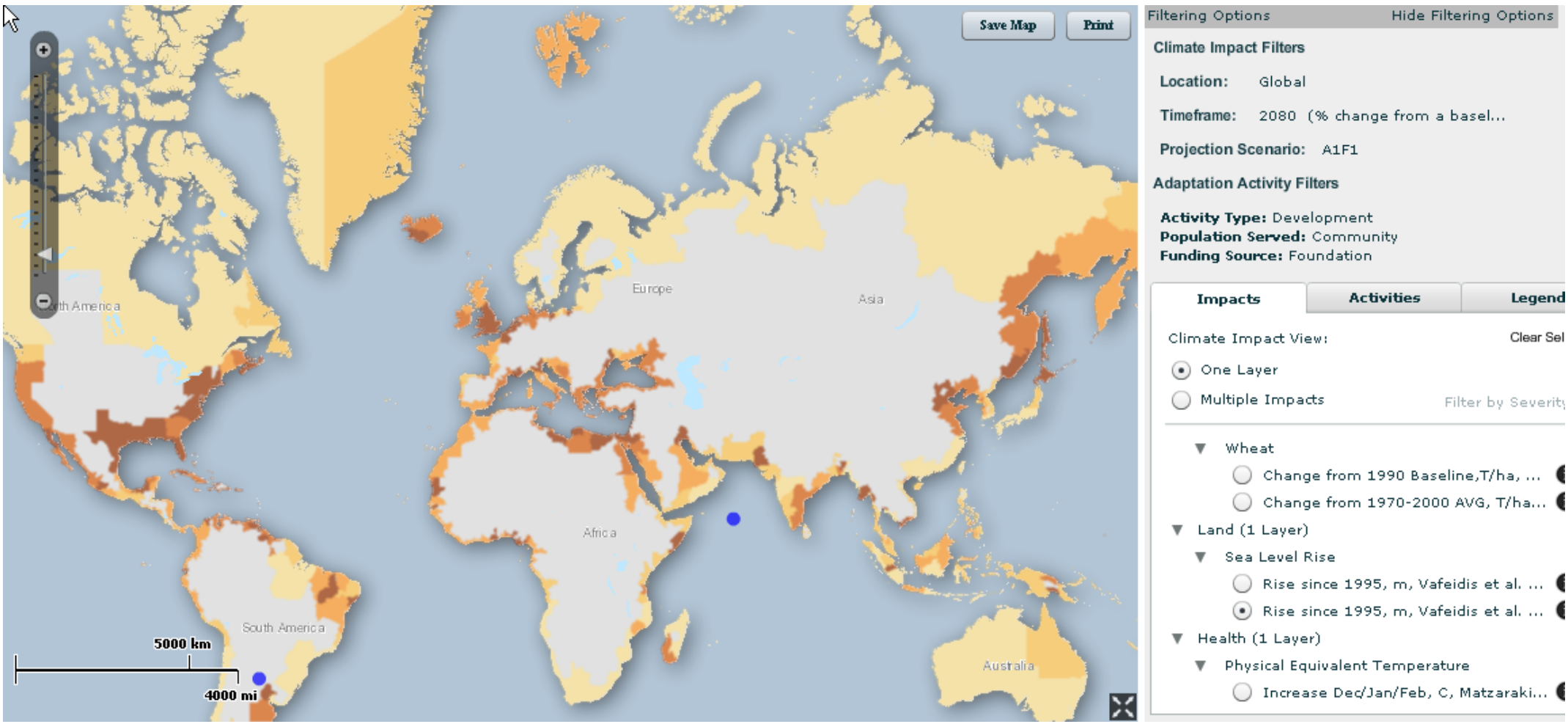
Projected Change in Sea Level Rise by 2080



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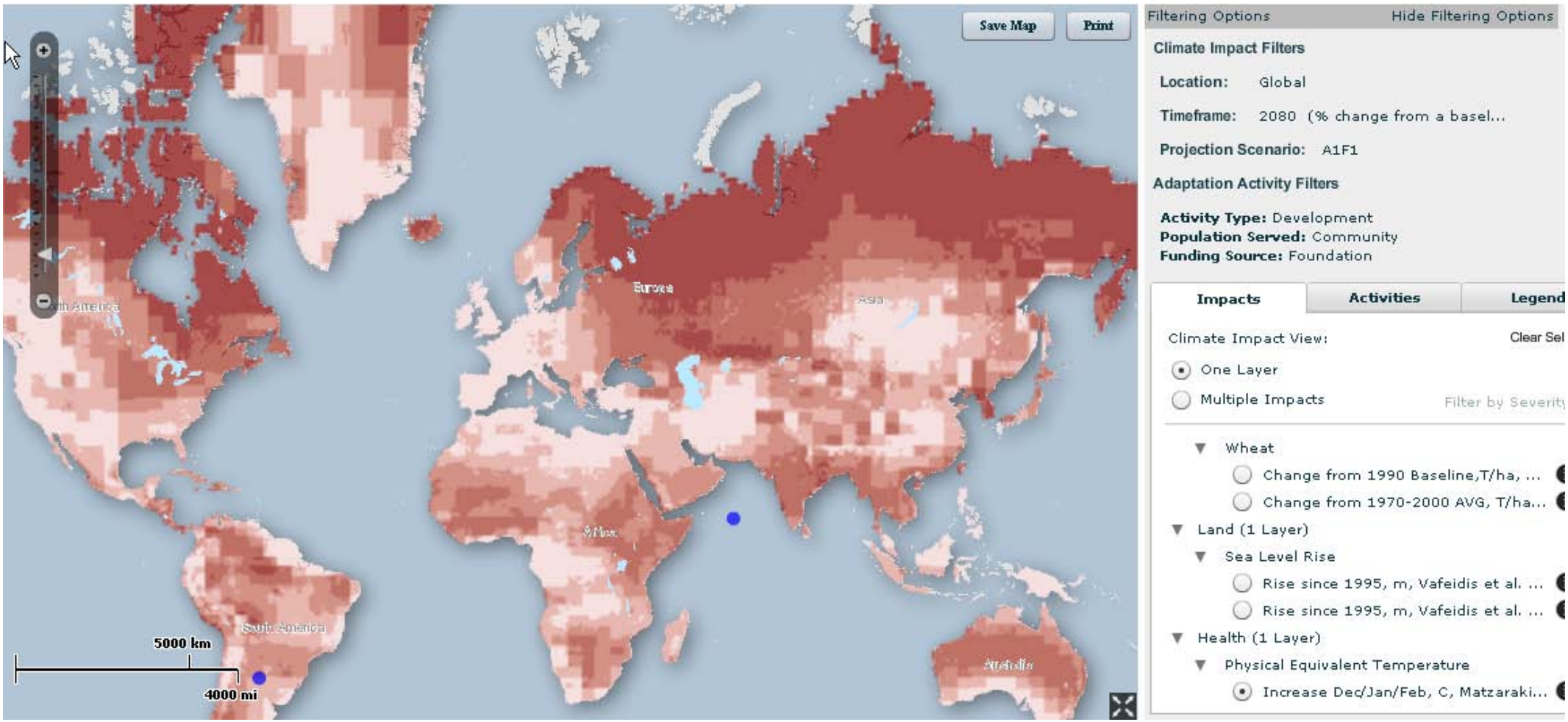
Projected Change in Physical Equivalent Temperature by 2080



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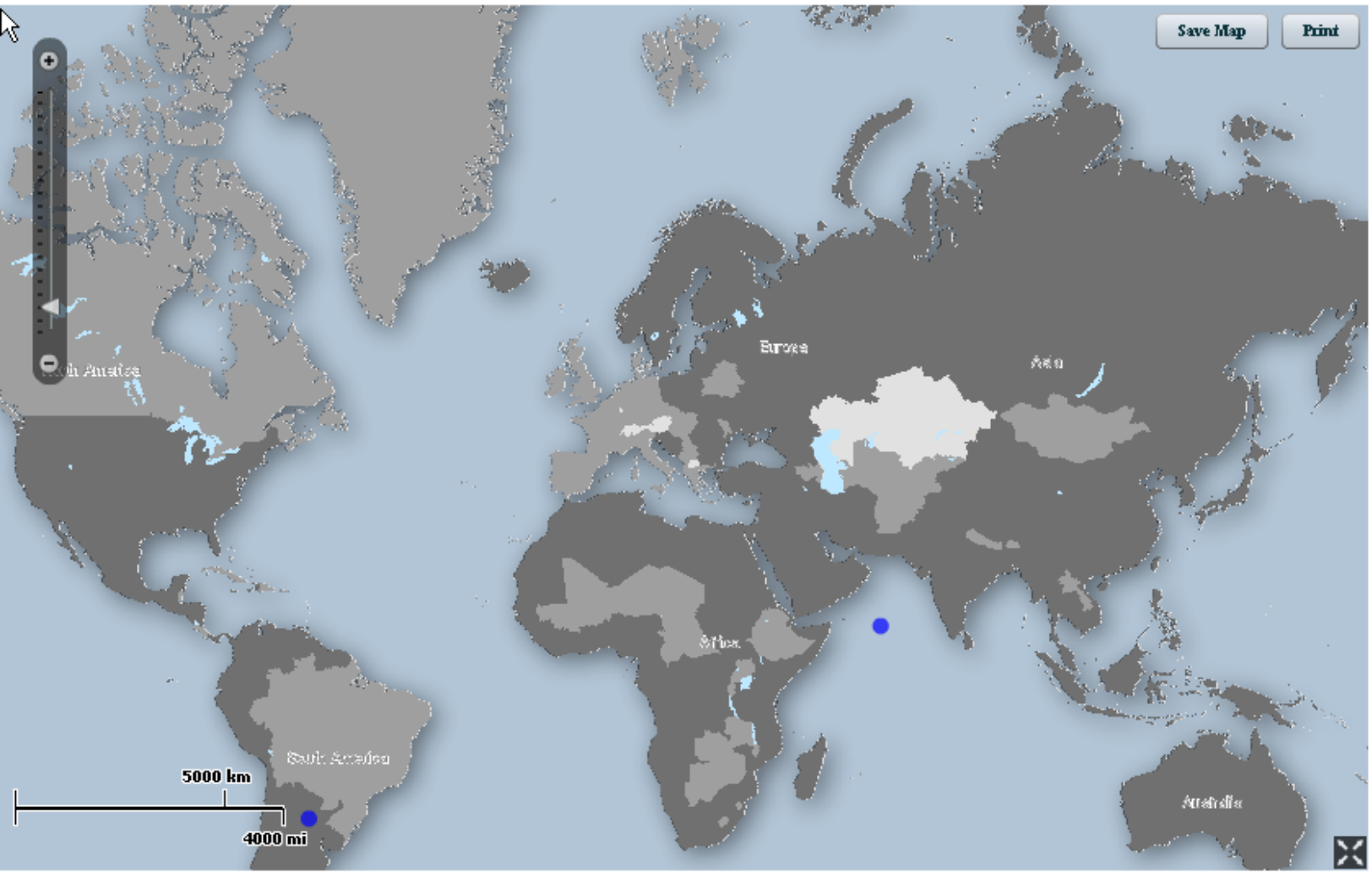
Overlay of Projected Changes in Maize and Sea Level Rise



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  - Maize/Corn
    - None
    - Change from 1970-2000 AVG, T/ha...
  - Rice
  - Wheat
- Land (1 Layer)
  - Sea Level Rise
    - None
    - Rise since 1995, m, Vafeidis et al. ...

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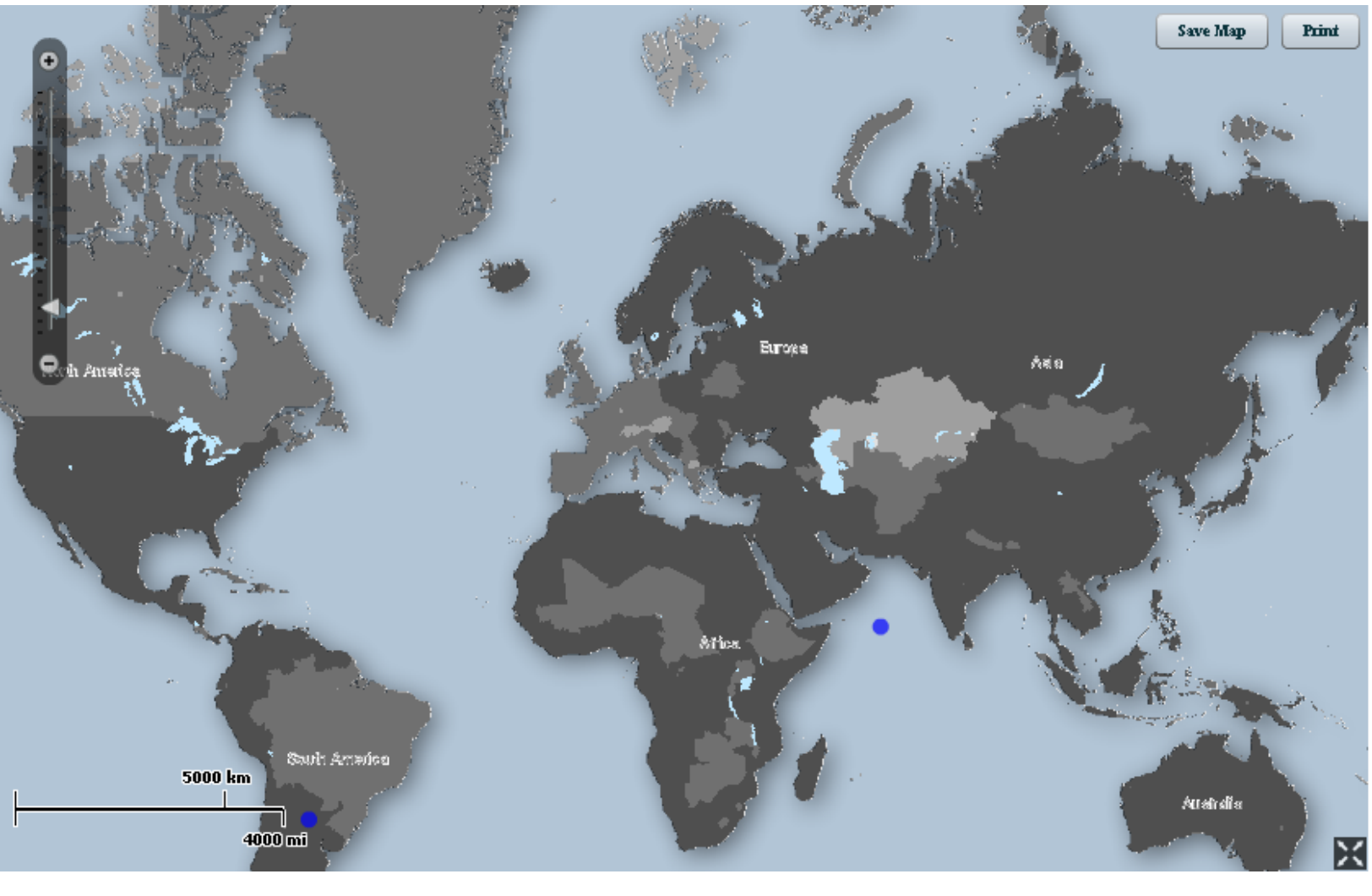
Overlay of Projected Changes in Maize, Sea Level Rise and Physical Equivalent Temperature



Filtering Options — Hide Filtering Options

Climate Impact Filters

Location: Global

Timeframe: 2080 (% change from a basel...

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Adaptation Activity Filters

Activity Type: Development
Population Served: Community
Funding Source: Foundation

Impacts | Activities | Legend

Climate Impact View: Clear Sel

- One Layer
- Multiple Impacts — Filter by Severity

- Land (1 Layer)
  - Sea Level Rise
    - None
    - Rise since 1995, m, Vafeidis et al. ...
    - Rise since 1995, m, Vafeidis et al. ...
- Health (1 Layer)
  - Physical Equivalent Temperature
    - None
    - Increase Dec/Jan/Feb, C, Matzaraki...
    - Increase Jun/Jul/Aug, C, Matzaraki...

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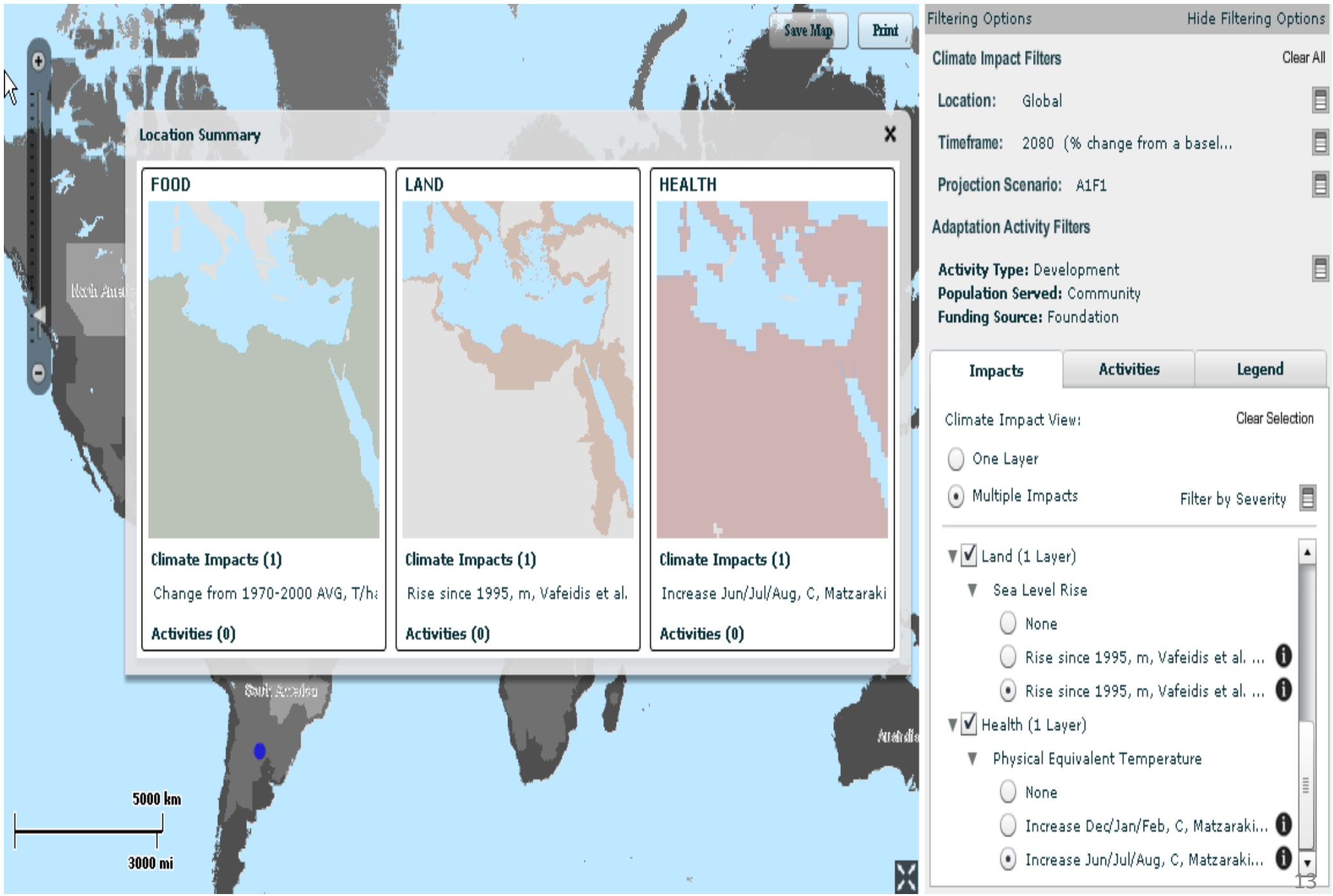
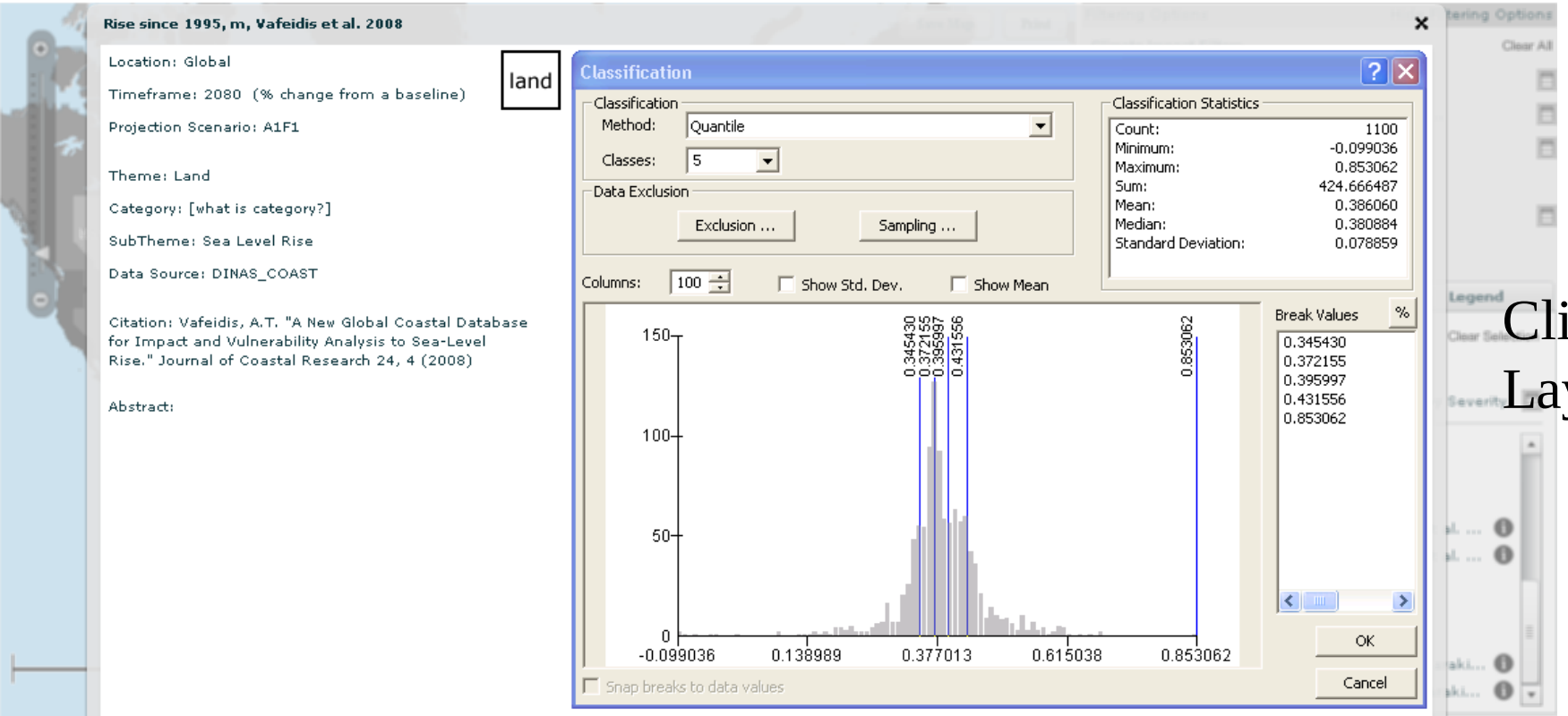
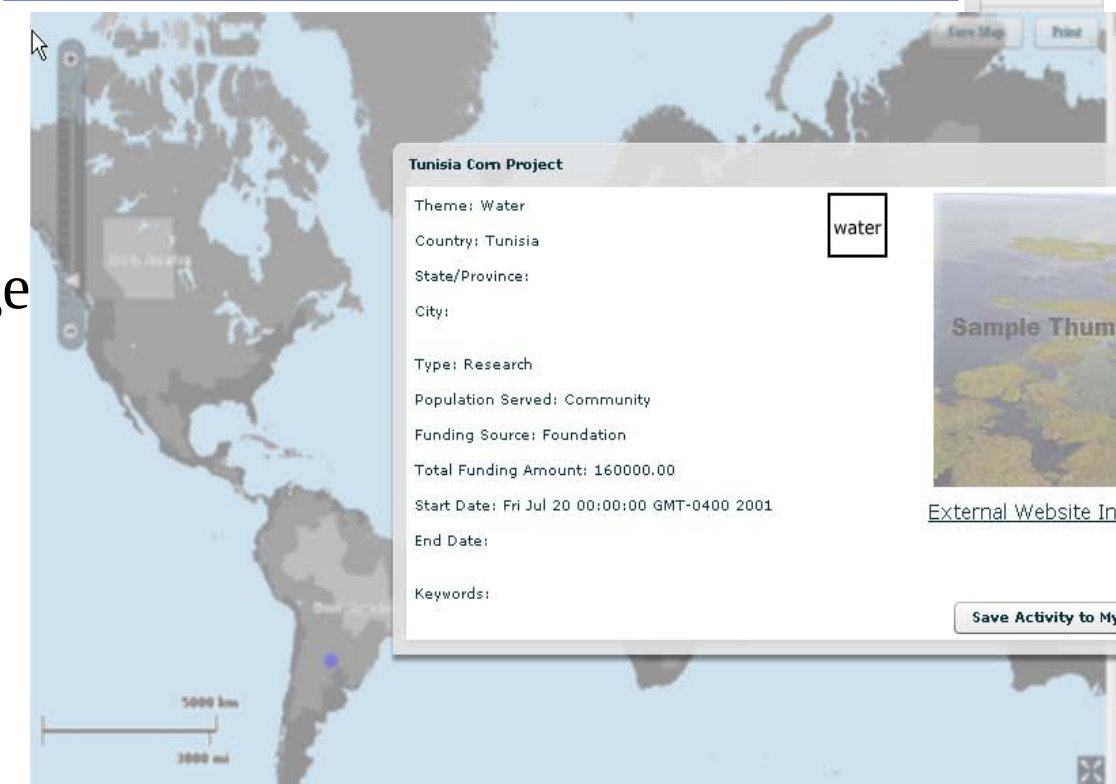
Clicking on a point on the map will display a detailed breakout map





Climate Impact Layer Detail Page



Project Detail Page

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Partners

- **Advisory Board Spanning Science, Policy & Practice**

  - Climate Institute, UNF, WRI, Rockefeller, RFF, ESRI, SEI

- **Collaborative Partners**
  - UNFCCC, UNDP, WRI, College of William & Mary, UNITAR, RMSI

- **Funding Sources**
  - RFF
  - Clipore (MISTRA - Swedish Foundation for Strategic Environmental Research)
  - UN Foundation
  - Goldman Sachs (through seconding of 1 FTE for FY09)
  - ESRI (mapping software)

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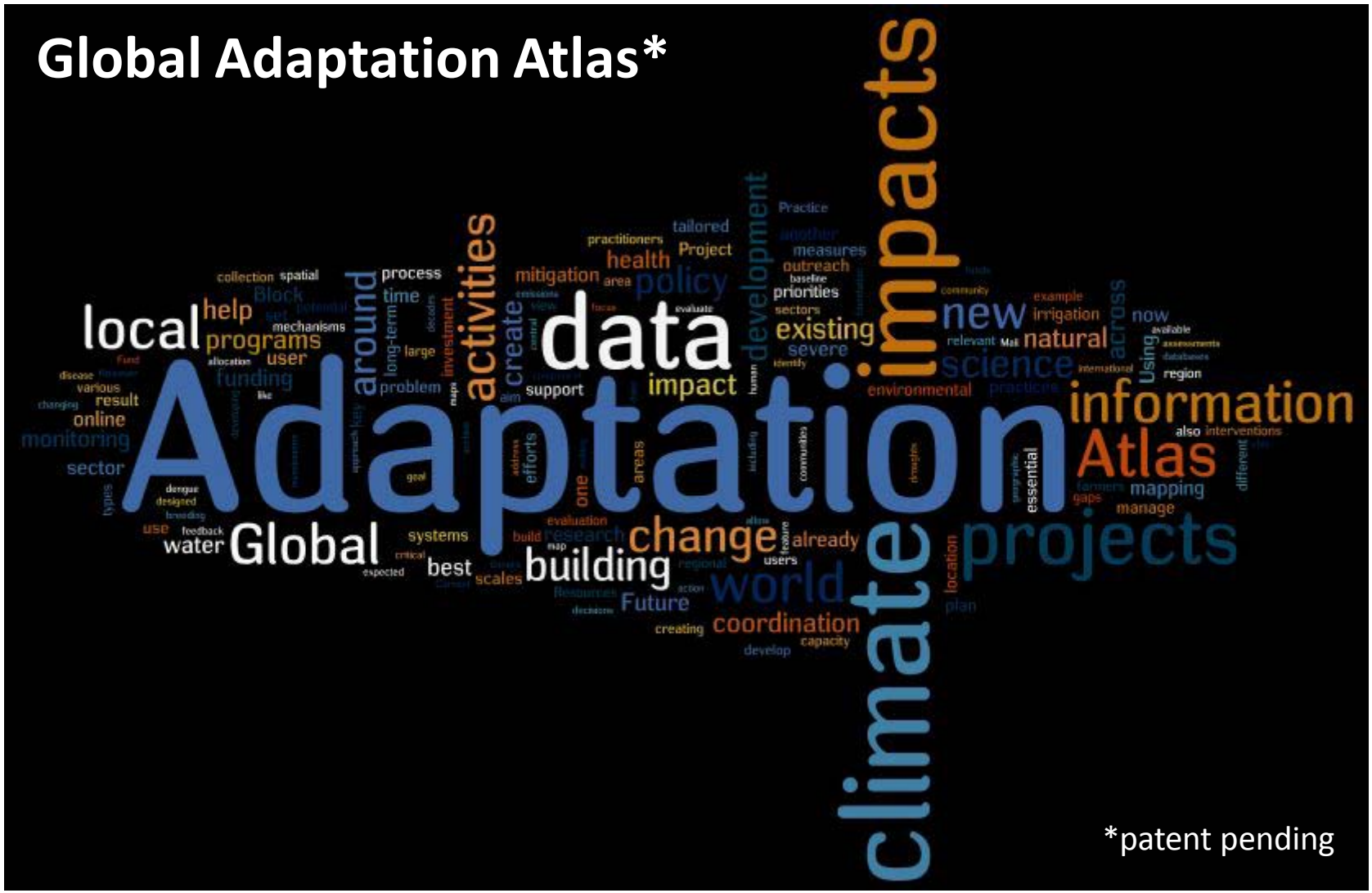
Global Adaptation Atlas*



For more on the Atlas, visit www.adaptationatlas.org or email us at info@adaptationatlas.org

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