



THE EARTH INSTITUTE
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TerraViva!™ SEDAC 2008 for Climate Impacts & Vulnerability Assessment

Presentation at the iseeT@COP15 kiosk, 17 Dec 2009

TerraViva! SEDAC is available free-of-charge at
<http://sedac.ciesin.columbia.edu/terraVivaUserWeb/>

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Socioeconomic Data & Applications Center
(SEDAC)



- Focus on human dimensions of environmental change
- Integration of social and Earth science data, especially with remote sensing
- Direct support to scientists, applied and operational users, decision makers, and policy communities
- Several **environmental treaty** applications



CIESIN World Data Center for Human Interactions in the Environment



The screenshot shows the CIESIN World Data Center website interface. At the top, there is a search bar and navigation tabs for 'Home', 'Real Data', 'Virtual Data', 'Data Guides', 'Measures', 'Hot Links', 'Tools', and 'Partners'. The main content area features a large map of the United States with several data layers selected in the 'Layers' panel on the right, including 'National Boundaries', 'Land of the Wild', 'Human Footprint Index', 'Human Influence Index', 'Environmental Performance', 'Ecological Footprint Per Capita', and 'CPIWV 2010 Pop Density'. Below the map, there is a '2002 Environmental Sustainability Index (ESI)' section with an abstract, keywords, and suggested citation. The footer includes the URL <http://sedac.ciesin.columbia.edu/wdc> and copyright information for 1997-2007.

<http://sedac.ciesin.columbia.edu/wdc>



TerraViva! SEDAC



The screenshot shows the TerraViva! SEDAC desktop application interface. It consists of four map windows arranged in a 2x2 grid. Each window displays a global map with different data layers overlaid, such as land use, population density, and environmental indicators. The application has a standard Windows-style interface with a menu bar, toolbar, and status bar at the bottom of each window.

- Provides visualization of SEDAC and remote sensing datasets in integrated desktop application





TerraViva! SEDAC Features



- Global data viewing engine lets users examine hundreds of variables
- Dynamic color-coded maps for quick comparison of countries.
- Create cross-tabulations through spatial overlays (e.g. land cover class area by country)
- Support for rendering maps in more than fifteen different geographic projections
- Make customized maps and charts
- A library of maps by theme: population distribution, land cover, physical geography, and more
- Gazetteer geographic locator can pinpoint cities, states, provinces, countries, water bodies, and weather stations

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TerraViva! SEDAC Features



- We'll be adding many climate- and water-related maps
- It's like a full atlas on your laptop!

It's free of charge!

**Just order it through
<http://sedac.ciesin.columbia.edu>**

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Today's Tour



1. Basic *TV! SEDAC* functionality:
 - Map Library
 - Multiple Maps: pan & zoom, mouse over
 - Map Projections
 - Geostatistical Data: emissions data, impacts data
 - Gazetteer
 - Documentation & Metadata
2. Using *TV! SEDAC* for climate impacts & vulnerability assessment
 - IPCC climatological time series
 - IPCC observed climate impacts
 - Climatological hazards data (drought & cyclones)
 - Change in runoff by 2080
 - Sea-level rise

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Today's Tour



1. Spatial Queries:
 - How many people in each country are impacted by sea-level rise?
 - What is the average population density in areas of greatest cyclone impact by country?
 - How many people in each country will be impacted by significant changes (>20%) in rainfall runoff between now and 2080?
 - What is the average infant mortality rate in drought impacted portions of countries compared to non-drought impacted regions

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For tutorials on how to use TerraViva! SEDAC, please visit:
<http://www.youtube.com/SEDACTerraViva/>



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SEDAC TerraViva! - Getting Started: The Map Library 0 ratings ☆☆☆☆

From SEDACTerraViva | December 15, 2009 | 31 views

This video is Part 1 of 3 in a series of tutorials given by SEDAC deputy Director Alex de Sherbinin on the use of SEDACTerraViva, a map viewer and standalone software application (Microsoft Windows-based). SEDACTerraViva uses a powerful data-viewing engine and tools to enable the visualization and integration of hundreds of socioeconomic and environmental variables and layers, including a range of satellite-based data. TerraViva is of primary interest... [\(more info\)](#)

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