# IRI DATA LIBRARY MAP ROOMS

The IRI Map Rooms contain more than 250 maps and analyses of current and historical climate conditions. In the last few years, the IRI has developed an increasing number of map rooms to serve climate-sensitive sectors. These interactive tools are tailored to the needs of the public health and food security communities and facilitate the use of climate information in their decision-making and planning operations.

This section provides an overview of some of the map rooms, as well as how to access them on the IRI web site.

# **:: INTERNATIONAL FEDERATION MAP ROOM**



▶ This map shows the difference between the current six-day total rainfall forecast and the long term average (1979-2004).

# Why is it important?

In responding to disasters such as cyclones, floods and other weather-related events, humanitarian organizations must decide when and where to send aid. Determining which areas are likely to be hit first or hardest by an event can mean the difference between life and death. Also critical is predicting disaster "hotspots", or areas at high-risk because of their location and the vulnerability of their populations (e.g., a densely populated flood plain.)

# What does it show?

Relative severity of forecast rainfall events, 1-6 days in advance; "predictions in context' maps showing where seasonal forecast indicates enhanced chance for continuation/reversal of previouslyobserved rainfall; and population and poverty maps.

### Who uses it?

International Federation of Red Cross and Red Crescent Societies' operations-support department

» Visit on web: http://iridl.ldeo.columbia.edu/maproom/.IFRC/

# :: FIRES MAP ROOM



**This map shows** daily rainfall estimates for Indonesia for the preceding dekad.

#### Why is it important?

Research on peatland fires in the Indonesian province of Central Kalimantan has uncovered a close correlation between satellite rainfall data and fire hotspot activity. In particular, rainfall during the dry season from June to October is critical in determining fire incidence. This finding means such data can help indicate whether an upcoming fire season will be more or less intense than usual, and can help authorities take preventive measures to avoid impacts

#### What does it show?

Daily precipitation estimates for Indonesia; graphs that show relationship between the number of fires and the NINO4 index in the previous month for the four Kalimantan provinces. Information also available in Indonesian Bahasa.

#### Who uses it?

Provincial environment, forestry and meteorological agencies.

» Visit on web: http://iridl.ldeo.columbia.edu/maproom/.Fire/

# **CONTRACT CONTRACT CONTRACT**



Normalized Difference Vegetation Index (NDVI) for the Africa/Middle East at a spatial resolution of 250 meters.

# Why is it important?

Swarms of desert locusts can travel thousands of miles and can threaten the food security and livelihoods of up to a fifth of the world's population. Recent plagues caused an estimated \$400 million in damages and affected 8.4 million people. Knowing when and where environmental conditions are right for these insects to multiply helps authorities control their numbers.

# What does it show?

The maps and analysis products illustrate recent climate conditions, such as rainfall and vegetation growth, which provide ideal breeding conditions for the locusts.

# Who uses it?

U.N. FAO Regional locust-control workers

» Visit on web: http://iridl.ldeo.columbia.edu/maproom/.Food\_Security/.Locusts

# : MENINGITIS MAP ROOM



**Overall distribution** of meningitis epidemics from 1841 to 1999.

# Why is it important?

Epidemics of meningitis occur worldwide. The "meningitis belt" in the Sahel region of Africa, however, has the greatest incidence of the disease. Epidemics occur throughout the belt in the dry season. They typically coincide with periods of very low humidity and dusty conditions and disappear with the onset of the rains, suggesting that these environmental factors may play an important role in the occurrence of the meningitis.

### What does it show?

Observed distribution of meningitis epidemics during 1841-1999; and a meningitis risk map derived from an environmentally-driven model of predicted probability of epidemic experience, based on absolute humidity profiles and land-cover type.

### Who uses it?

Disease-monitoring and surveillance staff Health researchers

» Visit on web: http://iridl.ldeo.columbia.edu/maproom/.Health/.Regional/.Africa/.Meningitis/

# : MALARIA MAP ROOM



**Enhanced Vegetation Index** in Southern Africa at a spatial resolution of 250 meters.

# Why is it important?

Economic development has played an enormous role in shaping the current global distribution of malaria. Where malaria is not adequately controlled, however, its distribution and seasonality are driven by various climate factors such as temperature, humidity and rainfall. By knowing when conditions are suitable for transmission of malaria, health officials are granted several weeks, sometimes months of warning to apply insecticides, stockpile medicines and alert hospitals.

# What does it show?

The maps illustrate models of climate suitability for seasonal endemic malaria, and recent climate conditions, such as rainfall anomalies, which may be associated with epidemic malaria in warm semi-arid regions of Africa.

### Who uses it?

National malaria-control program personnel in Africa

» Visit on web: http://iridl.ldeo.columbia.edu/maproom/.Health/.Regional/.Africa/.Malaria/

# **:: GLOBAL/REGIONAL/ENSO MAP ROOMS**



• Average wind climatology based on userdefined month and pressure level.

### Why is it important?

Having free access to reliable climate data and mapping products enables researchers, professionals and students to carry out their work. These comprehensive climate-information map rooms are intended to serve both the both national and international climate and meteorological community.

#### What does it show?

Global and regional precipitation and temperature anomalies, atmospheric temperature and circulation, ocean temperatures, political maps, and many others.

#### Who uses it?

Researchers Educators Journalists Graphic Designers Students

» Visit on web: http://iridl.ldeo.columbia.edu/maproom/.Global/