

IEDRO

Saving data, saving lives

INTERNATIONAL DATA RESCUE NEWS

VOLUME 4 ISSUE 5

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NICARAGUA



**Nicaragua: “A Country Profile”
How IEDRO helps in Nicaragua**

IEDRO NEWS

**UPCOMING & FUTURE DATES
IEDRO’s FAVORITE SEARCH ENGINE
STRIP DIGITIZATION PROJECT**

NICARAGUA A country in profile.

If Nicaragua

invokes the images of gunfire, say “*Hold*” to a post civil war country. With more than fifteen years since the Contra War, it is argued to be the safest country in Central America. Freedom of speech and expression guaranteed through the country’s constitution seems reflective of a nation whose citizens are passionate and it is alleged that even workers in the fields can quote Nicaraguan poetry.

Nestled between Honduras to the north and Costa Rica to the south, at 129,494 square km., Nicaragua is the largest yet least populated Central American country. With a 90% tropical climate, it boasts the second largest rainforest in the Americas after the



Brazilian Amazon. Geographically blessed with both Pacific and Atlantic shores, there are natural splendors waiting to be discovered.

Known to locals as “Mar Dulce” (Sweet Sea), Lake Nicaragua was created by a tectonic land shift and is separated from the Pacific Ocean by only a 17 km wide strip of land. As the land rose to form mountains the ocean waters of the

To the future
of Nicaragua,
“Salve a ti,
Nicaragua”
Hail to You,
Nicaragua.

Pacific were trapped in a grand basin forming this freshwater lake. It is home to an archipelago of islets – hundreds of islands of volcanic origin called “Las Isletas” and surprisingly freshwater sharks.

With only two seasons: rainy and dry, or winter and summer, Eastern Nicaragua is subject to heavy flooding along the upper and middle reaches of all major rivers, during the rainy season. From July through October, the coast is also subject to destructive tropical storms and hurricanes. In 1998 Hurricane Joan (Miriam) and Hurricane Mitch forced hundreds of thousands of Nicaraguans to flee their homes causing more than US\$1 billion in damage.

Running from the northern Pacific Gulf

of Fonesca, 28 volcanoes are not alone in their entrance into Costa Rica. As the second-poorest nation in the hemisphere, with unemployment at roughly 12.2%, with a further 35.4% underemployed, many Nicaraguans must cross the border into Costa Rica for work. Much needed money earned is sent home to support families. One of three children is malnourished. More than two thirds of Nicaraguan children under four have vitamin deficiencies. (*United Nations*, 2000).

Like many other impoverished countries, more than half the deaths of children under four are



caused by preventable diseases (diarrhea, pneumonia, malnutrition).

Tourism is predicted to be one of the saving graces of Nicaragua's economy. Already every year roughly 60,000 Americans visit Nicaragua with an estimated 5,300 U.S. citizens in residence.

As yet largely untouched by large resorts, it is believed that the country has the opportunity to enter tourism under the ban-

Current environmental issues: deforestation; soil erosion; and water

Current Priorities: reforestation and sustainable agriculture

ner of environmentally-friendly resort planning.

Kate Nyah Jax

Sources: 2000 United Nations Development Project report, World Bank, Institute for Nicaraguan Studies (IEN), La Prensa,

IEDRO in NICARAGUA

Data rescue for Nicaragua (www.ineter.gob.ni) with strip data digitization.

In Nicaragua precipitation is measured in over 100 locations using strip charts. Our project in this situation starts in the same manner, digitally photographing all charts at a sufficient resolution. The next step is somewhat trickier, as it is not a simple matter to read the charts for their respective information.

Continued on page 5 - **Nicaragua: Strip Chart Digitization Project**

INTERNATIONAL DATA RESCUE NEWS

RICK'S DATES



Rick will be in attendance:

Oct. 22-23, 2007
University of Maryland, MD

January 20-24, 2008
American Meteorological Society 2008 Annual Meeting
New Orleans Convention Center

UPCOMING DATES

Climate Information: Responding to User Needs (CIRUN) Conference

Two-day national conference Oct. 22-23, 2007 at the University of Maryland, College Park, MD Data Workshop

in partnership with NOAA, NASA and the American Meteorological Society.

Conference Objective: to foster dialogue between the providers of climate information and the diverse user community by connecting two groups: providers of climate information and the diverse community that uses it. Providers will learn how users from different sectors of society are affected by climate change, and what specific products they require. Users will hear what other organizations are doing to prepare for climate-change impacts and what sorts of information providers can produce now and in the future.

IEDRO's FAVOURITE SEARCH ENGINE

"Search the Internet and Make a difference"

www.goodsearch.com

search engine is powered by Yahoo.

It was created to allow users to search the Internet while donating money to their charity.

* Just name IEDRO as your NON-PROFIT*

IEDRO has received \$36.01 so far

\$
HELP
IEDRO
RAISE
FUNDS
\$

FUTURE DATES

January 20-24, 2008

The American Meteorological Society 2008 Annual Meeting New Orleans Convention Center

“Enhancing the Connectivity between Research and Applications for the Benefit of Society.”

Summary: A topic shaping our future weather, ocean, climate, and environmental enterprise. For successful efforts all sectors of society—academia, private, and government—must be involved. Focus: how mutual interactions between research and applications can be enhanced.

Including: "Hurricane Katrina: Looking back to look ahead" - weather community presentations on the meteorological event, with presentations on the social impacts. A special 2-day Hurricane Symposium. Full details of all events can be found at the AMS website.

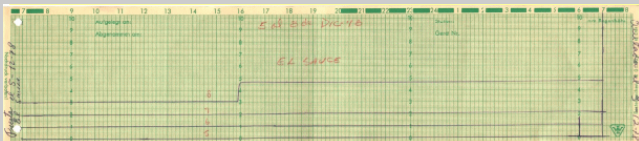
** Opportunity to tour Katrina-affected neighborhoods and volunteer for helping New Orleans Habitat for Humanity

**IEDRO
will have a
promotional
booth.**

**“Spreading the
word about the
great work we
do.”**

Nicaragua: Strip Chart Digitization Project *continued from page 3*

IEDRO is developing a computer program to read environmental charts showing rainfall, temperature, relative humidity, atmospheric pressure, sunshine, wind direction and speed, streamflow and other parameters and digitize the information within seconds instead of the 15 to 20 minutes to digitize these charts manually.



A sample precipitation strip chart

To protect the integrity of digitized data entering world data bases through in-country “manipulation” either intentionally or unintentionally IEDRO will maintain ownership of the **Strip Chart Digitization Project** software. Contact and discussions with KNMI, the Dutch Meteorological Service will continue.

Read Scott’s online blog: “My first use of the strip chart program”

<http://www.iedro.com/topics/2/posts/7>

Visit us on the web
www.IEDRO.org

The IDRN is published monthly by IEDRO.
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IEDRO's MISSION

The mission of the International Environmental Data Rescue Organization is to assist the scientific and educational communities of mainly developing countries locate, rescue and digitize all environmental data currently at risk on perishable media, and to make those digitized data freely and openly available to the world scientific and educational communities before it is too late.

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IEDRO is a registered 501©(3) organization

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Executive Director: Dr. Richard Crouthamel

Top 5 Critical Reasons to Rescue Data:

1. to predict the spread of diseases (malaria, yellow fever, West Nile Virus) so that doctors can reach and protect the children and the elderly before the disease hits.
2. to understand climate change and global warming by comparing past weather conditions with what's happening now.
3. to help keep the Earth's 1.8 Billion subsistence farming families from starvation by showing them the rainfall they can normally expect so that they can grow appropriate crops and save enough to get through the famine years.
4. to show engineers and builders the past extreme weather events so they can build bridges, dams, buildings to withstand these events when they occur again.
5. to show weather forecasters what weather patterns produced tornados, floods, hurricanes so that they can better predict those killers now.