

Data Rescue...Before it's too late!

International Data Rescue News

The first publication devoted entirely to environmental data rescue

Volume 1 Issue 3

September 2005

What's **Hot**?

IEDRO

(Booth 146)

86th AMS

Annual Meeting

(Page 4 inside)

Inside this issue:

Kenya Data Rescue back in operation	2
IEDRO's New Tax-exempt status	3
IEDRO & AMS	4
Marketing Raw Data and other Data Rescue Process Questions	5
How are the Data Rescue Sites doing?	6
News from the field	7
Frequently Asked Questions (FAQs)	8

IEDRO is growing!

The *I*nternational *E*nvironmental *D*ata *R*escue *O*rganization Ltd. (**IEDRO**) has just named its Board of Directors (**see the next issue of IDRN for details**). We have brought together professionals in the environmental sciences from inside and outside the United States. The "Board" will help set **IEDRO's** course and ensure the most effective and efficient organization to assist all countries with the rescue and digitization of their environmental data.

If any of our readers believe that serving on the IEDRO Board of Directors would be of interest, please provide us with your contact information and curriculum vi



pay but are reimbursed for travel and other expenses to participate in the annual Board of Directors meetings. All Board members serve two year terms, but are eligible for re-election.

The IEDRO Board

Chair

Richard Crouthamel - USA

Directors

Annie Hareau –Uruguay

Douglas Klotter –USA

Wilma Lutsch –South Africa

IEDRO now approved as non-profit organization by U.S. Internal Revenue Service! See what it means for us all ... Page 3

Please note: The IDRN is published monthly except during the months of June, July and August.

International Environmental Data Rescue Organization

Is the only non-profit organization whose focus is locating, rescuing and digitizing historic environmental data throughout the world. We depend on grants from charitable organizations and foundations as well as individuals to carry on our work. Check out: <http://IEDRO.COM>

Kenya on the move once again!

Mr. Martin Munkhondya, of Malawi continued his travels across Africa, replacing data rescue cameras and rejuvenating the data rescue teams. His most recent trip was to the National Meteorological Service of Kenya. With the able assistance of Mr J.M. Kimani, (photo to the right) the Kenya data rescue focal point, the Kenya Upper-air Data Rescue Project has begun again.



Mr. Munkhondya (right) with Kenya Data Rescue Focal Point - Mr. J. M. Kimani



The team members of the Kenya Upper Air Data Rescue Project from right to left, Mr D. Gikungu (with the beard) (Meteorologist) the team leader, Mr. J.M. Kimani, (senior Meteorologist) the Kenya focal point, Mr. J. Maina, (Meteorological Assistant), Mr. W. Nganyi, (Meteorologist), the Assistant team leader Mr. P. Nzioka (Met. Assistant and Mr. S. Mbugua (met assistant). The gentleman standing behind the group is Mr Josphat Nyangolo, (senior Meteorological Assistant)



Still a lot of work to do.



Mr. J.G. Warito, Deputy Director

IEDRO approved as non-profit organization by U.S. Internal Revenue Service!

The **International Environmental Data Rescue Organization, Ltd. (IEDRO)** has just been granted non-profit organizational status by the U.S. Internal Revenue Service under section 501 (c) (3) of the Internal Revenue Code effective April 12, 2005.

What does this mean to IEDRO?

The granting of 501 (c) (3) status is extraordinarily helpful to IEDRO. The ruling means:

1. IEDRO can apply for funding from most of the 70,000 U.S. charitable foundations whose own regulations limit their giving to only these exempt organizations. These charities provide funding for a wide range of activities such as environment, biodiversity, global warming, natural resources, hydrology, meteorology, climatology, disaster mitigation, all of which involve historic environmental data. It is estimated that these charities provide tens of billions of dollars annually to support studies and operations in these areas.
2. IEDRO can now take advantage of reduced rates for postage, as well as enjoying freedom from certain taxes and fees levied by Federal and State governments within the United States.
3. IEDRO is eligible for reduced or waived fees and costs associated with attending professional conferences, meetings and events such as the

annual meeting of the American Meteorological Society, being held in Atlanta, Georgia, January 29—February 2, 2005 (see page 4 of this issue)

4. IEDRO can now accept charitable donations directly from companies and individuals to carry on its data rescue work. These contributions are now fully tax deductible. A contributions page will be added to our web site soon to enable supporters to easily send us much needed support. A future issue of IDRN will explain where donations will be used and how contributors can designate their donations to support one or more of our activities.

**For those who wish to contribute now,
please mail your tax-deductible check or money
order to:**

IEDRO SUPPORT

901 Main Street

Deale, Maryland 20751 USA

IEDRO will send an acknowledgement for every contribution and a list of contributors will be added to our website.

Data Rescue... Before it's too late!



????????? Who cares about Data Rescue ????????

One of the main features of the American Meteorological Society Annual (AMS) Meeting “Impact Weather 2005” session: **What will be the top weather story of 2005?**
Is climate change changing the odds for extreme weather events?

Have we entered a period where we can expect more extreme weather events?

Is this a world-wide phenomenon?

Without a broad, accurate, and complete worldwide environmental data base, how will we know?

Potential events from the first 5 months of 2005 being considered by the AMS Program Committee for this year’s program include:

- **Rain and mud slides on the Pacific West Coast**
- **Winter storm season and in particular west coast snow events, milder winter in the east, cooler spring - energy implications**
- **Northwest drought including water management issues**
- **Utah flooding associated with snow pack**
- **Wildfires associated with drought**
- **Mt. St. Helen's potential for new eruptions**
- **African drought/ African Locust**
- **Flooding in China worst in 100 years**
- **Hurricane Dennis, unusual Cat. 4 in July**
- **Red Tide off the New England Coast**
- **Health and other risks associated with lightning strikes**
- **Growing season, energy inflationary trends**
- **Air Travel impact of thunderstorms, impact on operations, economics**

The events listed above in **blue type** are linked in some way to historical environmental observations either as input to explaining past events or as precursors of or statistical input for predicting future events. Perhaps we should provide some human and financial resources to rescue, preserve and digitize such data before it’s too late...before those data are gone forever.

IEDRO will be exhibiting at the 86th AMS Annual Meeting
(booth 146) <http://www.ametsoc.org/meet/annual/>

Marketing Raw Data and other Data Rescue Questions

1. When will the CDs that have been sent to NOAA be back again to their country of origin?

1. The National Climatic Data Center (NCDC) plans to return the CDs containing the observation images upon completion of the digitization of those images. NCDC plans to return two sets of CDs – one containing the images and the other set containing the digitized data

2. Why then should the country have back ups of CDs?

2. Back ups are needed for two reasons:

A. to have a safe set in case those sent to NCDC are lost in the mail. It would be quite tedious to have to re-photograph those images if a CD gets lost.

B. to have a complete set in case there is a need for anyone to visit the original data. Sometimes a researcher does not believe the digital values. The original record is needed to prove that the parameter value is real.

3. When the data rescue exercise is completed the digitized data is given freely to the world community. How can the participating country benefit unless it sells those data?

3. This is perhaps the most misunderstood part of the data rescue process. All participating countries agree to make their digitized data freely and openly available to the world community. The following are the reasons...

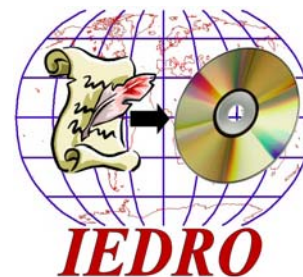
A. If countries sell their basic observational data, most hydrometeorological researchers in national meteorological services and universities cannot afford to purchase those data. Therefore, in that case, research projects that depend on those data will stop and advancement in the profession of weather forecasting and severe storm and climate forecasting will stop. These research projects ultimately will greatly benefit the entire world as well as individual countries.

B. If a country sells basic observational (raw) data then it will of course have to buy basic observational data from its neighboring countries to do its own forecasting and warnings and research. There is no net profit to be made there.

C. In most courts of law, digitized data are not allowed to be entered into evidence since there is always a chance that the original observations were incorrectly keyed (digitized). Therefore only the original paper based observations or photographic copies are allowed to be entered into evidence. We have no objections of a country selling photographic copies of the original observation sheets. This data rescue project has enabled each country to transfer its paper-based observations to images on CD-ROMs which can be marketed.

D. Once a country's basic observational data are digitized, inexpensive and free computer programs exist to transform those data into value-added products (such as wind roses, Log-P Skew-T diagrams, maps showing temperature extremes, etc. These "value-added products" can be marketed.

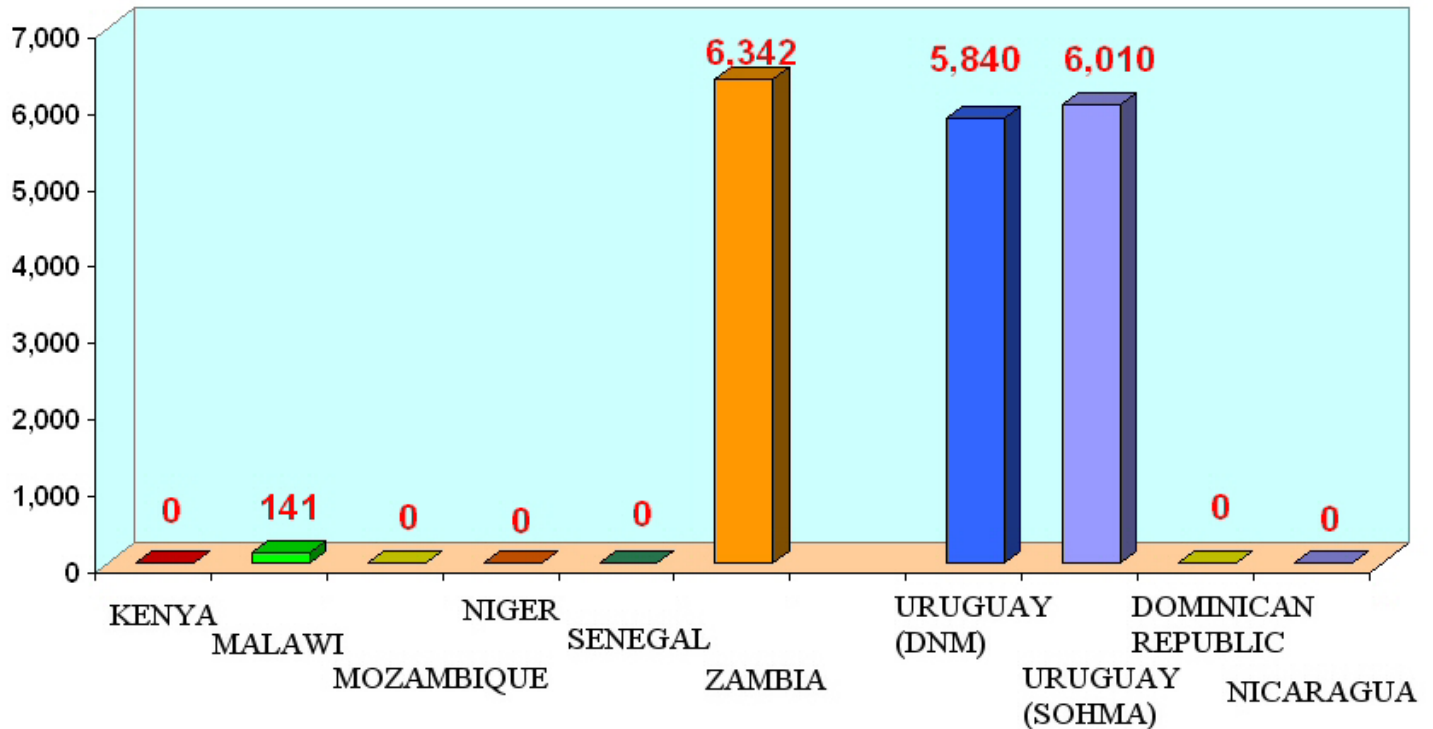
E. Without the Data Rescue Program funding, how long and how much money would it take for each participating country to perform the process on its own? The Data Rescue Program is spending about US\$4.00 to digitize each upper-air observation and about US \$0.50 to digitize each surface observation. The Data Rescue Program's investment for each country averages about US \$70,000. How long would it take for each country to sell its raw data to equal that investment?



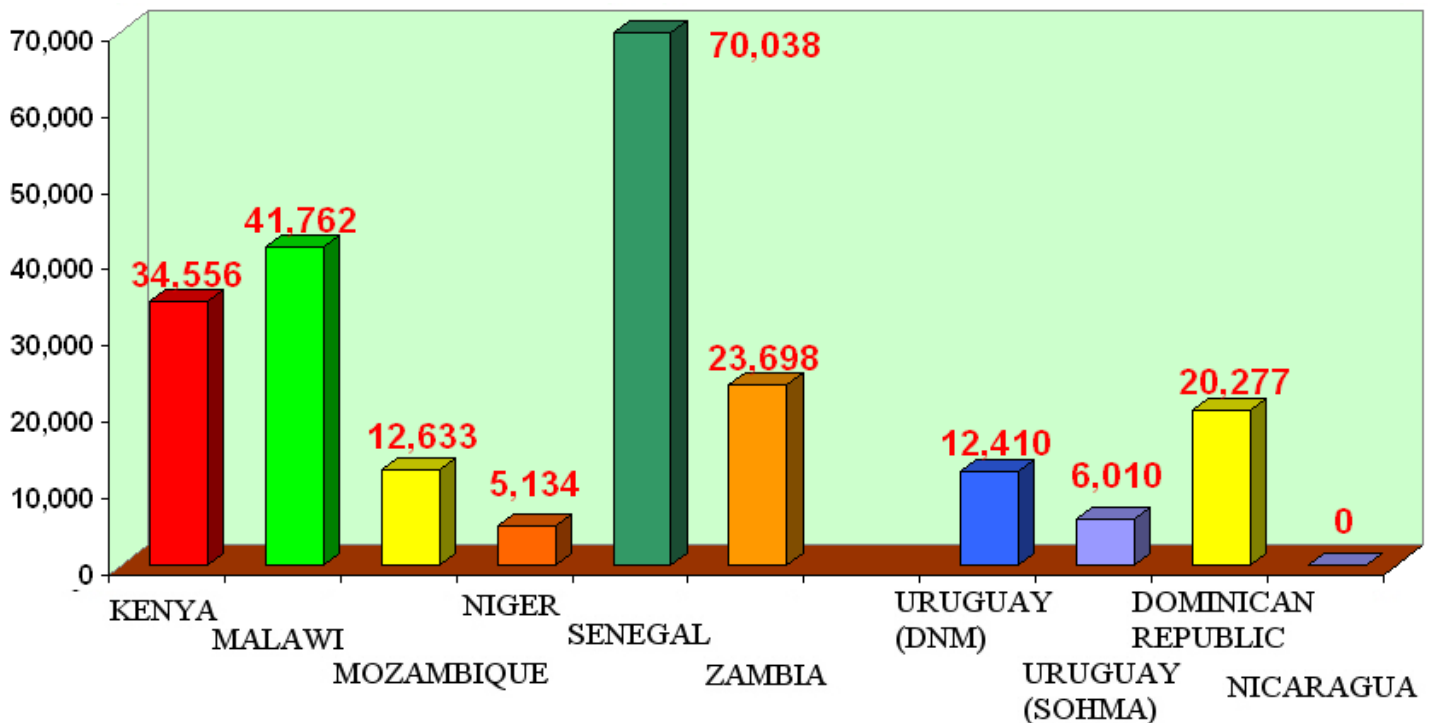
Data Rescue...Before it's too late!

How are the Data Rescue sites doing?

Number of New images received by country, since the last newsletter



Total Number of images received by country, as of the publishing of this newsletter



News from the field

KENYA Mr. Munkhondya (Malawi) has installed replacement cameras. The Kenya Data Rescue program is once again operating (see article page two).

MALAWI Martin Munkhondya, Data Rescue Team Leader visited Kenya to install replacement cameras and to assist in getting the data rescue effort operational again. The Malawi data rescue team continued to photograph additional observations with the replacement cameras installed earlier.

MOZAMBIQUE No news received

NIGER The Niger Meteorological Service has accepted the services of Mr. Munkhondya (Malawi) to assist them to get their data rescue program operational. Replacement cameras have been procured by NOAA and will be sent to Niger prior to Mr. Munkhondya's arrival

SENEGAL Mr. Munkhondya (Malawi) traveled to Senegal in August to install replacement cameras to help revive the Senegal Data Rescue program. (article in the next issue of IDRN)

ZAMBIA Ten CDs containing 6342 images from Zambia were received by NCDCA. It is a good feeling to have our friends in Zambia back in our data rescue family.

DOMINICAN REPUBLIC CDs continue to be received.

NICARAGUA INETER (Nicaragua's national meteorological service) supplied several additional sample Hydrometeorological charts to allow NOAA to continue to develop a computer program to digitize the graphical data represented including precipitation, water levels, temperature, humidity, etc.

URUGUAY (DNM) Lic. Raul Michelini, Director of the National Meteorological Service (DNM) provided the services of his data rescue staff in introducing SOHMA to the data rescue process.

URUGUAY (SOHMA) Several CDs containing over 6000 surface observations have been received by NOAA and according to the National Climatic Data Center, the images received from SOHMA have been "perfect".

Data Rescue... Before it's too late!





Data Rescue...Before it's too late!

Please submit articles for the **IDRN** to the address below.

International Environmental Data Rescue Organization, Ltd.

901 Main Street, Deale, Maryland 20751 U.S.A.

Phone: 410-867-1124; Fax: 410-867-9259

E-mail: ADMIN@IEDRO.COM Web site: IEDRO.COM

Frequently Asked Questions

How are countries chosen for participation in the Data Rescue Programs?

Data Rescue programs usually begin due to one of the following reasons. (1) Someone recognizes the importance of specific historical environmental data in their own area of interest. (2) A data gathering organization, such as a national meteorological service, realizes that their hydrometeorological observations that exist on paper, microfilm/microfiche or magnetic tape are becoming lost as the media on which they exist, deteriorates. Regardless of the motivation, what has to happen is that the desire for data rescue must be made known to organizations which support such activities...like **IEDRO**. Once we receive a request, we respond with a series of questions that will help better define the type of environmental data in need of rescue and eventual digitization, the amount of data and the vulnerability of those data. The next step is to contact funding organizations whose interests support environmental data rescue and digitization. Once we have defined the data rescue task and have secured funding, a program plan is devised and the work begins.

A third, very important requirement for **IEDRO** support is that the owner of the data to be rescued and digitized agrees that all digitized data will be made freely and openly available to the world community for either no cost or a nominal cost that would cover its reproduction and transmission.

Digitization Progress

Malawi Keying of radiosonde data completed
PIBAL data being keyed; follow-up quality control begun

Senegal Upper-air data being keyed

Kenya Upper-air data being keyed

Mozambique Keying format being built



IDRN is published free to subscribers by
The International Environmental Data Rescue
Organization, Ltd. (IEDRO)

No government funds are used.