

GLobal unique disaster IDentifier number (GLIDE)

<Enabling the Linking of National and Global Databases>

<http://glidenumber.net>

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GLIDE

How can we convince the national policy makers that

Disaster Reduction
is a **MUST** for
Sustainable Development in Asia

- A single disaster can wipe out annual GDP of a country.
- Natural Disasters can be the biggest obstacle to social security of a country.

Numbers of Victims of Recent Natural Disasters in Asia

Year	Country	Disaster	Number of Dead and Missing
1998	Afghanistan	Earthquake	4,700
	PNG	Tsunami	2,600
1999	Turkey	Earthquake	15,500
	India	Cyclone	9,500
2001	India	Earthquake	13,805
2002	Afghanistan	Earthquake	More than 800
	Korea	Typhoon	246
2003	Sri Lanka	Landslide	236
	Iran	Earthquake	More than 40,000

Ratio of Amount of Damage to GDP (Asia) (1975-2002)

Country Name	Year	Disaster Type	Damage/GDP
Armenia	1988	Earthquake	908%
Mongolia	1996	Wild Fire	192%
Mongolia	2000	Wind Storm	97%
Lao, PDR	1993	Wind Storm	27%
Nepal	1987	Flood	26%
Georgia	1991	Earthquake	22%
Mongolia	1990	Wild Fire	21%

How can we make this kind of info available to convince the financial authorities?

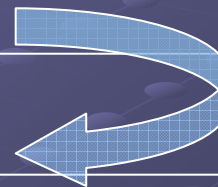
GLIDE - For Effective Disaster Information Sharing & Management

Background

- Each organization has its own databases using its own coding system
- No access between databases
- It's not easy to relate one event data to another database's data



Difficulty to match data

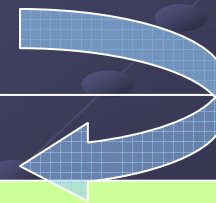


Different names are used;

(West) India Earthquake, Gujarat Earthquake, Bhuj Earthquake, Kobe Earthquake, Hanshin- Awaji Earthquake, Hyogo-Nanbu Earthquake

Different dates are registered;

Difficult to identify when a flood/drought started



By introducing GLoBal unique disaster IDentifier

- Easy access to various data sources
- Rapid automatic linking by search engine



Facilitate Effective Info. Sharing

GLIDE (GLobal unique disaster IDentifier)

“ADRC proposed universal tool for effective sharing of existing disaster data sources”

(Example)

Tsunami Disaster in
the Indian Ocean

The Indian Ocean
Earthquake and Tsunami

Tsunami Disaster on
December 26, 2004

Hazard Code

Serial Number

TS-2004-000147-IDN

Year

ISO Country Code

{ DR: Drought EQ: Earthquake EP: Epidemic FL: Flood TS: Tsunami SL: Slide VO: Volcano
WV: Wave / Surge WF: Wild Fire ST: Wild Storm }

Hazard Code

-2003		2004-			
DR	Drought	DR	Drought		
ET	Extreme Temperature	CW	Cold Wave	HT	Heat Wave
ST	Wind Storm	TC	Tropical Cyclones	EC	Extratropical Cyclone
		TO	Tornadoes	VW	Violent Wind
		SL	Severe Local Storms		
FL	Flood	FL	Flood	FF	Flash Flood
SL	Slide	LS	Land Slide	AV	Snow Avalanche
		MS	Mud Slide		
VO	Volcano	VO	Volcano		
EQ	Earthquake	EQ	Earthquake	FR	Fire
WV	Wave/Surge	TS	Tsunami	SS	Storm Surge
EP	Epidemic	EP	Epidemic		
IN	Insect Infestation	IN	Insect Infestation		
WF	Wild Fire	WF	Wild Fire		
OT	Other	OT	Other		
CE	Complex Emergency	CE	Complex Emergency		
AC	Accident	AC	Accident		

GLIDE number generation and utilization

○ Information Sharing (4)

Event

GLIDE operators input the information on the GLIDE number web-site
⇒ GLIDE number generated automatically

The web-site automatically links to other data base fitted GLIDE number

Report ↓ ↑ Information

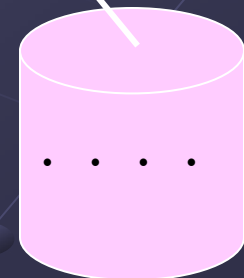
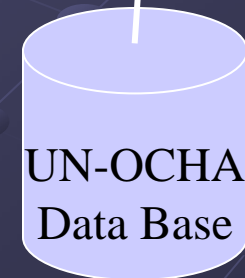
Registered User

< GLIDE number web-site >

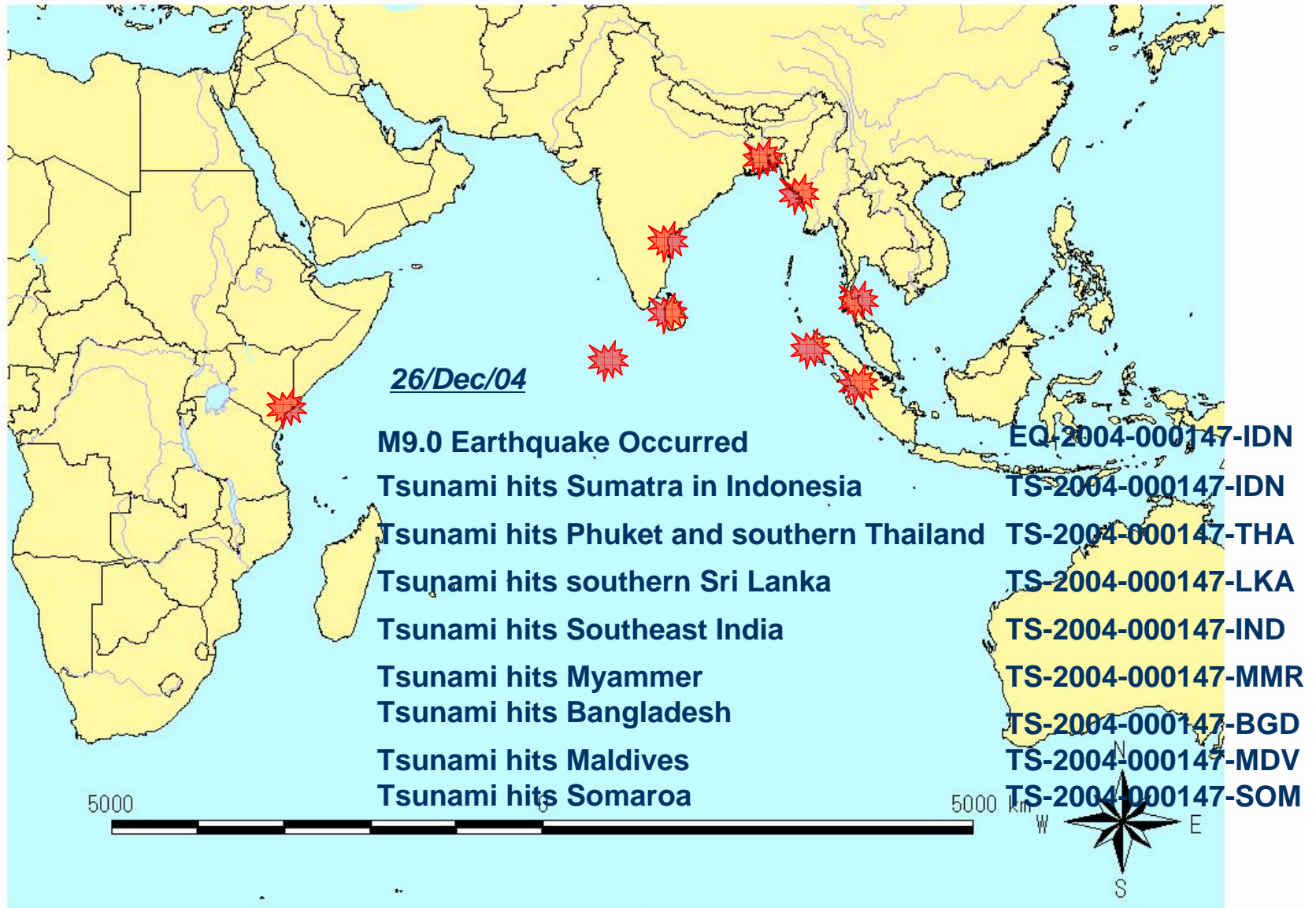
The screenshot shows the GLIDE number web-site search interface. At the top, there is a navigation bar with links for Home, Preferences, Login, Register, Help, and Contact us. Below this is the 'GLIDE Search' section, which includes three dropdown menus for 'Select Continent' (listing Africa, Americas, Asia, Australia, Europe), 'Select Country' (listing All countries), and 'Select Event' (listing All events). To the right of these menus is a 'Get results as:' section with options for Statistics, Charts, and Tabular report. Below the search filters is a 'Type keywords:' field and a 'Looking for:' dropdown set to 'All Words'. There are also date selection fields for 'Search between these dates: (yyyy-mm-dd)' with 'From' and 'To' fields, and a 'More than:' field set to '10' with a 'killed' label. A 'Search' button is located at the bottom right of the search section. Below the search section is a 'Search Results:' table with columns for 'Glide Number', 'Event', 'Country', and 'Comment'. The table contains two rows of results: 'FL-2003-123456-CAN' for a Flood in Canada and 'ST-2003-123457-CAN' for a Storm in Canada. To the right of the search results is a 'Natural Disasters' section with a list of events and a 'Technological disasters' section with a list of events.

Glide Number	Event	Country	Comment
FL-2003-123456-CAN	Flood	Canada	Large floods in Nova Scotia and Prince Edward Island
ST-2003-123457-CAN	Storm	Canada	Ice Storm in Ottawa, Toronto

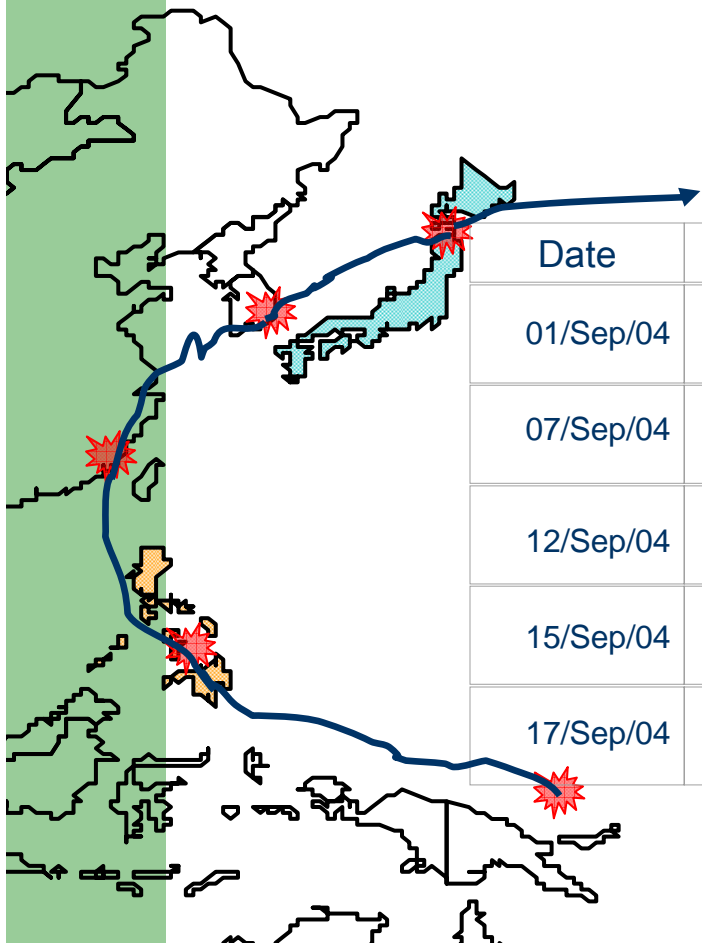
Link to the Data Base with GLIDE number



Easy info. sharing tool for Indian Ocean Tsunami



Easy info. sharing tool for Ongoing and multi countries Disasters



Date	Phenomena	GLIDE
01/Sep/04	WMO generate GLIDE for typhoon A	TC-2004-000817-
07/Sep/04	Many houses were lost in Philippines	TC-2004-000817-PHL
12/Sep/04	200 people evacuated to avoid StormSurge in China	SS-2004-000817-CHI
15/Sep/04	10 people dead by Landslide in Korea	LS-2004-000817-KOR
17/Sep/04	1000 houses were flooded in Japan	FL-2004-000817-JPN

Global IDentifier (GLIDE) Number

Automatic Link to ReliefWeb

http://www.reliefweb.int/w/rwb.nsf
/GLIDE?OpenForm&GLIDE=EQ-
2003-0630-IRN



The latest Disaster information

GLIDE: EQ-2003-0630-IRN

Iran (Islamic Republic Of) : Earthquake : 2003/12/26

ReliefWeb

Duration	2003/12/26
Country or District	Iran (Islamic Republic Of)
Name	Earthquake

Headline (Source, Date)

Personal Injury

BBC news 2004/01/16

ReliefWeb

Latest GLIDE Documents

Home Search Site Map Contact Help

Select - Menu -

Search

Latest documents pertaining to GLIDE No. EQ-2003-0630-IRN

[\[ReliefWeb Maps\]](#)

◀ Previous Next ▶

[21-Apr-2004](#) | **IRCS**

IRC Psychological support team response-Bam earthquake

[13-Apr-2004](#) | **IFRC**

Bam operation enters new phase

[13-Apr-2004](#) | **IRCS**

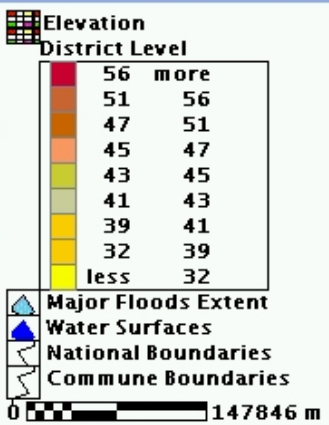
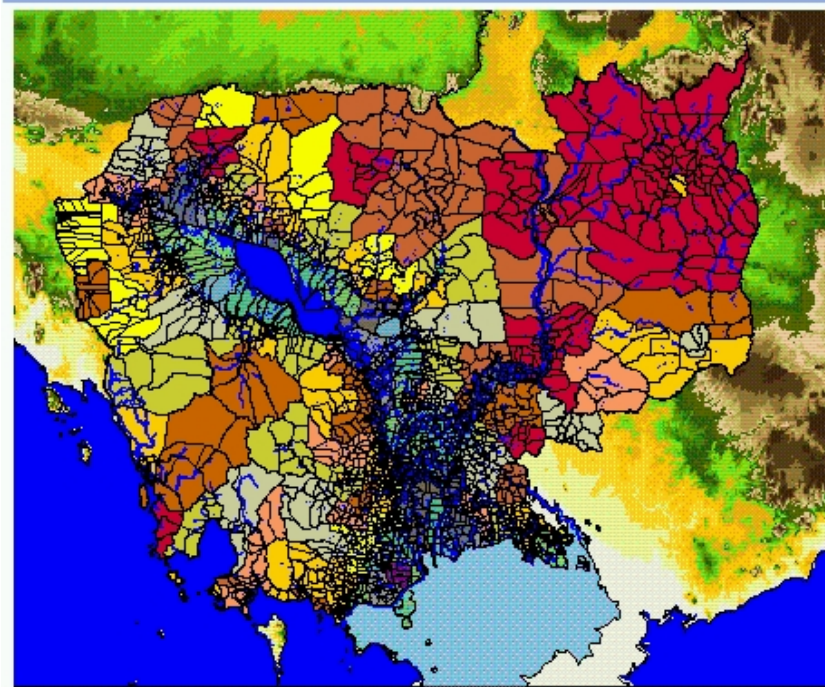
Distribution of assistance in Bam



Map | Table | Chart | Metadata | Links | Home | Refresh | Print

Layer: Area: Andoung Meas Indicator: % Underweight (<5 yrs)

% Underweight (<5 yrs), Unspecified View All Fit Enlarge Shrink Legend Off



FAO is using GLIDE on the web-GIS!

Map Source:

Major Floods Extent
Mekong River Commission
GLIDE#: FL-2000-000438-KHM
GIEWS Special Reports and Alerts 2000
Water Surfaces
Ministry of Public Works and Transport; Japan International Cooperation Agency

GLIDE#: FL-2000-000438-KHM

Indicator Data Source:

Provincial Department of Health (PDH)
Ministry of Planning (MOP)

<http://www.asiafivims.net/cambodia/index.jsp>

Indicator Description:

Underweight represents body mass relative to age and refers especially to lightness that is a deficit and is defined as low "weight-for-age" or below -2 standard deviations (or two z-scores) of the median value of the National Center for Health Statistics/WHO International Growth Reference for weight-or weight-for-age. Weight-for-age is influenced by the height of the child and his or her weight and is thus a composite of stunting and wasting. Weight-for-age is an outcome of both short and long-term food shortages, other forms of vulnerability or poor health conditions. Therefore, prevalence of underweight children is suggested as one of the main variables to be included in the Cambodia FIVIMS.

Current Disaster Events[Data sources](#)

Events in this list are picked up from multiple sources and automatically analyzed by a computer program to determine the likelihood of humanitarian intervention.



Click on any icon to get report on the event.
The events included in the map above are less than 4 days old.

See [Archive](#) for more

Earthquakes *Orange alerts or M>6 in the last 4 days* | [more events...](#)

[Taiwan](#), (M 6.2, <1m people)

[EMSC](#)—Saturday, April 01, 2006 10:02:00 AM () **New**

[Indonesia](#), (M 5.9, <1m people)

[EMSC](#)—Friday, March 31, 2006 9:14:00 PM

Ongoing OCHA coordination[Log in V.OSOCC](#)

Events in this list are currently active in UN OCHA's Virtual On Site Operations Coordination Centre.

V.OSOCC Disaster Related information from Asgard, ReliefWeb and UNOSAT

FL-2006-000027-IDN

[Flood and Landslide in Sulawesi, Indonesia](#)

[ACT Rapid Response for floods in northern Sulawesi, Indonesia](#) 17 Mar 2006

[Medical supplies timely reached Manado, Sulawesi Utara Indonesia](#)

Mar 2006

[See all items...](#)

FL-2006-000027-IDN

EQ-2006-000028-MOZ

[Earthquake in Mozambique, 7.5M, 1 km depth](#)



[Mozambique](#), (M 7.5, <1m people)

GDACS is using GLIDE on the web!

<http://www.gdacs.org/>

LS-2006-000024-PHL

[Landslides in St. Bernard, Southern Leyte, Philippines](#)

[UMCOR Hotline March 31 2006: Philippines](#) **New**

[A needless toll of natural disasters](#) 1 day 19 hours 15 min ago

[See all items...](#)



[Leyte Island - Village of Guinsaugon - Pre-Disaster](#)

ReliefWeb

News [more...](#)

[OPT: Gaza Strip avian flu update, 24 Mar 2006](#)

[HEALTH INFORMUM](#) 3/28/2006

[France donates 1 million euros to WFP operations in Yemen](#)

WFP 3/28/2006

[Kenya: Nutritious food for the children of a drought](#)

CARE 3/28/2006

[Sudan: Arab League should](#)

[refuses to field candidate](#)

IRIN 3/28/2006

[Congo: Water shortage hits Brazzaville](#)

IRIN 3/28/2006

[OPT: Emergency funding needed for Lutheran World](#)

<http://glidenumbers.net>

GLIDE_{number}

Automated GLobal IDentifier Number Generation Site

Enter

CDERA and FAO participated.



LA RED



Expecting more partners to join.

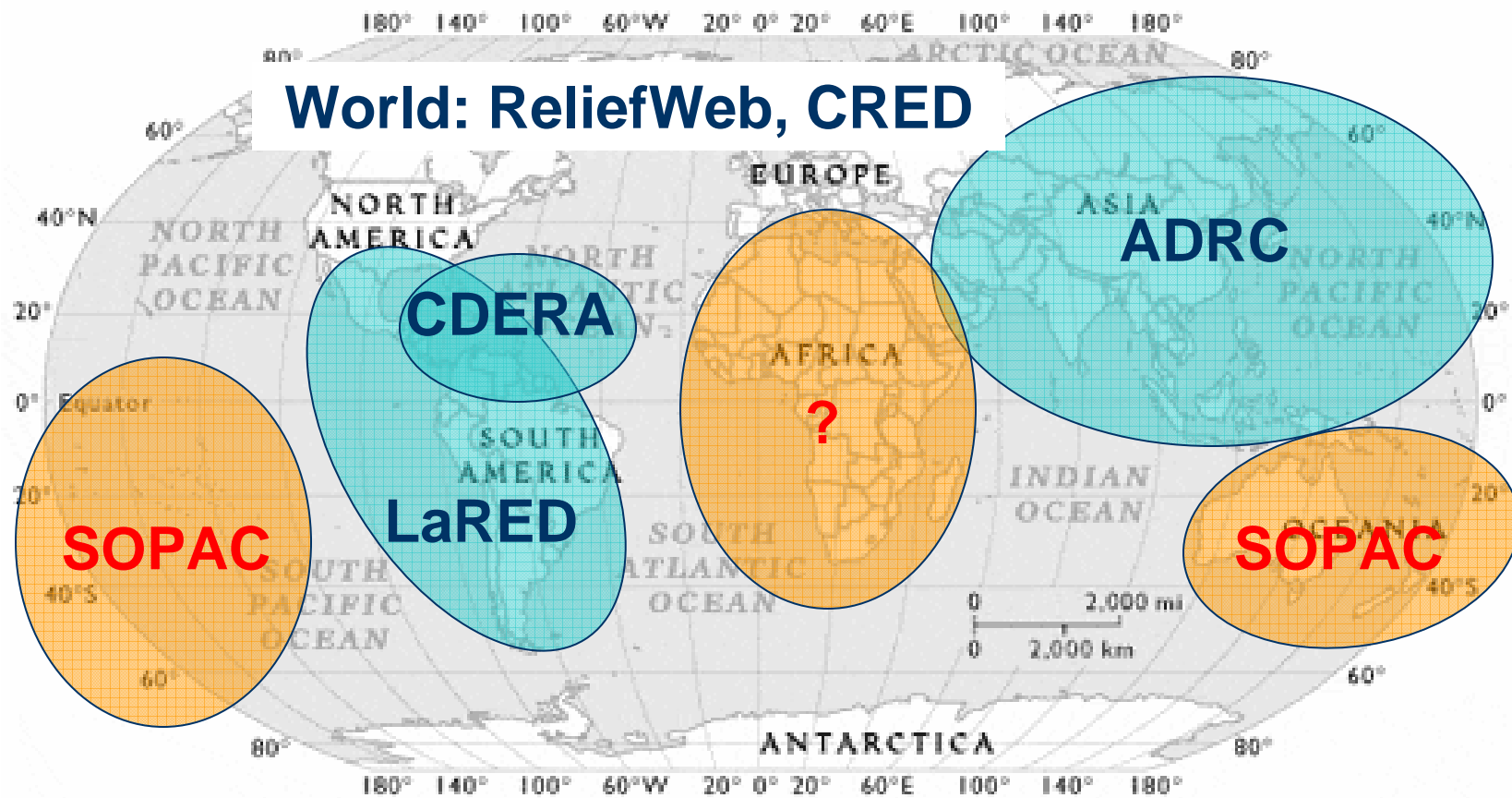
Current status of GLIDE utilization

GLIDE Operators	ADRC, CRED, LaRED, ReliefWeb and <u>CDERA (Caribbean Disaster Emergency Response Agency)</u>
using GLIDE for databases	ReliefWeb, ADRC, <u>FAO</u> , CDERA, <u>NIED (National Research Institute for Earth Science and Disaster Prevention of Japan)</u>
preparing for use	CRED, DRI, LaRED, <u>NII (National Institute of Informatics of Japan)</u> , <u>JAXA (Japan Aerospace Exploration Agency)</u> , <u>CEPREDENAC</u>
Endorsed by	IRI, ISDR, UNDP, WMO

In addition, some disaster related organizations and research institutes have expressed interest.

GLIDE promotion

Need for GLIDE operators



GLIDE Road Map for Disaster Information Sharing

2006

- Seminar for GLIDE users
- User's Manual
- Minor Version-up of GLIDENumber.net
 - Development of easy linking tool
 - Improvement of user interface by web-GIS
 - Add satellite meta image data
 - Add historical EM-DAT

2007 -

- Seminar for GLIDE users
- Minor Version-up of GLIDENumber.net
- Expanding GLIDE for future event (= Risk Assessment)

ADRC provides Satellite information with JAXA

Asian Disaster Reduction Center(ADRC)

Asian Disaster Reduction Center

ADRC TOP

MENU

English	Japanese	
Professional use	Academic use	General use

- DB + WWW search
- The Latest Disaster Information
- JAXA Satellite Information for Disaster Management**
- Glossary on Natural Disasters
- Training Information Database
- ADRC E-Net
- Conference and Disaster Studies
- Internet Exhibition
- Disaster Information of Member Countries
- ADRC Highlights
- Country Report from Member Countries
- UN/ISDR
- ADRRN (Asian Disaster Reduction & Response Network)
- Archives
- The Great Hanshin-Awaji Earthquake Database
- ADIC Accident and Disaster Database
- VENTEN-Internet based GIS Center Information
- Links
- ADRC Events & Publications
- Visitors

SiteMap

E-Mail to ADRC

Go to "Satellite Information for Disaster Management" page.

The mark in a map is being inter locked with Topics.

Tsunami Awareness Questionnaire Survey

Natural Disasters Data Book-2004

"Inamura no Hi" Tsunami Awareness

TDRM Good Practices

ACDR 2006 15-17 March in Seoul

IRP International Recovery Platform

TOPICS

- 06/03/05 ■ At least five people were killed and over 200 injured when a tropical storm swept over several villages near the Sundarbans mangrove forests in Bangladesh's south, police said on Sunday.
[Goto JAXA SIDM]
- 06/02/23 ■ An earthquake of a magnitude of 7.5 on the Richter scale struck Mozambique at 12:19 AM (local time) on Thursday 23 February 2006. At least two Mozambicans have died.
[Goto JAXA SIDM]
- 06/02/21 ■ At least 24 people have been killed in floods and landslides triggered by several hours of torrential rain in the city of Manado, Indonesia's eastern province of North Sulawesi.
[Goto JAXA SIDM]

Go to "Satellite Information for Disaster Management" of these events.

Satellite Information for Disaster Management

JAXA Satellite Information for Disaster Management

JAXA Satellite Information for Disaster Management

GLIDE Number:

Event:

Duration: / ~ /

Region/Country: /

Comment Keywords:

GLIDE Number	Event	Duration	Country	Comment	Goto
TO-2006-000032-BGD	Tropical Storm	2006/03/05	Bangladesh	At least five people were killed and over 200 injured when a tropical storm swept over several villages near the Sundarbans mangrove forests in Bangladesh's south, police said on Sunday.	ADRC
EQ-2006-000028-MOZ	Earthquake	2006/02/23	Mozambique	At least 27 people have been killed in floods and landslides triggered by several hours of torrential rain in the city of Manado, Indonesia's eastern province of North Sulawesi.	ADRC
MS-2006-000026-PHL	Mudslide	2006/02/17	Philippines	A mudslide triggered by heavy rains buried a whole village in the Philippine province of Southern Leyte. Reportedly more than 200 people were killed in the slide with about 1,500 people missing.	ADRC International Charter
LS-2006-000024-PHL	Flash floods	2006/02/14	Philippines	Philippine social welfare officials say six people have now died in the city of Zamboanga.	ADRC
FL-2006-000017-BRA	Heavy Rain	2006/01/31	Brazil	Three people were killed on Wednesday, January 25, 2006, when torrential rains destroyed their houses, bringing to 16 the number of people killed in the past five days, authorities said on Wednesday.	ADRC
				Devastating floods have killed at least 13 people in Bolivia and brought misery to more than 12,000 families following	

Managed by **GLIDE** numbers

Web-GIS is provided by **"Digital Asia Project"** of Keio University.

Go to ADRC latest information page of this event.

Go to Disaster Charter page of this event.

[\[Search Photos\]](#) [\[Search Satellite Images\]](#) [\[Search Observation Requests\]](#) [\[Request New Observation\]](#) which does not depend on a specific disaster.

Related information to the specific disaster.

JAXA Satellite Information for Disaster Management - Disaster Details

GLIDE Number:	TO-2006-000032-BGD	At least five people were killed and over 200 injured when a tropical storm swept over several villages near the Sundarbans mangrove forests in Bangladesh's south, police said on Sunday.
Event:	Tropical Storm	
Duration:	2006/03/05	
Country or District:	Bangladesh	

[\[Goto ADRC\]](#)

Related Locations of Satellite Images and Photos

Locations of satellite image and photo are pointed on this map.

Related Recent Photos

Thumbnail	Date/Poster/Title	Comments
	2006/03/05 12:34 by ADRC Title	This is comments about this photo
	2006/03/05 12:34 by ADRC Title	This is comments about this photograph.
	2006/03/05 12:34 by ADRC Title	This is comments about this photograph.

[\[View all images\]](#) [\[Add new image\]](#)

Related Satellite Images

Thumbnail	Observation Date	Sensor	Product	Comments
	2006/03/05 12:34	AVNIR	Level-1B	This is comments about this satellite image.
	2006/03/05 12:34	PRISM	Level-1R	This is comments about this satellite image.

Satellite Images

Request more observation

Related Observation Requests

Request ID	Requested Date	Observation Span	Event	Country	Organization	Status
123456	2006/03/05 12:34	2006/03/05 - 2006/03/11	Tropical Storm	Bangladesh	ADRC	Waiting for Authorization
123456	2006/03/05 12:34	2006/03/05 - 2006/03/11	Earthquake	Mozambique	ADRC	Rejected or Cancelled
123456	2006/03/05 12:34	2006/03/05 - 2006/03/11	Floods and landslide	Indonesia	ADRC	Waiting for Observation
123456	2006/03/05 12:34	2006/03/05 - 2006/03/11	Mudslide	Philippines	ADRC	Processing

[\[Request More Observation\]](#)

Go to ADRC latest disaster information page

From the Site

Request more observation

Related photos from Site

JAXA Satellite Information for Disaster Management - Photo Details

Posted Date:	2006/03/05 12:34
Poster:	ADRC
Title:	Title
Comments:	This is comments about this photograph.

Photo




[\[Edit this Photo\]](#) [\[Add New Photo\]](#)

High Resolution Image for ADRC member Countries

JAXA Satellite Information for Disaster Management - Satellite Image Details

Observation Date:	2006/03/05 12:34
Sensor:	PRISM
Product:	Level-1B
Comments:	This is comments about this satellite image.

Satellite Image



Click to get more high resolution satellite image.

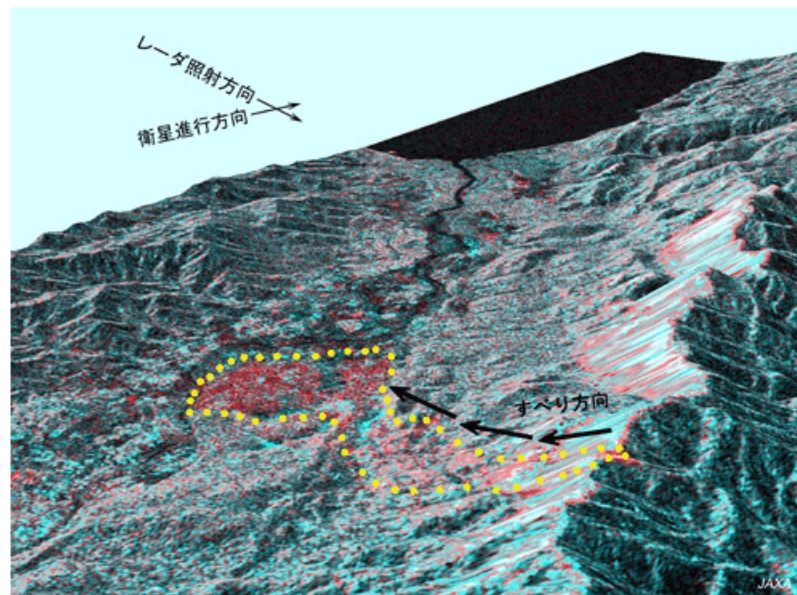
* This image is about 1 or 2 MB GeoTiff (it means several hundred meters as surface imagery).

[\[Download this image from FTP site\]](#)

Not only Raw Images but also Analyzed information

JAXA Satellite Information for Disaster Management – Satellite Image Details	
Observation Date:	ALOS/PALSAR: 2006/02/24, JERS-1/SAR 1996/02/02
Sensor:	ALOS/PALSAR and JERS-1/SAR (R: PALSAR, G and B: SAR)
Product:	Analyzed image
Comments:	<p>North-west view of landslide area in Leyte Island, Philippines Bird's eye view of the landslide stricken area: Color composite image with observation data by the PALSAR and JERS-1/SAR (R: PALSAR, G and B: SAR) The area circled by yellow dots is estimated as a disaster stricken area based on the color composite image.</p> <p>Layte Island Observed from the North-west Side: As the two radars used for the analyses, the PALSAR of the Daichi and the SAR of the Fuyo-1, share almost the same characteristics (such as radio frequencies), as well as the incident angles being almost the same, we can study the difference before and after the crisis by overlapping the images in a relatively simple way. For underscoring the difference, the image taken by the Fuyo-1 is colored with blue and green, and the one taken by the Daichi with red to make a color composite image. By doing so, we can confirm the geographic change in mountainous area and difference of brightness in the flatland. The brighter the area has become, the redder they are in the image.</p> <p>The image is a bird's-eye view of those changes explained above observed from the north east. The height information was acquired from the global altitude data with a 90-meter resolution that was compiled by the cooperative analysis of each country based on data observed by the Space Shuttle Endeavour mission which Astronaut Mori of JAXA participated in. In image, you can see the smooth area on the slope on the east side of the rigid line on the right-hand side of the image, but it was created due to the relative position between the inclination angle of the radar wave and the slope, thus it does not indicate the landslide.</p>

Satellite Image

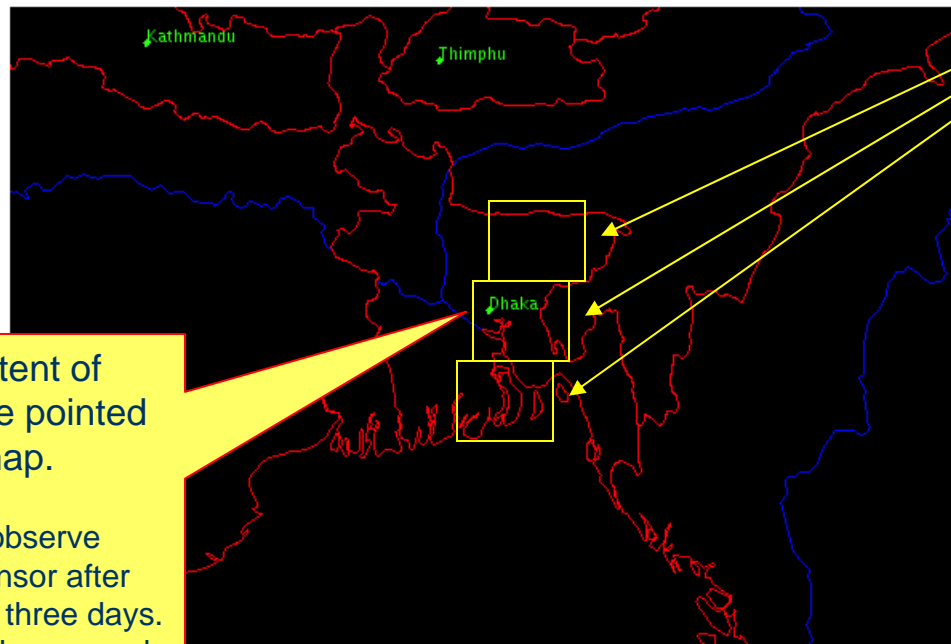


Request page for New Observation

JAXA Satellite Information for Disaster Management - Request New Observation

GLIDE Number:	DO NOT USE THIS FORM, unless you can identify disaster or GLIDE number. If you can, goto top page and click "GLIDE Number", then click "Request More Observation".
Event (type of disaster):	(Select) ▾
Observation Span:	1 week(s) from the beginning of observation. * These values depend on the selected event above.
Region/Country (location of occurrence):	(Select) ▾ / (Select) ▾
Organization:	Bangladesh * This value depends on your logged-in account.
Additional Information on the disaster:	<input type="text"/>
Additional Instructions (shipping instructions):	<input type="text"/>

Observation Locations



Selected locations on the map:

first extent
second extent
third extent

Delete selected extent

[+]
[-]
[Address]

Legend

- Layer1
- Layer2
- Layer3
- Layer4
- Layer5
- Layer6
- Layer7

Reset Submit Request

Download request form: [\[MS-Word\]](#) [\[PDF\]](#)

[E-Mail to JAXA](#) / [E-Mail to ADRC](#)

Selected extent of observation are pointed on this map.

- * In ALOS, it can observe with the optical sensor after observation within three days.
- * The extent is 70 km around.

[How to request observation](#)

GRIP GLIDE Proposal

- Establishing and running a governing body of GLIDE, which has a mandate to deliberate and decide important technical/non-technical matters concerning GLIDE.
- Maintaining glidenumbers.net (server maintenance)
- Entrusting an expert to review periodically the GLIDENUMBERS generated
- GLIDE promotion materials describing the mechanism of GLIDE, merits in having GLIDE-compatible databases, how to generate GLIDE, etc.
- Holding workshops to encourage countries and sub-national/national/regional institutions to use GLIDE.

