



DesInventar Disaster Inventory System

DesConsultar User's Guide Query Module for DesInventar

***Version 8.1.9
2009***



<http://www.osso.org.co>



<http://www.desenredando.org>

Introduction

As we have seen that DesInventar is a powerful software system for organizing and storing information about Disasters. As a complement to such functionality, DesConsultar is a module that allows the user to ask questions about the information in the database in an organized and flexible way.

In order to access the query module, the user should choose the “DesConsultar” button located in the database information screen.

Disaster database of the Republic of Vanuatu

Periodo: 1870-00-00 - 2009-07-26

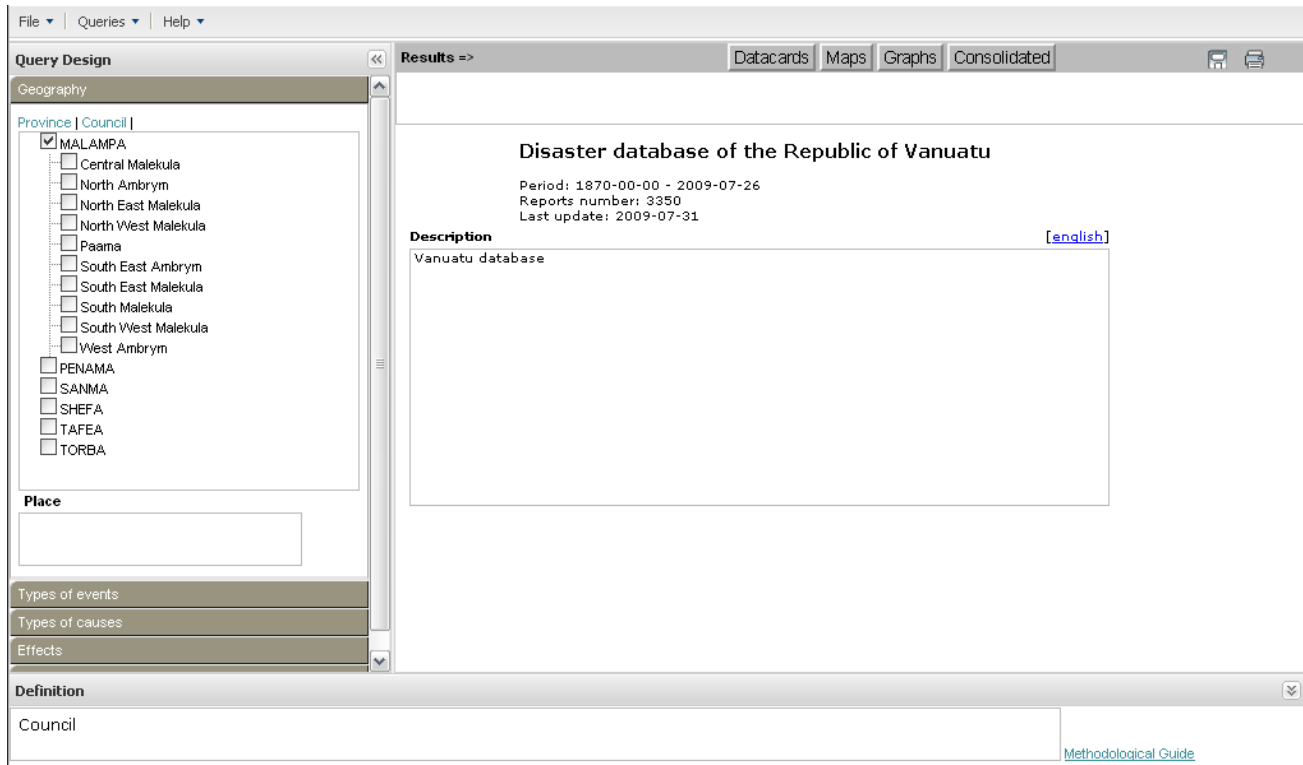
Número de fichas: 3104

Ultima actualización: 2009-07-26



Region/Database Information Screen

The above action will open the main window of DesConsultar which shows all the options available to the user.



DesConsultar main window

Query Design DesInventar/DesConsultar

DesInventar allows the user to make queries about the database using a powerful set of options which are directly related to the information and fields stored in the database. The query parameters are grouped into the following categories:

- Geography Selection
- Type of Events
- Type of Causes
- Effects
- Data cards

Geography Selection

The screenshot shows a window titled "Query Design" with a "Geography" tab selected. Below the tab, there are two sections: "Province | Council" and "Place". The "Province | Council" section contains a list of provinces and councils with checkboxes. The "MALAMPA" province is selected, and its sub-items are listed below it. The "Place" section is currently empty.

Province Council	Selected
MALAMPA	<input checked="" type="checkbox"/>
Central Malekula	<input type="checkbox"/>
North Ambrym	<input type="checkbox"/>
North East Malekula	<input type="checkbox"/>
North West Malekula	<input type="checkbox"/>
Paama	<input type="checkbox"/>
South East Ambrym	<input type="checkbox"/>
South East Malekula	<input type="checkbox"/>
South Malekula	<input type="checkbox"/>
South West Malekula	<input type="checkbox"/>
West Ambrym	<input type="checkbox"/>
PENAMA	<input type="checkbox"/>
SANMA	<input type="checkbox"/>
SHEFA	<input type="checkbox"/>
TAFEA	<input type="checkbox"/>
TORBA	<input type="checkbox"/>

Place

DesConsultar – Geography Selection

Located at the left of the query screen, the Geography Selection panel allows the user to precisely navigate and select the geography items of interest. The procedure is simple; just click and select the geography items that will be included in the query.

Notice that when the user selects an upper level geography item (Province, State etc.) in the query results are included all data cards that also belongs to any of the geography items that are part of the upper geography item. (i.e. include all municipalities in a selected province)

The **Place** field allows the user to select data cards using some specific terms from the **Place**, this is a text field and you can enter one or more terms for your search.

If you didn't select any geography items it means that you are making a query in all the geography.

Type of Events/Type of Causes

Types of events	Types of causes
<p>Ctrl+Click for multiple selection or de-selection</p> <ul style="list-style-type: none">AccidentAvalancheBiological migration or lossChange in coastlineContaminationDROUGHTEARTHQUAKEElectrical stormEpidemicExplosionFIREFlash floodFogFOREST FIRE	<p>Ctrl+Click for multiple selection or de-selection</p> <ul style="list-style-type: none">Atmospheric conditionsBehaviourContaminationDesignDeteriorationDroughtEarthquakeEl Niño – Southern Oscillation (ENSO)ErosionExplosionFaultFogGaleHuman errorInundationLa Niña (Pacific cold episode)LandslideLeakLocationLocaina
<p>Duration</p> <input type="text"/>	
<p>Observation about the event</p> <input type="text"/>	<p>Observations about the cause</p> <input type="text"/>

From these panels, you can select one or more types of events or types of causes for your query

You can also enter search terms for specific fields related to the Event or Cause in the data cards.

If you didn't select any Event or Cause in these fields, it means that there are no restrictions in the query and all events/causes are included in the query results.

Effects of Disasters



Effects

People and Housing

- Deaths
- Missing
- Wounded, sick
- Affected
- Relocated
- Homes affected
- Evacuees
- Victims

Sectors

- Transport
- Communications
- Aid organisation installations

Losses

- Loss value \$
- Loss value US\$

Other losses

Observations about the effects

The fields in this panel apply to query information about the effects of disaster as recorded in the data cards within the database. You can make the following types of queries:

- Test if there was any effect at all for a specified field.
- For the numeric fields in the data cards, you can make a query about the numerical value of the field using the operators: less than, more than or between.
- For the text fields of effects, you can make queries using one or more search terms.

Data cards Information Queries

Datcards

Range Date format YYYY MM DD

From: 1870

To: 2009

Sources

Datacard Status

Published

To approve

Draft

To delete

Serials Include Exclude

This panel allows you to define query parameters about fields in database related to the data cards such as the date of disaster, sources, status of data cards and disaster serial identifiers.

Completing and Executing a Query

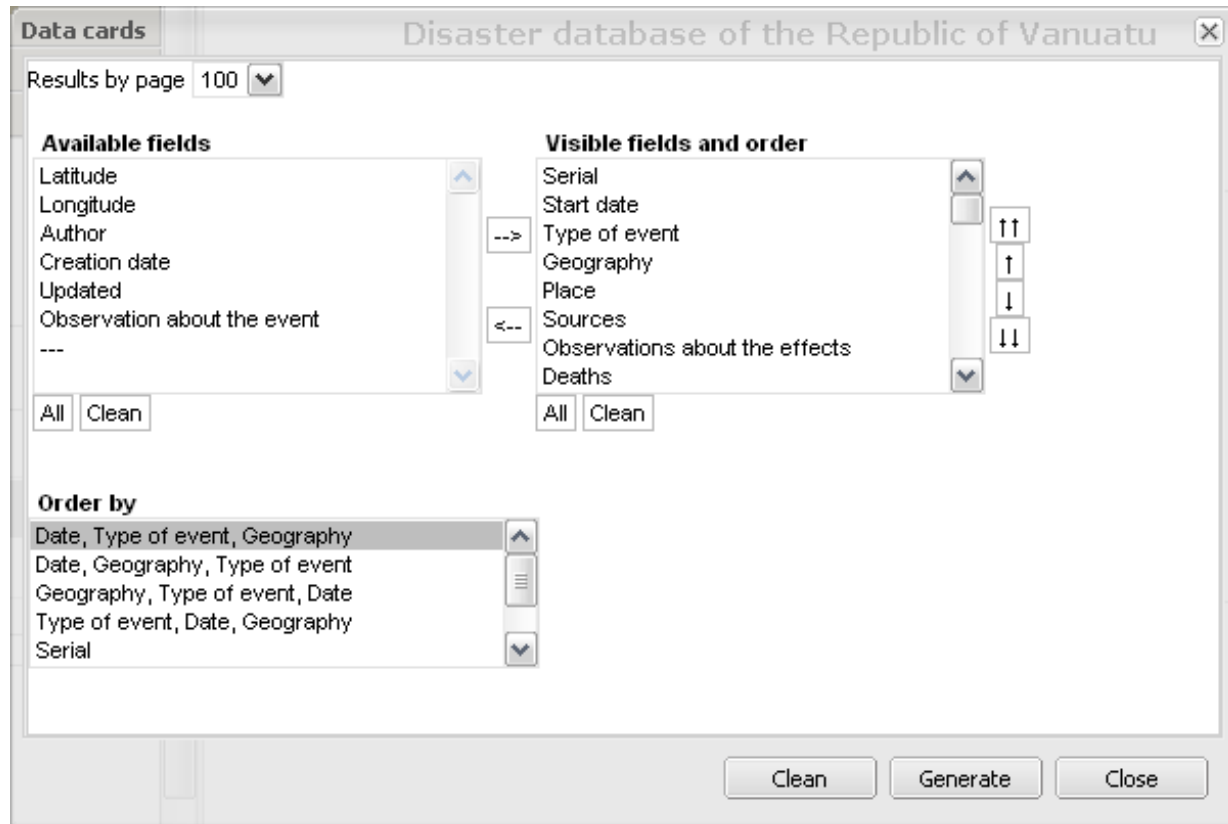
After all elements of the query have been defined, you can use any of the function buttons located at the top of the window to execute the query, display and analyze the results.



View Data cards Functionality

The data cards button executes the query against the database, retrieves the results and shows them in a grid where the user can navigate and see all the data retrieved.

The function uses the following screen to setup the parameters of the grid window:



After you have selected the fields that you want visible in the data grid and have chosen the order for the results, press the **Generate** button.

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Reports: 3104

Row	Serial	Start date	Type of event	Geography	Place	Sources
1	VO-1870-0000-001	1870-00-00	Volcanic Activity	PENAMA/South Ambae/	Aoba, SE side Lake Manaro Lakua; Lake Voui?	http://www.volcano.si.edu/
2	VO-1870-0000-002	1870-00-00	Volcanic Activity	PENAMA/North Ambae/	Aoba, SE side Lake Manaro Lakua; Lake Voui?	http://www.volcano.si.edu/
3	VO-1870-0000-003	1870-00-00	Volcanic Activity	PENAMA/East Ambae/	Aoba, SE side Lake Manaro Lakua; Lake Voui?	http://www.volcano.si.edu/
4	VO-1870-0000-004	1870-00-00	Volcanic Activity	PENAMA/West Ambae/	Aoba, SE side Lake Manaro Lakua; Lake Voui?	http://www.volcano.si.edu/
5	VO-1870-0000-101	1870-00-02	Volcanic Activity	MALAMPA/West Ambrym/	Ambrym. Eruption is UNCERTAIN	http://www.volcano.si.edu/
6	VO-1870-0000-102	1870-00-02	Volcanic Activity	MALAMPA/North Ambrym/	Ambrym. Eruption is UNCERTAIN	http://www.volcano.si.edu/
7	VO-1870-0000-103	1870-00-02	Volcanic Activity	MALAMPA/South East Ambrym/	Ambrym. Eruption is UNCERTAIN	http://www.volcano.si.edu/
8	VO-1871-0000-001	1871-00-01	Volcanic Activity	MALAMPA/West Ambrym/	Ambrym	http://www.volcano.si.edu/
9	VO-1871-0000-002	1871-00-01	Volcanic Activity	MALAMPA/North Ambrym/	Ambrym	http://www.volcano.si.edu/
10	VO-1871-0000-003	1871-00-01	Volcanic Activity	MALAMPA/South East Ambrym/	Ambrym	http://www.volcano.si.edu/

Query Results Data Grid

Map Functionality

DesInventar offers an amazing module for generating maps from the recorded data, giving the user a tool to analyze the geographical distribution of disasters. The following screen allows you to define the parameters for the maps.

Define range	Legend	Color
1 10	Between 1 - 10	Yellow
2 100	Between 11 - 100	Yellow
3 1000	Between 101 - 1000	Orange
4 10000	Between 1001 - 10000	Red
5 100000	Between 10001 - 100000	Red
6 1000000	Between 100001 - 1000000	Black
7	Between 1000001 ->	Black

Map Parameters

The following is a brief description of the meaning of each parameter. The best way to understand each of them is to experiment and build different maps.

Identification of areas : This parameters defines if in the map the names or codes of each geographic element are show.

Level of representation : Defines the geographic level at which the selected variable is grouped.

Variable to be represented : From this list, the user can choose which variable the map will show, the variables are related to the data card fields.

Ranges, legends and colors : This list of items allows the user to define the different ranges for the data and the colors used to represent it.

After all parameters have been set, select the **Generate** button and map will be displayed, the result should be something like the next image.



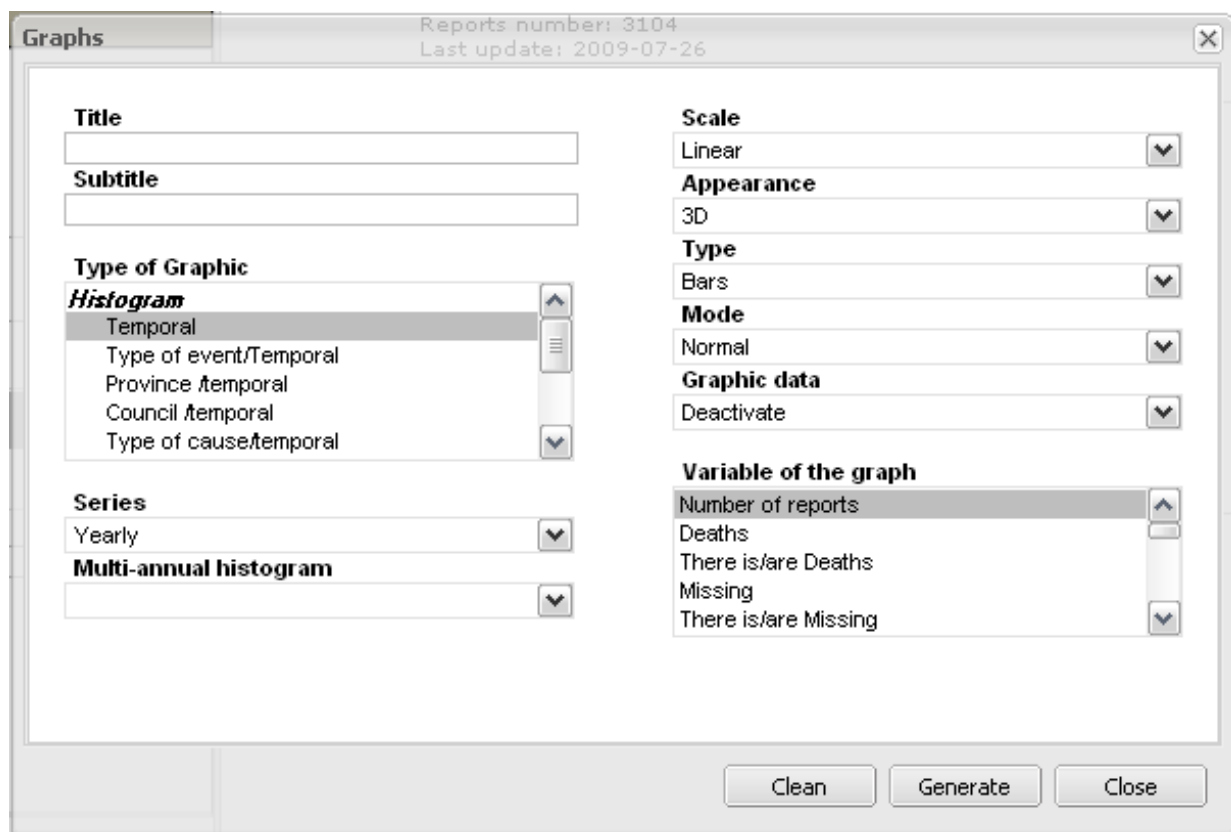
The module of maps in DesInventar is developed using standards such as WMS, allowing us to combine in a simple way layers from different sources. This enhances the utility of the information presented and makes the map an extraordinary element for analysis.

Graphics Functionality

The graphs module of DesConsultar is a tool to produce graphics about the information in the database. The user can choose which variable to represent and the time scale to produce the different types of graphics.

Graph Parameters

The following image shows the graph module parameters window:



Title/Subtitle : Define the title and subtitle to show at the top of the graphic.

Scale : By default the graphs are shown in a linear scale, but the user has the option to produce logarithmic graphs using this option.

Appearance : Defines if the graphic is shown in a 2D or 3D type of graph.

Type : Defines the type of graphics to show. The options are Bar, Lines and Pie. Some graph

types are restricted when combined with other parameters.

Mode : Defines if the data series in the graph are shown individually or in accumulative mode in which the values are being added along the time.

Graphic data : This parameter defines if the value of each data point is shown in the graph. This is useful with few values but can be a distraction when the graph has many values.

Variable of the graph : Allows the user to choose which variable the graphic will show.

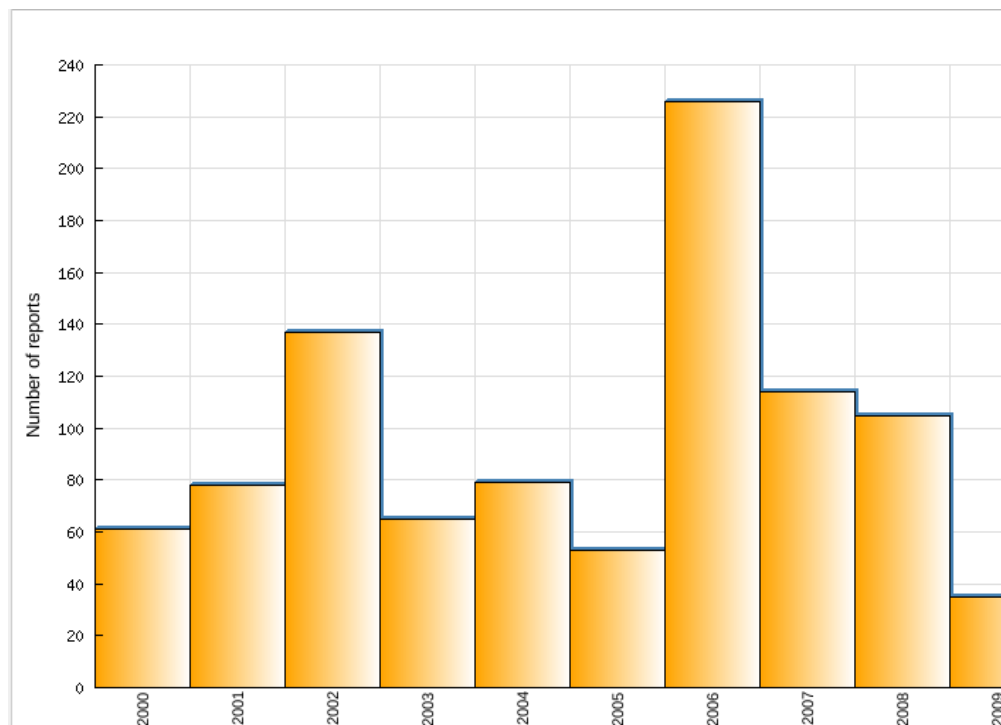
Type of Graphic : Allows you to choose which type of graphic to show. Generally Desconsultar handles two types of graphics, Histograms and Comparatives. Each of them has several types, which we will show examples of each of them later.

Series : Defines the temporal grouping of data in the graphs of type histogram, the value of this field can be yearly, monthly, daily, weekly.

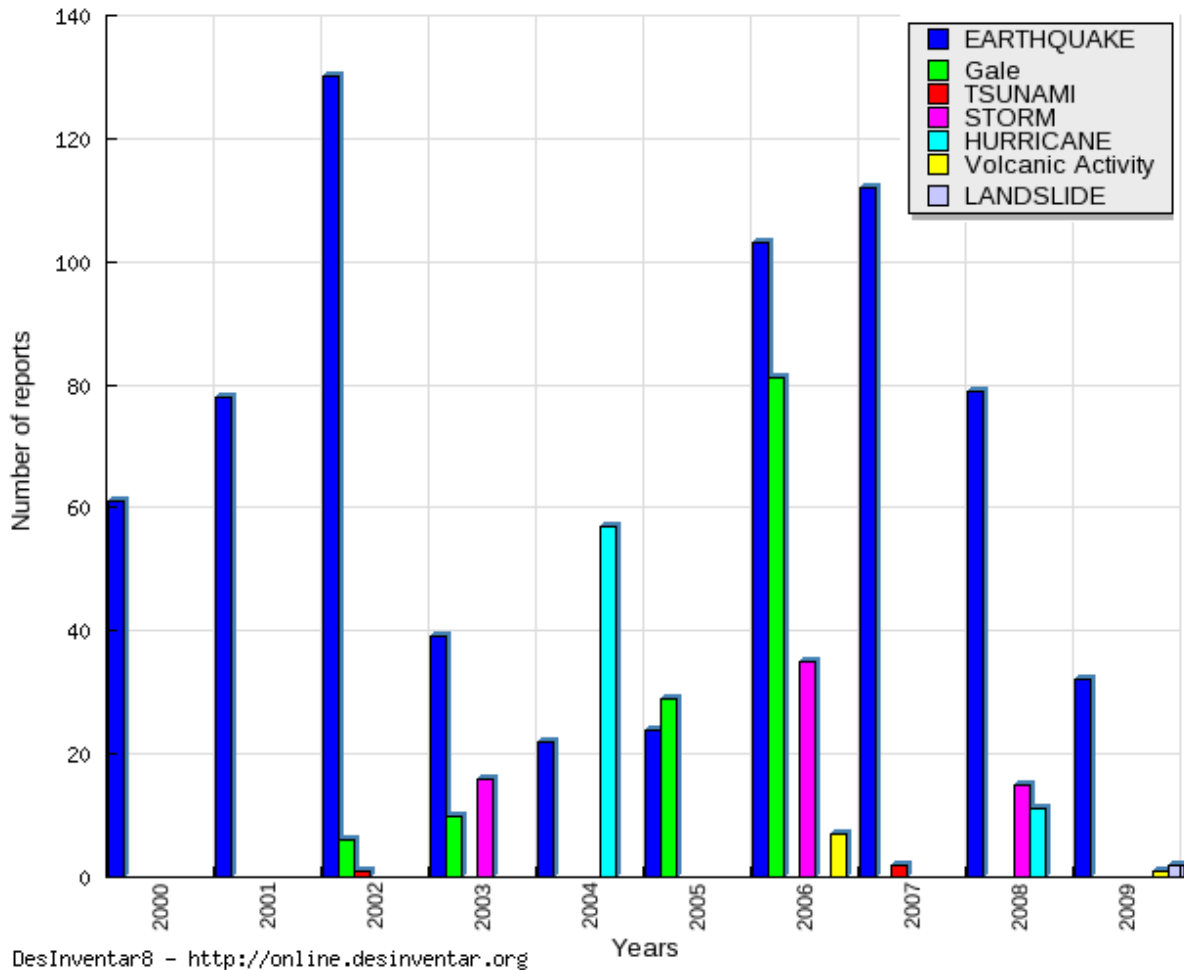
Multi-Annual histogram : Use this parameter to specify an additional level of grouping for the data, which can be by month, week, day.

Graph Results

After the parameters have been set, the **Generate** button produces the graphic, let's see some results according to the graphic type.

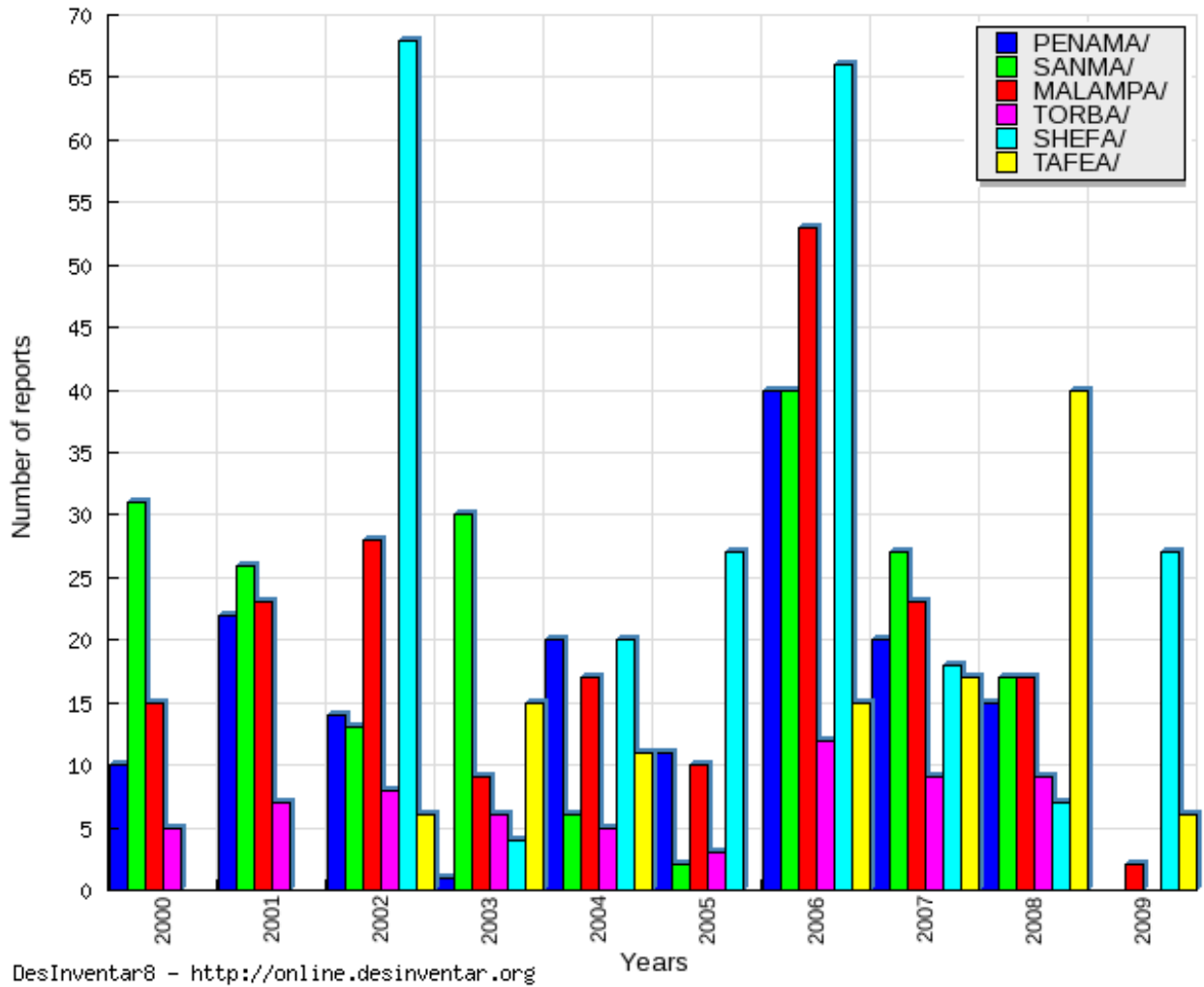


This is a simple Histogram Temporal, shows the data grouped according to the series parameter, in this example the data is grouped by each year and the variable is the Number of Reports in each year.

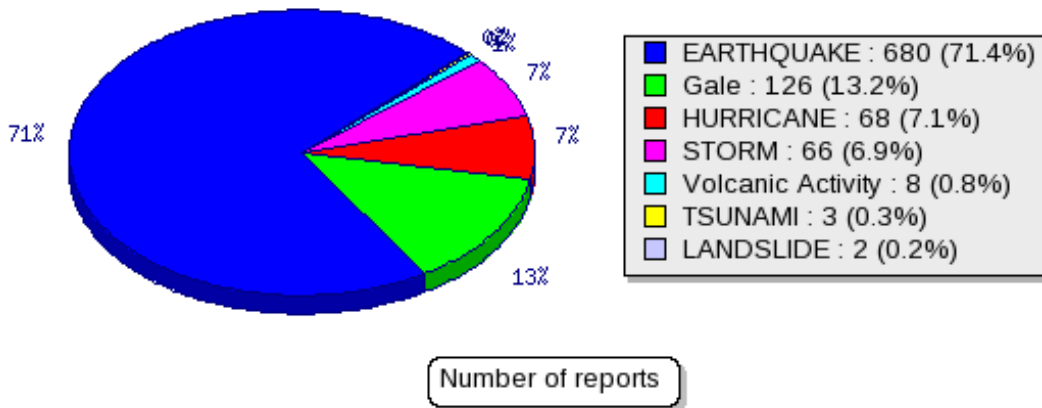


This is a Histogram: Type of Event/Temporal graph, it shows the data grouped by year but also discriminated by Type of Event.

Finally, here is a Histogram using year as the period and the first level of Geography as the second parameter. (This data is from the Vanuatu database)

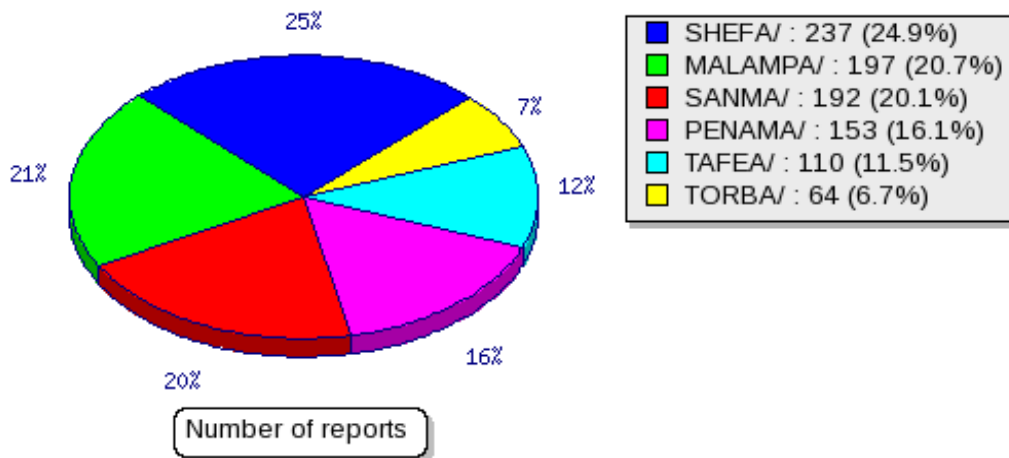


The other main type of graphic is Comparatives. In these the selected variable is shown against the selected type of comparative, for example by Type of Events.



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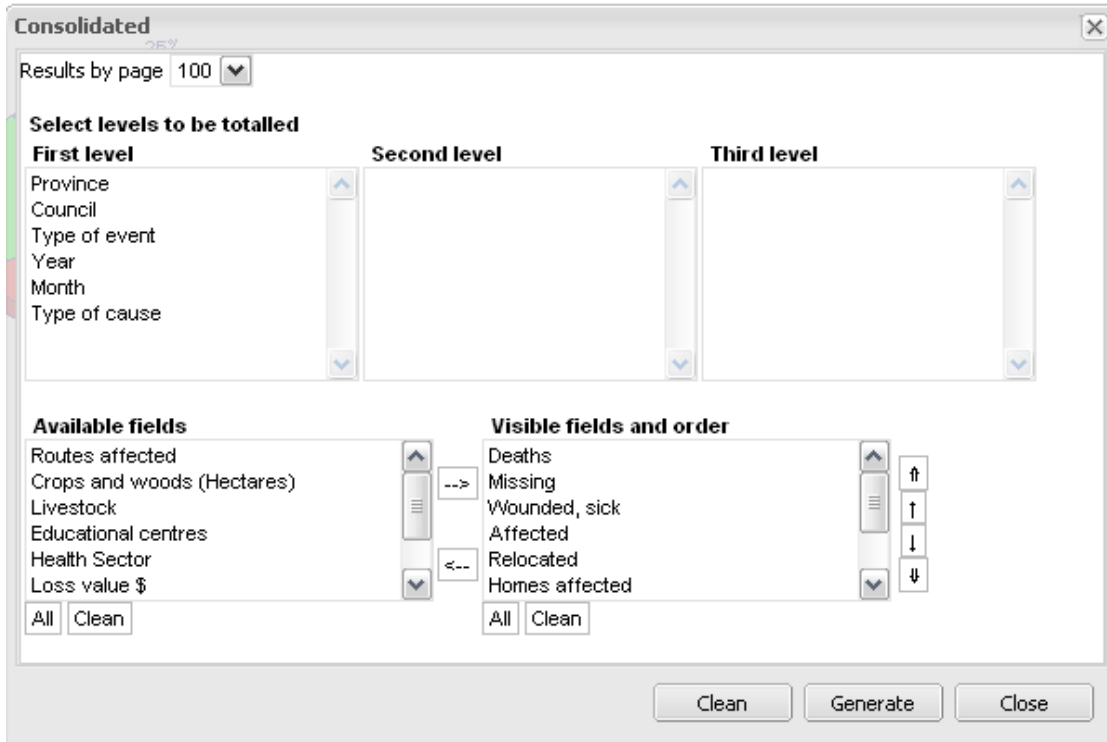
Here is a Comparative showing the Number of Reports distributed by Province (again, using the Vanuatu database as sample)



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Consolidated Data

The consolidated data functionality allows you to show in a data grid the data result from the query grouped by several parameters.



The parameter window has an upper section with fields to choose the level of data to be aggregated and a bottom section which defines the columns to show in the result window.

The following is an example of the result window:

Pages: 1 From 1 Number of consolidated: 9 | Reports: 2479

Row	Departamento	Reports	Deaths	Missing	Wounded, sick	Affected	Relocated	Homes affected	Evacuees	Victims	Homes destroyed
Totals		2060	2397	232	34962	853218	1355	5282	51352	348075	3863
1	CHUQUISACA/	103	156	5	2332	25278	0	0	0	9570	127
2	LA PAZ/	751	680	152	1289	190915	15	1275	1725	72482	1192
3	COCHABAMBA/	362	588	29	5976	277602	0	3341	1200	56923	1753
4	ORURO/	121	136	0	15524	654	0	120	0	2935	122
5	POTOSI/	105	95	1	829	101546	0	0	1200	42412	6
6	TARIJA/	165	119	37	1357	88260	0	1	150	19287	114
7	SANTA CRUZ/	317	608	8	2246	75511	480	121	12559	40925	265
8	BENI/	115	13	0	4993	92900	860	400	34410	101316	266
9	PANDO/	21	2	0	416	552	0	24	108	2225	18

The consolidated window shows the different column values grouped according to the selected field, in this sample the consolidated is made by the first level of geography (Departamento) and this data sample is from the Bolivia database.