# How to upload data into WOVOdat

Version: 3 April 2014

We offer 3 options for users to contribute data:

- 1. Data entry through *online form* for small amount of data (for admin and developer team only).
- 2. Submission of *original observatory data format*. Sending a file of any format to WOVOdat; and let the developer team to convert and upload into database.
- 3. *Data conversion* from spreadsheet file format (CSV, TSV, etc.) into WOVOdat-XML (WOVOml), then upload it into database.

Conversion of CSV file compliant with WOVOdat1.1 standard format

- (a) CSV of monitoring system:
  - Table that contain descriptive information (metadata) about monitoring system in specific volcano(es), which include network, station, instrument, airplane, and satellite data.
- (b) CSV of *monitoring data*: Table of data (seismic/deformation/gas/thermal/hydrology/potential fields/meteo) that have been registered by instruments described in the monitoring system (a) above.
- (c) Conversion of *customary/specific format data* that has been mapped by WOVOdat.

For now, the database only accepts data in WOVOdat-XML (WOVOml) format. Please refer to WOVOdat1.1 documentations for detail information on data format.

We offer 3 options for contributors to submit data:

- Submission of original observatory data format
- Send a file of any format to WOVOdat; and let the WOVOdat team convert and upload it to the database.
- Submission of spreadsheet (comma-separated values CSV) file.(<2Mb):

Send comma-separated values CSV file in WOVOdat1.1 standard/compliant format; (a)CSV of monitoring system:

network, station, instrument, airplane, satellite (b)CSV of data:

seismic, deformation, gas, hydrology, fields, thermal, meteo
Send comma-separated values CSV file in customary format; known/registered by

(c) CSV of customary format data

Option below appears for admin or developer team only

- Submission of small amount of data through online forms. bibliographic, inferred processes, volcano, Observation about volcanic activity, observatory contact information
- Upload WOVOml file

Upload of WOVOml format file to MySQL database

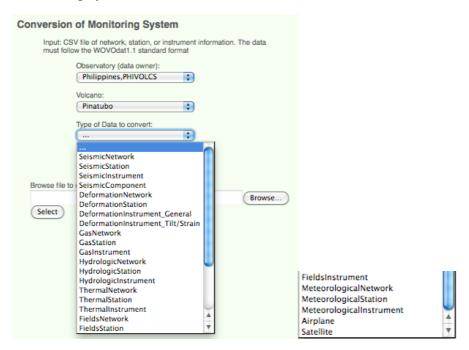
Checking Tools:

[1]Table check [2]Incoming File

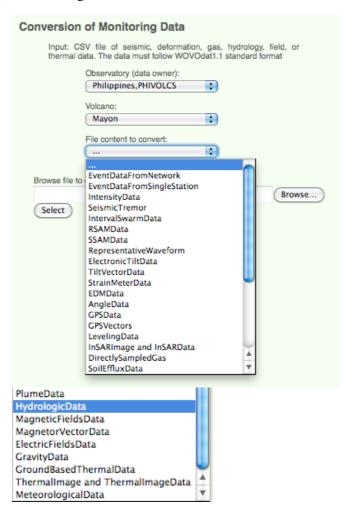
Figure 5. WOVOdat online UI for data submission (conversion and upload)

## **Submiting data through online conversion**

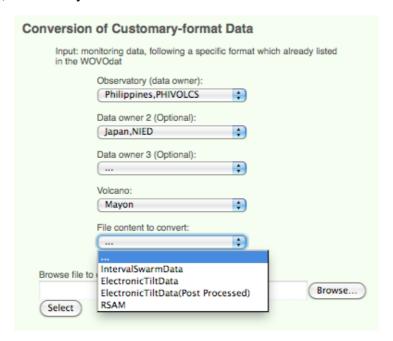
## (a) Monitoring system

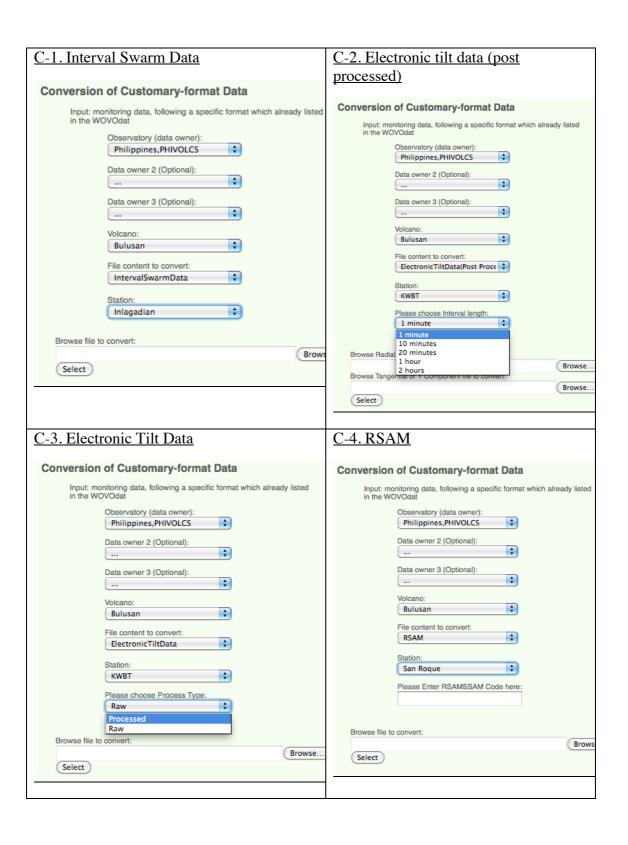


# (b) Monitoring data



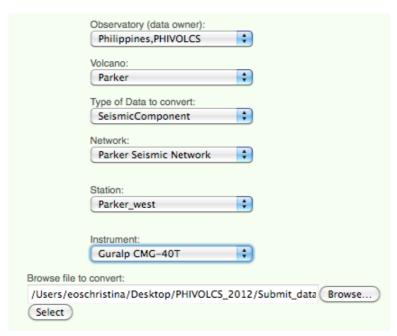
# (c) Customary format data





# **Example of conversion processes:** conversion of seismic-component information

1. User input: online form and submit CSV file (following WOVOdat standard format)



Input CSV format: si\_cmp table

si_cmp_id	si_cmp_code	si_id	si_cmp_name	si_cmp_type	si_cmp_resp
			GuralpBroadband Horizontal N-S	horizontal E-	frequency range: 0.04-25
	VPMGW_BB_BHE		component	W	Hz

si_cmp_band	si_cmp_samp si_cmp_icode		si_cmp_orient	si_cmp_sens		
Broadband				4.378540e+09 @ 1.000e+00 Hz (SEED		
	50	BHE	Clockwise,E=90,reversed=270	Stage 0)		

Ī	si_cmp_dep th	si_cmp_o	si_cmp_co m	cc_i	cc_id	cc_id	di_tlt_loadda te	di_tlt_pubda te	cc_id_loa	cb_id
ŀ	uı	0	111	u		3	le	2010-01-31	u	3
	2	)	comments					12:00:00		

2. Converting CSV to WOVOML (WOVOdat-XML) format.

```
Converting Data ...

Time: 2012-02-02 13:50:21

Observatory Name: PHIVOLCS
Volcano Name: Parker
File-type:SeismicComponent
Network Name: Parker Seismic Network
Station Name: Parker_west
Instrument Name: VPMGW_BB

Input File Name: VPMGW_BB_BHZ_si_cmp.csv
Uploaded Total CSV rows: 1 rows
Input File Size:367 bytes

Convert File Name: VPMGW_BB_BHZ_si_cmp.xml

Successfully converted from VPMGW_BB_BHZ_si_cmp.csv file to
VPMGW_BB_BHZ_si_cmp.xml file...

If you would like to see the result of VPMGW_BB_BHZ_si_cmp.xml, please click here to
download XML file
```

## **XML format:** *si\_cmp* (*seismic component*)

```
<?xml version="1.0" encoding="UTF-8" ?>
<wovoml xmlns="http://www.wovodat.org" xmlns:xsi="http://www.w3.org/2001/XMLSchema-</p>
instance"
version="1.1.0" xsi:schemaLocation="http://www.wovodat.org/WOVOdatV1.xsd">
 <MonitoringSystems>
 <SeismicComponents instrument="VPMGW_BB" owner1="PHIVOLCS">
       <SeismicComponent code="VPMGW_BB_BHE" instrument="VPMGW_BB"</p>
 owner1="PHIVOLCS">
             <name>GuralpBroadband Horizontal N-S component/name>
             <type>horizontal E-W</type>
             <comments>comments</comments>
             <respDesc>frequency range: 0.04-25 Hz</respDesc>
             <sampleRate>50</sampleRate>
             <seedBandCode>Broadband/seedBandCode>
             <seedInstCode>BHE</seedInstCode>
             <seedOrientCode>Clockwise,E=90,reversed=270</seedOrientCode>
             <sensitivity>4.378540e+09 @ 1.000e+00 Hz (SEED Stage 0)
             <depth>2</depth>
     <startTime>2010-06-01 12:00:00/startTime>
       </SeismicComponent>
 </SeismicComponents>
 </MonitoringSystems>
 </wovoml>
```

# 3. Upload XML file to MySQL database.



### Data stored in the database.

