

# Belmont Forum

## E-INFRASTRUCTURES & DATA MANAGEMENT Collaborative Research Action

### FUTUREVOLC

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Scoping Workshop

November 28-29, 2016

ANR, Paris



# 2012-2016 FutureVolc

- *European Commission FP7 project*
- *Leaders : University of Iceland and the Icelandic Meteorological Office*
- *“Long-term monitoring experiment in geologically active regions of Europe prone to natural hazards: the Supersite concept”*



# 2012-2016 FutureVolc

## Objectives:

Integration of space and ground based observations for improved monitoring and evaluation of volcanic hazards, and open data policy

→ 26 European partners including scientists, private companies, Government and Civil Protection



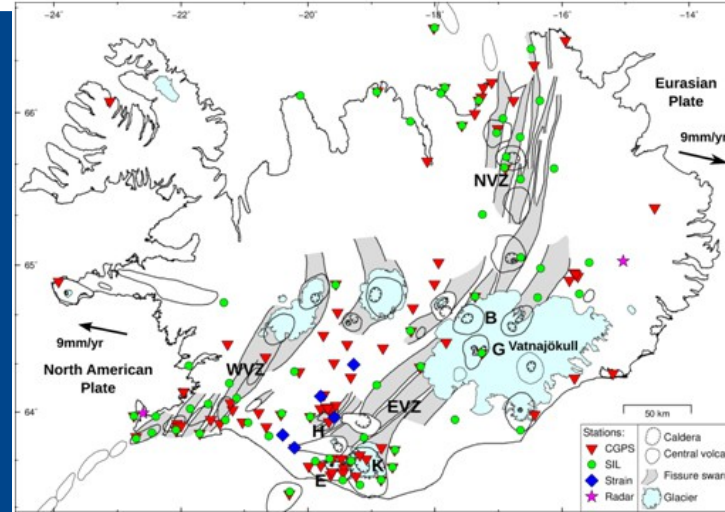
0700 WW1757 Malaga	Cancelled	1545 ZB44	Cancelled
0700 ZB970 Munich	Cancelled	1605 E273 Dublin	Cancelled
0705 BD3401 Munich	Cancelled	1610 WW1529 Nice	Cancelled
0710 UA8908 Frankfurt	Cancelled	1620 TCX507K Fuerteventura	Cancelled
0750 BD3431 Dusseldorf	Cancelled	1645 KL1430 Amsterdam	Cancelled
0810 EI263 Dublin	Cancelled	1715 LH4917 Munich	Cancelled
0810 TOM7658 Alicante	Cancelled	1725 M3337 Paris-CDG	Cancelled
0830 ZB496 Alicante	Cancelled	1745 WW1723 Faro	Cancelled
0850 TCX212K Palma	Cancelled	1810 EZ1835 Genoa	Cancelled
0850 LX421 Zurich	Cancelled	1815 KL1432 Amsterdam	Cancelled
0900 CO27 Newark	Cancelled	1820 LH4905 Frankfurt	Cancelled
0920 AZ3715 Paris-CDG	Cancelled	1830 PK792 Islamabad	Cancelled
1030 WW1031 Malaga	Cancelled	1850 LX425 Zurich	Cancelled
1045 TOM834 Orlando	Cancelled		
1115 WW1103 Geneva	Cancelled		



# e-Infrastructures & Data Management

Multidisciplinary data set:

- seismic
- gas
- hydrological
- Global Positioning System (GPS)
- weather (wind, precipitation..)
- ground, air and satellite-based radar and optical images
- ground and satellite based infrared images



# e-Infrastructures & Data Management

One web interface to gather :

- a database of the Icelandic volcanism
- a data portal with open data policy for specific events

→ [futurevolc.vedur.is](http://futurevolc.vedur.is)

**Catalogue of Icelandic Volcanoes**

Volcanoes | Data Portal | Eruption Search

Sort by: Aviation colour code

- Askja**  
Aviation colour code: Green  
Activity level: Moderate  
Last eruption: 1963 CE  
Catalogue Information  
Activity status
- Brennisteinsfjöll**  
Aviation colour code: Green  
Activity level: Moderate  
Last eruption: Late 10th century CE  
Catalogue Information  
Activity status
- Bárðarbunga**  
Aviation colour code: Green  
Activity level: High  
Last eruption: 2014 CE  
Catalogue Information  
Photos  
Activity status
- Eldey**  
Aviation colour code: Green  
Activity level: Low  
Last eruption: 1926 CE

**Catalogue of Icelandic Volcanoes**

Give us feedback

Icelandic Met Office | UNIVERSITY OF ICELAND INSTITUTE OF EARTH SCIENCES | RÍKISLÖGREGLUNGTJÓRNIN

Sign in | Additional information

Volcanoes | **Data Portal** | Eruption Search

Hide | Layers | Overview map | Legend

Time period:  
Date from: 08/16/2014  
Date to: 02/28/2015

Category:  
 GAS  
 GPS  
 Infrared  
 Infrasound  
 OPC  
 Other  
 Radar  
 Radiosonde  
 SAR

Clear | Search

Name	Category	Data level	File count	Total size	Zoom to
GPS kortatest	GPS	Level 3	1	0.2 MB	Zoom to
ISX2	Radar	Level 0	9669	4737.9 MB	Zoom to
DYNC	GPS	Level 1	196	143.5 MB	Zoom to
Test	GAS	Level 0	1	0.1 MB	Zoom to
Precipitation data	Other	Level 0	1	4.4 MB	Zoom to
Bárðarbunga collapse - Science paper (aa18988 2016-07-15) data	Other	Level 2	1	16.5 MB	Zoom to
Bárðarbunga collapse - Science paper (aa18988 2016-07-15) data	Other	Level 2	1	0.1 MB	Zoom to
Bárðarbunga collapse - Science paper (aa18988 2016-07-15) data	Other	Level 2	1	0.1 MB	Zoom to
Bárðarbunga collapse - Science paper (aa18988 2016-07-15) data	Other	Level 2	1	0.0 MB	Zoom to

Sign in to download

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# e-Infrastructure and Data Management issues

- Defining the format of the data and metadata
- Nature of the platform to support the data streaming in real-time/managing access rights/data storage
- Possibility of embargo for a limited time period for certain type of data before open access
  
- Time consuming and major effort to ensure interoperability of various computer systems used to collect data for monitoring and research on volcanoes. Requires special effort by all partners in a project

# e-Infrastructure and Data Management issues

- Different view of scientists when and how data should be open, and lack of full understanding of the benefits of open data policy.
- Deliver in real-time data that are still discussed for hazard assessment and that can be used by third part

# e-Infrastructure and Data Management

- Make decision regarding the e-infrastructure prior to up the beginning of the project
- Use EPOS (<https://www.epos-ip.org>) requirements to define a uniform format for data and metadata
- In case of hazard assessment, use another private platform to avoid any confusion in media or social networks

