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WP 8 Deliverable No. 8.1

Management of the Virtual access

Project acronym:
AHEAD2020

Project Title:
Integrated Activities for the High Energy Astrophysics Domain

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Prepared by: European Gravitational Observatory

Version	Revision Date	Prepared by	Review and approval
0.1	27/07/2020	G. Hemming	First draft.
0.2	03/08/2020	G. Hemming	Overhaul.
0.3	04/08/2020	S. Katsanevas, F. Spagnuolo	Review.
1.0	05/08/2020	G. Hemming	Final version.

Distribution List	Date	Version

LIST OF ACRONYMS AND ABBREVIATIONS

- EGO - European Gravitational Observatory
- ESCAPE - European Science Cluster of Astronomy and Particle Physics
- GWOSC - Gravitational Wave Open Science Center
- HTML - HyperText Markup Language
- REINFORCE - REsearch Infrastructures FOR Citizens in Europe

INTRODUCTION

Deliverable 8.1 involves the creation and maintenance of a website[1] that focuses on facilitating access to the existing Gravitational Wave Open Science Center[2] (GWOSC) infrastructure.

The site has been created with the aim of concentrating on identified core areas. These include:

- a brief introduction to both AHEAD2020 and the GWOSC;
- an explanation of where and how to get started with the GWOSC;
- a latest news section;
- some useful hints on exploring the data;
- an introduction to the GWOSC Event Portal;
- and ways to follow activities at the gravitational-wave interferometer laboratories.

This deliverable forms an important first milestone in the work package, which is entirely dedicated to the provision of resources for use in the advancement and development of the GWOSC.

This website will feed into the evaluation element of deliverable D8.2 and the redevelopment work of D8.3. As such, it is very much an element that will continue to evolve and develop, both in terms of content and structure, over time.

DESIGN

The website, which has been online since Monday the 3rd of August, 2020, is designed using the generic AHEAD2020 template structure, in order to ensure its uniform fit into the overall project style. See the figure below for details.

1 https://ep.ego-gw.eu/ahead2020/access/

2 https://www.gw-openscience.org/

Written in HTML5, the website is part of a web infrastructure that scores highly in terms of validation[3] against accessibility standards[4]. It is also responsively designed, ensuring correct visualisation on multiple devices - smartphones, tablets, laptops, desktops, etc. - and screen-sizes.

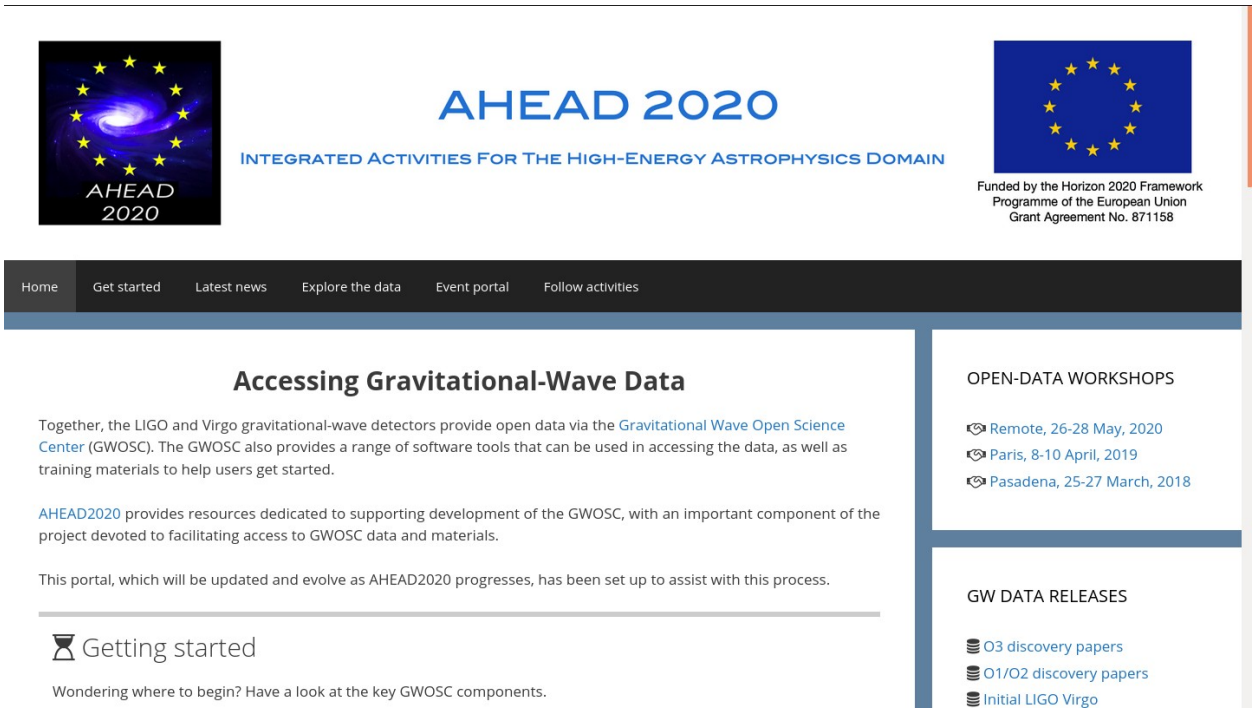

Figure 1: The Accessing Gravitational-Wave Data homepage.

DISSEMINATION

In order to improve dissemination of the website, recent re-development work done in relation to the European Gravitational Observatory (EGO) website[5], developed using a Wordpress[6] architecture, is leveraged. This means that the page is able to profit from the continuous daily flow of visitors to that website, immediately increasing potential coverage.

3 https://www.webaccessibility.com/

4 https://www.w3.org/standards/webdesign/accessibility.html

5 https://www.ego-gw.it/

6 https://wordpress.com/

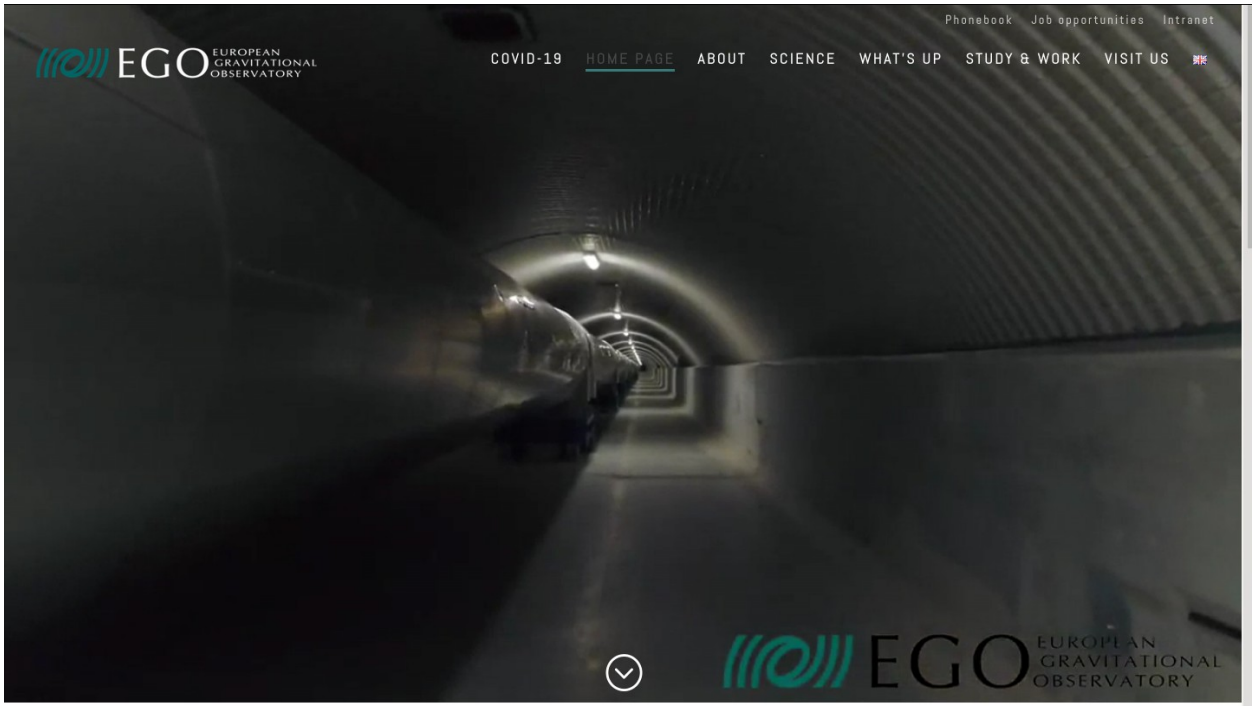

Figure 2: The EGO website, within which the virtual-access page is available.

The Virtual-Access website is linked to via the page found at the following address:

- https://www.ego-gw.it/projects/

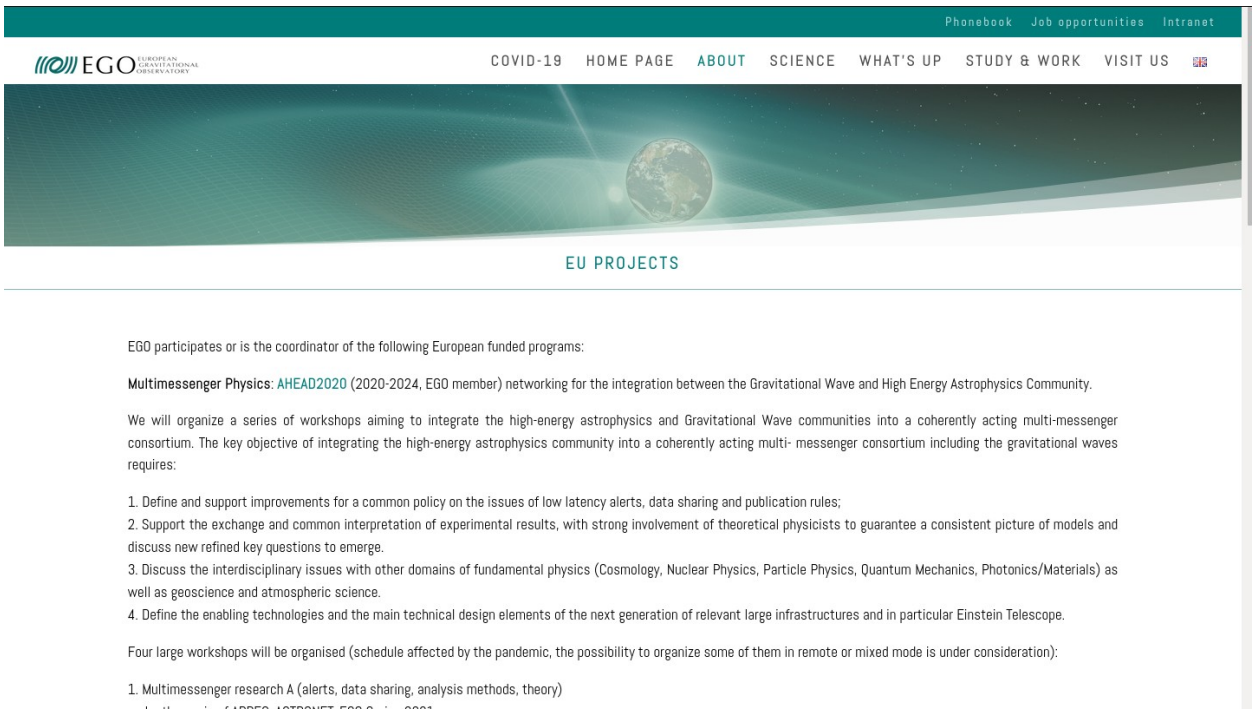

Figure 3: The EU Projects at EGO web page.

CONTENT

The Virtual-Access website delivers an array of content to the user. This section describes how this content is structured.

Project introduction

The content begins with an introduction to AHEAD2020, describing a broad outline and the general aims of the project. A link, pointing directly to the AHEAD2020 website[7] is also available.

This is followed by an brief introduction to the GWOSC itself.

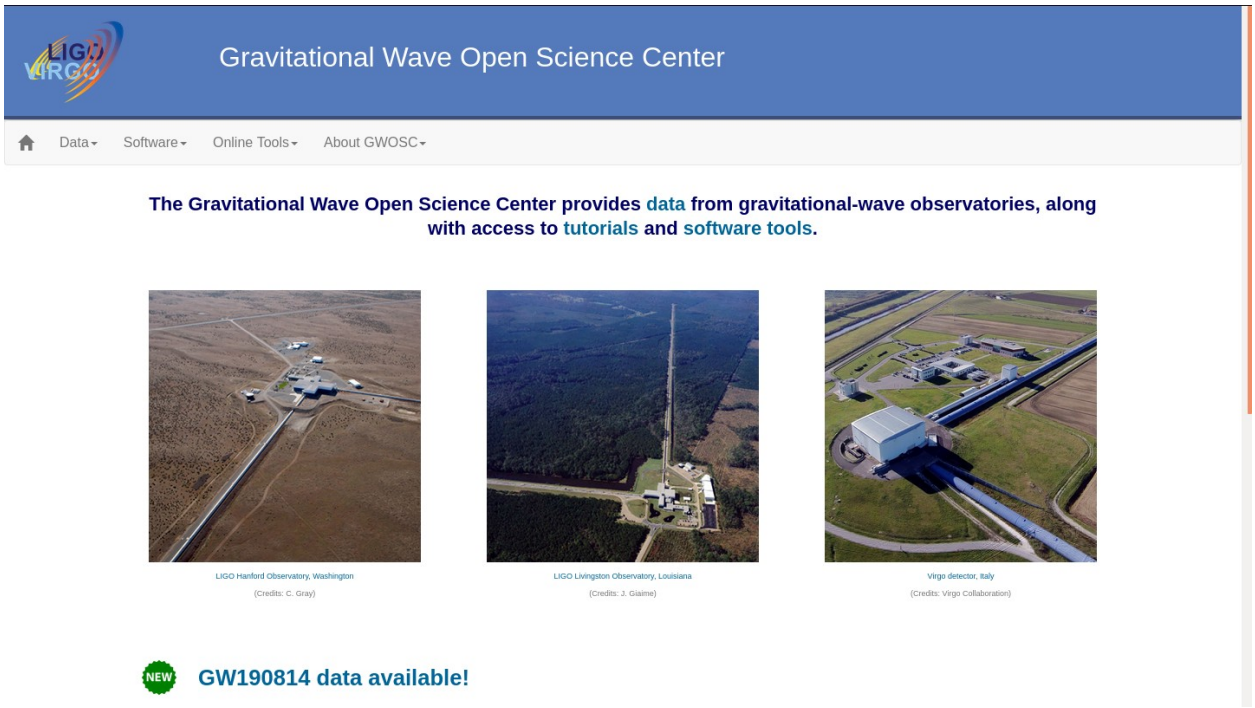

Figure 4: The GWOSC site.

Getting started

The *Getting Started* section breaks down the GWOSC activities into three key areas:

- Data - how and where to find them, and how they are categorised;
- Software - which packages are available;

7 http://ahead.iaps.inaf.it/

- and Tutorials - how to use the available software to access the data, as well as an introduction to useful theory and techniques.

Figure 5: The Getting Started section.

Latest News

The *Latest News* section will highlight upcoming and recent data-releases and open-data workshops, as well as any other information considered of use to the project community. It will be updated as and when required.

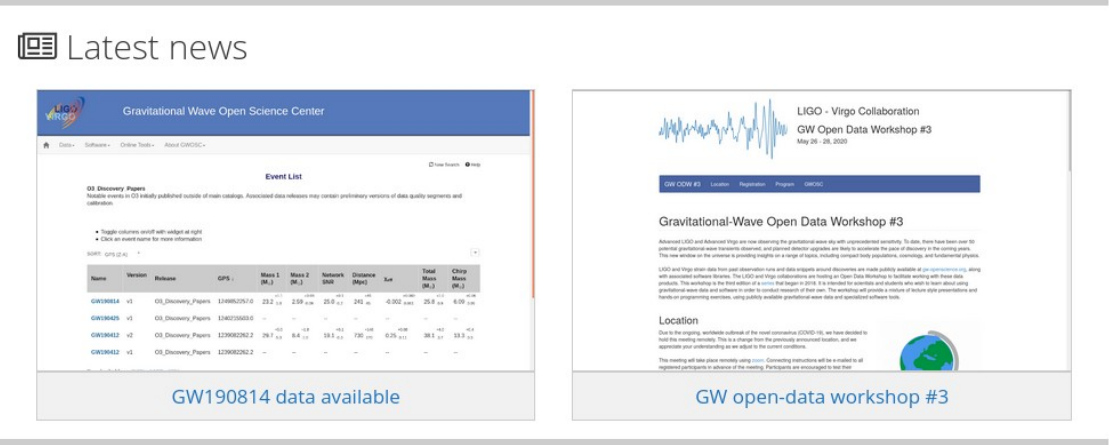

Figure 6: The Latest News section.

Exploring the data

The GWOSC provides details relating to a number of applications that are of considerable use in understanding and exploring gravitational-wave events and data. This section, which will be updated periodically, highlights a few of these applications.

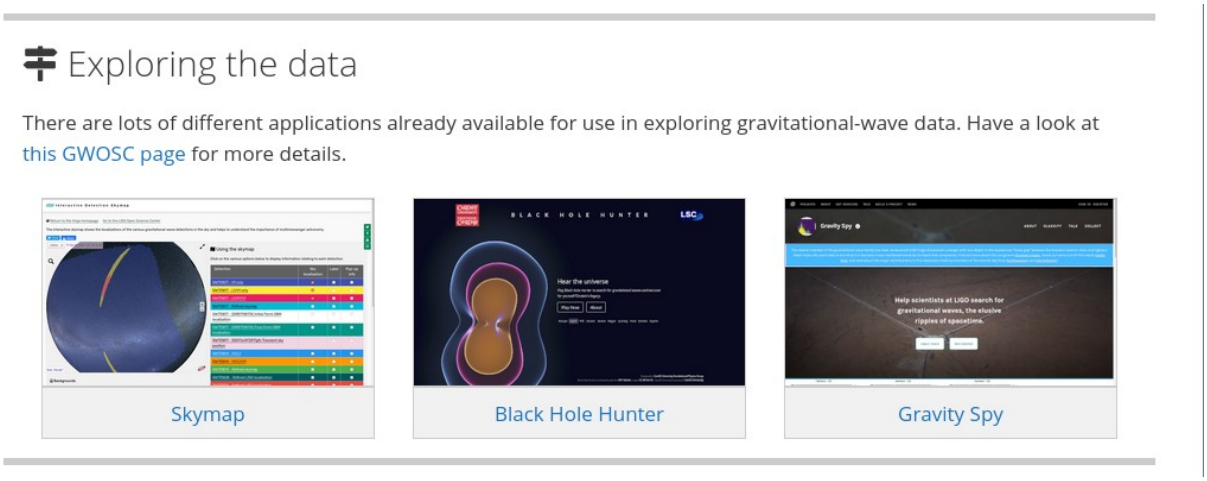

Figure 7: The Exporing The Data section.

The Event Portal

The GWOSC provides a powerful tool - the *Event Portal* - for use in finding data related to specific events of catalogues of events.

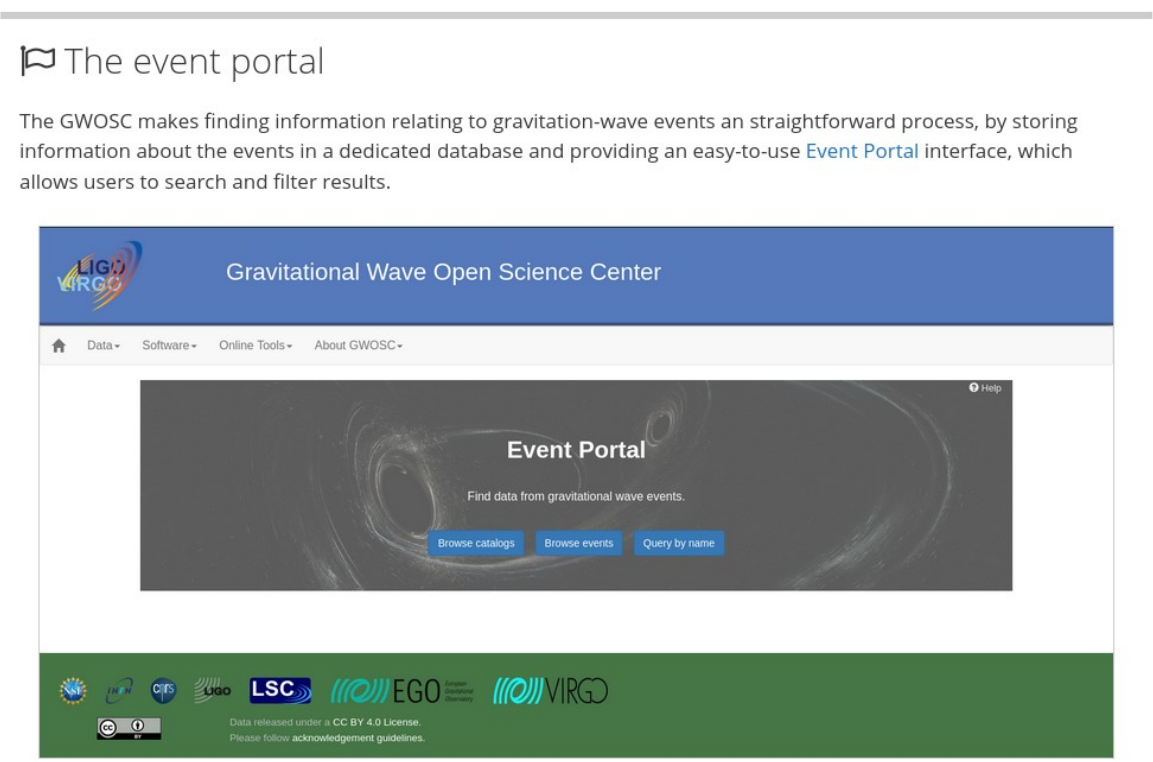

Figure 8: The Event Portal section.

Follow activities

While the GWOSC concentrates mainly on data and associated software, there are also many useful resources that users and members of the AHEAD2020 community can access in order to gain a better understanding of the activities that take place in the gravitational-wave observatories. In particular, the *Logbooks* at each of the detectors serve as both a means of keeping abreast of current activities on site and as historical memory for activities that have been carried out in the past.

Each of the Logbook instances, which are all different versions of the same core application, can be accessed via the Virtual-Access page.

This section will be further developed to provide more useful information.

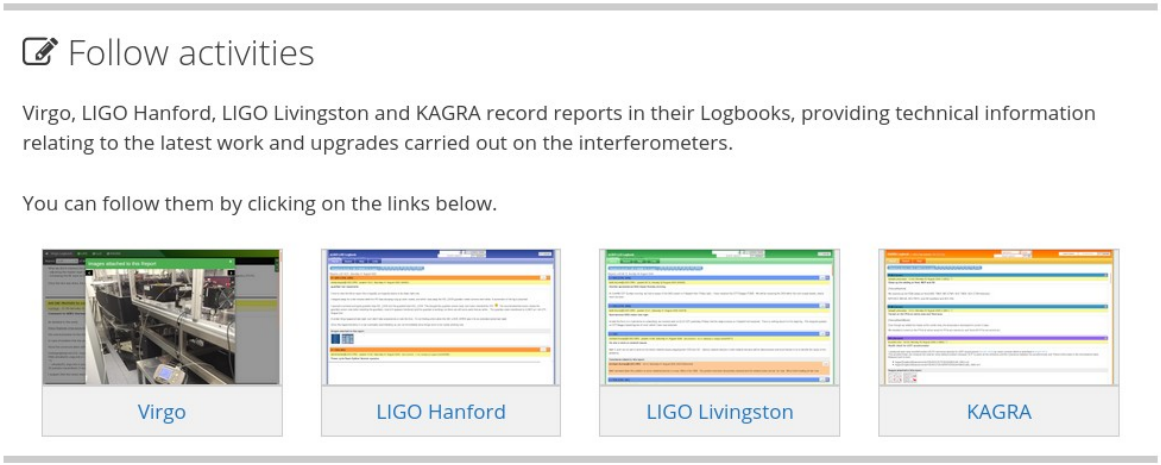

Figure 9: The Follow Activities section.

The footer

The footer currently contains the following links:

- a link to the AHEAD2020 project website;
- a link to the GWOSC website;
- a link to the About page within the AHEAD2020 project website.

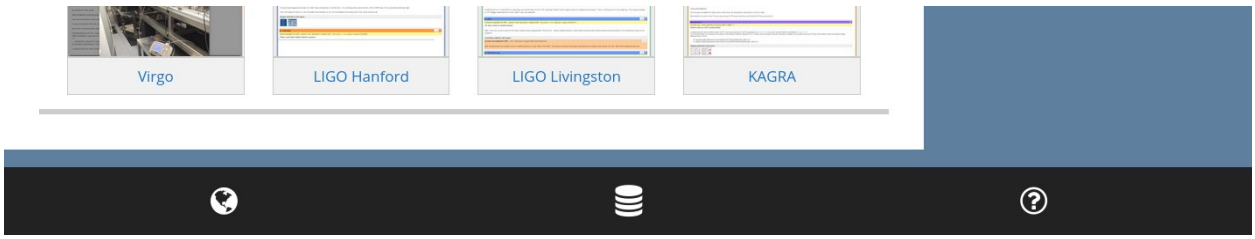

Figure 10: The website footer.

The idea behind the footer is to provide very simple and quick links to useful resources via icon images. This format makes the footer ideal for display on all devices, from smartphones to desktops.

Highlighted additional information

The website also highlights specific series of information, in order to make them easily accessible to users. These include:

- links to previous open-data workshops;

- different data-releases;
- gravitational-wave resources.

Figure 11: The additional Series.

These series will all be developed further as the project evolves.