

GWOSC: Gravitational Wave Open Science Center

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project

Gravitational wave detector data

- Gravitational wave detection projects – LIGO (USA), Virgo (France, Italy and 7 other European countries including Poland), KAGRA(Japan) form the LVK collaboration.
- Data collected by LVK are analyzed jointly and there is a common policy to release data.
- **Public Data Release: key data products are made available to the public, to be findable, accessible, interoperable, and reusable (FAIR).**

Open LVK data

- Data release plan

October 7, 2022
LIGO Data Management Plan (LIGO-M1000066-v27)
LIGO Laboratory Contact: gwosc@igwn.org

<https://dcc.ligo.org/LIGO-M1000066/public>

- Data release description

SoftwareX 13 (2021) 100658



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Contents lists available at [ScienceDirect](#)

SoftwareX

journal homepage: www.elsevier.com/locate/softx



Original software publication

Open data from the first and second observing runs of Advanced LIGO and Advanced Virgo



Timing of data releases

- Limited information from low-latency alerts will be available starting minutes after each transient detection.
- Short strain segments around detected transients are made available at the time of publication.
- Full strain data releases after a proprietary period of 18 months.

CERN COURIER | Reporting on international high-energy physics



POLICY | FEATURE

Preserving the legacy of particle physics

11 March 2019

“Only days after they announced the first observation of gravitational waves, the LIGO and Virgo collaborations made public their data.”

LVK Open Science Webpage



Gravitational Wave Open Science Center

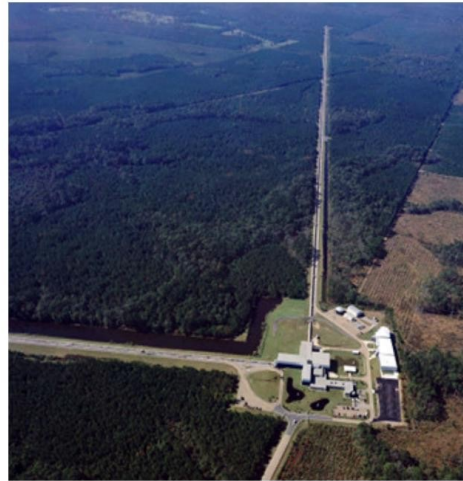
🏠 Data ▾ Software ▾ Online Tools ▾ About GWOSC ▾

The Gravitational Wave Open Science Center provides data from gravitational-wave observatories, along with access to tutorials and software tools.



LIGO Hanford Observatory, Washington

(Credits: C. Gray)



LIGO Livingston Observatory, Louisiana

(Credits: J. Giaime)



Virgo detector, Italy

(Credits: Virgo Collaboration)

<https://www.gw-openscience.org/about/>

GWOSC impact

Examples of projects using GWOSC
data: gw-openscience.org/projects/

- Professional research, student projects, classroom activities, text books, art projects, workshops, training

- Around 3000 visitors each month (unique IP) and thousands of strain file downloads

More than 230 published papers acknowledge use of GWOSC (INSPIRE-HEP)

