Global Observing Systems Information Center (GOSIC) Overview

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GOSIC
Global Observing Systems Information Center

GOOS
Global Ocean Observing System
GTOS
Global Terrestrial Observing System

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Global Ocean Observing System

Global Terrestrial Observing System

Agenda

- Presentation and Overview – 20 minutes
- Brief On-Line Demonstration – 20 minutes
- Q&A Session – 15 minutes
- Wrap-Up – 5 minutes

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Global Ocean Observing System

Global Terrestrial Observing System

A common point of access to datasets, data products, and services for GCOS, GOOS, and GTOS

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GTOS

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The GOSIC:

- was established in 1997 by the GCOS Joint Data and Information Management Panel (JDIMP)
- was developed at the University of Delaware
- was twice reviewed by independent panels (01/03)
- has been operational since 2007 at NOAA's National Climatic Data Center (NCDC)

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What does GOSIC offer:

- Users can find data and information about the GCOS, GOOS and GTOS and subsystems without having to navigate the hundreds of complex and vastly different web sites of the myriad of organizations in these global observing systems

- Allows users to determine the type and quality of the data through documentation provided by the participating data centers

- Provides access to data and data download regardless of data format

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What does GOSIC offer (continued):

- Provides quick and user-friendly cross-system access to data and information
- Provides a comprehensive inventory of datasets
- Links and information are kept up to date and are quality controlled with input from the secretariats and the World Data Centers
- Eliminates redundancy

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What does GOSIC offer (continued):

- Provides documentation of datasets and program elements:
  - Observing Requirements
  - Planning Documents
  - Data Management Plans
  - Publications
- Value added products:
  - Data Matrices
  - Data Flow Diagrams
- Provides several search mechanisms

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GOSIC Users:

Top level domain types:

- Academia: ~60%
- Government: ~20%
- Military: ~20%

Web statistics:

- ~2,500 hits per day

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The GOSIC Support of Regional Observing Systems:

- Developed web sites for the Pacific Islands GCOS, GOOS and HYCOS programs:
  - http://PI-GCOS.org
  - http://PI-GOOS.org
  - http://Pacific-HYCOS.org
  - Some of the Pacific Islands Meteorological Services on the PI-GCOS server

- Developed a central web page for the GOOS Regional Alliances (GRA)

GCMD
Global Change Master Directory

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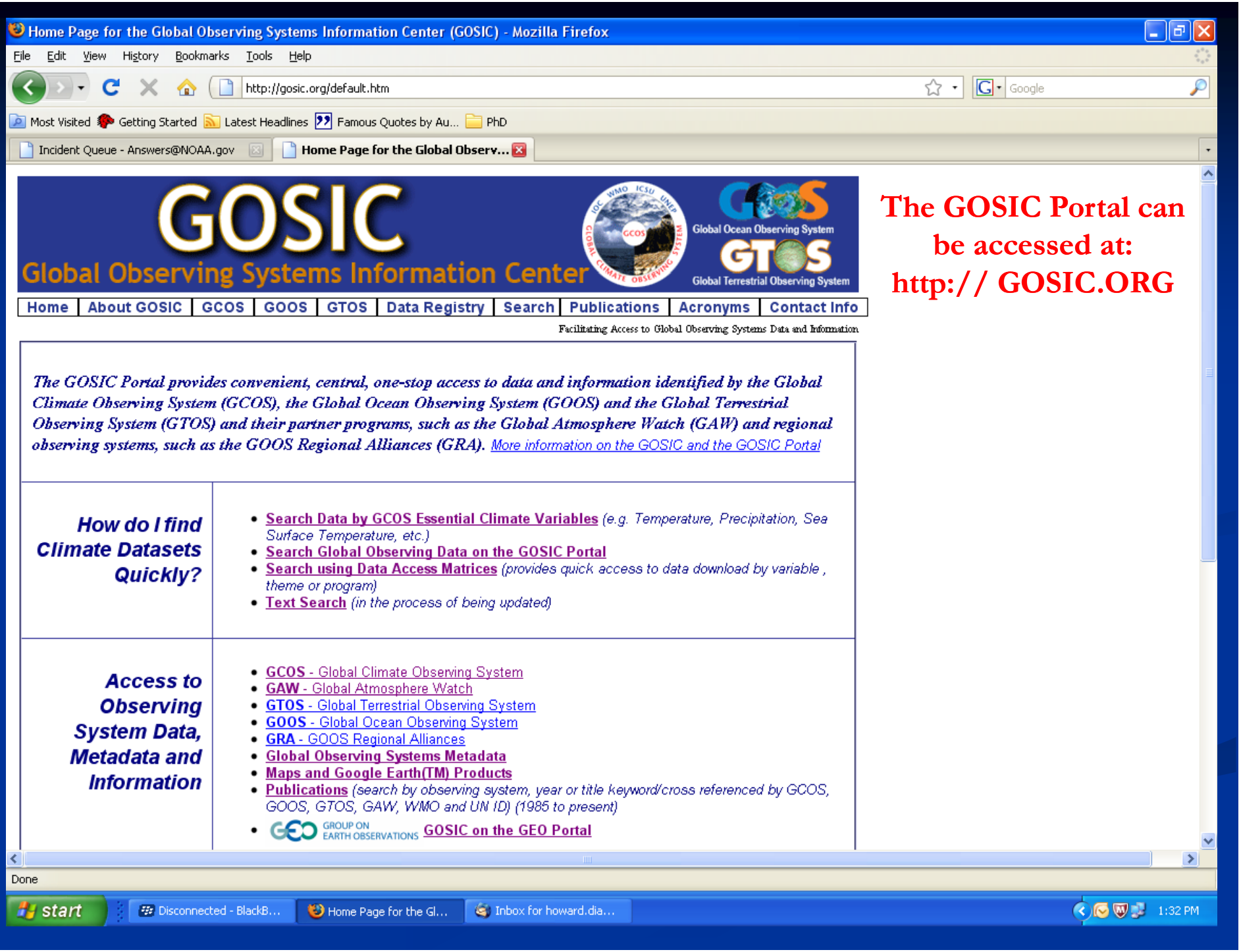
- The GOSIC cooperates with NASA's Global Change Master Directory (GCMD) to provide metadata for the global observing systems datasets.

- Users can access metadata via a portal on the GCMD



The GOSIC Portal can be accessed at: http:// GOSIC.ORG

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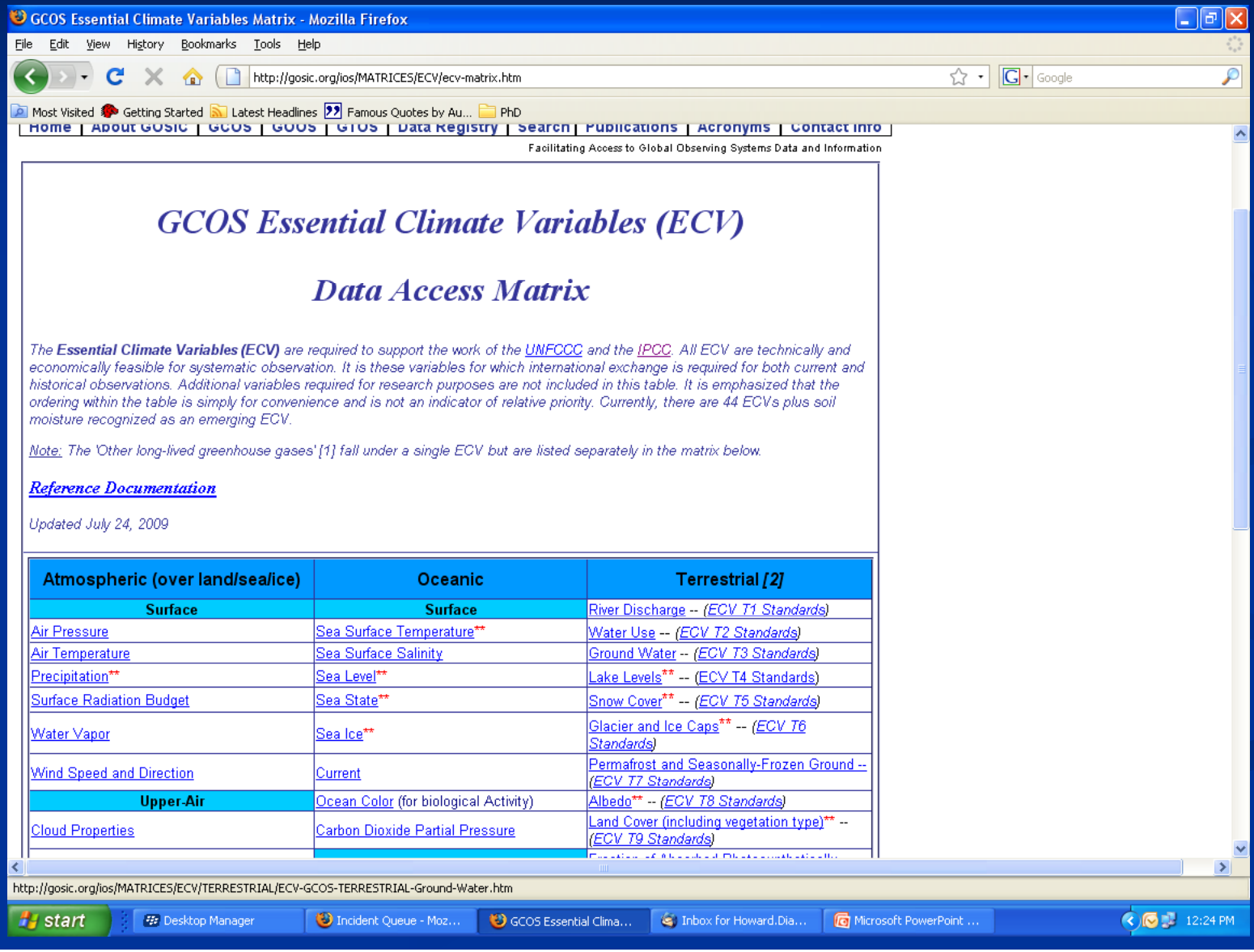

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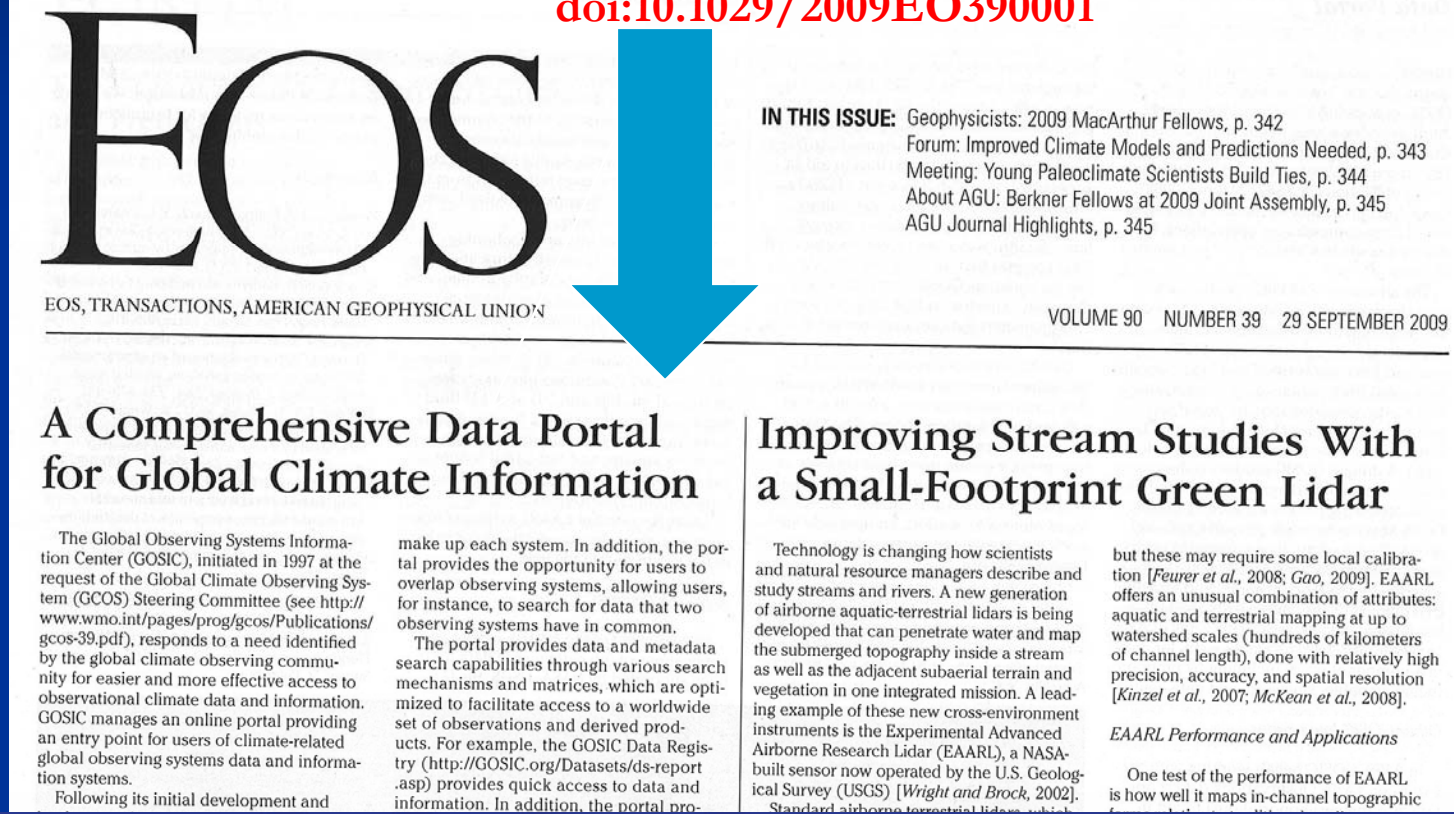
The GOSIC's overriding goal is to best serve the data access needs of all of GCOS (atmosphere, ocean, and terrestrial), and as such, we believe that serves as a data portal for GCOS.

That in no means that it is the sole route to such data, however, the GOSIC has the potential to serve as a unifying facility for GCOS that reaches across the various observing domains (e.g., atmosphere, ocean, terrestrial) and gets GCOS out of the mold of being perceived as being only about the GSN and GUAN.

The GOSIC facility also helps GCOS reach out to the greater GEOSS community as well by having established linkages in the GEOSS Data Registry as well as membership on the GEO Data Architecture team dealing with data integration and analysis

Thank You and Now on to the Demo
Special Recognition to Christina Lief

Diamond, H. J., and C. J. Lief (2009), A Comprehensive Data Portal for Global Climate Information, Eos Trans. AGU, 90(39), 341-342, doi:10.1029/2009EO390001



EOS

EOS, TRANSACTIONS, AMERICAN GEOPHYSICAL UNION

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A Comprehensive Data Portal for Global Climate Information

The Global Observing Systems Information Center (GOSIC), initiated in 1997 at the request of the Global Climate Observing System (GCOS) Steering Committee (see http://www.wmo.int/pages/prog/gcos/Publications/gcos-39.pdf), responds to a need identified by the global climate observing community for easier and more effective access to observational climate data and information. GOSIC manages an online portal providing an entry point for users of climate-related global observing systems data and information systems.

Following its initial development and

make up each system. In addition, the portal provides the opportunity for users to overlap observing systems, allowing users, for instance, to search for data that two observing systems have in common.

The portal provides data and metadata search capabilities through various search mechanisms and matrices, which are optimized to facilitate access to a worldwide set of observations and derived products. For example, the GOSIC Data Registry (http://GOSIC.org/Datasets/ds-report.asp) provides quick access to data and information. In addition, the portal pro-

Improving Stream Studies With a Small-Footprint Green Lidar

Technology is changing how scientists and natural resource managers describe and study streams and rivers. A new generation of airborne aquatic-terrestrial lidars is being developed that can penetrate water and map the submerged topography inside a stream as well as the adjacent subaerial terrain and vegetation in one integrated mission. A leading example of these new cross-environment instruments is the Experimental Advanced Airborne Research Lidar (EAARL), a NASA-built sensor now operated by the U.S. Geological Survey (USGS) [*Wright and Brock*, 2002].

but these may require some local calibration [*Feurer et al.*, 2008; *Gao*, 2009]. EAARL offers an unusual combination of attributes: aquatic and terrestrial mapping at up to watershed scales (hundreds of kilometers of channel length), done with relatively high precision, accuracy, and spatial resolution [*Kinzel et al.*, 2007; *McKean et al.*, 2008].

EAARL Performance and Applications

One test of the performance of EAARL is how well it maps in-channel topographic

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