



WMO

World Meteorological Organization  
Working together in weather, climate and water

*more*  
*Making Information*  
*Accessible*

GFCS, WIGOS and WIS

*Steve Foreman*

*World Meteorological Organization*



# Contents

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- Why GFCS, WIGOS and WIS?
- What are GFCS, WIGOS and WIS?
- Current state
  - Defining GFCS,
  - Building WIGOS,
  - Exploiting WIS



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Why GFCS, WIGOS and WIS?

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We need to change so that..



**GFCS**



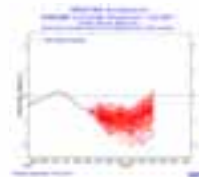
**GCW**



**GAW**



**Ash**



**Forecasts**



**Tsunami**



**Aviation**



**Space**



**Health**

**Weather**



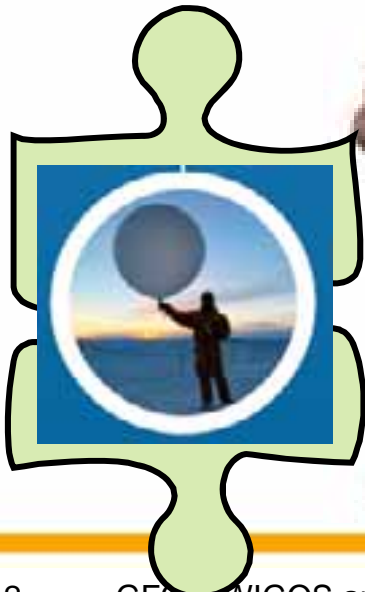
## WIGOS aims to...

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- **Increase** observation data exchange
- **Broaden** observation application
- **Simplify** observation access
- *and reduce observation costs*



WIGOS is.....





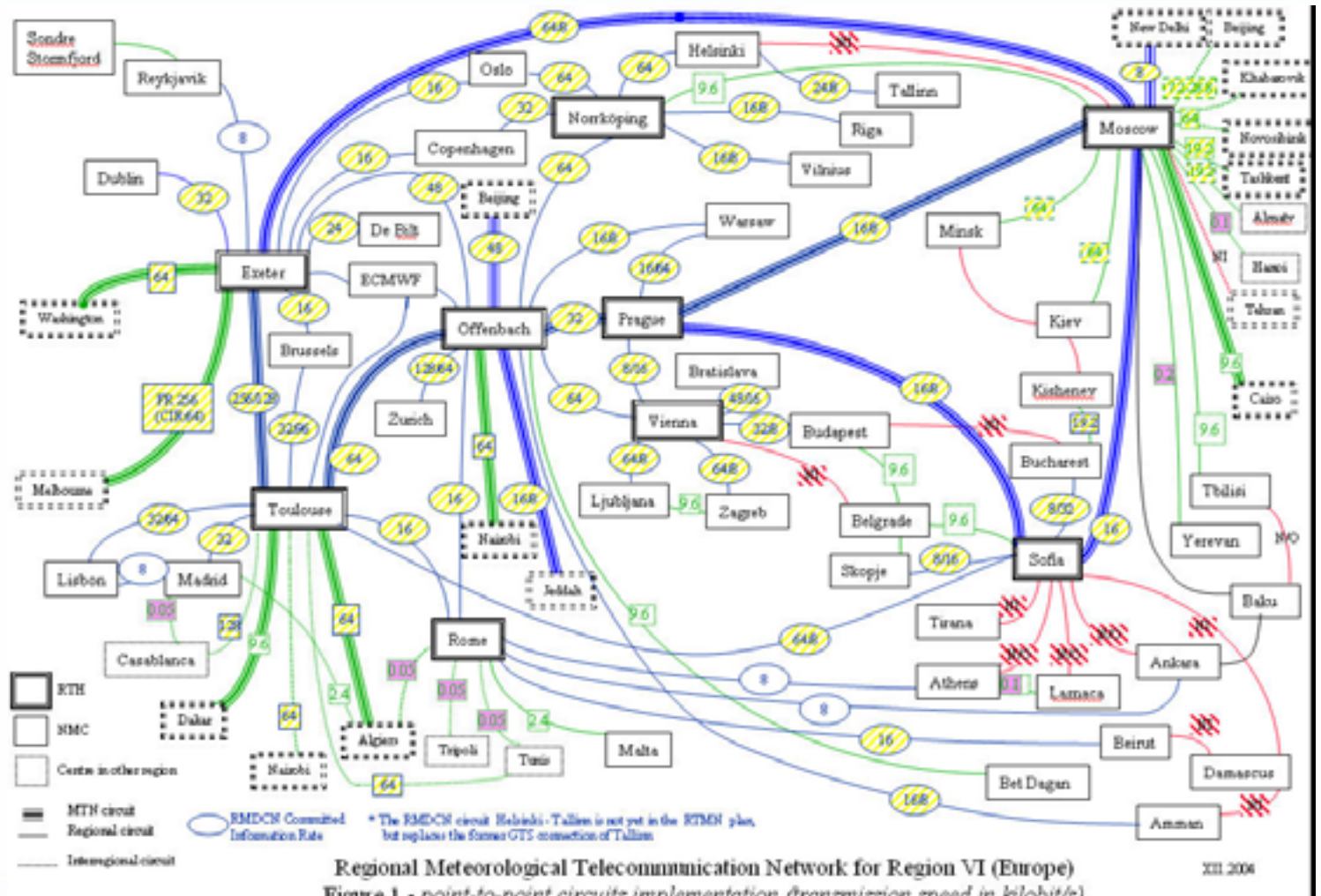
WIS aims to...

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- **Increase** data visibility
- **Broaden** data access
- **Simplify** data use



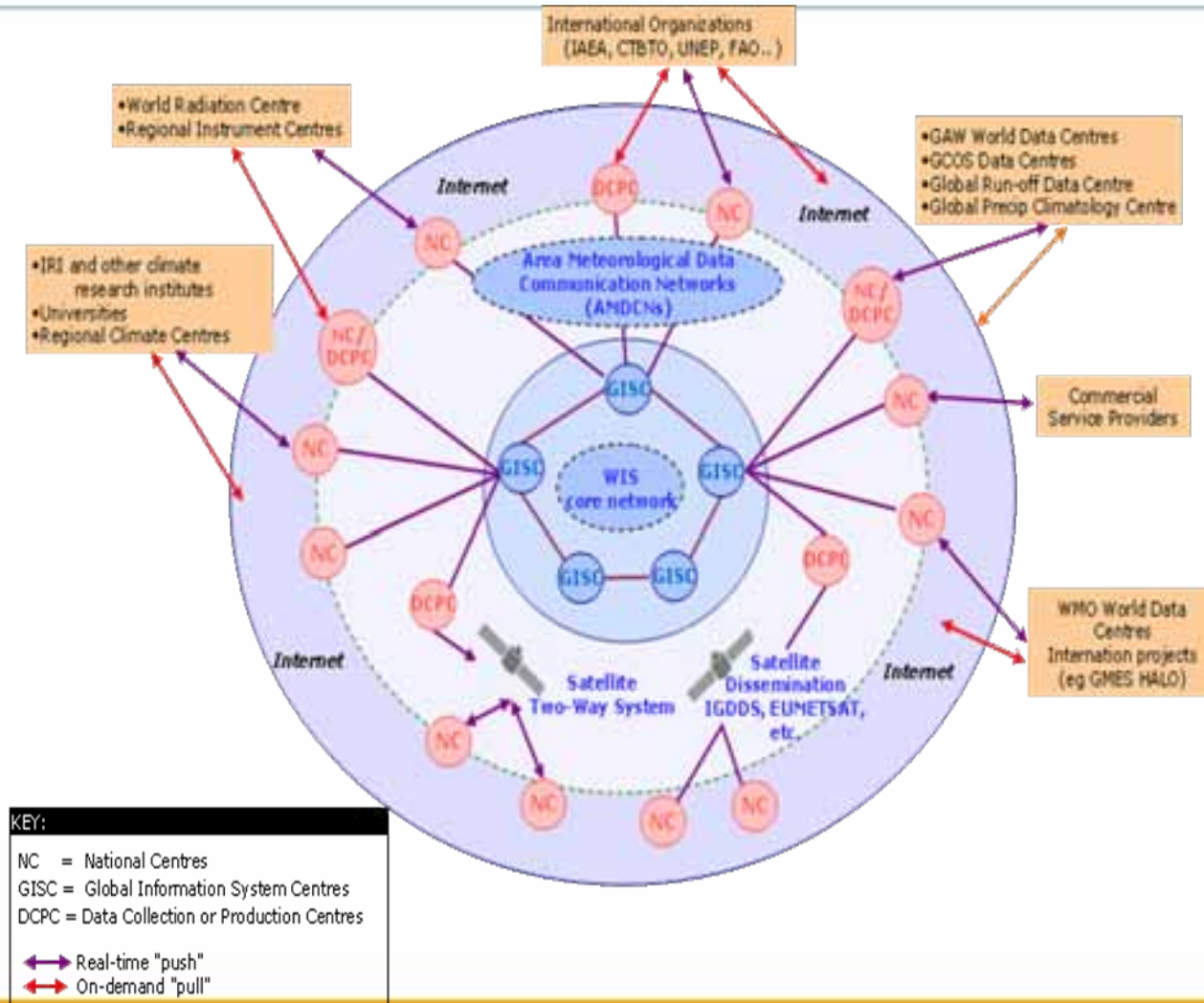
# The GTS is.....







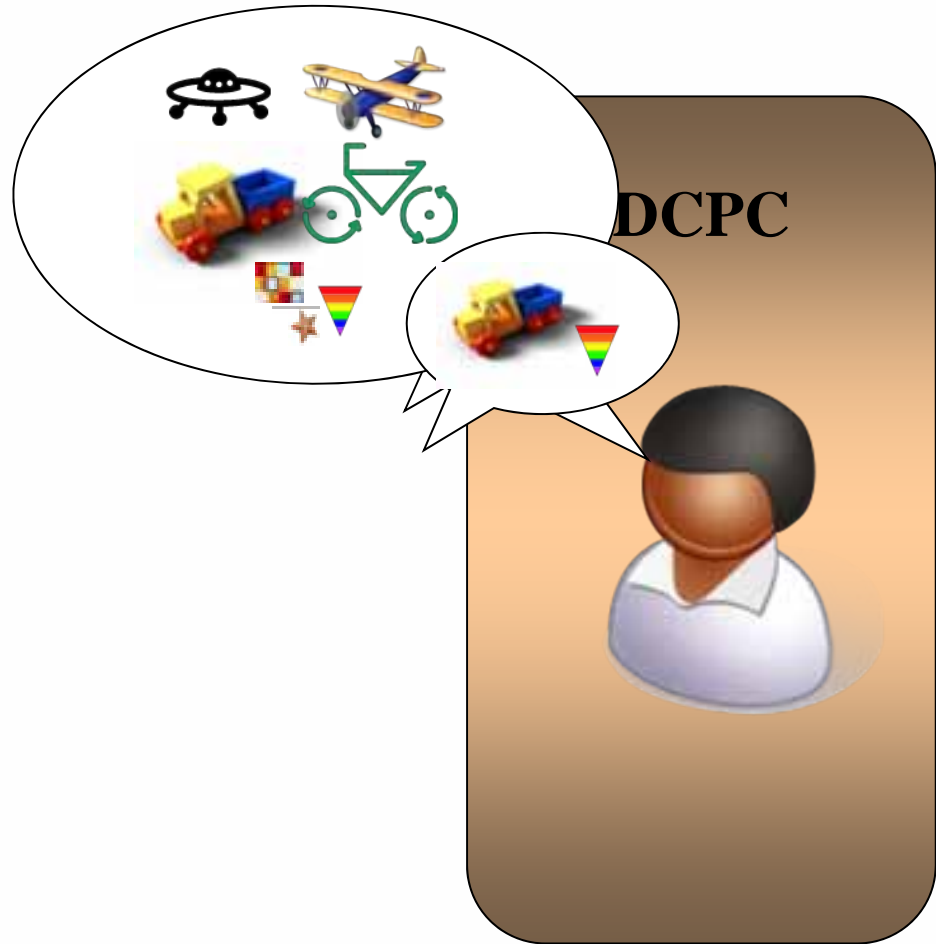
# WMO Centres





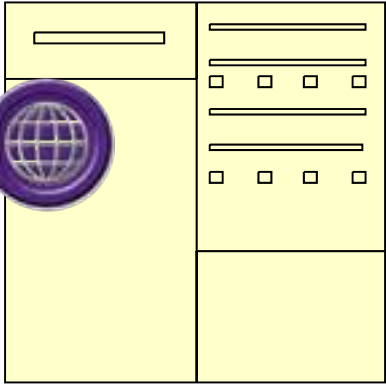
# Adding data to WIS

**WMO Pizza Programme**





Search: Climate change for 48°N to 60°N and 10°W to 5°E



Search Results

User searches for metadata then retrieves information from data custodian

Information request to custodian

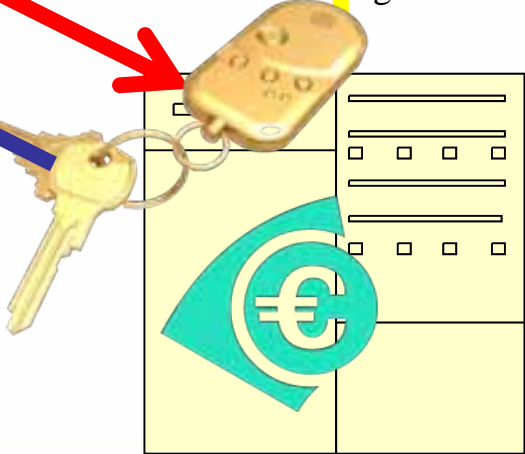
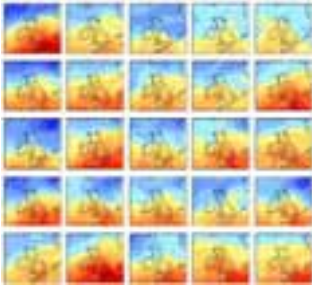
<http://www.metoffice.gov.uk/precis/qump>

Retrieve information



Centre publishes metadata to GISC DAR catalogue

Security/authentication/authorization and even charging is managed by each service provider



# GISC – DAR service

NC/DCPC information access service



## Where are we?

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- WIS became operational 1 January 2012
  - 2 Global Information System Centres
  - Several DCPCs
  - Metadata growing
- WIGOS
  - In planning phase
- GFCS
  - Proving the vision and the governance structure



# WIS Portal - GISC Tokyo

Welcome to Tokyo Global Information System Centre!

[Home](#) [About WIS](#) [Warning](#) [KML](#) [WMO format](#) [Metadata](#) [Help Desk](#) [News](#)

[urn:x-wmo:md.jp.go.jma.wis.dccc-wdccc-p.TER669N00.CH4@WIS-TOKYO-Tokyo](#)

[Edit](#) [Delete](#)

WDCGG - CH4 observation at Terberka

[urn:x-wmo:md.jp.go.jma.wis.dccc-wdccc-p.TER669N00.CO2@WIS-TOKYO-Tokyo](#)

[Edit](#) [Delete](#)

WDCGG - CO2 observation at Terberka

## Search

WIS\_Center  
(OAI Set):

Full Text:

climate

Title:

Abstract:

Keywords:

North:

80

West:

-10

East:

150

South:

60





## Metadata urn:x-wmo:md:jp.go.jma.wis.dcpc-wdcgg::p.TER669N00.CH4

WDCGG - CH4 observation at Teriberka

metadata detail

file identifier: urn:x-wmo:md:jp.go.jma.wis.dcpc-wdcgg::p.TER669N00.CH4  
 language: eng  
 character set: utf8  
 hierarchy level: dataset  
 hierarchy level name: archive of point observation data for a parameter

contact

date stamp: 2011-12-05T09:03:29Z  
 metadata standard name: ISO 19115-2 Geographic information — Metadata — Part 2: Extensions for imagery and gridded data  
 metadata standard version: ISO 19115-2:2009-02-15

reference system info

reference system identifier  
 code: WGS 84  
 code space: The World Geodetic System 1984

metadata extension info

extension on line resource

linkage  
 URL: [http://www.wmo.int/pages/prog/wis/2010/metadata/version\\_1-2](http://www.wmo.int/pages/prog/wis/2010/metadata/version_1-2)  
 name: WMO Core Profile version 1.2

identification info

distribution info

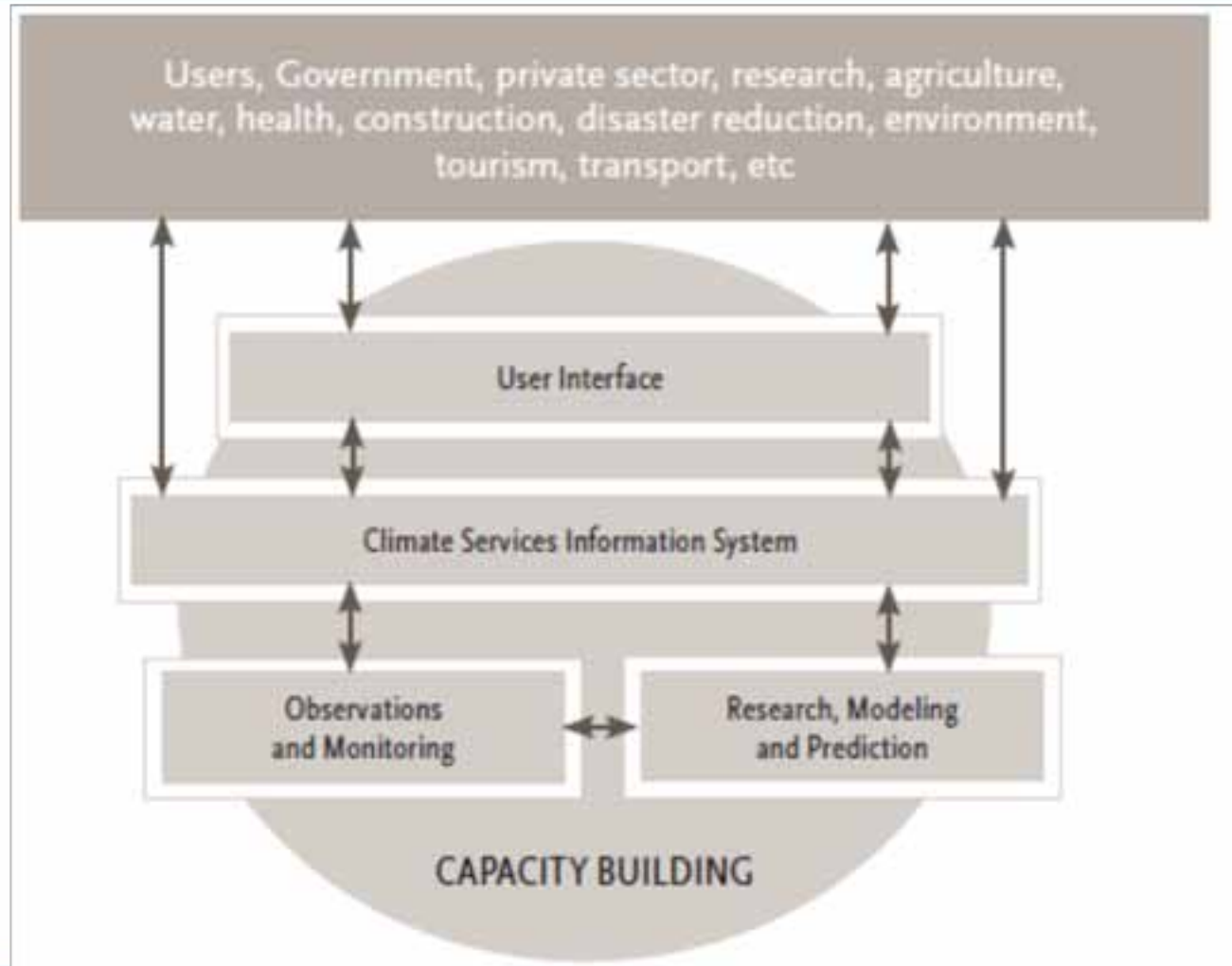


# WIGOS





# GFCS








- Data Discovery**
  - Simple Search
  - Extended Search
  - Browse by theme
  - Expert Search
  - SRU Search
  - Package List
- Registration**
- Miscellaneous**
- Imprint**

## Simple search

Provider	all		
Free text (meteorologic elements)	<input type="text"/>		
Geographic coordinates			
	56		
1.1		20	
	43.1		
Region	-User defined-		
<input type="button" value="Continue"/>		<input type="button" value="Reset"/>	



[Web address - http://gisc.dwd.de](http://gisc.dwd.de)



# GISC - Tokyo

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Welcome to Tokyo Global Information System Central!

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Search

WIS Center  
GISC Search  
WIS-TOKYO-Tokyo

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Search Reset

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