

# Introduction to the terminal

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## Setup ssh trust

- `cd ~/.ssh`
- **Generate public/private dsa key pair**

```
ssh-keygen -t dsa
```

- **Add public key into `~/.ssh/authorized_keys` on target host**

```
cat id_dsa.pub >> ~/.ssh/authorized_keys
```

# Web Services – Authentication principles

- **Identification (who you are)**
  - **ECMWF userid (from certificate or manual login with token)**
  - **Web only userid (from manual login)**
  - **Domain user (from IP address or DNS domain name)**
- **Authorisation (proof of who you are)**
  - **Certificate**
  - **Security token**
  - **Password**
- **Access Control (what you can access)**
  - **Protected pages**
  - **Personalised pages**

## Web Services – Access levels

### **Without certificate, from recognised domain:**

- **Forecast products (including current FC)**
- **Documentation**
- **Web-MARS browsing (registration needed)**

### **Certificate **or** Security token needed for:**

- **Dissemination management**

### **Security token validation needed for:**

- **Ecaccess**
- **Certificate request**

# Web access classes – authorised domain

User class	Auth Method	Browse MARS data	Retrieve Data		My Room	Real-time charts	Restricted Computing Docs
			Archived	Real-time			
Unregistered	Domain	✓	✗	✗	✗	✓	✓
Self registered	Domain + web password	✓	✓	✗	✓	✓	✓
Registered by Comp Rep	Domain + web password	✓	✓	🔧	✓	✓	✓
	Roaming password	✓	✓	🔧	✓	✓	✓
	Security token (or certificate)	✓	✓	🔧	✓	✓	✓

✓ - Yes

✗ - No



- Access given by Comp Rep

# Web access classes – other domains

User class	Auth Method	Browse MARS data	Retrieve Data		My Room	Real-time charts	Restricted Computing Docs
			Archived	Real-time			
Unregistered	Not applicable						
Self registered	Not applicable						
Registered by Comp Rep	web password	Insufficient privilege					
	Roaming password	✓	✓	🔧	✓	✓	✓
	Security token (or certificate)	✓	✓	🔧	✓	✓	✓

✓ - Yes

✗ - No



🔧 - Access given by Comp Rep

# Web Services – Login (1/2)

This is the login page as seen by a domain user from *ecmwf.int* who chose to login manually or doesn't have a certificate.

At this stage the user could choose to register himself, to login with a user id or login as an anonymous domain user.

ECMWF Login Page - Mozilla <2>  
https://nwmstest.ecmwf.int/login?mode=advanced

European Centre for Medium-Range Weather Forecasts

Home Your Room Login Contact Feedback Site Map Search:

About Us Overview Getting here Committees  
Products Forecasts Order Data Order Software  
Services Computing Archive PrepIFS  
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Publications Newsletters Manuals Library  
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Related  
ECMWF Certificate Authority  
Forgot your password?  
Forgot your User ID?

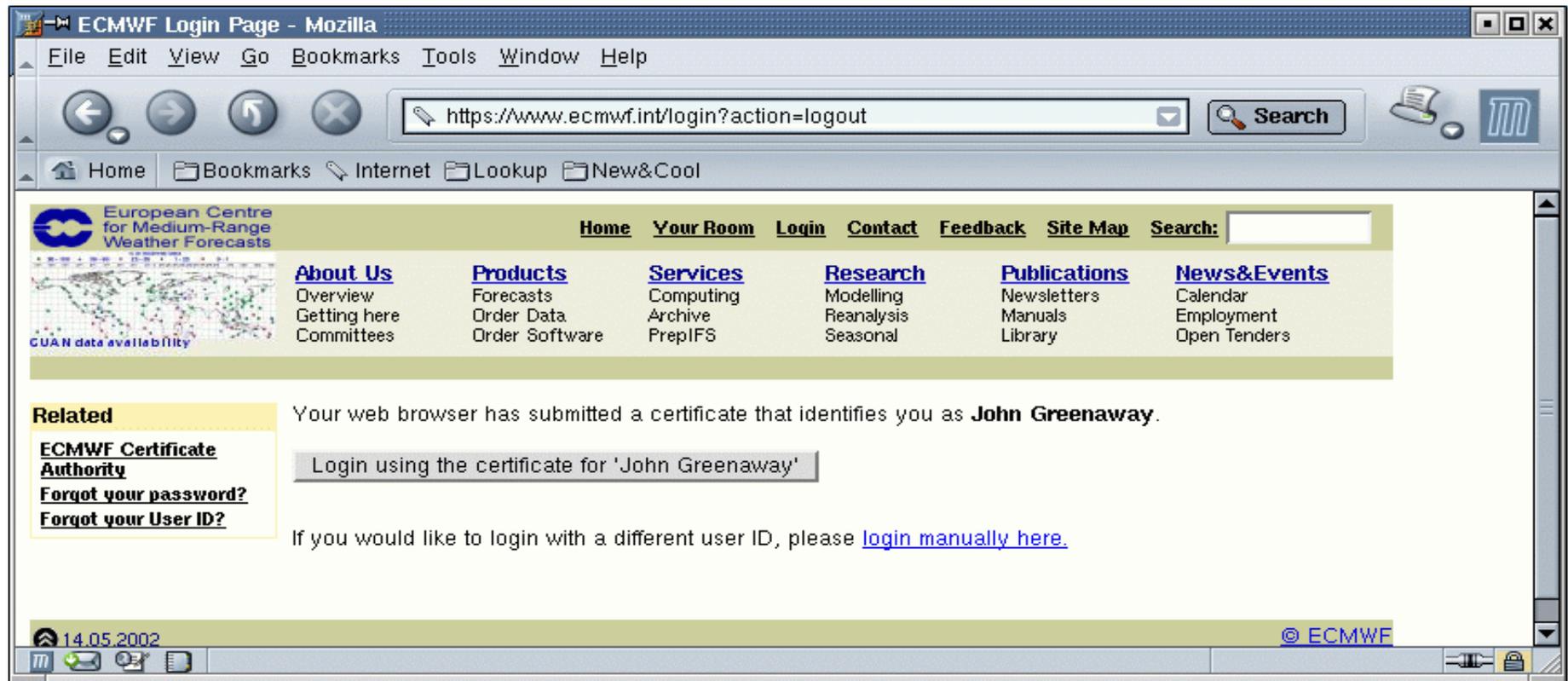
Registered users:  
User ID:   
Web password:   
or  
SecurID Passcode:   
Login

Not registered yet?  
Some services will not be available to you unless you register.  
Register now OR  
Continue without registering  
If you Continue without registering, we will recognise you as an anonymous user from the Internet domain **domain\_ecmwf**.

14.05.2002 © ECMWF

Should you have forgotten your User ID and/or web password you can request a new one from this page.

# Web Services – Login (2/2)



This is the login page as seen by a domain user from *ecmwf.int* who has a certificate.

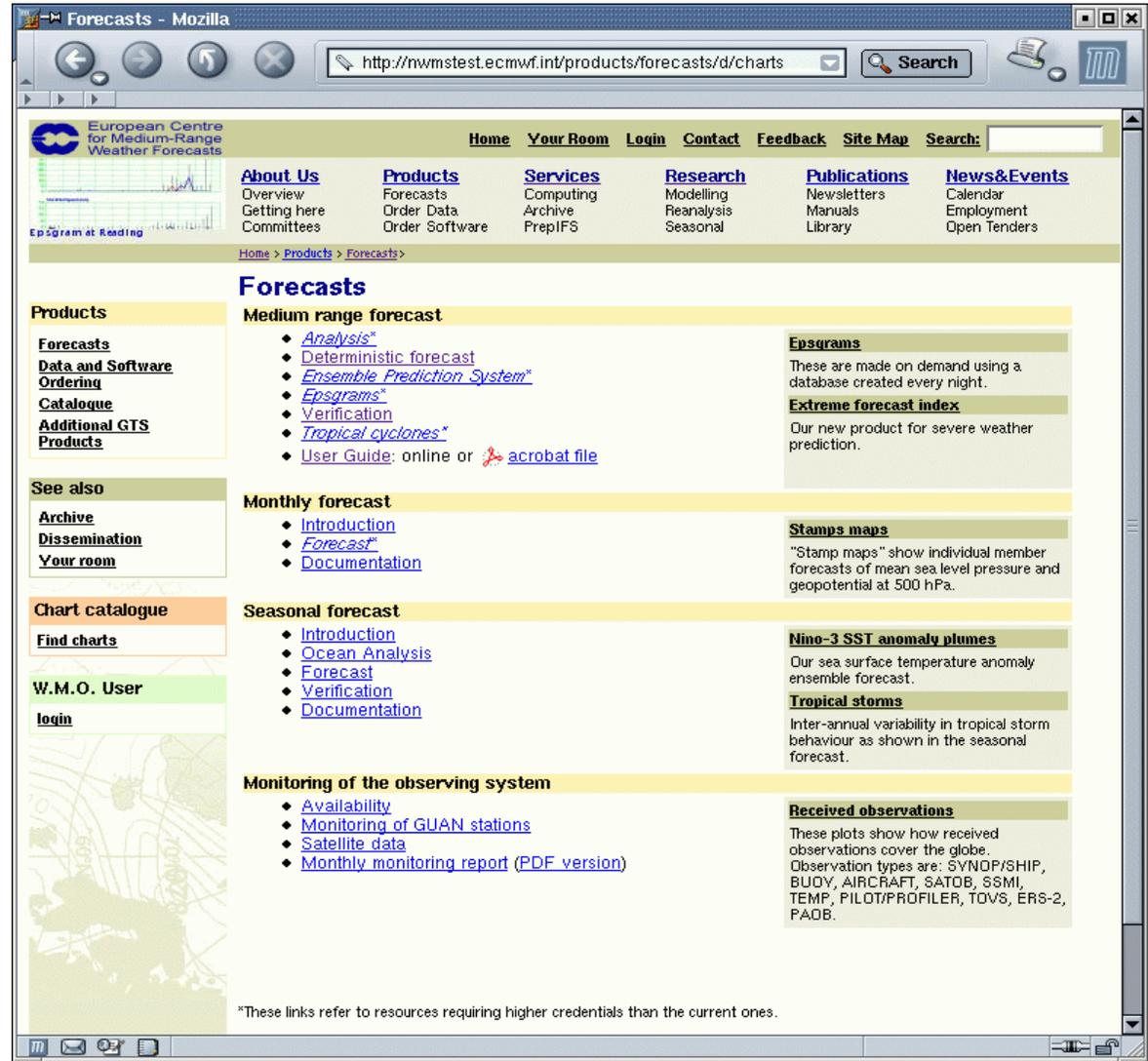
At this stage the user could either login with the certificate or login as a different user by clicking on [login manually here](#)

# Web Services – Personalisation (1/2)

This page will look different depending on the user who is viewing it and possibly WHERE from.

The page is currently being viewed by a public user.

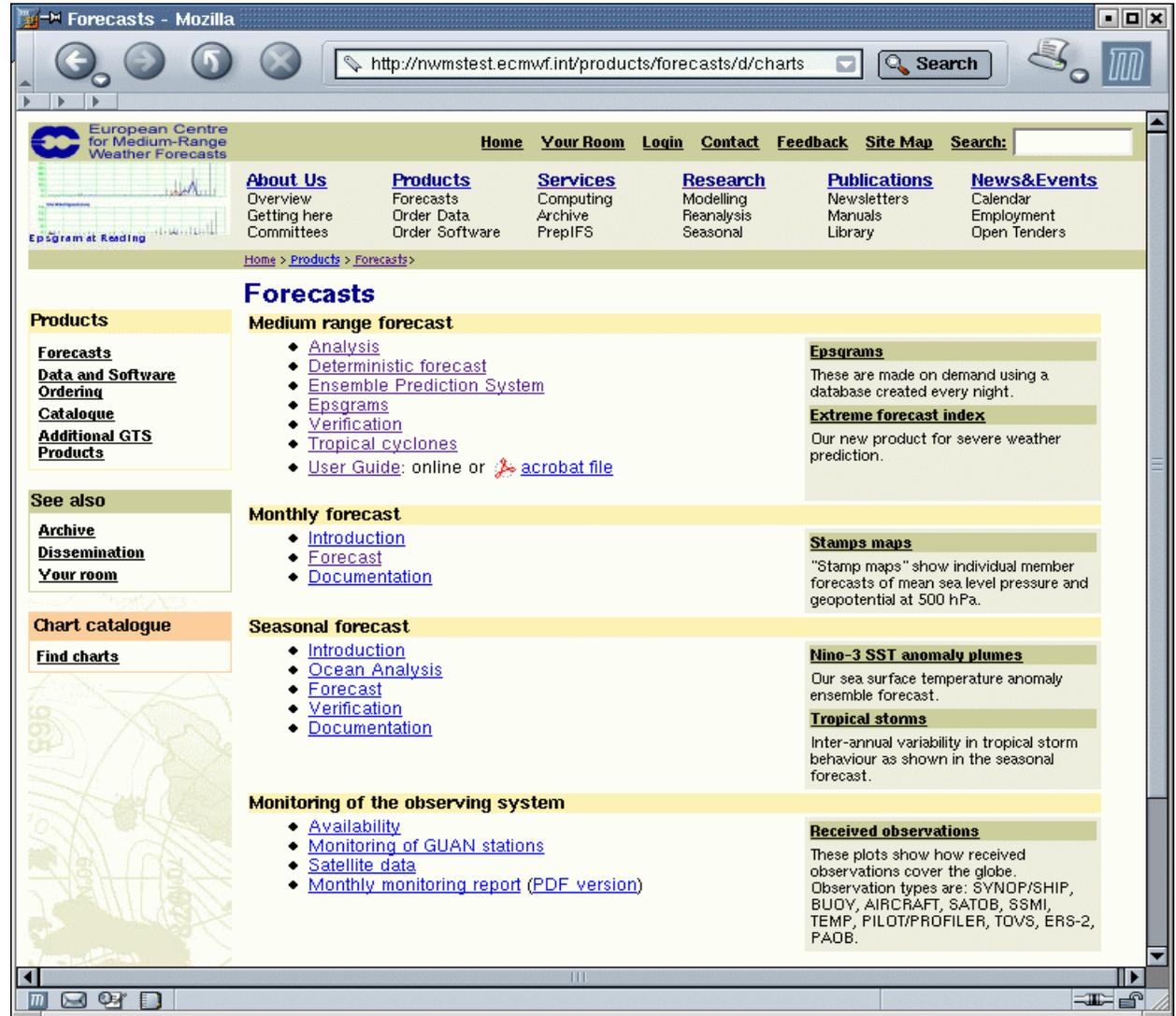
\* denotes area with restricted access



# Web Services – Personalisation (2/2)

This page will look different depending on the user who is viewing it.

The page is currently being viewed by an *ECMWF domain user*.



The screenshot shows a Mozilla browser window displaying the ECMWF website. The address bar shows the URL <http://nwmstest.ecmwf.int/products/forecasts/d/charts>. The page features a navigation menu with links for Home, Your Room, Login, Contact, Feedback, Site Map, and Search. The main content area is titled "Forecasts" and includes sections for Medium range forecast, Monthly forecast, Seasonal forecast, and Monitoring of the observing system. A sidebar on the left contains links for Products, See also, and Chart catalogue. The page also includes a search bar and a logo for the European Centre for Medium-Range Weather Forecasts.

**European Centre for Medium-Range Weather Forecasts**

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[Products](#)  
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Seasonal

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Calendar  
Employment  
Open Tenders

[Home](#) > [Products](#) > [Forecasts](#)

## Forecasts

### Products

- [Forecasts](#)
- [Data and Software Ordering](#)
- [Catalogue](#)
- [Additional GTS Products](#)

### See also

- [Archive](#)
- [Dissemination](#)
- [Your room](#)

### Chart catalogue

- [Find charts](#)

### Medium range forecast

- [Analysis](#)
- [Deterministic forecast](#)
- [Ensemble Prediction System](#)
- [Epsgrams](#)
- [Verification](#)
- [Tropical cyclones](#)
- [User Guide: online or !\[\]\(a0ad59e373bf3d6531a15867b6302357\_img.jpg\) \[acrobat file\]\(#\)](#)

### Monthly forecast

- [Introduction](#)
- [Forecast](#)
- [Documentation](#)

### Seasonal forecast

- [Introduction](#)
- [Ocean Analysis](#)
- [Forecast](#)
- [Verification](#)
- [Documentation](#)

### Monitoring of the observing system

- [Availability](#)
- [Monitoring of GUAN stations](#)
- [Satellite data](#)
- [Monthly monitoring report \(PDF version\)](#)

### Epsgrams

These are made on demand using a database created every night.

### Extreme forecast index

Our new product for severe weather prediction.

### Stamps maps

"Stamp maps" show individual member forecasts of mean sea level pressure and geopotential at 500 hPa.

### Nino-3 SST anomaly plumes

Our sea surface temperature anomaly ensemble forecast.

### Tropical storms

Inter-annual variability in tropical storm behaviour as shown in the seasonal forecast.

### Received observations

These plots show how received observations cover the globe. Observation types are: SYNDP/SHIP, BUOY, AIRCRAFT, SATOB, SSMI, TEMP, PILOT/PROFILER, TOVS, ERS-2, PAOB.

# Web Services – Registration

ECMWF Registration Page - Mozilla

https://nwmstest.ecmwf.int/register

European Centre for Medium-Range Weather Forecasts

Home Your Room Login Contact Feedback Site Map Search:

**About Us**  
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## ECMWF Registration Page

You may register here with ECMWF Web Services. All you have to do is to choose a **User ID** and tell us your name and your **e-mail address** .

Once we have processed your request, we will send you a **password** , which you may use to log in.

Please choose a User ID:  (At least 5 characters long)

Your first name is:

And your last name is:

Your e-mail address is:

Your e-mail address (again):

14 05 2002

© ECMWF

Here (domain) users can register with their e-mail address.

# Web Services – Certificate request

1. Start Firefox and on [www.ecmwf.int](http://www.ecmwf.int) navigate to Login > ECMWF Certificate Authority

2. Create certificate

- Do not remember password for this site

3. Install Certificate and CA

- When asked to set a Master Password **just press “Enter”**
- Trust CA to identify Web sites (only)



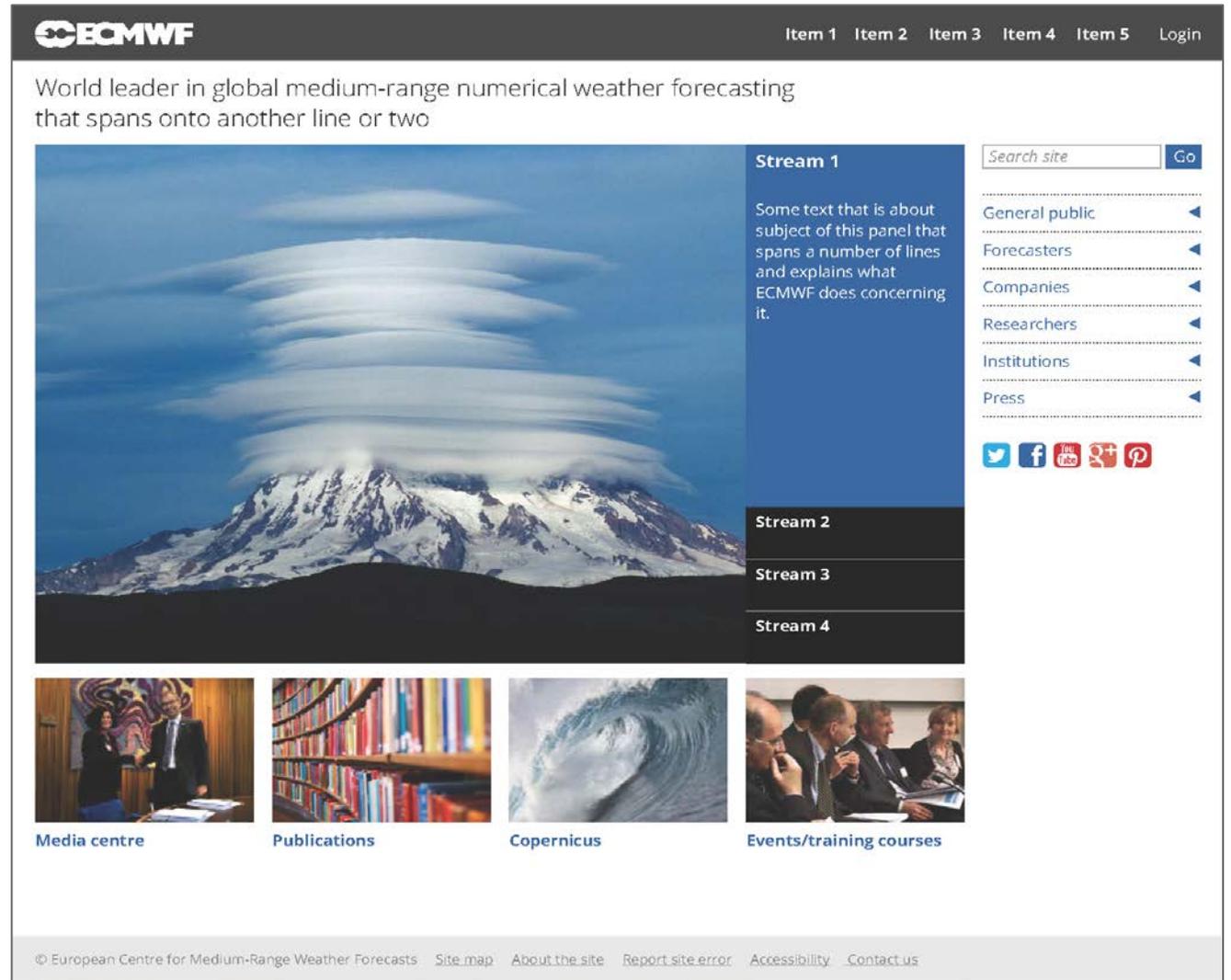
4. Quit Firefox

5. Restart Firefox and login to Website using your certificate

# Web2013 project - Overview

ECMWF is redeveloping its website in order to:

- Better reflect the status of ECMWF;
- Improve the overall usability of the website;
- Improve the relevance, quality and accessibility of content;
- Provide enhanced functionality;
- Make it easier to maintain and develop.



The screenshot displays the ECMWF website interface. At the top, the ECMWF logo is on the left, and navigation links for 'Item 1' through 'Item 5' and a 'Login' link are on the right. Below the navigation, a main heading reads 'World leader in global medium-range numerical weather forecasting that spans onto another line or two'. A large image of a mountain with a unique cloud formation is featured. To the right of the image is a 'Stream 1' section with a blue background and white text. Below this are sections for 'Stream 2', 'Stream 3', and 'Stream 4'. A search bar with a 'Go' button is located to the right of the main content. Below the search bar is a vertical menu with categories: 'General public', 'Forecasters', 'Companies', 'Researchers', 'Institutions', and 'Press'. Social media icons for Twitter, Facebook, YouTube, and LinkedIn are also present. At the bottom of the main content area, there are four small images with captions: 'Media centre', 'Publications', 'Copernicus', and 'Events/training courses'. The footer contains copyright information and links for 'Site map', 'About the site', 'Report site error', 'Accessibility', and 'Contact us'.

# Web2013 – Changes and release

## Key changes

- Drupal web content management system
- New web design and content organization
- New Apache SOLR web search
- Enhanced charts (ecCharts Django code)
- Revised and updated web content
- Simplified registration and login
- Removal of Your Room functionality

## Release strategy

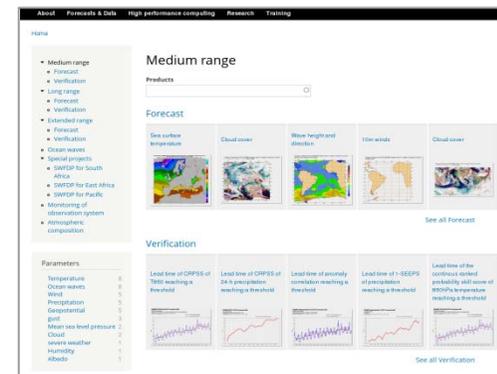
- All key areas migrated in January
- Early access later in April
- Maintain old site for one year
- Some areas live on old site at release
- Migrate remaining areas after release
- Maintain links between new and old

# Web2013 – Charts highlights

- **Browsable charts equivalent to current site**
- **All current charts will be migrated**
- **Increased interactivity not as much as ecCharts**
- **Supported chart downloads via <http://api.ecmwf.int/>**
- **Technically based on Django (WREP) and Drupal**



- **Key changes:**
  - **No *Your Room* facility**
  - **Improved (different) navigation, search and perma-linking**



# Web2013 - Access Control changes

- **Reduced number of login methods (authentication):**
  - Roaming password
  - SSL user certificate
  - Security token
- **CAPTCHA will be used to avoid abuse of registration system**
- **An email address validation step will be required for all registrations**
- **Public registration will be possible but will not provide enhanced access**
- **Single sign-on across web sites**
- **No domain login (“Continue without registering”)**
- **Accounts may have enhanced access based on the domain from which the registration occurs**
- **All user accounts manageable through EMS**

# Web2013 - Login characteristics authorized domain

User Class	Auth Method	Browse MARS data	Retrieve Data		<del>Work Rooms</del>	Real-time charts	Restricted Computing Documents
			Archived	Real Time			
<del>Unregistered</del>	<del>Domain</del>	✓	✗	✗	✗	✓	✓
Self registered	<del>Domain + web password</del>	✓	✓	✗	✓	✓	✓
Fully registered	<del>Domain + web password</del>	✓	✓	🔧	✓	✓	✓
	Roaming password	✓	✓	🔧	✓	✓	✓
	Token	✓	✓	🔧	✓	✓	✓

If registered from known domain

KEY: ✓ — Yes. ✗ — No. 🔧 — Access given by Computing Representative .

# Web2013 - Login characteristics other domain

User Class	Auth Method	Browse MARS data	Retrieve Data		<del>Join Rooms</del>	Real-time charts	Restricted Computing Documents
			Archived	Real Time			
Unregistered	Not applicable						
Self registered	As fully registered if from a known domain		<del>Not applicable</del>			No access if from an unknown domain	
Fully registered	web password	insufficient privilege					
	Roaming password	✓	✓	🔧	✓	🔧	✓
	Token	✓	✓	🔧	✓	🔧	✓

KEY: ✓ — Yes. ✗ — No. 🔧 — Access given by Computing Representative.

# Sources of information

- **Service status**

- On [www.ecmwf.int](http://www.ecmwf.int): **Services > Computing > System status** or <http://www.ecmwf.int/services/computing/status/>
- `less /etc/motd`

- **man/xman**

- print entries from on-line reference manuals
- find man page entries by keyword
- *beware* - different parameter options on different systems
- `man man` will show what options are available
- not all commands will have man pages on all systems (e.g. HPCF)

- **FAXes**

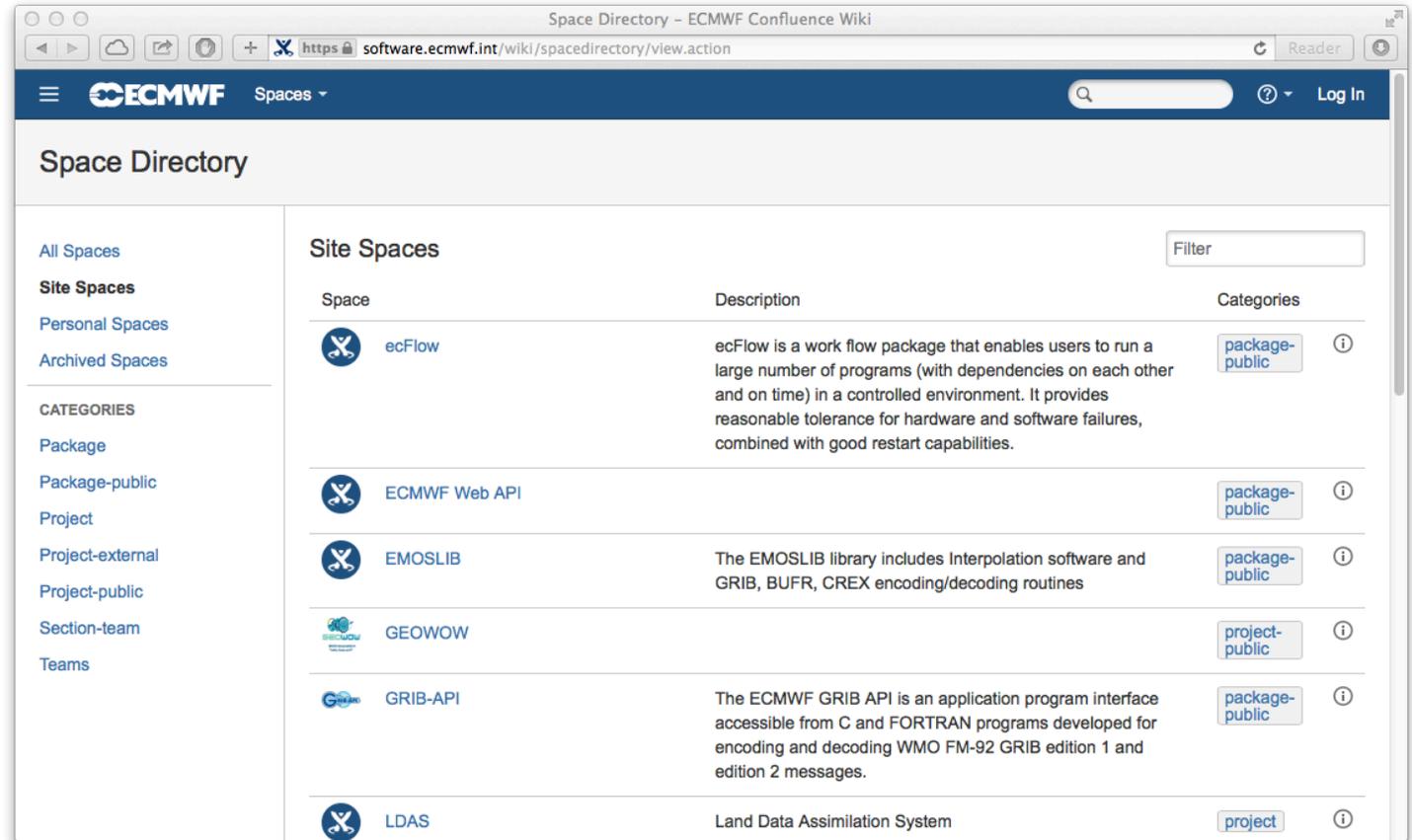
sent to TAC Reps, Met. Contact points and Computing Representatives

- **[www.ecmwf.int](http://www.ecmwf.int)**

- Newsletters on-line since Summer 1995 issue

# Software Support

- Effort to improve the support ECMWF provides to MS for its software packages
- Dedicated first line of support, issue management, binary packages, moderated forums, etc.



The screenshot shows the ECMWF Space Directory website. The browser address bar displays 'https://software.ecmwf.int/wiki/spacedirectory/view.action'. The page title is 'Space Directory - ECMWF Confluence Wiki'. The main content area is titled 'Space Directory' and features a table of 'Site Spaces'. The table has columns for 'Space', 'Description', and 'Categories'. The categories are represented by icons and labels like 'package-public' or 'project'. A sidebar on the left contains navigation links for 'All Spaces', 'Site Spaces', 'Personal Spaces', and 'Archived Spaces', along with a 'CATEGORIES' section listing various space types.

Space	Description	Categories
 ecFlow	ecFlow is a work flow package that enables users to run a large number of programs (with dependencies on each other and on time) in a controlled environment. It provides reasonable tolerance for hardware and software failures, combined with good restart capabilities.	 
 ECMWF Web API		 
 EMOSLIB	The EMOSLIB library includes Interpolation software and GRIB, BUFR, CREX encoding/decoding routines	 
 GEOWOW		 
 GRIB-API	The ECMWF GRIB API is an application program interface accessible from C and FORTRAN programs developed for encoding and decoding WMO FM-92 GRIB edition 1 and edition 2 messages.	 
 LDAS	Land Data Assimilation System	 

# Who to contact

- **CallDesk (24h/7d)**

[calldesk@ecmwf.int](mailto:calldesk@ecmwf.int)

- connectivity problems, token problems
- suspected fault
- operational query

- **Software Support**

[software.support@ecmwf.int](mailto:software.support@ecmwf.int)

- any suggestions for improvements or bug reports with *any* ECMWF software package

- **User Support (office hours)**

[advisory@ecmwf.int](mailto:advisory@ecmwf.int)

- advice on any aspect of the use of ECMWF computers

# Who to contact

- **Data & Software Services (office hours)**

- Changes in dissemination

requirements:

[data.services@ecmwf.int](mailto:data.services@ecmwf.int)

- Software request:

[software.services@ecmwf.int](mailto:software.services@ecmwf.int)

- **Member State Computing Representative (office hours)**

- registration / administration
- ECMWF software installed locally

