

The CESM Experiment Database

<https://csegweb.cgd.ucar.edu>

CESM Breckenridge Workshop – June 18-21

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<https://csegweb.cgd.ucar.edu>

In a nutshell...

What is it? The CESM Experiment Database is an on-line collaborative notebook to store metadata about CESM experiment runs. It provides a “snap-shot” view of the state of the model at run time (i.e. version, resolution, machine, compiler, compset, collaborators, approvals, diagnostics links, build configuration notes, etc...)

Why do we need it? Previously, many CESM developers and scientists stored their run metadata locally on their own desktop or via a wiki. The CESM Experiment Database provides a web-based, centralized and standardized method for the storage of all run metadata.

Who should use it? All CESM developers, programmers and scientists running the model from both inside and outside of NCAR. A CESM/CISM SVN developers login or NCAR/CGD UCAS login is all that is needed to use the database.

Need help migrating existing metadata into the database or adding new metadata?

Please contact aliceb@ucar.edu.

Preview:

- Motivation
- Users Views
- Work-flow with Running the CESM
- Incorporating User Feedback
- Future Directions
- Comments / Questions

Motivation

The CESM development and user community needed a coherent, web-based centralized database to store their run metadata.

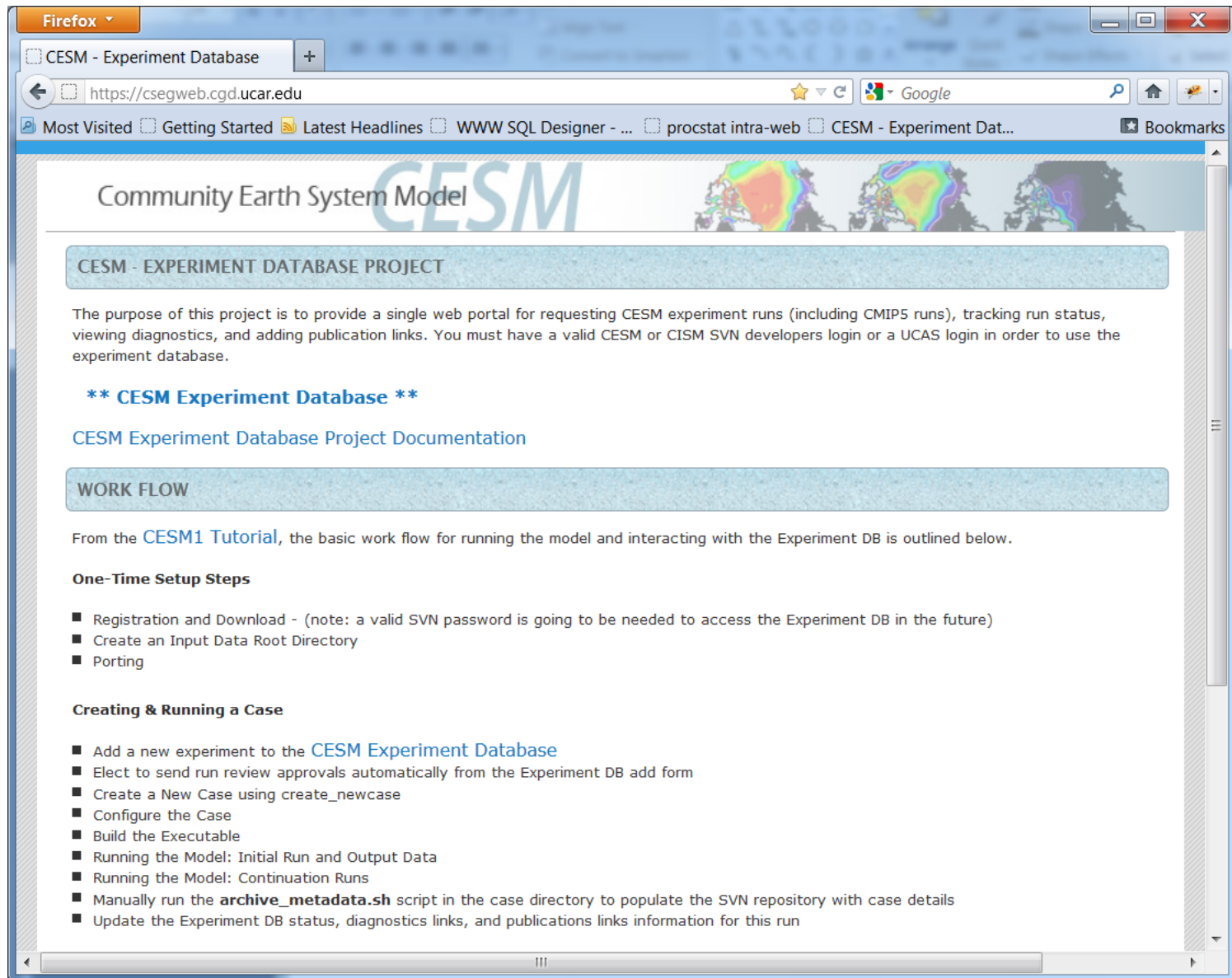
The metadata represents a snap-shot view of how the model was run for a given experiment. Individuals and groups maintained their own “databases” of run metadata. For example:

- http://www.cgd.ucar.edu/cseg/cmip5_dashboard/ncar/index.html
 - http://www.cgd.ucar.edu/cseg/cmip5_dashboard/ncar/index.html
 - http://www.cgd.ucar.edu/cseg/ccsm4_0_runs/
 - <http://www.cgd.ucar.edu/ccr/hteng/DP/>
- and many more

Previous Run Database

- http://ccsm-rundb.cgd.ucar.edu/case_list.php
- ** no longer available

<https://csegweb.cgd.ucar.edu>



Firefox

CESM - Experiment Database

https://csegweb.cgd.ucar.edu

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Community Earth System Model

CESM - EXPERIMENT DATABASE PROJECT

The purpose of this project is to provide a single web portal for requesting CESM experiment runs (including CMIP5 runs), tracking run status, viewing diagnostics, and adding publication links. You must have a valid CESM or CISM SVN developers login or a UCAS login in order to use the experiment database.

**** CESM Experiment Database ****

[CESM Experiment Database Project Documentation](#)

WORK FLOW

From the [CESM1 Tutorial](#), the basic work flow for running the model and interacting with the Experiment DB is outlined below.

One-Time Setup Steps

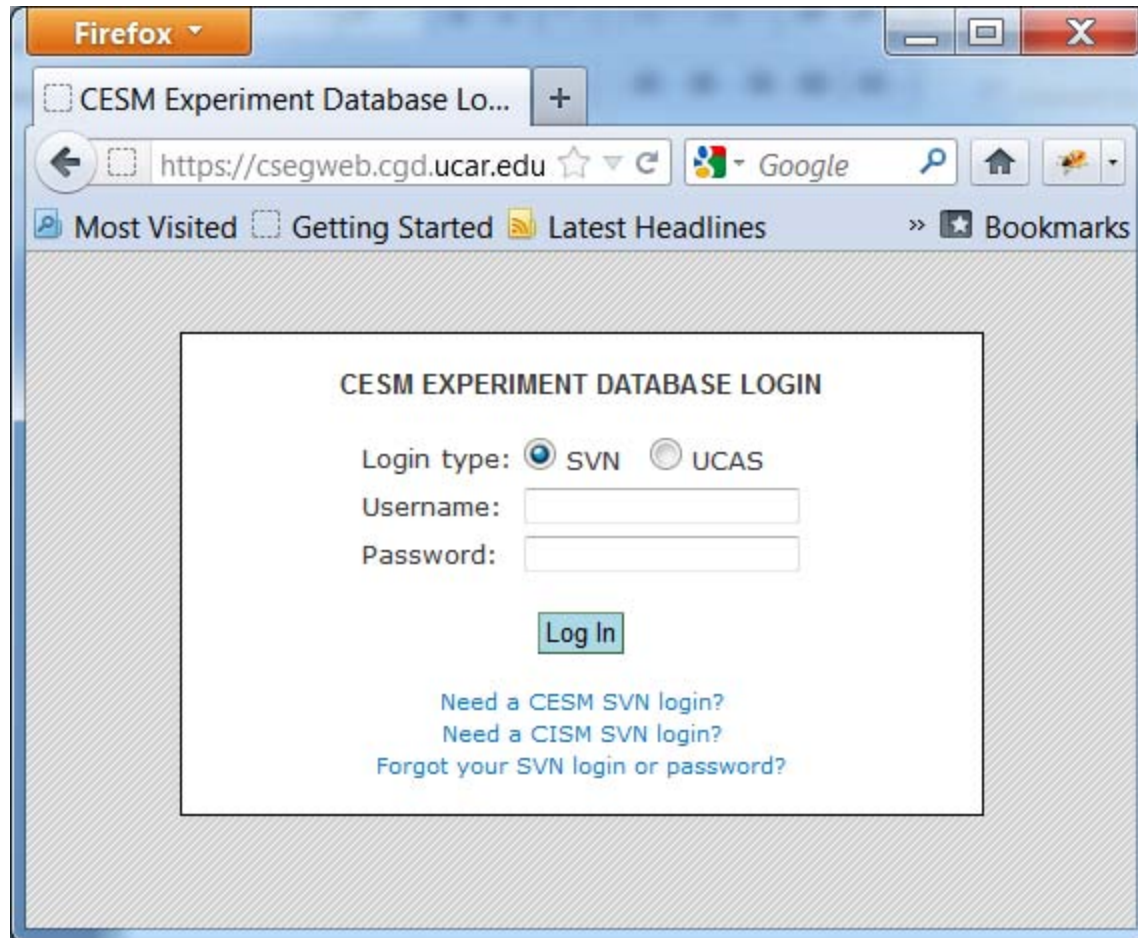
- Registration and Download - (note: a valid SVN password is going to be needed to access the Experiment DB in the future)
- Create an Input Data Root Directory
- Porting

Creating & Running a Case

- Add a new experiment to the [CESM Experiment Database](#)
- Elect to send run review approvals automatically from the Experiment DB add form
- Create a New Case using create_newcase
- Configure the Case
- Build the Executable
- Running the Model: Initial Run and Output Data
- Running the Model: Continuation Runs
- Manually run the `archive_metadata.sh` script in the case directory to populate the SVN repository with case details
- Update the Experiment DB status, diagnostics links, and publications links information for this run

Users View

<https://csegweb.cgd.ucar.edu/expdb> (SVN or UCAS authentication)



The image shows a screenshot of a Firefox browser window. The address bar displays the URL <https://csegweb.cgd.ucar.edu>. The page content is a login form titled "CESM EXPERIMENT DATABASE LOGIN". The form includes a "Login type:" section with two radio buttons: "SVN" (selected) and "UCAS". Below this are input fields for "Username:" and "Password:". A "Log In" button is positioned below the password field. At the bottom of the form, there are three links: "Need a CESM SVN login?", "Need a CISM SVN login?", and "Forgot your SVN login or password?".

Firefox

CESM Experiment Database Lo... +

https://csegweb.cgd.ucar.edu

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CESM EXPERIMENT DATABASE LOGIN

Login type: SVN UCAS

Username:

Password:

[Need a CESM SVN login?](#)
[Need a CISM SVN login?](#)
[Forgot your SVN login or password?](#)

Users View – main index and search filtering options

Firefox

https://csegweb..._to_display=25

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/index.cgi?sorted=e.request_date&order=DESC&num_to_display=25

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Logged in as Alice Bertini | [Update Profile](#) | [Logout](#)

CESM EXPERIMENT DATABASE

Select an experiment: -- select experiment -- [Add New Experiment](#) [View Decadal Prediction Experiments](#) -- search -- [Go](#)

Search Filter Options:

User	Status	Working Group	Experiment Type	Data Category
--Select User--	--Select Status--	--Select Working Group--	--Select Experiment Type--	--Select Data Category--
Location	Machine	Resolution	Compset	Date Range
--Select Location--	--Select Machine--	--Select Resolution--	--Select Compset--	--Begin-- --End--

[Submit](#) [Reset](#)

Displaying experiments [1 - 25] out of 1472

ID	Case Name	Diags	Pubs	Type	Compset	Resolution	Machine	Request Date	Status	Assigned
665	b40_b18c2_23	Diags	Pubs	EXP	B_2000_TRACK5DEV	1.9x2.5_gx1v6	franklin	2099-07-13	Unknown	Cecile Hannay
1613	b.e10.B200ZC5CN.f09_g16.001	Diags	Pubs	CMIP5	B_1850_CAM5_CN	0.9x1.25_gx1v6	hopper	2012-06-12	Pending	Adrienne Middleton
1616	f.e10.FAMIP.f02_f02.cam5_PD.001	Diags	Pubs	EXP	F_AMIP_CAM5	0.23x0.31_0.23x0.31	janus	2012-06-12	Pending	TBD
1611	e.10.E1850CN.0.47x0.63_gx1v6.2xco2.001	Diags	Pubs	EXP	E_1850_CN	0.47x0.63_gx1v6	jaguar	2012-06-08	Pending	Adrienne Middleton
1610	e.10.E1850CN.0.47x0.63_gx1v6.001	Diags	Pubs	EXP	E_1850_CN	0.47x0.63_gx1v6	janus	2012-06-08	Pending	Adrienne Middleton
1609	b.e10.B20GHGC5CN.f09_g16.002	Diags	Pubs	CMIP5	B_1850_CAM5_CN	0.9x1.25_gx1v6	jaguar	2012-06-01	Pending	Adrienne Middleton
1612	b.e10.B1850C5CN.f09_g16.ramp.001	Diags	Pubs	EXP	B_1850_CAM5_CN	0.9x1.25_gx1v6	titan	2012-05-31	Running	Andrew Mai
1607	f.e11.FW.f19_f19.WMSPD.001	Diags	Pubs	EXP	F_2000_WACCM	1.9x2.5_1.9x2.5	bluefire	2012-05-30	Pending	Sean Santos
1602	b.e10.B20GHGC5CN.f09_g16.001	Diags	Pubs	CMIP5	B_1850_CAM5_CN	0.9x1.25_gx1v6	jaguar	2012-05-23	Pending	Adrienne Middleton

Detail Experiment View

Firefox

https://csegweb...cgi?item=1617

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_item.cgi?item=1617

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CESM EXPERIMENT DATABASE - DETAIL VIEW - B.E10.B20OZC5CN.F09_G16.002

<< [Return to list](#)

-- select experiment -- [Update](#) [Add New Experiment](#) [Clone](#) [View run.txt](#) -- search -- [Go](#)

** Required fields for case name reservation only.

General Information	
Current Status:	Pending
Unique Experiment ID:	1617
** Case name <small>(must be unique - see Case Naming Conventions);</small>	b.e10.B20OZC5CN.f09_g16.002
Last Update:	2012-06-15
Title:	b.e10.B20OZC5CN.f09_g16.002
Purpose of Run:	CESM1(CAM5) 20th-century transient ozone only
Original Contact:	hannay@ucar.edu
Requestor:	Julie Arblaster
Scientific Lead:	Julie Arblaster
Software Engineering Lead:	Adrienne Middleton
Assigned to:	Adrienne Middleton
Request Date:	2012-06-15
Data Category: <small>See Data Management Plan for details.</small>	Production - Experiment
Experiment Type:	CMIP5
Working Group(s):	Climate Variability and Change;
General Information Notes: Add Note	
Case Creation Information	
** Tag name:	cesm1_0_beta20
Base Repository Tag:	cesm1_0_beta20
** Publication and hardware:	NCSS - ORNL - icm...

Firefox

https://csegweb....cgi?item=1617

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_item.cgi?item=1617

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Case Creation Information	
** Tag name:	cesm1_0_beta20
Base Repository Tag:	cesm1_0_beta20
** Run location and hardware:	NCCS - ORNL : jaguar
Compiler:	TBD
** Compset:	B_1850_CAM5_CN
** Resolution:	0.9x1.25_gx1v6
Case directory:	
Case Creation Notes:	Add Note

Pre-Configuration Information	
Run Type:	hybrid
Reference case name:	b40_1850_1d_b08c5cn_138j
Reference case date:	

env_conf.xml specifications:	
env_conf.xml Notes:	Add Note

env_mach_pes.xml specifications:	
env_mach_pes.xml Notes:	Add Note

env_run.xml specifications:	
env_run.xml Notes:	Add Note

env_build.xml specifications:	
env_build.xml Notes:	Add Note

Post-Configuration Information	
Buildconf notes:	Add Note

SourceMods Information	

Detail Experiment View – cont'd

Firefox | https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_item.cgi?item=1617

SourceMods Information

Submitted By	Submit Date
Julie Arblaster	2012-06-15

Add historical ozone forcing to 1850 control compset:

```

/
&prescribed_ozone_n1
  prescribed_ozone_datapath           = '/tmp/proj/ccsm/inputdata/atm/cam/ozone'
  prescribed_ozone_file                = 'ozone_1.9x2.5_L26_1850-2005_c090803.nc'
  prescribed_ozone_name                = 'O3'
  prescribed_ozone_type                = 'INTERP_MISSING_MONTHS'

And additional variables:

&cam_inparm
fincl1 = 'cb_ozone_c','TMSO2','TMso4_a1','TMso4_a2','TMso4_a3','UTGWORO'
fincl2 = 'TREFHTMN','TREFHTMX','TREFHT','QREFHT','PRECC','PRECL','PSL','UBOT','VBOT'
fincl4 = 'T200:I','T500:I','U850:I','UBOT:I','V850:I','VBOT:I','Z100:I','Z200:I','PRECC:I','PRECL:I'
mfilt = 1,365,30,120,240
nhtfrq = 0,-24,-24,-6,-3
    
```

SourceMods notes:
[Add Note](#) [Edit](#) [Delete](#)

Performance/Cost Estimates

Estimated charges:	
Current charges:	
Throughput:	

Special Instructions

Special Instruction notes:
[Add Note](#)

Pre-Run Instructions

Pre-Run Instruction notes:
[Add Note](#)

Run Instructions

Run Length:	156
Model Begin Date:	1850-01-01
Model End Date:	2006-01-01

Detail Experiment View – cont'd

Firefox

https://csegweb....cgi?item=1617 +

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_item.cgi?item=1617

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Run Instructions

Run Length:	156
Model Begin Date:	1850-01-01
Model End Date:	2006-01-01
Priority/Targeted queue:	
Run directory:	/lustre/widow3/scratch/adriane/b.e10.B20ZC5CN.f09_g16.002
History file location on archive:	

Be sure to run archive_metadata.sh from the case directory in order to populate the SVN case repository.

Case Directory link: <small>svn password protected</small>	
Case Directory Archive link: <small>svn password protected</small>	
Run History link: <small>svn password protected</small>	

Diagnostics Plan - Details

Diagnostics Plan notes:
[Add Note](#)

Additional Information

Additional Information notes:
[Add Note](#)

Request for CCR Post-processing by-variable or CMIP5

Request for post-processing? <small>(email was sent to Gary Strand - CCR)</small>	No
--	----

Setup Approvals

Email reminder frequency:	Once a day
---------------------------	------------

Component	Liaison/Reviewer	Approval Request Date	Approval Date
atm Add Approval			
atm emails:			
cpl Add Approval			
cpl emails:			
glc Add Approval			

Detail Experiment View – cont'd

Firefox

https://csegweb....cgi?item=1617 +

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_item.cgi?item=1617

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Additional Information

Additional Information notes:
[Add Note](#)

Request for CCR Post-processing by-variable or CMIP5

Request for post-processing?
(email was sent to Gary Strand - CCR)

Setup Approvals

Email reminder frequency:

Component	Liaison/Reviewer	Approval Request Date	Approval Date
atm Add Approval			
atm emails:			
cpl Add Approval			
cpl emails:			
glc Add Approval			
glc emails:			
ice Add Approval			
ice emails:			
Ind Add Approval			
Ind emails:			
ocn Add Approval			
ocn emails:			
data Add Approval			
data emails:			

Security

Viewing?	All authorized Experiment DB users
Updating?	Affiliated users with this experiment only

Questions or comments? email [Alice Bertini](#)

Add New Experiment

Firefox

https://csegweb...bin/add_exp.cgi +

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/add_exp.cgi

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Logged in as Alice Bertini | [Update Profile](#) | [Logout](#)

CESM EXPERIMENT DATABASE - ADD AN EXPERIMENT

[<< Return to list](#)

-- select experiment --

-- search --

** Required fields for case name reservation only.

General Information	
Requestor	Alice Bertini
Title:	<input type="text"/>
Purpose of Run:	<input type="text"/>
Scientific Lead:	TBD
Software Engineering Lead:	TBD
Assigned to:	TBD
Request Date (MM-DD-YYYY):	06-17-2012 <input type="text"/>
Data Category: <small>See Data Management Plan for details.</small>	TBD
Working Group(s): <small>use Shift + Ctrl to select multiples</small>	Atmosphere Biogeochemistry Chemistry Climate Variability and Change Land
General Information Notes:	<input type="text"/>
Case Creation Information	
Contact Alice Bertini to add new options in pulldown menus.	
** Tag name:	<input type="text"/>
** Case name <small>(must be unique - see Case Naming Conventions):</small>	<input type="text"/>
Base Repository Tag:	<input type="text"/>

Add New Experiment – cont'd

Firefox

https://csegweb...bin/add_exp.cgi +

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/add_exp.cgi

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History file location on archive:

Diagnostics Plan

Diagnostics Plan notes:

Additional Information

Additional Information notes:

Request for CCR Post-processing by-variable or CMIP5

Request for post-processing?
(email sent to Gary Strand - CCR) Yes No

Setup Approvals

Email reminder frequency?

Component	Liaison/Reviewer	Brief email message
atm	TBD	<input type="text"/>
cpl	Eaton, Brian	<input type="text"/>
glc	Hannay, Cecile	<input type="text"/>
ice	Mills, Michael (WACCM)	<input type="text"/>
	Neale, Richard	<input type="text"/>
	TBD	<input type="text"/>
Ind	TBD	<input type="text"/>
ocn	TBD	<input type="text"/>
data	TBD	<input type="text"/>

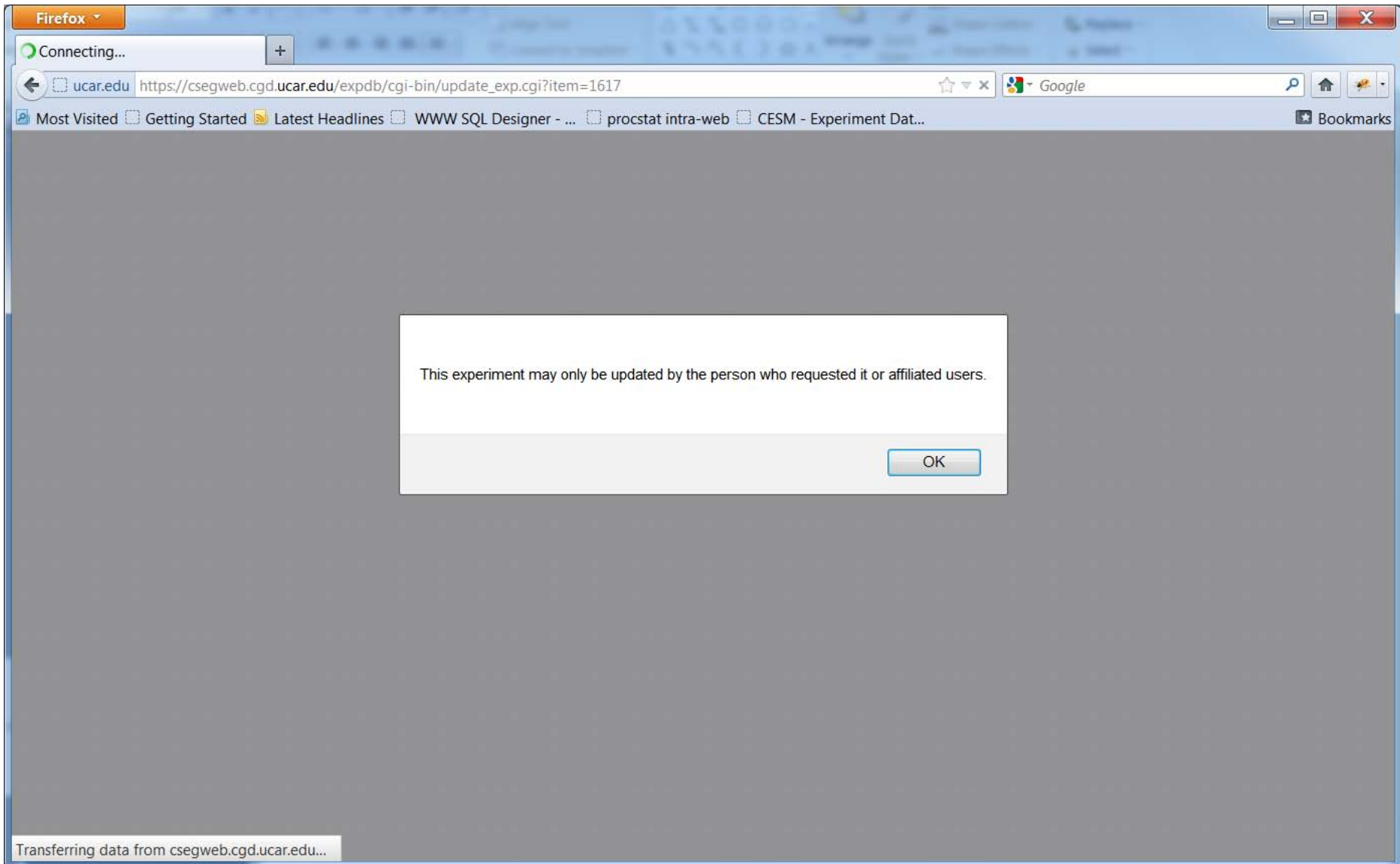
Security

Viewing? All authorized Experiment DB users Affiliated users with this experiment only Alice Bertini only

Updating? All authorized Experiment DB users Affiliated users with this experiment only Alice Bertini only

Questions or comments? email Alice Bertini

Update an Experiment



Update an Experiment – cont'd

Firefox

https://csegweb...p.cgi?item=284

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/update_exp.cgi?item=284

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Logged in as Alice Bertini | [Update Profile](#) | [Logout](#)

CESM EXPERIMENT DATABASE - UPDATE EXPERIMENT - A1.TESTING.ADD

<< [Return to list](#)

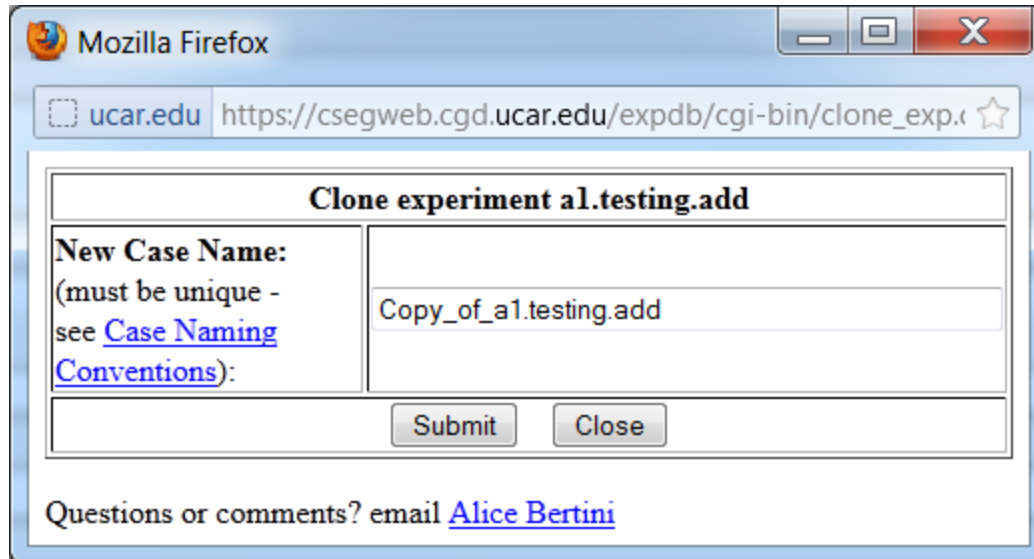
-- select experiment --

[Add New Experiment](#) [Clone](#) [View run.txt](#) -- search -- [Go](#)

** Required fields for case name reservation only.

General Information					
Current Status:	Unused				
Unique Experiment ID:	284				
** Case name <small>(must be unique - see Case Naming Conventions);</small>	a1.testing.add				
Title:	a1.testing add form updating test update and again				
Purpose of Run:	testing again with update and again				
Original Contact:					
Requestor:	Alice Bertini				
Scientific Lead:	Alice Bertini Bertini, Alice				
Software Engineering Lead:	Alice Bertini Bertini, Alice				
Assigned to:	Alice Bertini Bertini, Alice				
Request Date:	0000-00-00				
Data Category: <small>See Data Management Plan for details.</small>	Development - Evaluation				
Experiment Type:	CMIP5 CMIP5 - CMIP5 or add new (password required)				
Working Group(s): <small>If you add additional working groups, then select all working groups as existing ones are not saved on submit.</small>	<ul style="list-style-type: none"> Atmosphere Biogeochemistry Chemistry Climate Variability and Change Land Climate Variability and Change; Atmosphere;				
	<table border="1"> <thead> <tr> <th>Submitted By</th> <th>Submit Date</th> </tr> </thead> <tbody> <tr> <td>Alice Bertini</td> <td>2011-09-30</td> </tr> </tbody> </table>	Submitted By	Submit Date	Alice Bertini	2011-09-30
Submitted By	Submit Date				
Alice Bertini	2011-09-30				

Clone an Experiment



The screenshot shows a Mozilla Firefox browser window with the address bar displaying `ucar.edu https://csegweb.cgd.ucar.edu/expdb/cgi-bin/clone_exp.c`. The main content area features a form titled "Clone experiment a1.testing.add". The form includes a label "New Case Name:" with a note "(must be unique - see [Case Naming Conventions](#)):" and a text input field containing "Copy_of_a1.testing.add". Below the input field are "Submit" and "Close" buttons. At the bottom of the form, there is a link: "Questions or comments? email [Alice Bertini](#)".

Clone experiment a1.testing.add	
New Case Name: (must be unique - see Case Naming Conventions):	<input type="text" value="Copy_of_a1.testing.add"/>
<input type="button" value="Submit"/> <input type="button" value="Close"/>	
Questions or comments? email Alice Bertini	

Mozilla Firefox

ucar.edu https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_diags.cgi?experiment_

Experiment Diagnostics Detail View - al.testing.add

Unique Experiment ID:	284	
Plans: <input type="button" value="Add Note"/>	Submitted By	Submit Date
	Alice Bertini	2011-09-30
	Last edited by: Alice Bertini	Edited on: 2012-05-26
	diagnostics plan note updated	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Diagnostics Links

Submitted By	Submit Date	Action
Alice Bertini	2012-06-17	<input type="button" value="Edit"/>
Description:	test with update	<input type="button" value="Delete"/>
Diagnostics Link:	https://csegweb.cgd.ucar.edu/expdb	

Submitted By	Submit Date	Action
Alice Bertini	2012-02-17	<input type="button" value="Edit"/>
Description:	this is a new link	<input type="button" value="Delete"/>
Diagnostics Link:	http://csegweb.cgd.ucar.edu/cgi-bin/index.cgi	

Add/Update Diagnostics Links for an Experiment

Add/Update Publications Links for an Experiment

Experiment Publications Detail View - a1.testir.add

Unique Experiment ID: 284

Note: Complete publication citations by using OpenSky <http://opensky.library.ucar.edu/submission>. By submitting to OpenSky, the requirements of UCAR's Intellectual Property and Technology Transfer Policy are met. Citations listed in the Experiment DB are for the benefit of Experiment DB users and do not represent a complete and/or correctly formatted citation.

Publications

Submitted By	Submit Date	Action
Alice Bertini	2012-06-17	
Title:	The response of the climate system to very high greenhouse gas emission scenarios	
Description:	** testing 1.** Well informed decisions on climate policy necessitate simulation of the climate system for a sufficiently wide range of emissions scenarios. While recent literature has been devoted to low emissions futures, the potential for very high emissions has not been thoroughly explored. We specify two illustrative emissions scenarios that are significantly higher than the A1FI scenario, the highest scenario considered in past IPCC reports, and simulate them in a global climate model to	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
Opensky Citation URL:	http://nldr.library.ucar.edu/repository/collections/OSGC-000-000-003-778	

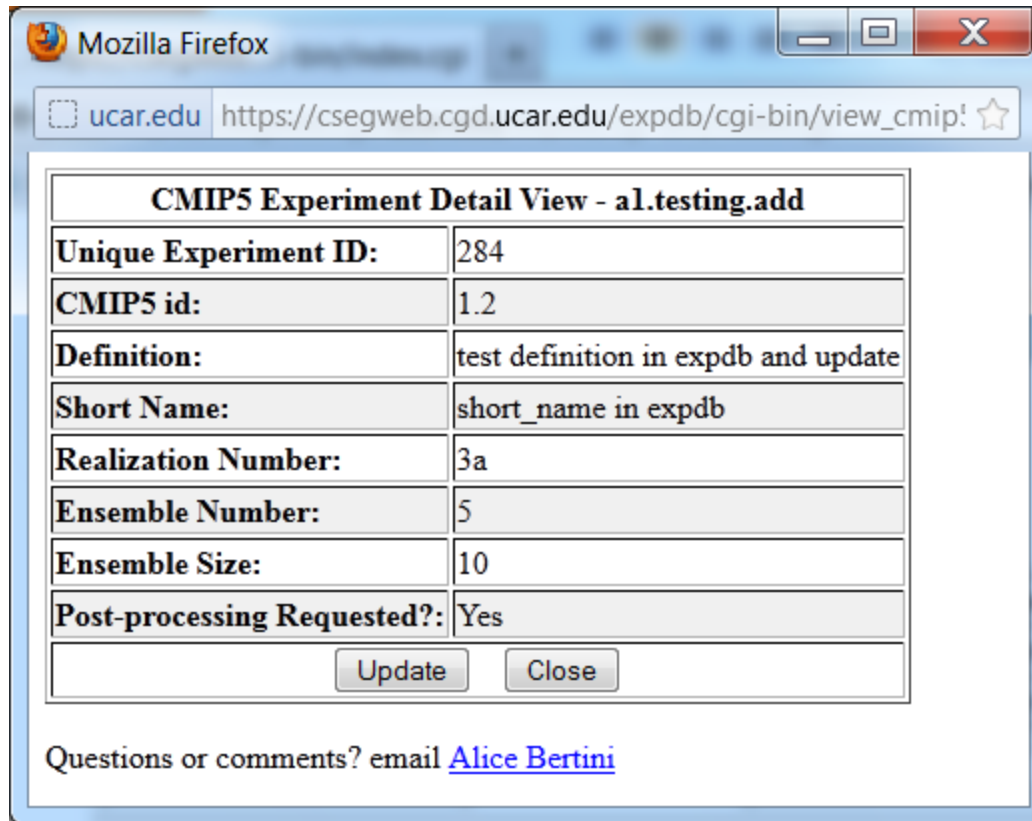
Update Run Status for an Experiment

Mozilla Firefox https://csegweb.cgd.ucar.edu/expdb/cgi-bin/update_status.cgi?experim

Update experiment status - al.testing.add

Select status:	Unused ▾	
Notes:	Submitted By	Submit Date
	TBD	2011-10-12
	Last edited by: Alice Bertini	Edited on: 2012-06-13
	update test in status update.	<input type="button" value="Edit"/>
		<input type="button" value="Delete"/>
	<input type="text" value="This is adding a note to the status field"/>	
Submitted by:	Alice Bertini	
Estimated charges:	<input type="text" value="2500 charges"/>	
Current charges:	<input type="text" value="1500 charges"/>	
Throughput:	<input type="text" value="14.35 simulated_years/6 hours"/>	
<input type="button" value="Submit"/> <input type="button" value="Close"/>		

CMIP5 Unique Experiment Type



The screenshot shows a Mozilla Firefox browser window with the address bar displaying `ucar.edu https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_cmip!`. The main content area displays a table titled "CMIP5 Experiment Detail View - a1.testing.add". The table contains the following information:

CMIP5 Experiment Detail View - a1.testing.add	
Unique Experiment ID:	284
CMIP5 id:	1.2
Definition:	test definition in expdb and update
Short Name:	short_name in expdb
Realization Number:	3a
Ensemble Number:	5
Ensemble Size:	10
Post-processing Requested?:	Yes

Below the table are two buttons: "Update" and "Close". At the bottom of the page, there is a text prompt: "Questions or comments? email [Alice Bertini](#)".

Decadal Prediction Unique Experiment View

Firefox

https://csegweb...bin/view_DP.cgi

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/view_DP.cgi

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Logged in as Alice Bertini | Update Profile | Logout

CESM EXPERIMENT DATABASE - CMIP5 DECADAL PREDICTION EXPERIMENTS

<< Return to list

Select an experiment: -- select experiment --

-- search -- Go

Decadal Prediction Experiments - Select the checkbox to toggle display

Set ID	Name	Initialization Description								
<input type="checkbox"/>	1	hindcast	ocn/ice: hindcast g.b29.01 (4-year salinity restoring,/YEAGER/csm/g.b29.01/rest/) atm/Ind: CCSM4 20thC runs							
	First Case Name	Ens. size	Nyrs	Start yr	End yr	IC/ocn,ice	IC/atm,Ind	IC/ocn	IC/ice	
<input checked="" type="checkbox"/>	20	b40.dp.hd-1961.20C.1d.001	10	30	1961	1990	g.b29.01 0194-01-01	20thC(011,daily rewrite)		
<input type="checkbox"/>	21	b40.dp.hd-1966.20C.1d.001	10	10	1966	1975	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite		
	Ensemble Case Name	Ens.#	IC/ocn,ice	IC/atm,Ind	IC/ocn	IC/ice				
	181	b40.dp.hd-1966.20C.1d.002	2	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	182	b40.dp.hd-1966.20C.1d.003	3	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	183	b40.dp.hd-1966.20C.1d.004	4	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	184	b40.dp.hd-1966.20C.1d.005	5	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	185	b40.dp.hd-1966.20C.1d.006	6	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	186	b40.dp.hd-1966.20C.1d.007	7	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	187	b40.dp.hd-1966.20C.1d.008	8	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	188	b40.dp.hd-1966.20C.1d.009	9	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
	189	b40.dp.hd-1966.20C.1d.010	10	g.b29.01 0199-01-01	20thC(005,006,007)+011 rewrite					
<input checked="" type="checkbox"/>	22	b40.dp.hd-1971.20C.1d.001	10	10	1971	1980	g.b29.01 0204-01-01	20thC(011,daily rewrite)		
<input checked="" type="checkbox"/>	23	b40.dp.hd-1976.20C.1d.001	10	10	1976	1975	g.b29.01 0209-01-01	20thC(005,006,007)+011 rewrite		
<input checked="" type="checkbox"/>	24	b40.dp.hd-1981.20C.1d.001	10	25	1981	2005	g.b29.01 0214-01-01	20thC(011,daily rewrite)		
<input checked="" type="checkbox"/>	25	b40.dp.hd-1981.rcp4_5.1d.001	10	6	2005	2010	b40.dp.hd-1981.20C.1d.0??	b40.dp.hd-1981.20C.1d.0??		

Update User Profile

Firefox

https://csegweb...dateProfile.cgi

https://csegweb.cgd.ucar.edu/expdb/cgi-bin/updateProfile.cgi

Most Visited Getting Started Latest Headlines WWW SQL Designer - ... procstat intra-web

Logged in as Alice Bertini | Logout

CESM EXPERIMENT DATABASE - UPDATE USER PROFILE

[Return to list](#)

** Required fields that cannot be edited.

Your User Profile Information	
Title	Ms.
** First Name	Alice
Middle Name	Lynn
** Last Name	Bertini
Position	Software engineer
** Email:	aliceb@ucar.edu
SVN Login (non-editable):	aliceb@ucar.edu
UCAS Login (non-editable):	aliceb
Personal Web URL:	http://csegweb.cgd.ucar.edu

Your Organization Information	
Location (TBD if not listed)	NCAR
** Organization:	UCAR/NCAR
Department:	CGD / CCR
Section:	CCR
Office:	145E
** Street Address:	P.O. Box 3000 1850 Table Mesa Drive Boulder, CO. 80305
** City:	Boulder
State:	CO
Country:	USA

Work-flow with the CESM

<http://csegweb.cgd.ucar.edu>

Basic flow:

1. Enter new experiment into DB to reserve casename (at a minimum)
2. Create a new case on the machine to run the model
3. Configure / Build
4. Update experiment DB with any configure / build specifics
5. Manually run `archive_metadata.sh` script from case directory to populate run SVN repository with case files
6. Run
7. Monitoring and Diagnostics checks (repeat steps 3-6 as needed)
8. Update experiment DB with status
9. Repeat step 5 to archive final configuration / build information
10. Update experiment DB with status, diagnostics links, publication links

Incorporating User Feedback

Developers' feedback

- Need more testing and porting info stored in DB
- Need consistent info available to users regarding known problems and fixes

Scientists' feedback

- Need to open up to outside collaborators – SECURITY.....
- Would like to know when result data sets are available
- Which experiments should go into the DB?

Management feedback

- Incorporate Data Management Plan
- Add links to Opensky citations of publications

Security

<https://csegweb.cgd.ucar.edu/expdb>

- Authentication

- SVN Developers Repository Access – CESM/CISM

- Jay Shollenberg's SVN auth API

- http://www.cesm.ucar.edu/working_groups/Software/secp/repo_access_form.shtml

- UCAS CGD login / password

- CISL UCAS auth REST API

- <https://wiki.ucar.edu/display/weg/Auth+REST+API>

- User Profile management tools / dashboard
- Experiment Level Security
 - Restrict view / update privileges
- Code modifications for session management
- N-tier support to reduce risk of SQL injection

Future Directions

Integration:

- Between experiment database and running the model
- With live web server for results and diagnostics output
<http://www.cesm.ucar.edu/experiments/>
- With ESG and other data portals
- With testing, porting and known issues database
- With performance database
- With post-processing status database
<http://webint.cgd.ucar.edu/project/ccr/procstat/cgi-bin/index.cgi>

Comments / Questions ?



Please contact Alice Bertini at aliceb@ucar.edu for any questions, problems, or suggestions.

