

# ESGF-QCWT Quality Control Working Team

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# **ESGF-QCWT Aims**

The ESGF-QCWT aims to improve the quality of ESGF user services with regard to additional (external) documentations.

## Working tasks are:

- Integration of external metadata into ESGF publisher,
   e.g. quality, citation, version history
- Display and access of external metadata, e.g. request for version information or for external metadata access details (e.g. access of known issues)
- Support of dataset collections,
   e.g. request of datasets in a specific version or belonging to a specific citation entity



# **ESGF-QCWT Working Plan**

The ESGF-QCWT started with the integration of IPSL's version information system (Errata Module) into the ESGF publisher.

## Next steps:

- Consolidation of integration approach for external metadata into the ESGF publisher
- Ingest procedure for ESGF publication of external metadata
- ESGF-QCWT Charge



# **ESGF-QC** Working Team

## **Team Leaders:**

Martina Stockhause and Katharina Berger

## **Team Members:**

Guillaume Levavasseur

## **Team Page:**

https://acme-climate.atlassian.net/wiki/pages/viewpage.action?pageId=3998239

## **Demo Implementation:**

http://esgf-dev.dkrz.de:8080

## Possible Collaborations:

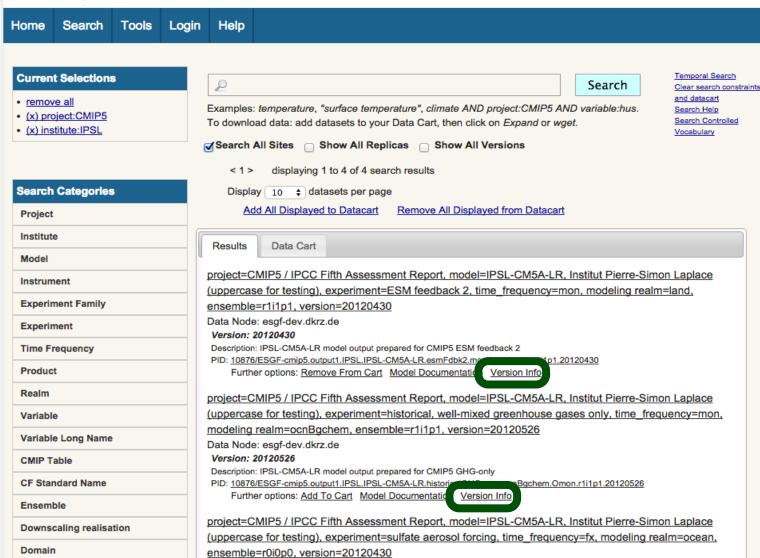
- ESGF-PWT (Publisher)
- ESGF-MSWT (Metadata and Search)
- ESGF-WPWT (Workflow and Provenance)
- ESGF-RVWT (Replication and Versioning)

M. Stockhause et al.



## **ESGF-QCWT** Demonstration

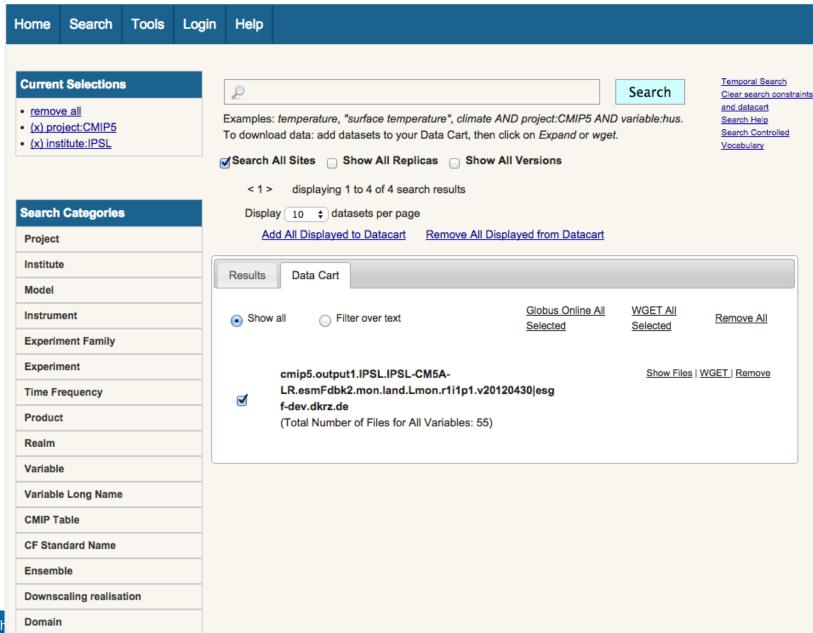




M. Stockhause et



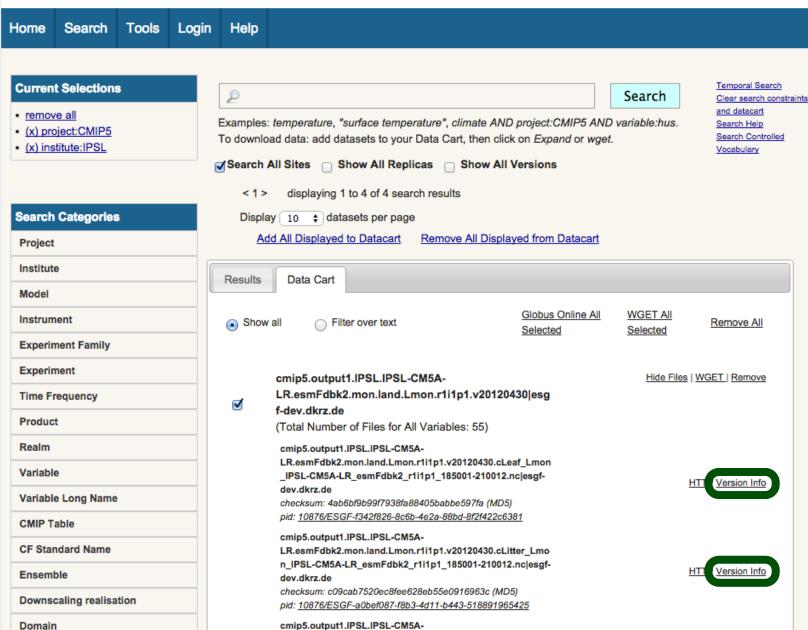








M. Stocki



LR.esmFdbk2.mon.land.Lmon.r1i1p1.v20120430.c3PftFrac L

42b4fcf1cd272bcca7dab9ffed3e32df (MD5)

20120430 IS the latest.

N.B.: Versions in bold letters are current versions of your files.

	Dataset:	cmip5.output1.IPSL.IPSL-CM5A-LR.esmFdbk2.mon.land.Lmon.r1i1p1
Dataset	PID: Current version: Data citation:  Versioning history:	10876/ESGF-cmip5.output1.IPSL.IPSL-CM5A-LR.esmFdbk2.mon.land.Lmon.r1i1p1.20120430  20120430 IS the latest.  Identifier: http://cera-www.dkrz.de/WDCC/ui/Entry.jsp?acronym=IPILe2  Title: IPSL-CM5A-LR model output prepared for CMIP5 esmFdbk2 experiment, served by ESGF  Author: Institut Pierre Simon Laplace (IPSL)  Publication Year: 2011  Publisher: World Data Center for Climate (WDCC) at DKRZ  20110726 is the original/first version.
File 1	Filename:  Dataset: PID: Checksum: Current version: Versioning history:	20120430 corrects issue #1 #8 #18  baresoilFrac_Lmon_IPSL-CM5A-LR_esmFdbk2_r1i1p1_185001-210012.nc  cmip5.output1.IPSL.IPSL-CM5A-LR.esmFdbk2.mon.land.Lmon.r1i1p1.v20120430  10876/ESGF-69a43a39-b519-4895-aafd-bae12abbc27d  ef276ab18a329913c8b007719f7585b1 (MD5)  20120430 IS the latest.  20110726 is the original/first version.  20120430 is a symbolic link to previous version.
File 2	Filename:  Dataset: PID: Checksum: Current version: Versioning history:	c3PftFrac_Lmon_IPSL-CM5A-LR_esmFdbk2_r1i1p1_185001-210012.nc cmip5.output1.IPSL.IPSL-CM5A-LR.esmFdbk2.mon.land.Lmon.r1i1p1.v20120430  10876/ESGF-2757e310-08cb-45cc-8144-06b1f2c2cbef cdaedae11aeb1ac44a95ae40bb0dc72f (MD5)  20120430 IS the latest. 20110726 is the original/first version. 20120430 is a symbolic link to previous version.
	Filename:  Dataset: PID:	c4PftFrac_Lmon_IPSL-CM5A-LR_esmFdbk2_r1i1p1_185001-210012.nc cmip5.output1.IPSL.IPSL-CM5A-LR.esmFdbk2.mon.land.Lmon.r1i1p1.v20120430 10876/ESGF-dec3b7a4-f9cb-4eda-9a06-89cb9630f304

Checksum:

Current version:



#### Description:

Some runoff variables give implausibly low values. Units provided by the land surfaces model (ORCHIDEE) have to be corrected by a factor 48.

#### File(s):

Variable	Table	Model	Experiment	Member	Period
mrro	*	*	*	•	*_*
mrros	*	*	*	*	*_*
evspsblsoi	*	*	*	*	*_*
evspsblveg	*	*	*	*	*_*
tran	*	*	*		*_*

#### Status:

In Progress

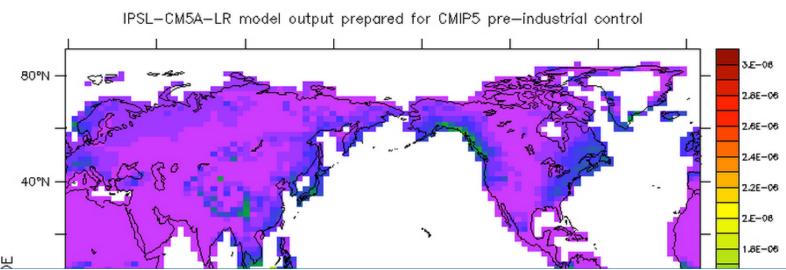
#### New version(s):

20120430

20120526

M. Stock

#### Comment(s):





e-List is a web-module developed to automatically list and describe each known issue about all IPSL climate models. The following table lists all issues giving their ID, a short description, all affected files (in Unix syntax) and the corresponding version(s) for corrected issues or in progress.

#### How does it work?

- 1. Feel free to expand the list of affected files or new versions that does not cause any action.
- 2. Then click on the desired errata number (in the left column) to get more details about the corresponding issue raised in the IPSL database (see color legend in footer).

	Short description	Affected file(s)	New version(s)
<u>#1</u>	Wrong soil depth axis from ORCHIDEE	tsl_*_*_*_*-*.nc	20120430 ‡
<u>#2</u>	Wrong pH computing	ph_*_*_*_*.nc ‡	20120430 ‡
<u>#3</u>	Duplicated grid-cells on the edges of ocean grid	stfof_*_*_*_*-*.nc	20120430 ‡
#4	Incomplete 6-hourly files	va_6hrLev_IPSL-CM5 ‡	20111119 ‡
<u>#5</u>	Wrong albedo and cloudy fraction from ISCCP	albisccp_*_IPSL-CM5 +	None ‡
<u>#6</u>	Corrupted files	ua_6hrLev_IPSL-CM5 ‡	20120114 ‡
<u>#7</u>	Aerosols forcing prescribed in a wrong way	*_*_*_ sstClimAerosc ‡	20120430 ‡
<u>#8</u>	Wrong units for variables related to runoff	mrro_*_*_*_*-*.nc	20120430 ‡
<u>#9</u>	Deleted overlaps during TGCC datanode migration	Several files ‡	20130506 ‡
<u>#10</u>	10-years offset	ua_6hrPlev_IPSL-CM ‡	20120114 ‡
<u>#11</u>	Missing files	psl_6hrPlev_IPSL-CM ‡	None ‡
<u>#12</u>	Condensed water path with only liquid water	clwvi_*_*_*_*-*.nc	None ‡
<u>#13</u>	Corrupted files with missing values	nbp_Lmon_IPSL-CM! ‡	20130217 ‡
<u>#14</u>	Corrupted timesteps	ua_6hrPlev_IPSL-CM ‡	None ‡
<u>#15</u>	Wrong specific humidity due to convection into CM5A models	tnhusc_cfSites_*_*_*_ ‡	None ‡
<u>#16</u>	Missing files	co2_*_*_*_*-*.nc	None ‡
<u>#17</u>	SST forcing interpolated in a wrong way	*_*_*_ amipFuture_*, ‡	None ‡

### e-Query



e-Query is a web-module developed to query a file or a set of file about versioning. The following form allows you to send a list of PID(s), tracking ID(s) or filename(s) embedded in a simple text file. This module returns the version history for each queried file. It helps you as well to know if you have the latest version(s) of your file(s) with the associated corrections/modifications.

This interface will only deal with original CMIP5 files from IPSL-CM5.

IPSL-CM5 full errata is available through e-List

#### How does it work?

- Download or copy this <u>template</u>.
- 2. Fill it in two ways:
  - A. With one PID or tracking ID per line (recommended): tracking ID(s) can be found in global attributes of your file(s) using the NCO commands (e.g., "ncdump -h").
  - B. With one filename and one version number per line, comma-separated: the version corresponds to the publication date of your file(s) and can be found in the dataset properties from ESGF portal.
- 3. Select your template through the form.
- 4. Send your request or export it to PDF file.



Your query counts 1 dataset and 49 files.

N.B.: Versions in bold letters are current versions of your files.

Dataset:	cmip5.output1.IPSL.IPSL-CM5A-LR.esmFdbk2.mon.land.Lmon.r1i1p1
PID:	10876/ESGF-cmip5.output1.IPSL.IPSL-CM5A-LR.esmFdbk2.mon.land.Lmon.r1i1p1.20120430
Current version:	20120430 IS the latest.
Data citation: <a href="http://cera-www.dkrz.de/WDCC/ui/Entry.jsp?acronym=IPILe2">ldentifier: <a href="http://cera-www.dkrz.de/WDCC/ui/Entry.jsp?acronym=IPILe2">http://cera-www.dkrz.de/WDCC/ui/Entry.jsp?acronym=IPILe2</a></a>	
	Title: IPSL-CM5A-LR model output prepared for CMIP5 esmFdbk2 experiment, served by ESGF
	Author: Institut Pierre Simon Laplace (IPSL)
	Publication Year: 2011
	Publisher: World Data Center for Climate (WDCC) at DKRZ
Versioning history:	20110726 is the original/first version.
	20120430 corrects issues #1 #8 #18

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IPSL-CM5 full errata is available through e-List

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  - B. With one filename and one version number per line, comma-separated: the version corresponds to the publication date of your file(s) and can be found in the dataset properties from ESGF portal.
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This interface will only deal with original CMIP5 files from IPSL-CM5.

IPSL-CM5 full errata is available through e-List

#### How does it work?

- 1. Download or copy this template.
- 2. Fill it in two ways:
  - A. With one PID or tracking ID per line (recommended): tracking ID(s) can be found in global attributes of your file(s) using the NCO commands (e.g., "ncdump -h").

Template = *List of queries* 

bfe\_Omon\_IPSL-CM5A-LR\_1pctCO2\_rlilp1\_195001-198912.nc;20111010

10876/ESGF-cmip5.output1.MPI-M.MPI-ESM-LR.amipFuture.fx.land.fx.r0i0p0.20120917

10876/ESGF-0cb949b2-1828-49f7-aeb0-508419654aef

10876/ESGF-07805f0a-88fa-44f6-9a81-97108a0994a4 10876/ESGF-c2384ce1-ca85-45a8-863a-b8c83f033ad4

- B. With one filename and one version number per line, comma-separated: the version corresponds to the publication date of your file(s) and can be found in the dataset properties from ESGF portal.
- 3. Select your template through the form.
- 4. Send your request or export it to PDF file.

Select your file : Choisissez un fichier Aucun fichier choisi	Send	Export to PDF
Enter PID, tracking ID or name :   Show all files	Send	Export to PDF



#### Dataset: cmip5.output1.IPSL.IPSL-CM5A-LR.1pctCO2.mon.ocnBgchem.Omon.r1i1p1

PID: 10876/ESGF-cmip5.output1.IPSL.IPSL-CM5A-LR.1pctCO2.mon.ocnBgchem.Omon.r1i1p1.20120430

Current version: 20120430 IS the latest.

Data citation:

Identifier: http://cera-www.dkrz.de/WDCC/CMIP5/Compact.jsp?acronym=IPILc1

Title: IPSL-CM5A-LR model output prepared for CMIP5 1pctCO2 experiment, served by ESGF

Author: Institut Pierre Simon Laplace (IPSL)

Publication Year, 2011

Publisher: World Data Center for Climate (WDCC) at DKRZ

Versioning history:

20110427 is the original/first version. 20111010 corrects issue #25 20120430 corrects issue #2

#### Dataset: cmip5.output1.MPI-M.MPI-ESM-LR.amipFuture.fx.land.fx.r0i0p0

PID: 10876/ESGF-cmip5.output1.MPI-M.MPI-ESM-LR.amipFuture.fx.land.fx.r0i0p0.20120917

Current version: 20120917 IS the latest.

Data citation:

DOI: 10.1594/WDCC/CMIP5.MXELaf

Title: CMIP5 simulations of the Max Planck Institute for Meteorology (MPI-M) based on the MPI-ESM-LR model: The amipFuture experiment, served by ESGF

Authors: Giorgetta, Marco; Jungclaus, Johann; Reick, Christian et al.

Publication Year, 2013

Publisher: World Data Center for Climate (WDCC) at DKRZ

Versioning history:

No other version is available for this dataset.

#### Dataset: cmip5.output1.IPSL.IPSL-CM5A-LR.1pctCO2.mon.ocnBgchem.Omon.r1i1p1

PID: 10876/ESGF-cmip5.output1.IPSL.IPSL-CM5A-LR.1pctCO2.mon.ocnBgchem.Omon.r1i1p1.20111010

Current version: 20111010 IS NOT the latest.

Data citation:

Identifier: http://cera-www.dkrz.de/WDCC/CMIP5/Compact.jsp?acronym=IPILc1

Title: IPSL-CM5A-LR model output prepared for CMIP5 1pctCO2 experiment, served by ESGF

Author: Institut Pierre Simon Laplace (IPSL)

Publication Year, 2011