



*Partnerships for development of next-generation software for distributed access and analysis of simulated, observed, and reanalysis data from the climate and weather communities.*

**Registration:** [Click here to register](#)

**Conference Date:** Dec 8, 2015 to Dec 11, 2015—08:00 - 18:00 PST

**Conference venue:** Marriott Hotel, 350 Calle Principal, Monterey, California 93940

**Meeting Room:** *San Carlos 3*

**Registration:** *Mezzanine/San Carlos 3* — Dec 7, 2015 —10:00 - 11:00 PST; 17:00 PST; and Dec 8, 2015 —07:00 PST

**Conference Webinar Logistics:** 5th Annual Earth System Grid Federation Conference webinar on December 8, 9, 10, 11, 2015 08:00 PST at:

- **Remote participation:**
  - [Join WebEx \(ESGF 2015 - Remote Conference\)](#)
    - [Global call-in-numbers:](#) Access code: 801 836 525

**Social Activities:**

- Meet-n-Greet @ London Bridge Pub (NO HOST) - Dec 7, 2015 —17:00 PST
- Awards Ceremony & Ice Breaker @ Marriott Hotel - *San Carlos 4* (Cost: \$40) Dec 8, 2015 —18:00 PST
- Happy Hour @ Blue Fin Café Billiards (Cost: \$20) Dec 9, 2015 —18:00 PST

**Joint DOE, NASA, NOAA, IS-ENES, and ANU/NCI  
Earth System Grid Federation (ESGF)  
Face-to-Face Conference Agenda**

Time	Topic										
<b>Monday, December 7, 2015</b>											
10:00 – 12:00	Registration: Mezzanine/San Carlos 3										
14:00 – 16:00	Registration: Mezzanine/San Carlos 3										
17:00	Meet-n-Greet at London Bridge Pub (NO HOST) - Dec 7, 2015										
<b>Tuesday, December 8, 2015</b>											
07:00 – 08:30	Registration: Mezzanine/San Carlos 3										
08:00 – 08:30	Meet-n-greet										
08:30 – 08:40	Welcome, safety, introduction, conference charge, agenda overview (Dean N. Williams) <ul style="list-style-type: none"> <li>• How conference attendees contribute to the conference's final report</li> <li>• Framing of the ESGF F2F Annual Meeting</li> </ul>										
08:40 – 08:45	DOE opening comments (Justin Hnilo—Program Manager for DOE BER CESD's Data and Informatics)										
<b>Science Drivers Project Requirements and Feedback</b>											
08:45 – 11:00	<b>Science Drivers</b> Session Discussion Lead (Dean N. Williams)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>08:45 – 09:15</b></td> <td>Karl Taylor—WCRP CMIP and WGCM Infrastructure Panel (WIP)</td> </tr> <tr> <td><b>09:20 – 09:40</b></td> <td>David Bader—DOE Accelerated Climate Modeling for Energy (ACME)</td> </tr> <tr> <td><b>09:45 – 10:05</b></td> <td>Peter Gleckler—Observations for Model Intercomparisons (Obs4MIPs)</td> </tr> <tr> <td><b>10:10 – 10:30</b></td> <td>Sébastien Denvil—ENES and Coordinated Regional Climate Downscaling (CORDEX)</td> </tr> <tr> <td><b>10:35 – 10:55</b></td> <td>Jerry Potter—Collaborative REAnalysis Technical Environment Intercomparison Project (CREATE-IP)</td> </tr> </table>	<b>08:45 – 09:15</b>	Karl Taylor—WCRP CMIP and WGCM Infrastructure Panel (WIP)	<b>09:20 – 09:40</b>	David Bader—DOE Accelerated Climate Modeling for Energy (ACME)	<b>09:45 – 10:05</b>	Peter Gleckler—Observations for Model Intercomparisons (Obs4MIPs)	<b>10:10 – 10:30</b>	Sébastien Denvil—ENES and Coordinated Regional Climate Downscaling (CORDEX)	<b>10:35 – 10:55</b>	Jerry Potter—Collaborative REAnalysis Technical Environment Intercomparison Project (CREATE-IP)
	<b>08:45 – 09:15</b>	Karl Taylor—WCRP CMIP and WGCM Infrastructure Panel (WIP)									
	<b>09:20 – 09:40</b>	David Bader—DOE Accelerated Climate Modeling for Energy (ACME)									
	<b>09:45 – 10:05</b>	Peter Gleckler—Observations for Model Intercomparisons (Obs4MIPs)									
	<b>10:10 – 10:30</b>	Sébastien Denvil—ENES and Coordinated Regional Climate Downscaling (CORDEX)									
	<b>10:35 – 10:55</b>	Jerry Potter—Collaborative REAnalysis Technical Environment Intercomparison Project (CREATE-IP)									
<ul style="list-style-type: none"> <li>• Example use case requirements from each of the major supporting projects</li> <li>• What are the key things that are difficult to do today and are impeding scientific progress or</li> </ul>											

	<ul style="list-style-type: none"> <li>productivity?</li> <li>What is your timeline for data production and distribution?</li> <li>What is the estimated size of your distributed archive?</li> <li>What are the administrative/sponsor requirements that arise from each project (basically, metrics collection and reporting)?</li> <li>Homework assignment before the conference is to convert all known science drivers to use cases</li> </ul>										
11:00 – 11:10	<b>Break</b>										
11:10 – 12:00	<p><b>Science Driver Town Hall Discussion</b> Session Discussion Lead (Dean N. Williams)</p> <p>Town Hall Panel: (Dave Bader, Sébastien Denvil, Peter Gleckler, Jay Hnilo, Tsengdar Lee, Jerry Potter, Karl Taylor)</p> <ul style="list-style-type: none"> <li>What is working, and what is not?</li> <li>What are the key challenges that scientists encounter?</li> <li>What data services would address the identified challenges? What exists already today? What do we still need? What are the key characteristics that these services need to have to be successful (i.e. integrated, easy to customize, etc.)?</li> <li>What are the key impediments (on the data provider/service provider side) in delivering these services?</li> <li>Which services should be developed with the highest priority, and what would be their measurable impact on science?</li> </ul>										
12:00 – 13:30	<b>Lunch</b>										
13:30 – 15:35	<p><b>Required Data Center and Interoperable Services</b> Session Discussion Lead (Michael Lautenschlager)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>13:30 – 13:50</b></td> <td>Dean N. Williams—DOE/LLNL</td> </tr> <tr> <td><b>13:55 – 14:15</b></td> <td>Ben Evans—ANU/NCI</td> </tr> <tr> <td><b>14:20 – 14:40</b></td> <td>Stephan Kindermann—ENES/DDC/DKRZ</td> </tr> <tr> <td><b>14:45 – 15:05</b></td> <td>Sébastien Denvil—ENES/IPSL</td> </tr> <tr> <td><b>15:10 – 15:30</b></td> <td>Phil Kershaw—ENES/CEDA</td> </tr> </table> <ul style="list-style-type: none"> <li>Example use case requirements from each of the major supporting data centers</li> <li>What are the key things that are difficult to do today and are impeding scientific progress or productivity?</li> <li>What is your timeline for data production and distribution?</li> <li>What is the estimated size of your distributed archive?</li> <li>What (or which) projects do you support?</li> <li>Scaling? For example, can we make our data access services such as TDS elastic so that they scale out to meet demand?</li> <li>What about provision of hosted processing, be it cloud services, batch computing, or other deployments alongside data center archives?</li> <li>What about mobility of workloads and data: how can new technologies like containers enable us port whole workloads and data between infrastructures?</li> <li>How we can attach persistent identifiers and associate metadata to workloads and data to make them repeatable and allow them to be referenced and cited?</li> <li>Homework assignment before the conference is to convert all known data center drivers and interoperable services to use cases</li> </ul>	<b>13:30 – 13:50</b>	Dean N. Williams—DOE/LLNL	<b>13:55 – 14:15</b>	Ben Evans—ANU/NCI	<b>14:20 – 14:40</b>	Stephan Kindermann—ENES/DDC/DKRZ	<b>14:45 – 15:05</b>	Sébastien Denvil—ENES/IPSL	<b>15:10 – 15:30</b>	Phil Kershaw—ENES/CEDA
<b>13:30 – 13:50</b>	Dean N. Williams—DOE/LLNL										
<b>13:55 – 14:15</b>	Ben Evans—ANU/NCI										
<b>14:20 – 14:40</b>	Stephan Kindermann—ENES/DDC/DKRZ										
<b>14:45 – 15:05</b>	Sébastien Denvil—ENES/IPSL										
<b>15:10 – 15:30</b>	Phil Kershaw—ENES/CEDA										
15:35 – 15:45	<b>Break</b>										
15:45 – 16:45	<p><b>Data Center and Interoperable Services Town Hall Discussion</b> Session Discussion Lead (Michael Lautenschlager)</p>										

	<p>Town Hall Panel: (Ben Evans, Stephan Kindermann, Dean N. Williams, Sébastien Denvil, Phil Kershaw)</p> <ul style="list-style-type: none"> <li>• Data integration and advanced metadata capabilities</li> <li>• Data and metadata collection and sharing capabilities</li> <li>• Data quality, uncertainty quantification, and ancillary Information</li> <li>• Use of broader ontology for discovery and use of project data sets</li> <li>• Data discovery and access, data downloading, and subsetting services and capabilities</li> <li>• Data preparation services and tools</li> <li>• Authentication and security</li> <li>• Local and remote publication services</li> <li>• Local and remote catalog and search services, data transfer services</li> <li>• Human-computer interface (i.e., User Interface, APIs, etc.)</li> <li>• Resource discovery and allocation services</li> <li>• Workflow services (link together scientific or project execution)</li> <li>• Computing services</li> <li>• Exploration services (includes analytics and visualization)</li> <li>• Identify key gaps, identify benefitting communities, and prioritize</li> </ul>										
16:45	<b>Adjourn Day 1</b>										
18:00	Awards Ceremony and Ice Breaker at Marriott Hotel - <i>San Carlos 4</i> (Cost: \$40)										
<b>Wednesday, December 9, 2015</b>											
08:00 – 08:30	Meet-n-greet										
08:30 – 10:00	<p><b>Advanced Computational Environments and Data Analytics</b> Session Discussion Lead (Robert Ferraro)</p> <table border="1"> <tr> <td><b>08:30 – 08:45</b></td> <td>Overview of the CWT and target milestones (Daniel Duffy—NASA/GSFC)</td> </tr> <tr> <td><b>08:50 – 09:05</b></td> <td>WPS Overview and Demo (Charles Doutriaux—DOE/LLNL)</td> </tr> <tr> <td><b>09:10 – 09:25</b></td> <td>Analytics as a Service Framework (Thomas Maxwell—NASA/GSFC)</td> </tr> <tr> <td><b>09:30 – 09:45</b></td> <td>Ophedia (Sandro Fiore—ENES/CMCC)</td> </tr> <tr> <td><b>09:50 – 10:05</b></td> <td>WPS Service and Back-end (Maarten Plieger—ENES/KNMI)</td> </tr> </table> <ul style="list-style-type: none"> <li>• What are the key challenges that scientists encounter?</li> <li>• What capabilities would address the identified challenges? What exists already today? What do we still need?</li> <li>• What are the impediments for resource providers and software developers to provide these missing capabilities?</li> <li>• Which requirements need to be addressed with the highest priority and what would be their measurable impact on science?</li> <li>• Overall integration?</li> <li>• What are the key things that are difficult to do today and are impeding scientific progress or productivity?</li> <li>• Homework assignment before the conference is to convert all known data center drivers to use cases</li> </ul>	<b>08:30 – 08:45</b>	Overview of the CWT and target milestones (Daniel Duffy—NASA/GSFC)	<b>08:50 – 09:05</b>	WPS Overview and Demo (Charles Doutriaux—DOE/LLNL)	<b>09:10 – 09:25</b>	Analytics as a Service Framework (Thomas Maxwell—NASA/GSFC)	<b>09:30 – 09:45</b>	Ophedia (Sandro Fiore—ENES/CMCC)	<b>09:50 – 10:05</b>	WPS Service and Back-end (Maarten Plieger—ENES/KNMI)
<b>08:30 – 08:45</b>	Overview of the CWT and target milestones (Daniel Duffy—NASA/GSFC)										
<b>08:50 – 09:05</b>	WPS Overview and Demo (Charles Doutriaux—DOE/LLNL)										
<b>09:10 – 09:25</b>	Analytics as a Service Framework (Thomas Maxwell—NASA/GSFC)										
<b>09:30 – 09:45</b>	Ophedia (Sandro Fiore—ENES/CMCC)										
<b>09:50 – 10:05</b>	WPS Service and Back-end (Maarten Plieger—ENES/KNMI)										
10.10 – 10:25	<b>Break</b>										
10:25 – 11:00	<p><b>Computational Environments and Data Analytics Town Hall Discussion</b> Session Discussion Lead (Robert Ferraro)</p>										

	<p>Town Hall Panel: (Daniel Duffy, Aashish Chaudhary, Charles Doutriaux, Thomas Maxwell, Sandro Fiore, Maarten Plieger)</p> <ul style="list-style-type: none"> <li>• Define a scalable compute resource (clusters and HPCs) for projects' data analysis</li> <li>• Data analytical and visualization capabilities and services</li> <li>• Analysis services when multiple data sets are not co-located</li> <li>• Performance of model execution</li> <li>• Advanced networks as easy-to-use community resources</li> <li>• Provenance and workflow</li> <li>• Automation of steps for the computational work environment</li> <li>• Resource management, installation, and customer support</li> <li>• Identify key gaps, identify benefitting communities, and prioritize</li> </ul>																										
11:00 – 12:00	<p><b>ESGF Development for Data Centers and Interoperable Services</b>  Session Discussion Lead (Luca Cinquini)</p> <p>ESGF working team report out on meeting projects' requirements, give work achieved over the past year, prioritized development, roadmap, needed resources for meeting goals, collaborations with other agencies, etc.</p> <table border="1" data-bbox="509 747 1503 900"> <tr> <td><b>11:00 – 11:10</b></td> <td>CoG User Interface Working Team (Sylvia Murphy—NOAA/ESRL)</td> </tr> <tr> <td><b>11:15 – 11:25</b></td> <td>Dashboard Working Team (Sandro Fiore—ENES/CMCC)</td> </tr> <tr> <td><b>11:30 – 11:40</b></td> <td>Data Transfer Working Team (Luckasz Lacinski—DOE/ANL)</td> </tr> <tr> <td><b>11:45 – 11:55</b></td> <td>Identity Entitlement Access Team (Philp Kershaw—ENES/BADC)</td> </tr> </table>	<b>11:00 – 11:10</b>	CoG User Interface Working Team (Sylvia Murphy—NOAA/ESRL)	<b>11:15 – 11:25</b>	Dashboard Working Team (Sandro Fiore—ENES/CMCC)	<b>11:30 – 11:40</b>	Data Transfer Working Team (Luckasz Lacinski—DOE/ANL)	<b>11:45 – 11:55</b>	Identity Entitlement Access Team (Philp Kershaw—ENES/BADC)																		
<b>11:00 – 11:10</b>	CoG User Interface Working Team (Sylvia Murphy—NOAA/ESRL)																										
<b>11:15 – 11:25</b>	Dashboard Working Team (Sandro Fiore—ENES/CMCC)																										
<b>11:30 – 11:40</b>	Data Transfer Working Team (Luckasz Lacinski—DOE/ANL)																										
<b>11:45 – 11:55</b>	Identity Entitlement Access Team (Philp Kershaw—ENES/BADC)																										
12:00 – 13:30	<b>Lunch</b>																										
13:30 – 16:45	<p><b>ESGF Development for Data Centers and Interoperable Services</b>  Session Discussion Lead (Luca Cinquini)</p> <p>ESGF working team report out on meeting projects' requirements, give work achieved over the past year, prioritized development, roadmap, needed resources for meeting goals, collaborations with other agencies, etc.</p> <table border="1" data-bbox="509 1184 1503 1709"> <tr> <td><b>13:30 – 13:40</b></td> <td>Installation Working Team (Prashanth Dwarakanath—ENES/Liu)</td> </tr> <tr> <td><b>13:45 – 13:55</b></td> <td>International Climate Network working Group (Eli Dart—DOE/ESnet)</td> </tr> <tr> <td><b>14:00 – 14:10</b></td> <td>Metadata and Search Working Team (Luca Cinquini—NASA/JPL)</td> </tr> <tr> <td><b>14:15 – 14:25</b></td> <td>Node Manager Working Team (Sasha Ames—DOE/LLNL)</td> </tr> <tr> <td><b>14:30 – 14:40</b></td> <td>Persistent Identifier Services (Tobias Weigel—ENES/DKRZ)</td> </tr> <tr> <td><b>14:45 – 14:55</b></td> <td>Provenance Capture Working Team (Bibi Raju—DOE/PNNL)</td> </tr> <tr> <td><b>15:00 – 15:10</b></td> <td>Publication Working Team (Sasha Ames—DOE/LLNL)</td> </tr> <tr> <td><b>15:15 – 15:25</b></td> <td>Quality Control Working Team (Martina Stockhause—ENES/DKRZ)</td> </tr> <tr> <td><b>15:30 – 15:45</b></td> <td style="text-align: center;">Break</td> </tr> <tr> <td><b>15:45 – 15:55</b></td> <td>Replication and Versioning Working Team (Stephan Kindermann—ENES/DKRZ)</td> </tr> <tr> <td><b>16:00 – 16:10</b></td> <td>Software Security Working Team (Prashanth Dwarakanath—ENES/Liu)</td> </tr> <tr> <td><b>16:15 – 16:25</b></td> <td>Support Working Team (Matthew Harris—DOE/LLNL)</td> </tr> <tr> <td><b>16:30 – 16:40</b></td> <td>User Working Team (Torsten Rathmann—ENES/DKRZ)</td> </tr> </table>	<b>13:30 – 13:40</b>	Installation Working Team (Prashanth Dwarakanath—ENES/Liu)	<b>13:45 – 13:55</b>	International Climate Network working Group (Eli Dart—DOE/ESnet)	<b>14:00 – 14:10</b>	Metadata and Search Working Team (Luca Cinquini—NASA/JPL)	<b>14:15 – 14:25</b>	Node Manager Working Team (Sasha Ames—DOE/LLNL)	<b>14:30 – 14:40</b>	Persistent Identifier Services (Tobias Weigel—ENES/DKRZ)	<b>14:45 – 14:55</b>	Provenance Capture Working Team (Bibi Raju—DOE/PNNL)	<b>15:00 – 15:10</b>	Publication Working Team (Sasha Ames—DOE/LLNL)	<b>15:15 – 15:25</b>	Quality Control Working Team (Martina Stockhause—ENES/DKRZ)	<b>15:30 – 15:45</b>	Break	<b>15:45 – 15:55</b>	Replication and Versioning Working Team (Stephan Kindermann—ENES/DKRZ)	<b>16:00 – 16:10</b>	Software Security Working Team (Prashanth Dwarakanath—ENES/Liu)	<b>16:15 – 16:25</b>	Support Working Team (Matthew Harris—DOE/LLNL)	<b>16:30 – 16:40</b>	User Working Team (Torsten Rathmann—ENES/DKRZ)
<b>13:30 – 13:40</b>	Installation Working Team (Prashanth Dwarakanath—ENES/Liu)																										
<b>13:45 – 13:55</b>	International Climate Network working Group (Eli Dart—DOE/ESnet)																										
<b>14:00 – 14:10</b>	Metadata and Search Working Team (Luca Cinquini—NASA/JPL)																										
<b>14:15 – 14:25</b>	Node Manager Working Team (Sasha Ames—DOE/LLNL)																										
<b>14:30 – 14:40</b>	Persistent Identifier Services (Tobias Weigel—ENES/DKRZ)																										
<b>14:45 – 14:55</b>	Provenance Capture Working Team (Bibi Raju—DOE/PNNL)																										
<b>15:00 – 15:10</b>	Publication Working Team (Sasha Ames—DOE/LLNL)																										
<b>15:15 – 15:25</b>	Quality Control Working Team (Martina Stockhause—ENES/DKRZ)																										
<b>15:30 – 15:45</b>	Break																										
<b>15:45 – 15:55</b>	Replication and Versioning Working Team (Stephan Kindermann—ENES/DKRZ)																										
<b>16:00 – 16:10</b>	Software Security Working Team (Prashanth Dwarakanath—ENES/Liu)																										
<b>16:15 – 16:25</b>	Support Working Team (Matthew Harris—DOE/LLNL)																										
<b>16:30 – 16:40</b>	User Working Team (Torsten Rathmann—ENES/DKRZ)																										
16:40	<b>Adjourn Day 2</b>																										
18:00	Happy Hour at Blue Fin Café Billiards (Cost: \$20)																										

**Thursday, December 10, 2015**

08:00 – 08:30	Meet-n-greet														
08:30 – 09:30	<p><b>ESGF Development for Data Centers and Interoperable Services Town Hall Discussion</b>            Session Discussion Lead (Luca Cinquini)</p> <ul style="list-style-type: none"> <li>• What tools have been identified during the previous discussions that should be made more widely accessible to the community?</li> <li>• Are these working team tools addressing community needs?</li> <li>• What other tools are there that could address key community needs?</li> <li>• How should tools and services be made available in the future for the ESGF integrated infrastructure?</li> <li>• What level of support would be expected from the science community?</li> <li>• How do we want to assess the maturity and capability (e.g. benchmarks or crowdsourcing) of the working team tools and services?</li> <li>• Are there any conventions that are needed for the working teams in respect to the many projects?</li> <li>• What level of service, monitoring, maintenance, and metrics is needed for each of the working team data services and tools?</li> <li>• What do working teams want to see from others?</li> <li>• What do the scientists want to have access to with regard to the working teams?</li> <li>• What standards and services that needs to be adopted within the compute environment that will allow projects to participate in multi-agency data initiatives discussed on the first day?</li> <li>• What is needed for data sharing across the multi-international agencies?</li> </ul>														
09:30 – 12:00	<p><b>Coordinated Efforts with Community Software Projects</b>            Session Discussion Lead (Sébastien Denvil)</p> <table border="1" data-bbox="509 1165 1503 1459"> <tr> <td><b>09:30 – 09:55</b></td> <td>THREDDS Data Server (TDS) (John Caron—U.S.A.)</td> </tr> <tr> <td><b>10:00 – 10:15</b></td> <td>Science DMZ for ESGF Supernodes (Eli Dart—DOE/ESnet)</td> </tr> <tr> <td><b>10:20 – 10:35</b></td> <td>Named Data Networking (NDN) (Christos Papadopoulos—Colorado State)</td> </tr> <tr> <td><b>10:40 – 10:55</b></td> <td>Climate Model Output Rewriter Version 3 (CMOR3) (Denis Nadeau—DOE/LLNL)</td> </tr> <tr> <td><b>11:00 – 11:15</b></td> <td>Synda (synchro-data) (Sébastien Denvil—ENES/IPSL)</td> </tr> <tr> <td><b>11:20 – 11:35</b></td> <td>Globus (Rachana Ananthakrishnan—DOE/ANL)</td> </tr> <tr> <td><b>11:40 – 11:55</b></td> <td>On-demand streaming of massive climate simulation ensembles (Cameron Christensen—Univ. of Utah)</td> </tr> </table> <ul style="list-style-type: none"> <li>• How will your efforts help the ESGF community of users?</li> <li>• What is your timeline for releasing your efforts?</li> <li>• What standards and services need to be adopted within the environment that will allow ESGF to participate in early adoption?</li> <li>• How are you funded for longevity?</li> </ul>	<b>09:30 – 09:55</b>	THREDDS Data Server (TDS) (John Caron—U.S.A.)	<b>10:00 – 10:15</b>	Science DMZ for ESGF Supernodes (Eli Dart—DOE/ESnet)	<b>10:20 – 10:35</b>	Named Data Networking (NDN) (Christos Papadopoulos—Colorado State)	<b>10:40 – 10:55</b>	Climate Model Output Rewriter Version 3 (CMOR3) (Denis Nadeau—DOE/LLNL)	<b>11:00 – 11:15</b>	Synda (synchro-data) (Sébastien Denvil—ENES/IPSL)	<b>11:20 – 11:35</b>	Globus (Rachana Ananthakrishnan—DOE/ANL)	<b>11:40 – 11:55</b>	On-demand streaming of massive climate simulation ensembles (Cameron Christensen—Univ. of Utah)
<b>09:30 – 09:55</b>	THREDDS Data Server (TDS) (John Caron—U.S.A.)														
<b>10:00 – 10:15</b>	Science DMZ for ESGF Supernodes (Eli Dart—DOE/ESnet)														
<b>10:20 – 10:35</b>	Named Data Networking (NDN) (Christos Papadopoulos—Colorado State)														
<b>10:40 – 10:55</b>	Climate Model Output Rewriter Version 3 (CMOR3) (Denis Nadeau—DOE/LLNL)														
<b>11:00 – 11:15</b>	Synda (synchro-data) (Sébastien Denvil—ENES/IPSL)														
<b>11:20 – 11:35</b>	Globus (Rachana Ananthakrishnan—DOE/ANL)														
<b>11:40 – 11:55</b>	On-demand streaming of massive climate simulation ensembles (Cameron Christensen—Univ. of Utah)														
12:00 – 13:30	<b>Lunch</b>														
13:30 – 14:30	<p><b>Community Software Projects Town Hall Discussion</b>            Session Discussion Lead (Sebastien Denvil)</p> <p>Town Hall Panel: (John Caron, Eli Dart, Christos Papadopoulos, Denis Nadeau, Sébastien Denvil, Rachana Ananthakrishana, Cameron Christensen)</p>														

	<ul style="list-style-type: none"> <li>• What standards and services need to be adopted within the environment that will allow projects to participate in multi-agency data initiatives?</li> <li>• How should these tools and services be made available in ESGF's future in an integrated way?</li> </ul>																																										
14:30 – 15:00	<p><b>Poster Session</b> Session Discussion Lead (Dean N. Williams)</p> <p>Posters:</p> <table border="1" data-bbox="509 466 1503 1421"> <tr><td>1.</td><td>Climate4Impact Portal (Maarten Plieger—KNMI)</td></tr> <tr><td>2.</td><td>ACME Workflow (Matthew Harris—DOE/LLNL)</td></tr> <tr><td>3.</td><td>HPSS connections to ESGF (Sam Fries—DOE/LLNL)</td></tr> <tr><td>4.</td><td>Distributed Resource for the ESGF Advanced Management (DREAM) (Dean N. Williams—DOE/LLNL)</td></tr> <tr><td>5.</td><td>Observation Data Publication into the ESGF (Misha B. Krassovski—DOE/ORNL)</td></tr> <tr><td>6.</td><td>Climate Data Management System, version 3 (CDMS3) (Denis Nadeau—DOE/LLNL)</td></tr> <tr><td>7.</td><td>Ultrascale Visualization Climate Data Analysis Tools (UV-CDAT) (Aashish Chaudhary—Kitware)</td></tr> <tr><td>8.</td><td>CDATWeb (Matthew Harris—DOE/LLNL)</td></tr> <tr><td>9.</td><td>NetCDF/HDF5 (Ben Evans—NCI/ANU)</td></tr> <tr><td>10.</td><td>PROV (Ben Evans—NCI/ANU)</td></tr> <tr><td>11.</td><td>Climate Forecast (CF) Convention (Karl Taylor—DOE/LLNL)</td></tr> <tr><td>12.</td><td>ES-DOC (Mark Greenslade—ENES/IPSL)</td></tr> <tr><td>13.</td><td>Agreement on Data Management and Publication Workflow (Guillaume Levavasseur—ENES/IPSL)</td></tr> <tr><td>14.</td><td>Data Citation Service (Martina Stockhause—ENES/DKRZ)</td></tr> <tr><td>15.</td><td>PCMDI's Metrics Package (Paul Durack—DOE/LLNL)</td></tr> <tr><td>16.</td><td>DOE UVCMetrics (Jeff Painter—DOE/LLNL; Brian Smith—DOE/ORNL)</td></tr> <tr><td>17.</td><td>ESMValTool (Stephan Kindermann—ENES/DKRZ)</td></tr> <tr><td>18.</td><td>CMIP6 Errata as a New ESGF Service (Guillaume Levavasseur—ENES/IPSL)</td></tr> <tr><td>19.</td><td>Enabling In Situ Analytics in the Community Earth System Model via a Functional Partitioning Framework (Valentine Anantharaj—DOE/ORNL)</td></tr> <tr><td>20.</td><td>The OPTIRAD Project: cloud-hosting the IPython Notebook to provide a collaborative data analysis environment for the earth sciences community (Phil Kershaw—ENES/CEDA)</td></tr> <tr><td>21.</td><td>A NASA Climate Model Data Services (CDS) End-to-End System to Support Reanalysis Intercomparison (Jerry Potter—NASA/GSFC)</td></tr> </table> <ul style="list-style-type: none"> <li>• How will your efforts help the ESGF community of users?</li> <li>• What is your timeline for releasing your efforts?</li> <li>• What standards and services need to be adopted within the environment that will allow ESGF to participate in early adoption?</li> <li>• How should these tools and services be made available in ESGF's future in an integrated way?</li> <li>• How are you funded for longevity (i.e., funding source)?</li> </ul>	1.	Climate4Impact Portal (Maarten Plieger—KNMI)	2.	ACME Workflow (Matthew Harris—DOE/LLNL)	3.	HPSS connections to ESGF (Sam Fries—DOE/LLNL)	4.	Distributed Resource for the ESGF Advanced Management (DREAM) (Dean N. Williams—DOE/LLNL)	5.	Observation Data Publication into the ESGF (Misha B. Krassovski—DOE/ORNL)	6.	Climate Data Management System, version 3 (CDMS3) (Denis Nadeau—DOE/LLNL)	7.	Ultrascale Visualization Climate Data Analysis Tools (UV-CDAT) (Aashish Chaudhary—Kitware)	8.	CDATWeb (Matthew Harris—DOE/LLNL)	9.	NetCDF/HDF5 (Ben Evans—NCI/ANU)	10.	PROV (Ben Evans—NCI/ANU)	11.	Climate Forecast (CF) Convention (Karl Taylor—DOE/LLNL)	12.	ES-DOC (Mark Greenslade—ENES/IPSL)	13.	Agreement on Data Management and Publication Workflow (Guillaume Levavasseur—ENES/IPSL)	14.	Data Citation Service (Martina Stockhause—ENES/DKRZ)	15.	PCMDI's Metrics Package (Paul Durack—DOE/LLNL)	16.	DOE UVCMetrics (Jeff Painter—DOE/LLNL; Brian Smith—DOE/ORNL)	17.	ESMValTool (Stephan Kindermann—ENES/DKRZ)	18.	CMIP6 Errata as a New ESGF Service (Guillaume Levavasseur—ENES/IPSL)	19.	Enabling In Situ Analytics in the Community Earth System Model via a Functional Partitioning Framework (Valentine Anantharaj—DOE/ORNL)	20.	The OPTIRAD Project: cloud-hosting the IPython Notebook to provide a collaborative data analysis environment for the earth sciences community (Phil Kershaw—ENES/CEDA)	21.	A NASA Climate Model Data Services (CDS) End-to-End System to Support Reanalysis Intercomparison (Jerry Potter—NASA/GSFC)
1.	Climate4Impact Portal (Maarten Plieger—KNMI)																																										
2.	ACME Workflow (Matthew Harris—DOE/LLNL)																																										
3.	HPSS connections to ESGF (Sam Fries—DOE/LLNL)																																										
4.	Distributed Resource for the ESGF Advanced Management (DREAM) (Dean N. Williams—DOE/LLNL)																																										
5.	Observation Data Publication into the ESGF (Misha B. Krassovski—DOE/ORNL)																																										
6.	Climate Data Management System, version 3 (CDMS3) (Denis Nadeau—DOE/LLNL)																																										
7.	Ultrascale Visualization Climate Data Analysis Tools (UV-CDAT) (Aashish Chaudhary—Kitware)																																										
8.	CDATWeb (Matthew Harris—DOE/LLNL)																																										
9.	NetCDF/HDF5 (Ben Evans—NCI/ANU)																																										
10.	PROV (Ben Evans—NCI/ANU)																																										
11.	Climate Forecast (CF) Convention (Karl Taylor—DOE/LLNL)																																										
12.	ES-DOC (Mark Greenslade—ENES/IPSL)																																										
13.	Agreement on Data Management and Publication Workflow (Guillaume Levavasseur—ENES/IPSL)																																										
14.	Data Citation Service (Martina Stockhause—ENES/DKRZ)																																										
15.	PCMDI's Metrics Package (Paul Durack—DOE/LLNL)																																										
16.	DOE UVCMetrics (Jeff Painter—DOE/LLNL; Brian Smith—DOE/ORNL)																																										
17.	ESMValTool (Stephan Kindermann—ENES/DKRZ)																																										
18.	CMIP6 Errata as a New ESGF Service (Guillaume Levavasseur—ENES/IPSL)																																										
19.	Enabling In Situ Analytics in the Community Earth System Model via a Functional Partitioning Framework (Valentine Anantharaj—DOE/ORNL)																																										
20.	The OPTIRAD Project: cloud-hosting the IPython Notebook to provide a collaborative data analysis environment for the earth sciences community (Phil Kershaw—ENES/CEDA)																																										
21.	A NASA Climate Model Data Services (CDS) End-to-End System to Support Reanalysis Intercomparison (Jerry Potter—NASA/GSFC)																																										
15:00 – 17:00	<b>Team Discussion and Across Team Discussions</b>																																										
17:00	<b>Adjourn Day 3</b>																																										

<b>Friday, December 11, 2015</b>	
08:00 – 08:30	Meet-n-greet
08:30 - 10:00	<p><b>ESGF Development Teams Report Back on Conference Findings</b>            Session Discussion Lead (Dean N. Williams)</p> <ul style="list-style-type: none"> <li>• Poster session feedback</li> <li>• Open discussion</li> </ul>
10:00 – 10:15	<b>Break</b>
10:15 - 12:00	<p><b>ESGF XC and WIP Breakout Meeting</b></p> <ul style="list-style-type: none"> <li>• Discuss of the construction of the annual report</li> <li>• Meeting location and time of the next ESGF F2F meeting</li> </ul> <p><b>Working Teams Meeting</b></p> <ul style="list-style-type: none"> <li>• All working teams discuss conference findings for their area for the annual report</li> </ul>
12:00 – 13:30	<b>Lunch</b>
13:30 – 17:00	<p><b>General Data Code Sprint</b>            Session Discussion Lead (Working Team Leads)</p>
17:00	<b>Adjourn Day 4</b>
<b>Concludes the 5<sup>th</sup> Annual ESGF F2F Conference</b>	