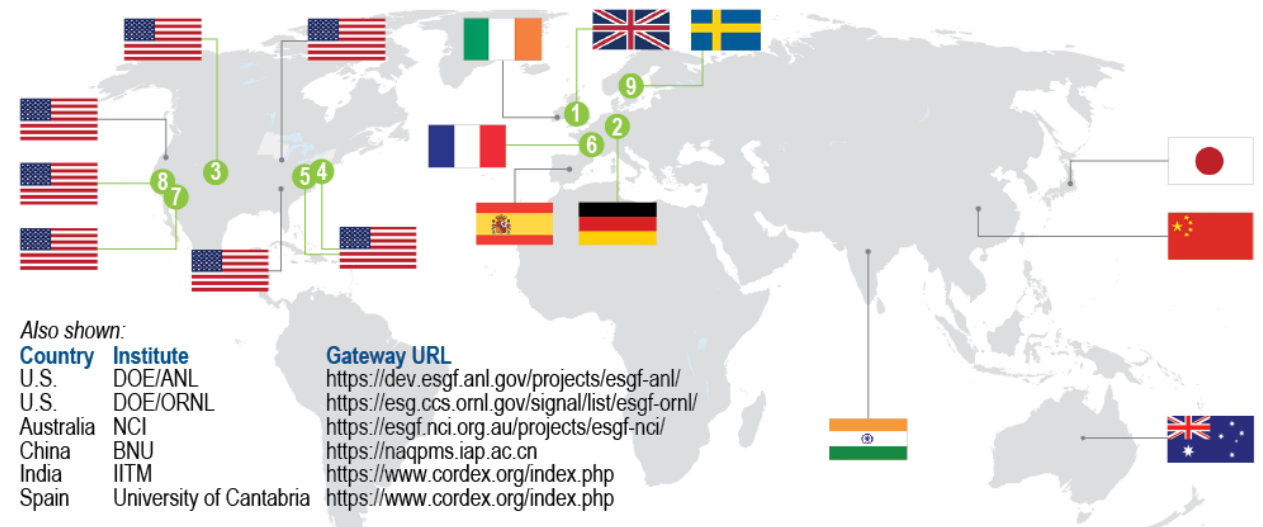
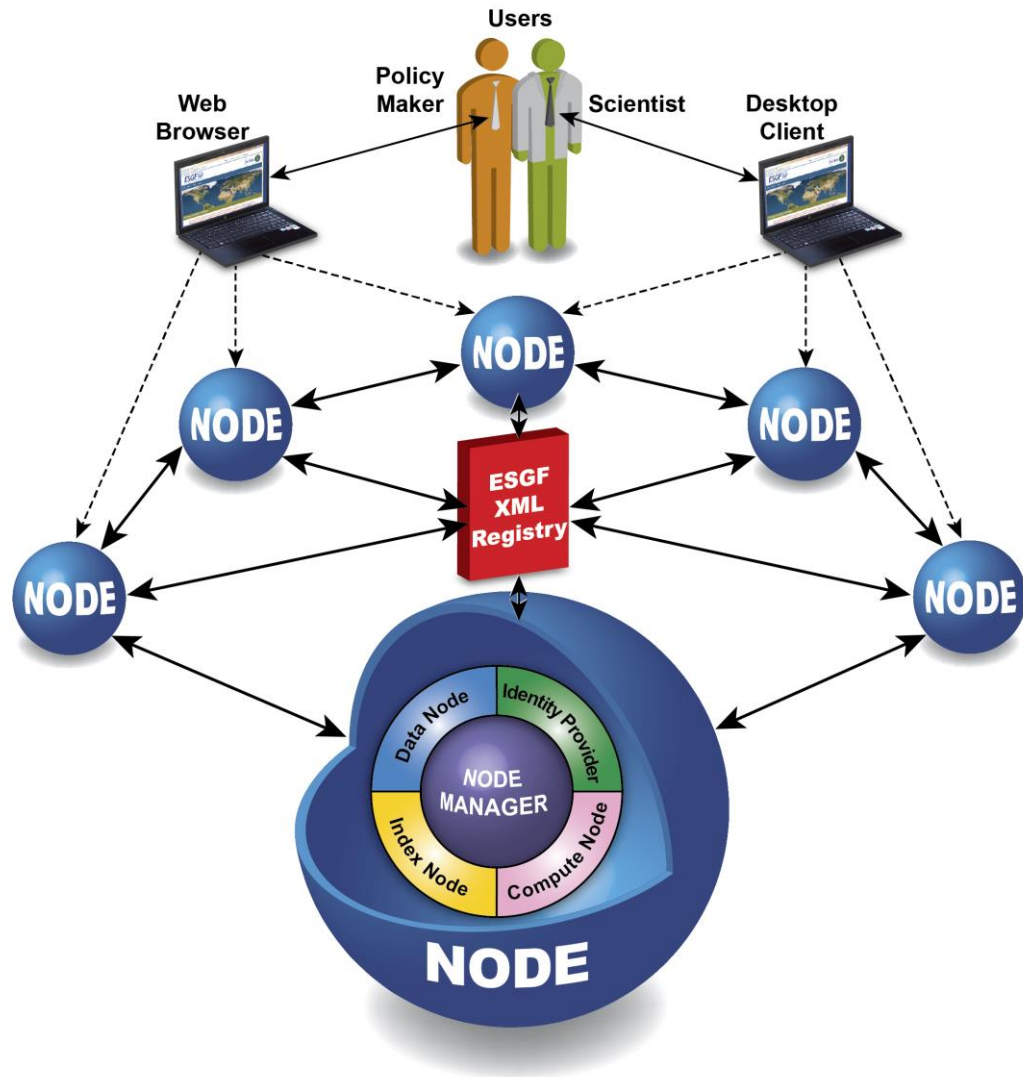


Earth System Grid Federation



	Inst.	Gateway URL	Ver.	Country	Project(s)	Contact
1	CEDA	https://esgf-index1.ceda.ac.uk/	2.2.3	U.K.	CMIP5, CORDEX, Obs4MIPs, SPECS, ESA CCI, EUCLEIA, CLIPC	alan.iwi@stfc.ac.uk
2	DKRZ	https://esgf-data.dkrz.de/	2.3.8	Germany	CMIP5, CORDEX, Obs4MIPs, ISI-MIP	berger@dkrz.de
3	ESRL/NOAA	https://esgf.esrl.noaa.gov/	2.3.8	U.S.	HIWPP, Coupled NEMS	sylvia.murphy@noaa.gov
4	GFDL/NOAA	https://esgdata.gfdl.noaa.gov/	2.2.3	U.S.	CMIP5, ncpp2013, Obs4MIPs	hans.vahlenkamp@noaa.gov
5	GSFC/NASA	https://esgf.nccs.nasa.gov/	2.3.8	U.S.	CMIP5, Obs4MIPs, Ana4MIPs, NEX-GDDP, NEX-DCP30, CREATE-IP	daniel.q.duffy@nasa.gov
6	IPSL	https://esgf-node.ipsl.upmc.fr/	2.2.3	France	CMIP5, CORDEX, Obs4MIPs	sebastien.denvil@ipsl.jussieu.fr
7	JPL/NASA	https://esgf-node.jpl.nasa.gov/	2.3.8	U.S.	Obs4MIPs, GASS-YoTC, CMAC	Luca.Cinquini@jpl.nasa.gov
8	DOE/LLNL	https://pcmdi.llnl.gov	2.3.8	U.S.	CMIP5, CMIP3, input4MIPS, ACME	sasha@llnl.gov
9	LiU	https://esg-dn1.nsc.liu.se/	2.2.2	Sweden	CMIP5, CORDEX, Obs4MIPs	pchengi@nsc.liu.se

Centralized Archive

1999

Distributed Data Ecosystem

2017

Virtual Laboratory

2022

Planned Earth System Grid System Evolution

Usable capabilities

Prototype capabilities

Future capabilities

	Data Management	User Interface	Network	Data Transfer	Authentication & Authorization	Federation	Version Control	Quality Control & Assurance	Replication	Distributed Search	Metrics	User Notification	Long-tail Publication	Distributed Computation	Data Citation	Provenance Capture	Workflow	Dynamic Resources	In situ Analysis	Machine Learning	Analytical Modeling
ESGF-VL	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Prototype	Prototype	Prototype	Prototype	Future	Future	Future	Future
ESGF	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Prototype	Prototype	Prototype	Prototype						
ESG-CET	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Usable	Prototype	Prototype	Prototype									
ESG-II	Usable	Usable	Usable	Usable	Prototype	Prototype	Prototype														
ESG-I	Prototype	Prototype	Prototype	Prototype																	

- 2020-
- 2011-2020
- 2006-2011
- 2001-2006
- 1999-2001

Model Intercomparison Projects

Planned Earth System Grid System Data Archival

Remote Sensing, In Situ, Climatology, Diagnostics, Ecosystem, Hydrology, Biology, Etc.

Petabytes (10¹⁵)

Exabytes (10¹⁸)