("Traditional") *HPC Platform*

Earth System Model Simulation

post-processing (& analysis)

Initial condition or checkpoint

(periodic) output physical variables

Final check point

Multiple Tools, Visualisation

(dedicated?) Analysis Facilities ("Data HPC/Data Cloud")

Multiple Tools (other data)

download

Reformatting, Sub-setting, Downloading, Processing.

ESGF Earth System Grid Federation

Cloud Computing

(Distributed/Federated?) Internet Archives (Servers/Public Clouds)

Multiple Roles, at least:
Model Developer, Model Tinkerer, Expert Data Analyst, Service Provider, Data User