

# **GLOBUS AT PURDUE UNIVERSITY**

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## **OUTLINE: GLOBUS IN...**

- The HPC Center
  - Statistics
- The Purdue Community
- The Hubzero Platform
  - Files
  - Tools
  - Publication



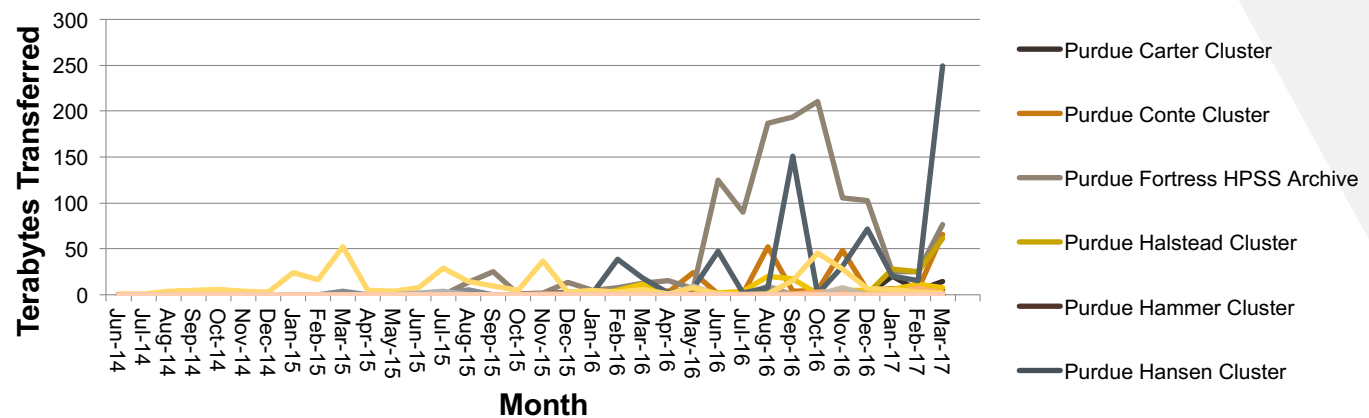
## **GLOBUS AT PURDUE RESEARCH COMPUTING**

Deployed Globus in 2014, with a single server.

DTN nodes are now a standard part of each HPC or data resource

# ADOPTION

Terabytes Transferred per Month per Managed Endpoint



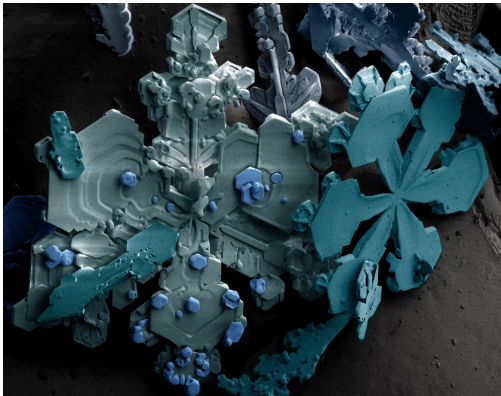
Last 12 months:

1.9 PB transferred (388TB last month!)

Average of 152 TB, 74 unique users per month

## SCIENCE CASES

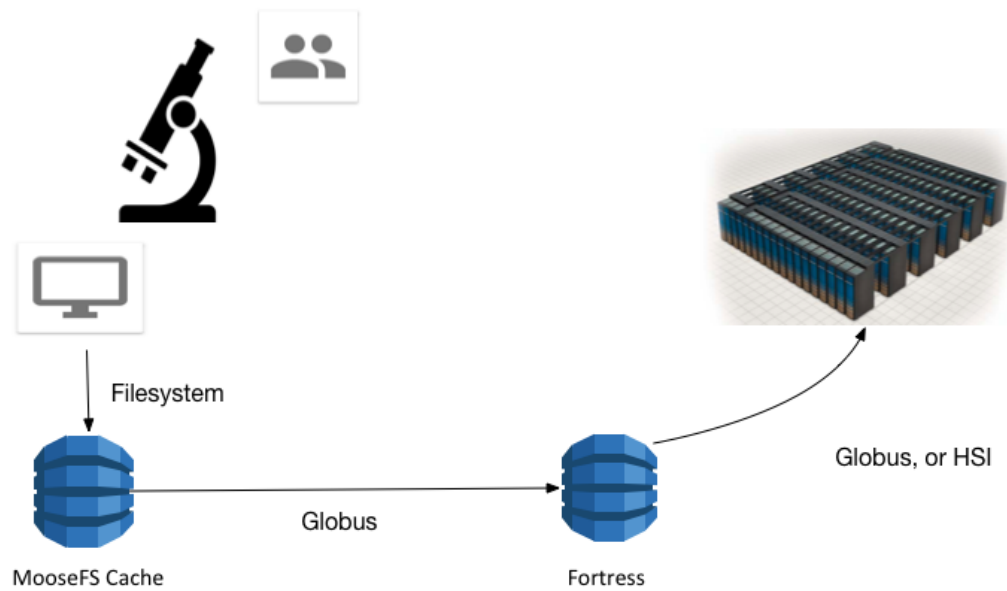
### CRYO-EM



### Genomics Core



# CRYO-EM



# SCIENCE CASES

## Ag Extension Distance Education

## Humanities

**Courses:**

- AGRONOMY ESSENTIALS
- PRECISION AGRICULTURE
- NUTRIENT MANAGEMENT
- SCHEDULE

Course graduates receive a personalized certificate. Those who complete all three courses will receive a framed Crop Professional Certificate in addition to the course certificates. Certified Crop Advisors also receive Continuing Education Units (CEUs).

Past students have given us high marks. Of all 424 respondents on our anonymous end-of-course surveys for Agronomy Essentials and Precision Agriculture:

- 97% said they Would Recommend or Highly Recommend the Course.
- 99% Agreed or Strongly Agreed that they Improved Their Understanding of the Subject.
- 99% Agreed or Strongly Agreed that the Course Content Was Appropriate to the Aims and Objectives.

**WE ARE PURDUE**  
WHAT WE MAKE  
MOVES THE WORLD FORWARD

Video window

Toolbar

Preview pictures

Waveform

Time line

Codes

Current playback position

Timestamps

# GLOBUS IN HUBZERO “PROJECTS”

Link external data into your gateway

Home / Groups / Discover Hubzero / Projects / Discover Hubzero Project / Files

## Discover Hubzero Project

Project by group discoverhubzero

Project manager

Files » Connect

Available connections for your project:

Connecting your project to an external service such as Google Drive lets you extend collaborative editing possibilities and take advantage of file syncing tools provided by the remote service.

- Globus** → CONNECT  
To enable this service for your project, connect now!
- Google Drive** → CONNECT  
To enable this service for your project, connect now!
- More services to come!**  
We are working to make other services available in the near future, with Dropbox first in the line. Stay tuned!

Navigation sidebar:

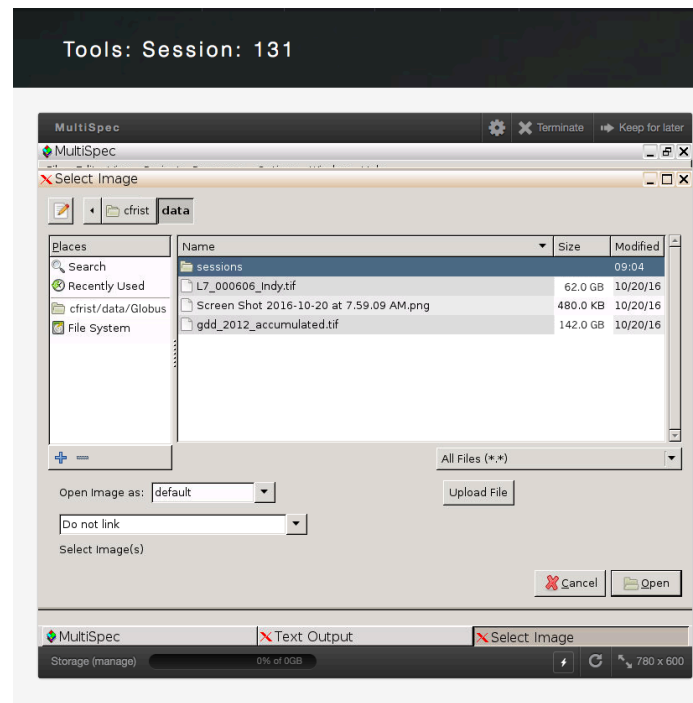
- Updates
- Info
- Team (2)
- Files (4)**
- Discover Hubzero Project Master Repository
- Publications (1)
- Databases (1)
- To Do (1)
- Notes



# HUBZERO TOOLS

**Load data or save results for  
online simulation through a  
Globus endpoint**

*Some development in progress against  
HTTPS endpoints*



# PUBLICATION

## File support + Globus publication APIs

- Use Globus endpoint to link archival storage (HPSS) to publish big datasets in PURR

- DOIs:

- PURR at Purdue can mint own
- For other hub owners, target Globus publication for DOIs

**PURDUE UNIVERSITY** Purdue University Research Repository **PURR**

Home Publications Projects Get Started Policies About

### Collaborate on Research

Any Purdue faculty member, graduate student, or staff can create a project in PURR, which provides a set of tools and data storage to support research and collaboration. Invite collaborators from other institutions to join your project!

[Learn More](#)

#### Start Your Research Project

- Create a Data Management Plan**  
Learn about the detailed requirements for your data management plan (DMP). Funding agency requirements are very specific and our DMP resources can help you to clear up any confusion. [Get Started](#)
- Upload Research Data to Your Project**  
Create a project to upload and share your data with collaborators using our step-by-step form to guide you through the process. Invite collaborators from other institutions to join your project. [Create a Project](#)
- Publish your Dataset**  
Package, describe, and publish your dataset with a Datacite DOI. Publishing will ensure your dataset is citable, reusable, and archived for the long-term. [See Published Datasets](#)

#### Featured Dataset

**2012 Latino Immigrant National Election Study**  
James A. McCann, Purdue  
Michael Jones-Correa, Cornell

An original national survey of the foreign-born Latino population in the US who were interviewed during...

#### Have a Question?

Username:

Name:

E-mail:

Question: