

Argo Data Management report 2016
US GDAC (Global Data Assembly Center)
September 22nd, 2016



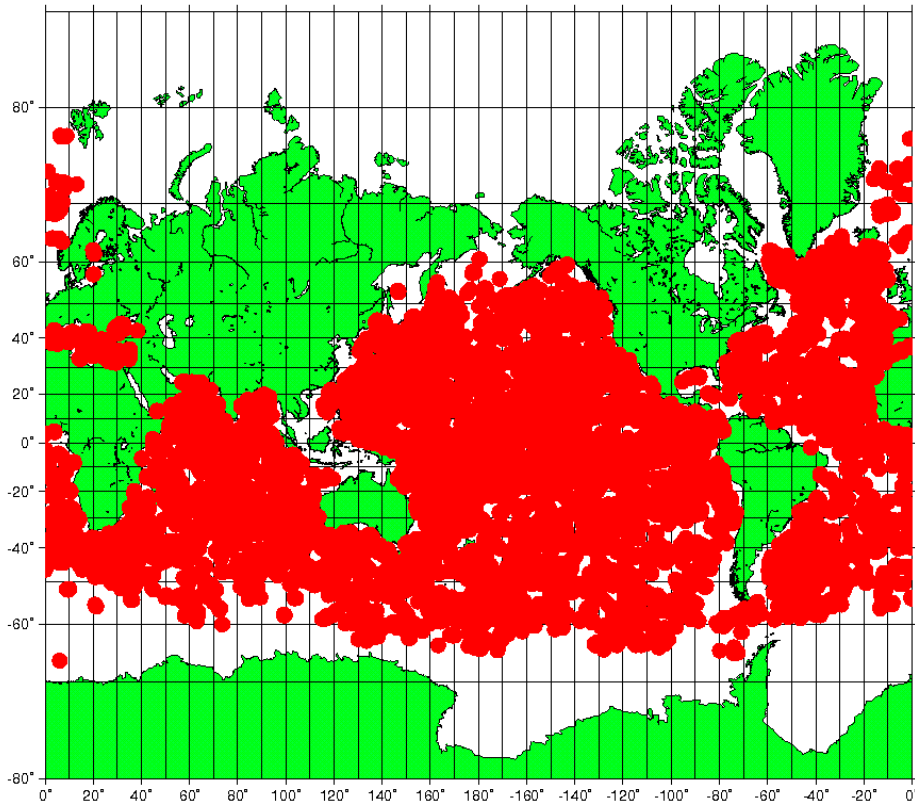
Select the DAC, dates, coordinate box, output preference and

Year Month Day North
START: 2016 08 01 West 180 180 East
END: 2016 09 22 South -90

DAC FloatID Output Type:
ALL acml bodc csiro gts
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 Text List Only
 Text List and Location Plot
 Text Loc Plot with ProfileIDs

Return Delayed Mode Profiles Only
Go Reset

USGODAE Argo GDAC Data Browser



GDAC Functions

(If your centre operates a GDAC, report the progress made on the following tasks and if not yet complete, estimate when you expect them to be complete)

- National centres reporting to you
- Operations of the ftp server
- Operations of the www server
- Data synchronization
- Statistics of Argo data usage : Ftp and WWW access, characterization of users (countries, field of interest : operational models, scientific applications) ...

National centres reporting to you

Currently, 9 of the National DACs submit regularly to the US GDAC. The other DACs use the Coriolis as a proxy, and the US GDAC downloads the data from this proxy.

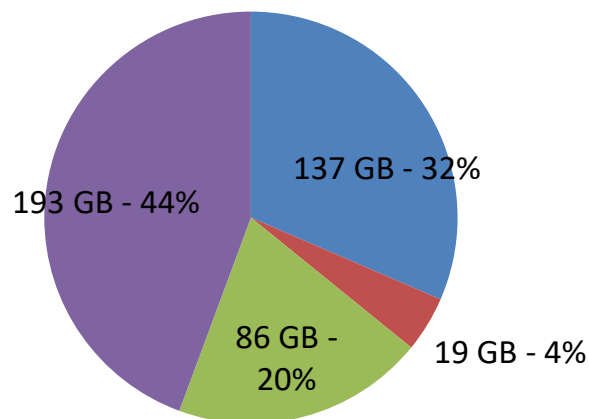
As of September 22nd, 2016, the following shows the Argo footprint on the US GDAC.

| DAC | MetaData | Technical | Trajectory | Trajectory D-Mode | Trajectory Bio |
|----------|----------|-----------|------------|----------------------|-------------------|
| AOML | 6,023 | 5,845 | 7,229 | 1,383 | 0 |
| BODC | 538 | 511 | 420 | 0 | 0 |
| Coriolis | 2,315 | 2,288 | 2,226 | 1 | 190 |
| CSIO | 345 | 331 | 340 | 0 | 0 |
| CSIRO | 748 | 730 | 711 | 0 | 0 |
| INCOIS | 394 | 382 | 370 | 0 | 18 |
| JMA | 1,455 | 1,422 | 1,418 | 0 | 0 |
| KMA | 217 | 206 | 207 | 0 | 0 |
| KORDI | 119 | 115 | 119 | 0 | 0 |
| MEDS | 435 | 423 | 421 | 0 | 6 |
| NMDIS | 19 | 19 | 19 | 0 | 0 |
| Totals | 12,608 | 12,272 | 13,480 | 1,384 | 214 |

| DAC | Profiles | Profiles D-Mode | Profiles Bio |
|----------|-----------|--------------------|-----------------|
| AOML | 879,266 | 572,866 | 22,324 |
| BODC | 57,402 | 31,307 | 0 |
| Coriolis | 226,758 | 129,638 | 27,853 |
| CSIO | 39,115 | 10,221 | 0 |
| CSIRO | 124,279 | 97,846 | 18,612 |
| INCOIS | 51,631 | 27,819 | 3,076 |
| JMA | 170,094 | 95,532 | 7,118 |
| KMA | 26,074 | 20,786 | 0 |
| KORDI | 16,302 | 0 | 0 |
| MEDS | 44,379 | 27,386 | 2,707 |
| NMDIS | 2,460 | 0 | 0 |
| Totals | 1,637,760 | 1,013,401 | 81,690 |

US GDAC Argo Footprint (435 GB)

■ dac ■ etc ■ geo ■ latestest_data



Operations of the ftp server

The US GDAC hosts an anonymous FTP server that allows download to all available

Argo data that it currently has. This includes the Argo aggregate files, as well as, the raw NetCDF files that are received by the DACs. Additionally, the Argo index files are available for download as well. These index files are updated on the US GDAC approximately twice per hour.

US GDAC FTP server: <ftp://usgodae.org/pub/outgoing/argo>

Operations of the www server

The US GDAC hosts an apache webserver that allows the users to download Argo data via standard tools such as wget. Similar to the FTP server, all Argo data is available for download.

In addition the US GDAC hosts the 'USGODAE Argo GDAC data browser' that allows for limited querying capabilities (time, area, dac, etc).

US GDAC HTTP server: <http://usgodae.org/pub/outgoing/argo>

Argo Data Browser: http://usgodae.org/cgi-bin/argo_select.pl

Data synchronization

The US GDAC synchronizes with the French GDAC once per day at 1015 UTC. The process involves downloading all of the index files from the French GDAC and comparing them to the local US GDAC. After comparison, all necessary files are then downloaded and submitted normally into the US GDAC.

The typical synchronization takes approximately 15 minutes to complete each day. However, there are times when it takes much longer and we need to investigate.

Statistics of Argo data usage

FTP Statistics

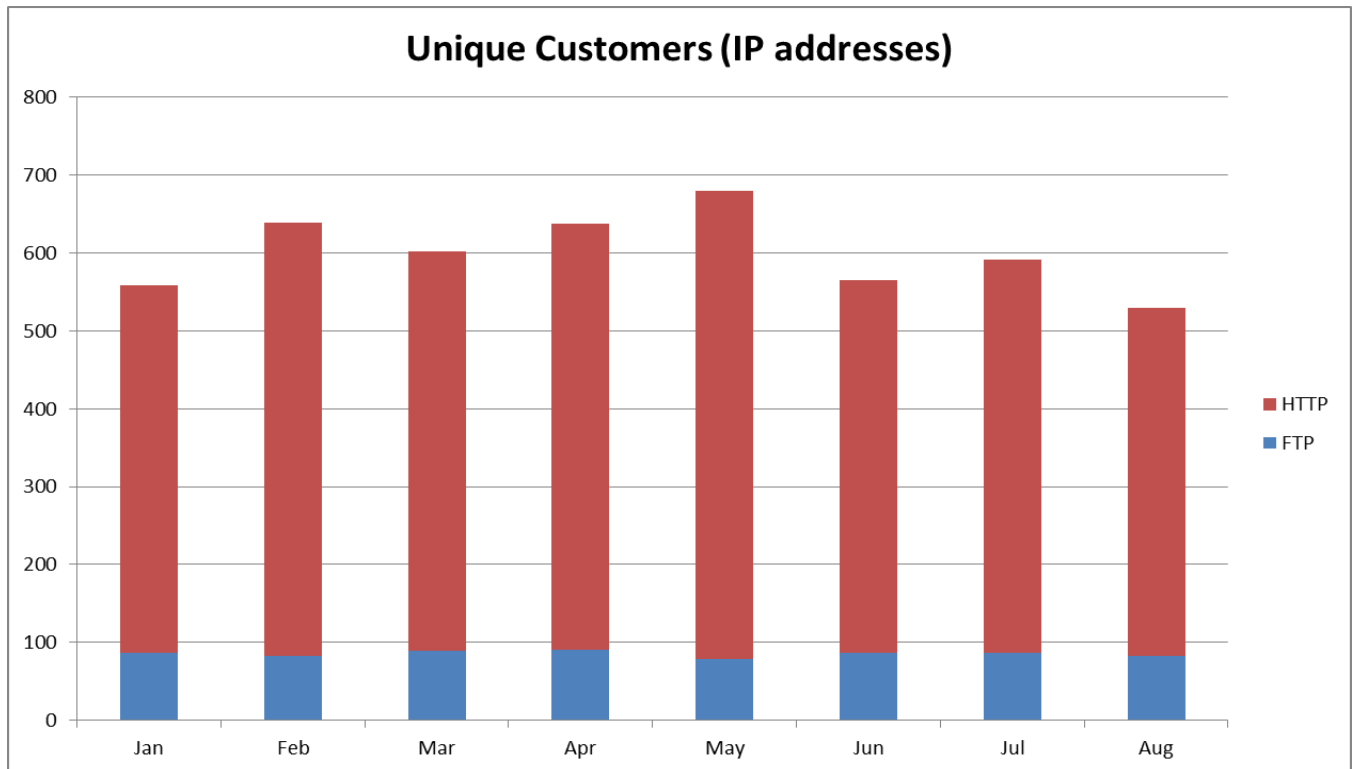
| Date | Unique IPs | Hits (1000's) | Gigabytes |
|----------|------------|---------------|-----------|
| Jan 2016 | 86 | 1,437 | 1,732 |
| Feb 2016 | 82 | 1,995 | 1,689 |
| Mar 2016 | 89 | 1,807 | 2,325 |
| Apr 2016 | 91 | 2,412 | 2,201 |
| May 2016 | 79 | 1,998 | 2,903 |
| Jun 2016 | 87 | 2,256 | 2,654 |
| Jul 2016 | 86 | 2,134 | 1,987 |
| Aug 2016 | 82 | 1,476 | 1,945 |

HTTP Statistics

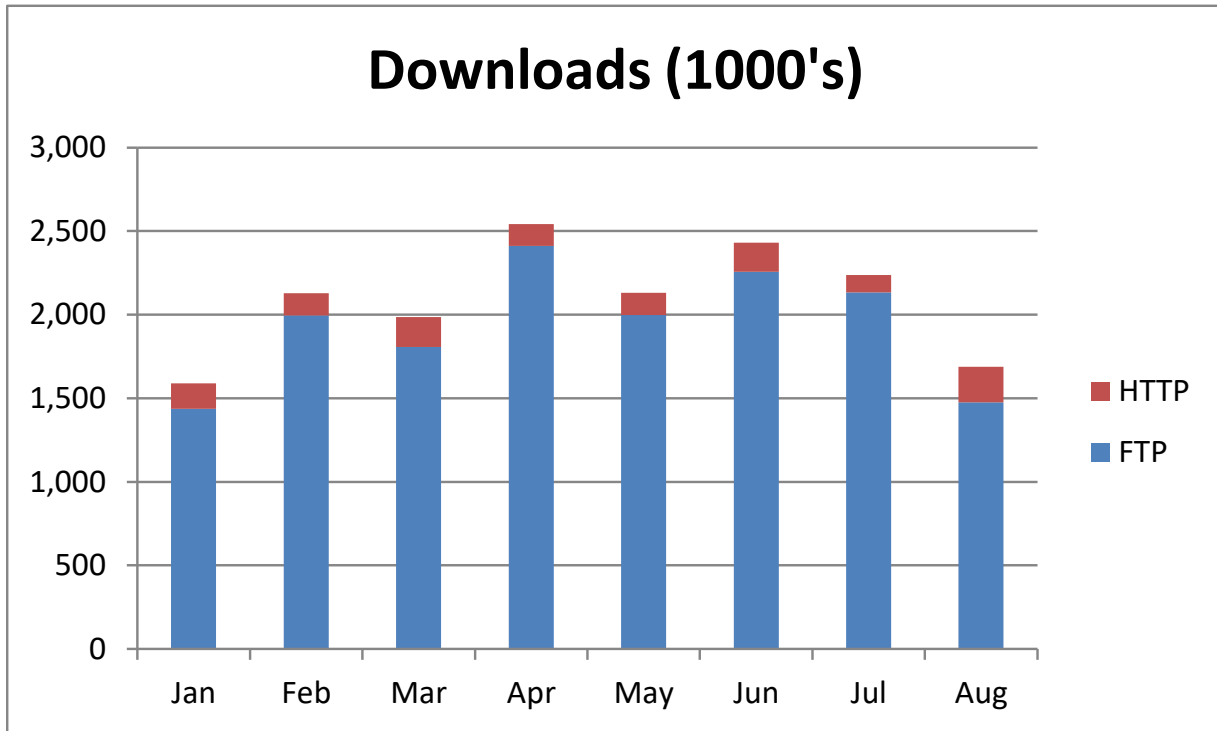
| Date | Unique IPs | Hits (1000's) | Gigabytes |
|----------|------------|---------------|-----------|
| Jan 2016 | 473 | 153 | 1,775 |
| Feb 2016 | 557 | 134 | 1,479 |

| | | | |
|----------|-----|-----|-------|
| Mar 2016 | 513 | 178 | 1,850 |
| Apr 2016 | 547 | 129 | 2,788 |
| May 2016 | 601 | 133 | 2,567 |
| Jun 2016 | 478 | 174 | 2,894 |
| Jul 2016 | 505 | 104 | 2,004 |
| Aug 2016 | 447 | 212 | 2,133 |

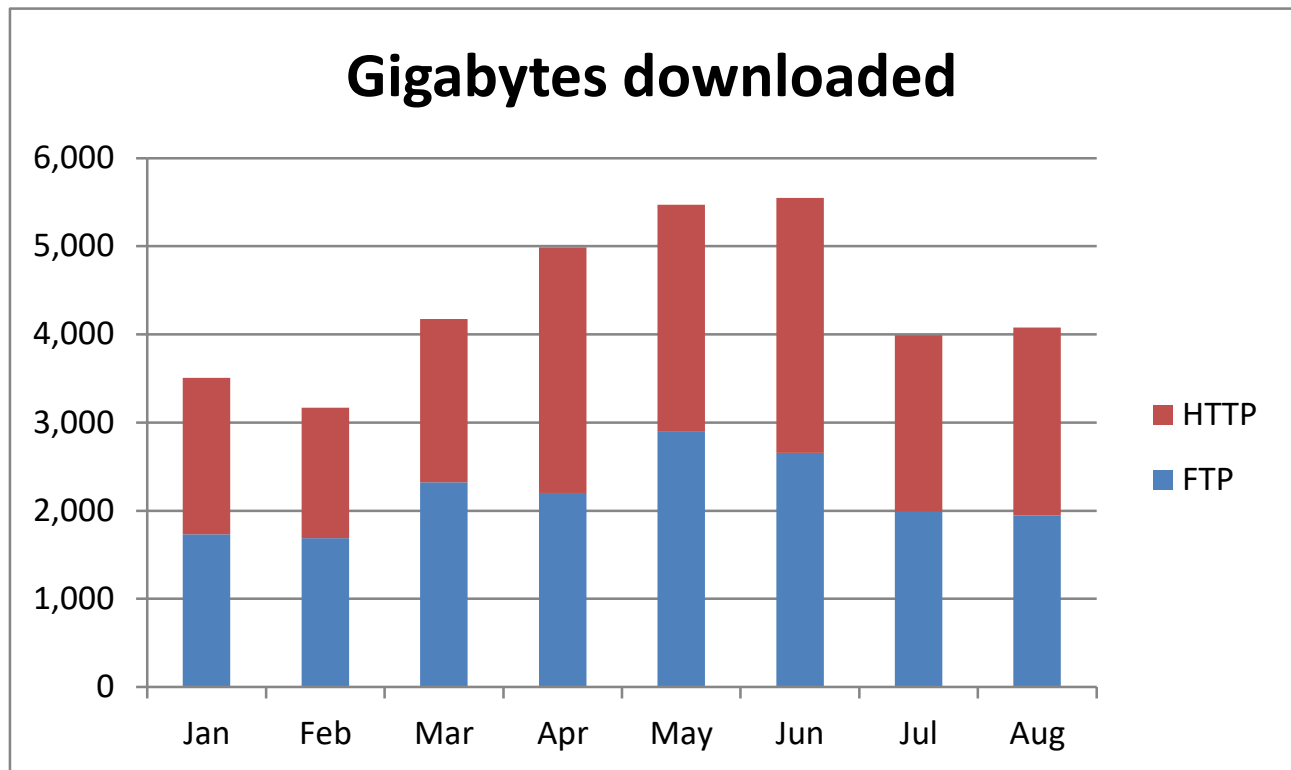
The following chart shows the unique customers downloading Argo data per month.



The following chart shows individual successful downloads in 1000's. One successful download would equate to one Argo file being downloaded, regardless of size.



The following charts shows how many terabytes worth of Argo has been downloaded per month.



Visitors

The following list shows the countries that have downloaded Argo data from the US GDAC.

- Australia (AUS)
- Belgium (BEL)
- Brazil (BRA)
- Canada (CAN)
- Chile (CHL)
- China (CHN)
- Denmark (DNK)
- Fiji (FJI)
- France (FRA)
- Germany (DEU)
- Hong Kong (HKG)
- India (IND)
- Indonesia (IDN)
- Italy (ITA)
- Japan (JPN)
- Korea Republic of (KOR)
- Macau (MAC)
- Malaysia (MYS)
- Mexico (MEX)
- Netherlands (NLD)
- New Zealand (NZL)
- Norway (NOR)
- Poland (POL)

Puerto Rico (PRI)

Samoa (WSM)

South Africa (ZAF)

Spain (ESP)

Switzerland (CHE)

Taiwan; Republic of China (ROC) (TWN)

United Kingdom (GBR)

United States (USA)