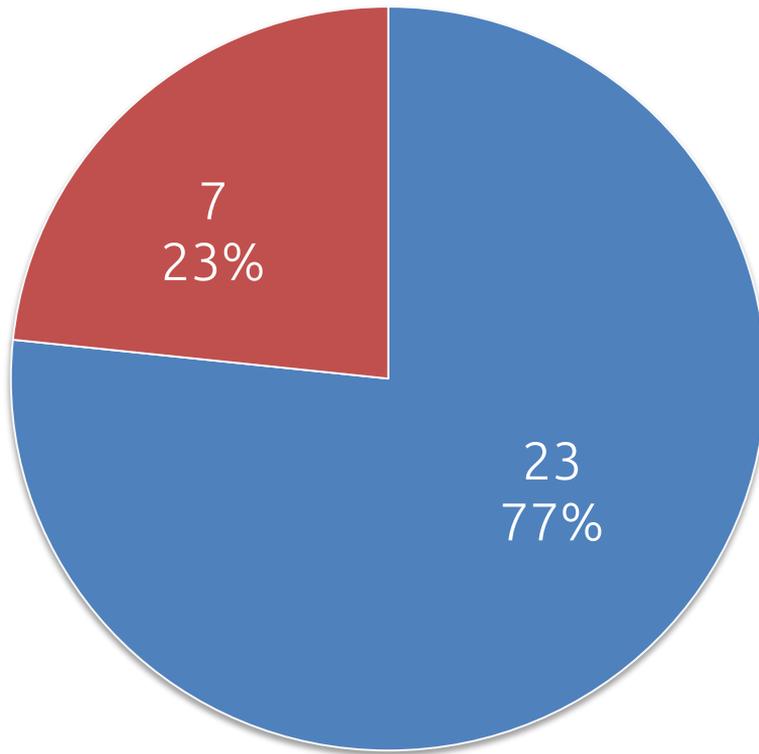


# Unidata Community Survey

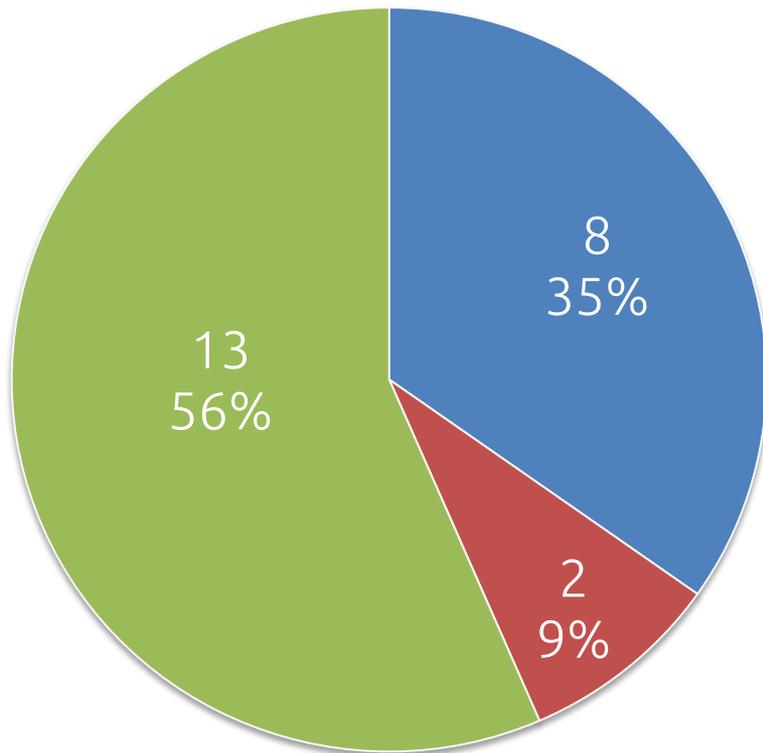
CONDUIT use and GFS 0.25° Interest  
Users Committee Spring Meeting  
March 2015

# 30 Community Responses to the Survey



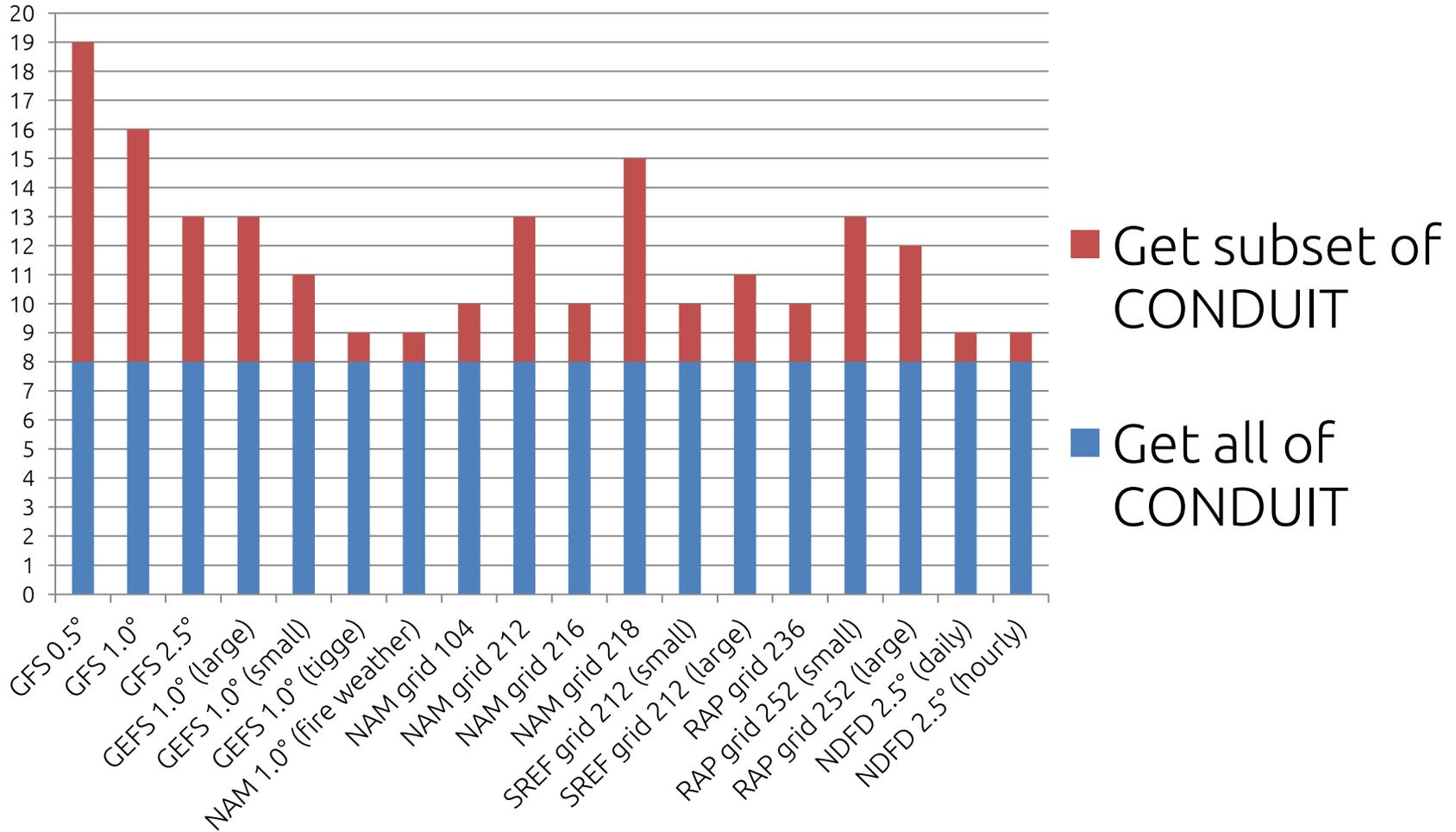
- Participate in IDD
- Do not participate in IDD

# Of 23 Sites Participating in the IDD:

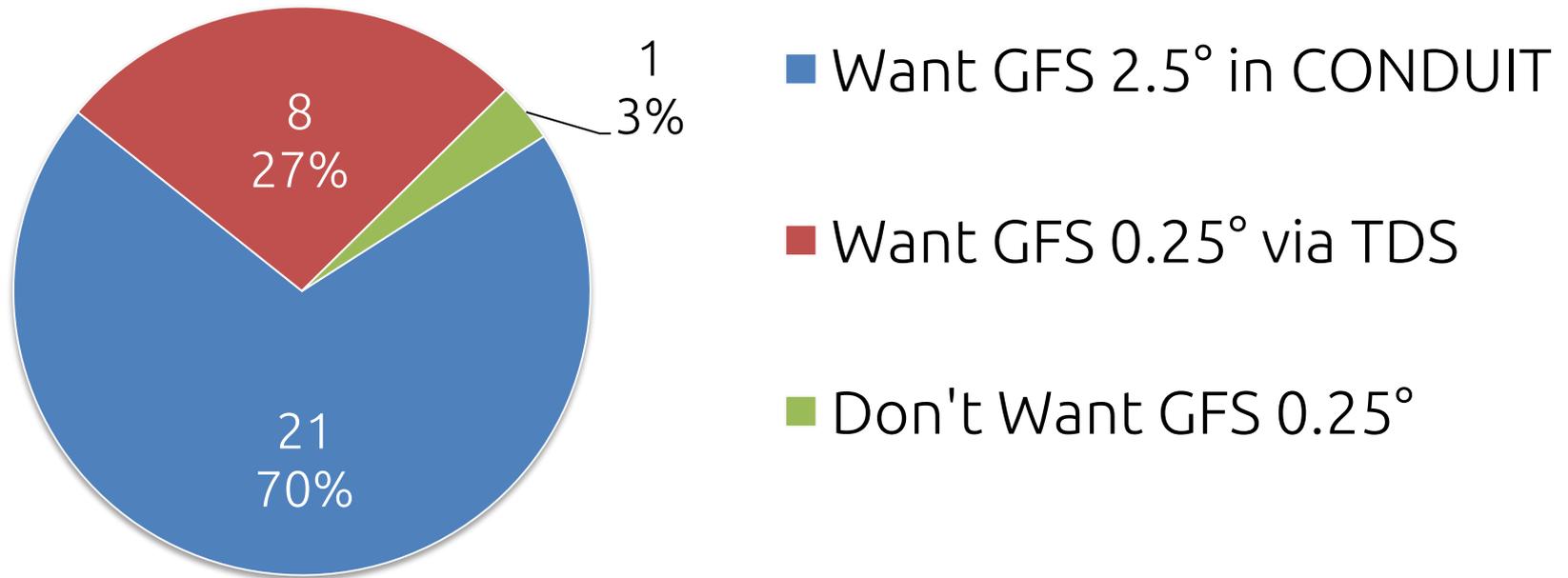


- Get everything on CONDUIT
- Get nothing on CONDUIT
- Get subset of CONDUIT

# Of 21 Sites Receiving CONDUIT Data



# Interest in GFS 0.25° Output



# Interest in Other Datasets

No clear trend here, but a number of suggestions:

- We would like to see the FULL NAM data set (AWPHYS), as we currently use FTP from the NCEP server to bring that into our systems.
- If we obtain the 0.25 degree GFS, I will no longer need the 0.5 or 1.0 degree GFS. I will continue to use the 2.5 degree GFS until the 204-384 is available at some other resolution.
- I use the GEFS pgrb2b grids from NCEP in addition to the pgrb2a available on CONDUIT to initialize WRF.

# Other Datasets (continued)

- Hires window model output (4km ARW/NMM on grid 227)
- Higher resolution, non-bias-corrected sref on grid 132
- Select fields from the gfs native grid sflux data sets, e.g. TMIN/TMAX, Precip, clouds, snow depth
- MRMS data? Already receiving this direct from NOAA, perhaps others would be interested.
- HIWPP Perhaps? especially once they iron out their fields issues :)

# Other Datasets (continued)

- HWRF - all products
- GFDL - all products
- FIM when it is available.
- I would be interested in seeing the GFDL and HWRF tropical models added during tropical season.
- CONUS grids for the WRF-NMM and WRF-ARW
- NAM 4-km nest
- Possibly the HRRR, if it were possible to receive subsets with only certain variables, etc.

# Comments

- Our estimates are more likely the peak rates that our IT folks would like to see for us, rather than our actual peak capabilities.
- We are anxious to receive the new higher-resolution GFS data. It will have a big impact on our operational runs of the WRF model over Mauna Kea to predict optical turbulence for the astronomy community. We are also running an operational volcanic emissions dispersion model for Kilauea. We have the band with and capacity for the new data.

# Comments (continued)

- Numbers are based on statistics provided by rtstats and are guestimates My biggest concern with the volume of data would not be receiving the data but scouring. We already spend a lot of time scouring NEXRAD/TDWR data, possibly due to the large number of products. I think scouring .25 km GFS data would be ok, since the numbers of files associated with the data would be (relatively) small, just that the file sizes would be bigger.

# Comments (continued)

- Since there wasn't an option above, I want to clarify that only the first 192 hours of the 0.25 degree GFS would be fine as well.
- New GFS initial data for local high resolution model, the WRF output products more error than the old GFS version.
- GFS data size larger than the old version, Is very slowly to downloads 0.25 GFS data.
- I would like very thanks for your kindness to provided free and very good meteorology data.

# Comments (continued)

- I have been downloading the 0.25 degree model for a couple of months now and it seems to work despite the size. I encourage you to add this model.
- Do we need 0.25 deg data out to the whole 384 run? Maybe we can have 0.25 deg data out to 168h or something to reduce the total size of each run? 384h GFS forecasts are pretty much cartoons anyways, does it matter whether the cartoon is at 1 degree or 0.5 or 0.25?
- Really don't know exactly how much data per day or per hour we can handle.. The queue on my main idd relay is 20 Gb and that's about as big as it can go on the existing machine.

# Comments (continued)

- IDD serves as a backup to noaaport, and we serve as a backup to unidata. we would prefer to have the 0.25 degree products over noaaport, and use the IDD as a backup. There is ample capacity in the existing noaaport stream, especially if gfs is staggered with other products.. However, if that feed is not upgraded, yes please, serve the 0.25 degree over conduit :) It would certainly help alleviate some of the current ncep capacity issues.. :)

# Comments (continued)

- We'd like to feed some data from our satellite dish to UNIDATA in the event of an emergency.
- We are using GFS, GDAS, GEFS etc from 2004 onwards from the publicly available download servers (NCEP). Alternative datastreams are very interesting to us so we are keen on finding out a bit more on possible participation. We are not yet familiar with CONDUIT and would like to know whether we can use the service.

# Comments (continued)

- The 0.25 degree GFS output may be useful for certain case studies, but our department wouldn't be interested in receiving full output in near real-time(perhaps a limited, subset).
- Would initially be interested in accessing GFS 0.25 deg. model output via a THREDDS Data Server to gauge internal usage, and then possibly at a later time via CONDUIT (assuming dataset could be viewed in AWIPS II).

# Comments (continued)

- The maximum estimates up above are very rough based on our current usage; I don't think we've ever tried pushing our IDD feed to the limit so the maxima might actually be much higher than this.
- We might take some of the data in real time, but are not likely interested in taking the whole thing

# Comments (continued)

- We would be VERY interested in getting the 0.25 data delivered to Unidata where we could access the aggregated data via OPeNDAP (and WMS). We would use this to drive our ocean forecast model in regions that extend beyond the NAM domain.

# Comments (continued)

- We have been using remote access (i.e., the Unidata Thredds server) for our data analysis needs for a few years. It works great. The full feed NCEP grids contain quite a bit of data that we never use. We grab what we need, when we need it. We do grab some products via ftp from the NOMADS server. Increasingly we are using curl to subset and grab just what we need. It would make sense to provide the GFS 0.25 degree model output via conduit at this time for some users, but ultimate, Unidata should explore moving to a cloud-based paradigm for data access.

# Raw Survey Results

You can view the raw survey results, which allow you to match up the responding institutions with their comments, at:

[http://www.unidata.ucar.edu/community/surveys/2015conduit/survey\\_results.html](http://www.unidata.ucar.edu/community/surveys/2015conduit/survey_results.html)

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