

# DIGITAL MAPPING TECHNIQUES 2014

The following was presented at DMT'14  
(June 1-4, 2014 - Delaware Geological Survey,  
Newark, DE)

The contents of this document are provisional

See Presentations and Proceedings  
from the DMT Meetings (1997-2014)

<http://ngmdb.usgs.gov/info/dmt/>

# Geologic Data Processing and Delivery at the Alaska Geological Survey

By Jennifer E. Athey and DGGGS Staff

Alaska Division of Geological & Geophysical Surveys (DGGGS)  
3354 College Road  
Fairbanks AK 99709-3707  
Telephone: (907) 451-5028  
Fax: (907) 451-5050  
email: [jennifer.athey@alaska.gov](mailto:jennifer.athey@alaska.gov)

## ABSTRACT

Recently the Geologic Communications Section at the Alaska Division of Geological & Geophysical Surveys (DGGGS) has made significant progress addressing user expectations and streamlining DGGGS's geologic data publication process since the publication inefficiencies I described in 2009, 5 years ago ([http://pubs.usgs.gov/of/2010/1335/pdf/usgs\\_of2010-1335\\_Athey.pdf](http://pubs.usgs.gov/of/2010/1335/pdf/usgs_of2010-1335_Athey.pdf)). At the time, about one-third of maps intended for publication were actually published from 2004 to 2009. Our current success is demonstrated by our publication output, which has more than doubled since 2004, while maintaining the same publication quality. We now have more geologists on staff than in 2004 and produce more data releases and formal publications in general. Below is an update of DGGGS's publication process (presented at the DMT'14 meeting as a poster, see [http://ngmdb.usgs.gov/Info/dmt/docs/DMT14\\_Athey.pdf](http://ngmdb.usgs.gov/Info/dmt/docs/DMT14_Athey.pdf)).

Major changes in DGGGS publication process:

---

GIS .....	Hired one full-time GIS analyst/cartographer to complete publications and one full-time GIS Administrator to manage DGGGS spatial data. There is room for improvement here as completion of GIS work is still a bottleneck in the process. Use of USGS's NCGMP09 geologic database standard is mandatory. Some staff are collecting field data digitally.
Editing/Approval.....	Tasks are documented. Pre-publication meetings with authors increases communication. One staff member tracks all publications, which are prioritized. Publication status is reviewed biweekly in management meetings and is available for staff to review at all times.
Metadata.....	One staff member creates all metadata in consultation with authors.
Archiving .....	In-house archiving application manages physical and digital project files (AGDI; doi: <a href="https://doi.org/10.14509/24504">10.14509/24504</a> ). DGGGS plans to formalize division-wide archiving expectations and methodology.
Infrastructure.....	Automations and applications facilitate routine tasks, including website functionality. Robust platform combines Oracle, Postgres, ArcGIS for Server, multi-user geodatabase environment (SDE), and open-source software to serve in-house and public data needs such as web mapping applications ( <a href="http://maps.dggs.alaska.gov/">http://maps.dggs.alaska.gov/</a> ).

---

DGGS interfaces with the public in a number of ways, both proactively reaching out to user groups and providing data for the users who know to come to us for Alaska geologic information. We constantly evaluate what data formats our users need and currently provide digital data and hard-copy publications. Self-evaluating our effectiveness as a data provider, future-proofing our infrastructure, monitoring trends in information sharing, and paying attention to our customers' needs will ensure DGGS maintains its position as the premier resource for Alaska geologic knowledge.