

UNAVCO WInSAR Report 2008

December 17, 2008

Contact us: winsar@unavco.org

WInSAR Funding

NSF/NASA Grant

\$50K from each, total \$100K per year (2008-2011; startup 6/08)

USGS Cooperative Agreement

\$50K per year (FY2009 –FY2013; startup 11/08)

Archived data and tasking purchases for volcano targets

University of Nevada Reno (John Bell) PO

\$6K for data and tasking purchases related to Wells earthquake

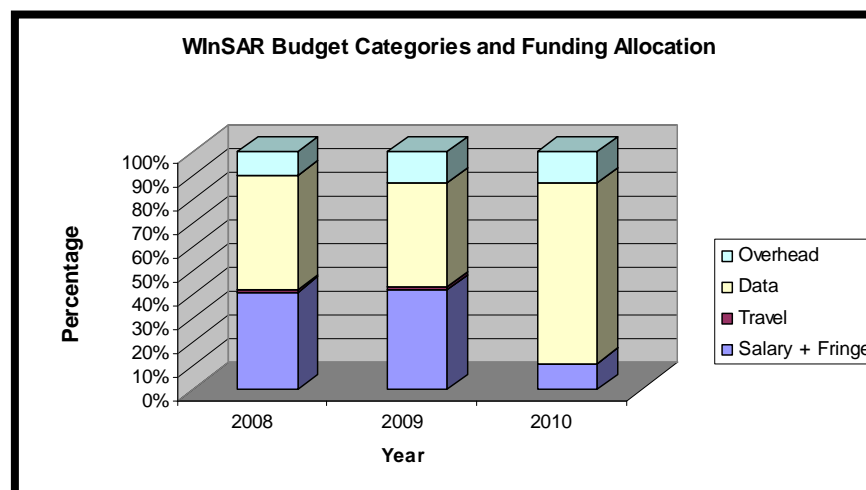
UNAVCO-ASF Information Technology proposal (with ESA partnering)

submitted to NASA Research Opportunities in Solid Earth Sciences

Learned last week this was not successful

WInSAR Funding Picture 2008-2010

- \$100K from NASA/NSF per year
- \$50K from USGS per year
- Personnel funds:
 - Archivist (3 years, 0.25 FTE)
 - Software Developer (2 years, 0.5 FTE)
- Remaining funds: data purchase, scientist travel to conference
- Data/tasking funds budgeted through NSF/NASA in 2008: \$48K
- Data/tasking funds expended or committed in 2008 to date: \$38K
- GeoEarthScope will cover about \$20K of WInSAR 2008 expended for data

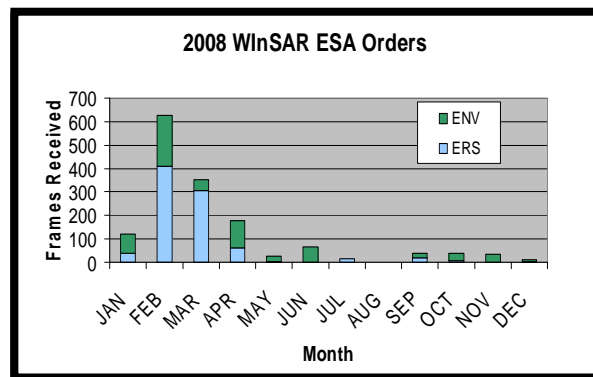


WInSAR Holdings Summary

UNAVCO WInSAR Node Searchable Catalog

- 1.3 Tb
- ERS: 6,518 frames
 - increase of 768 from December 2007
- Envisat: 948 frames or swaths
 - increase of 480 from December 2007
- ~10,600 ALOS L1 data pool catalog (data at ASF)

<http://winsar.unavco.org/search.php>



GeoEarthScope Holdings Summary

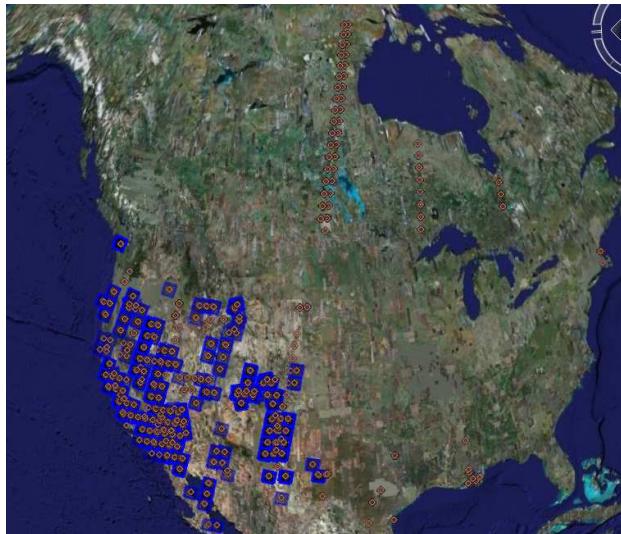
- 17 Tb in GeoEarthScope
- ERS: 55,000 frames (sources:ASF and ESA)
- Envisat: 7,800 frames (source: ESA)
- Radarsat-1: 41,000 frames (source: ASF)

http://geoes-insar.unavco.org/archive_search_and_download_requests.php

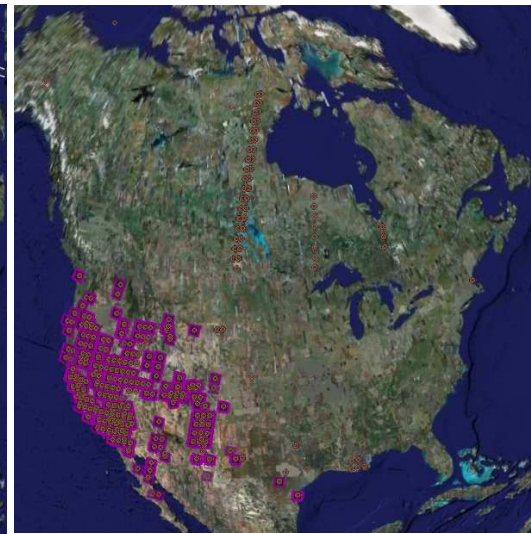
Envisat



ERS1



ERS2



2008 Tasks Accomplished

- **New ESA Category-1 proposal submitted, accepted**
- **Previous WInSAR Cat-1 projects closed, final reports submitted**
- **On track with ESA billing, orders**
- **~1250 ERS/Envisat scenes ordered, received, ingested**
- **Envisat tasking submitted for Wells, USGS targets**
- **Improvements to the UNAVCO WInSAR database/web**
 - **Improved frame assignments Envisat/ERS**
 - **Improved ingestion of ASF ALOS L1 data pool metadata into searchable catalog**
 - **Order request page allows Envisat requests and shows GeoEarthScope holdings**
 - **Database design**
- **Response to Wells earthquake and ShakeOut drill**
- **UNAVCO Internet-2 implementation completed – faster download speeds**

<http://winsar.unavco.org/ordering/searchn.php>

Request ordering of ERS or Envisat frames
See GeoEarthScope holdings

| sensor | phase | orbit | track | frame | bperp | bpar | date | request/download | remarks | lat | lon |
|--------|-------|-------|-------|-------|-------|------|------------|----------------------------------|------------|-------|---------|
| ENV1 | A | 34220 | 98 | 2961 | | | 2008-09-15 | <input type="checkbox"/> request | | 32.04 | -107.52 |
| ENV1 | A | 34220 | 98 | 2943 | | | 2008-09-15 | <input type="checkbox"/> request | | 32.93 | -107.3 |
| ENV1 | A | 34220 | 98 | 2925 | | | 2008-09-15 | | | 33.82 | -107.08 |
| ENV1 | A | 34220 | 98 | 2907 | | | 2008-09-15 | | | 34.71 | -106.86 |
| ENV1 | A | 34220 | 98 | 2889 | | | 2008-09-15 | <input type="checkbox"/> request | | 35.6 | -106.63 |
| ENV1 | A | 34220 | 98 | 2871 | | | 2008-09-15 | <input type="checkbox"/> request | | 36.49 | -106.4 |
| ENV1 | A | 34220 | 98 | 2853 | | | 2008-09-15 | <input type="checkbox"/> request | | 37.38 | -106.17 |
| ENV1 | A | 33719 | 98 | 2961 | | | 2008-08-11 | in GeoEarthScope | c003/38118 | 32.04 | -107.52 |
| ENV1 | A | 33719 | 98 | 2943 | | | 2008-08-11 | in GeoEarthScope | c003/38114 | 32.93 | -107.3 |
| ENV1 | A | 33719 | 98 | 2925 | | | 2008-08-11 | in GeoEarthScope | c003/38111 | 33.82 | -107.08 |
| ENV1 | A | 33719 | 98 | 2907 | | | 2008-08-11 | in GeoEarthScope | c003/38110 | 34.71 | -106.86 |
| ENV1 | A | 33719 | 98 | 2889 | | | 2008-08-11 | in GeoEarthScope | c003/38113 | 35.6 | -106.63 |
| ENV1 | A | 33719 | 98 | 2871 | | | 2008-08-11 | in GeoEarthScope | c003/38119 | 36.49 | -106.4 |
| ENV1 | A | 33719 | 98 | 2853 | | | 2008-08-11 | in GeoEarthScope | c003/38098 | 37.38 | -106.17 |
| ENV1 | A | 33218 | 98 | 2961 | | | 2008-07-07 | in GeoEarthScope | c003/38052 | 32.04 | -107.52 |
| ENV1 | A | 33218 | 98 | 2943 | | | 2008-07-07 | in GeoEarthScope | c003/38067 | 32.93 | -107.3 |
| ENV1 | A | 33218 | 98 | 2925 | | | 2008-07-07 | in GeoEarthScope | c003/38060 | 33.82 | -107.08 |
| ENV1 | A | 33218 | 98 | 2907 | | | 2008-07-07 | in GeoEarthScope | c003/38068 | 34.71 | -106.86 |
| ENV1 | A | 33218 | 98 | 2889 | | | 2008-07-07 | in GeoEarthScope | c003/38049 | 35.6 | -106.63 |
| ENV1 | A | 33218 | 98 | 2871 | | | 2008-07-07 | in GeoEarthScope | c003/38054 | 36.49 | -106.4 |
| ENV1 | A | 33218 | 98 | 2853 | | | 2008-07-07 | in GeoEarthScope | c003/38066 | 37.38 | -106.17 |
| E2 | A | 68589 | 98 | 3015 | | | 2008-06-02 | <input type="checkbox"/> request | | 29.36 | -108.16 |

Alternative: (e.g.swaths)
e-mail EOLI shopcart to winsar@unavco.org

2009 Plans

- Proceed with general WInSAR ordering as budget allows
- USGS orders, Wells orders
- Unify search for GeoEarthScope and WInSAR holdings
 - Merge databases of metadata
 - Search interface enhancements
- Website Improvements
 - Replace Java map with GoogleMaps base showing scene footprints
 - Merge request and search/download interface
- WInSAR node syncing capability
 - Form a user group among those institutions wishing to have up-to-date WInSAR node

InSAR search/access Q and A at the UNAVCO Booth:

Today 3-4 pm --- Thursday 9:30-10 am