



## ASF Celebrates 20 Years of SAR Data

The Alaska Satellite Facility (ASF) celebrated the 20th anniversary of the first Synthetic Aperture Radar (SAR) downlink at the facility by hosting an Open House on 20 August 2011. The event provided tours, lectures, demonstrations, and activities for the entire community. Each activity was accompanied by a display that linked the concepts involved to the data and services provided by ASF. The event provided an opportunity to showcase the broad range of science applications that utilize remote-sensing data.

For 20 years, ASF has worked in conjunction with University of Alaska Fairbanks' researchers and hundreds of scientists across the globe providing imagery from several key Earth-observing satellite sensors. As one of eight National Aeronautics and Space Administration Distributed Active Archive Centers, ASF has the data that scientists can access, over a petabyte (approximately 13.3 years of HDTV content or 58,292 movies) of satellite data to be exact. This information is also beneficial for

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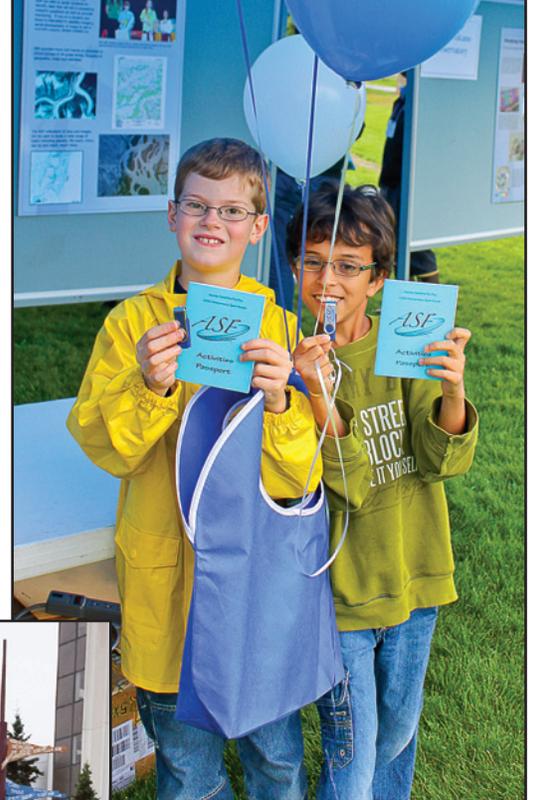


Photo left—Tanja Gens and her father, ASF staff member Rudi Gens, demonstrate the How Radar Works activity to an Open House visitor. Photo below—Eddie Trochim watches as Ian Dixon launches a bottle rocket during the Open House.



Photo at top—Anna Wolf displays the satellite she created at the Build Your Own Satellite activity.

Photo above—Max Wilson and Rishi Gens show off their passports and the thumb drives they received at the Open House. Visitors to the Open House were invited to complete an activity passport. ASF distributed thumb drives as prizes to those who participated in six or more activities.

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budding researchers in the community and classrooms dedicated to studying Earth science.

The activities featured at the Open House can be done in association with visits to the facility by school groups. The activities include creating an antenna hat, building a satellite using marshmallows, gum drops, toothpicks and sticks of gum, launching bottle rockets, answering questions based on information found on maps, and matching glacier photos across time. ASF welcomes opportunities to encourage students to utilize remote-sensing data in their research and projects.

ASF recognizes the outstanding achievements of Alaska's young scientists in the areas of Earth Science, remote-sensing, and space-related research by presenting certificates of achievement and cash awards to the students presenting exceptional research at two annual science fair events. At the Interior Alaska Science Fair, which highlights students from Kindergarten through eighth grade who have been selected to represent their school at the district level, ASF presents three awards. At the Alaska Statewide High-School Science Symposium (ASHSSS), which



Photo left—Audrey Sanches shows off her satellite constructed of marshmallows, toothpicks, gum drops, and gum while wearing her antenna hat. Photo above—ASF Director Nettie La Belle-Hamer greets University of Alaska Fairbanks Chancellor Brian Rogers and his wife, Sherry Modrow, as they arrive at the ASF Open House.

is an opportunity for students to present the results of their research in a manner similar to that of a scientist presenting their work at a conference of their peers, ASF presents a single award. Through these awards, mentorships of students, and the ASF staff presentations of seminars and tours for citizens and students, ASF continues its expansion into the global community.



Photo above—ASF staff member Bruce Crevensten explains tornados and vortices to Max Wilson and Rishi Gens prior to stamping their activity passport. Photo right—Joseph and Anna Wolf match photos of glaciers in Alaska from 100 years ago with photos from the present based on the recognizable features.



Clockwise from the top—Shelby Daniels instructs her father, Will, on the correct color to use in her antenna hat. Justin, Catrina, Tarley, Jacob, and Chena Nicoll watch as ASF staff member Kirk Hogenson demonstrates how to put an antenna hat together. Tully La Belle-Hamer, Joe Leuci, Nick Sheehan, and Alex Higgins request ASF staff judge who created the best hat. Hayden Arko launches a bottle rocket. Nettie La Belle-Hamer assists two boys with a question from the map find activity in the GeoData Center.





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## The ASF API

The Alaska Satellite Facility (ASF) has developed and deployed an Application Programming Interface (API) as an additional avenue to access the SAR Data Center's (SDC) archive. The purpose of this API is to present users a flexible Web service that facilitates the search for and visualization of ASF datapool assets, as well as delivery of relevant metadata about those assets. The API facilitates the bulk delivery of ASF holdings to the SAR data user community in an efficient and accurate manner.

The API can be used in numerous ways to process queries as HTTP GET or HTTP POST data requests. Requests need to contain only one of the three required parameters to succeed: bbox, path, or granule list. Returns from the API are in either csv, kml, or Metalink file formats and are not limited to 1,000 granules, allowing for direct access to granules in the ASF datapool.

Additional detailed information about the API and how to use it in your research can be found at, [http://www.asf.alaska.edu/program/sdc/asf\\_api](http://www.asf.alaska.edu/program/sdc/asf_api). Development of additional parameters to refine queries to and returns from the ASF API is ongoing in response to user needs. Please contact ASF if there is a specific parameter that would be useful in your search and visualization of the SDC holdings.



## *Submissions and Subscriptions*

This newsletter, published by ASF, was created to provide detailed information about special projects and noteworthy developments, as well as science articles highlighting the use of ASF data.

To receive the newsletter by postal mail, please fill out the subscription form linked to the ASF home page at [www.asf.alaska.edu](http://www.asf.alaska.edu). Current and back issues of the newsletter can also be obtained through the ASF Web site.

Submissions to the *ASF News & Notes* and suggestions about content are always welcome. If you are interested in contributing materials, please call or send an email to the editor:

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