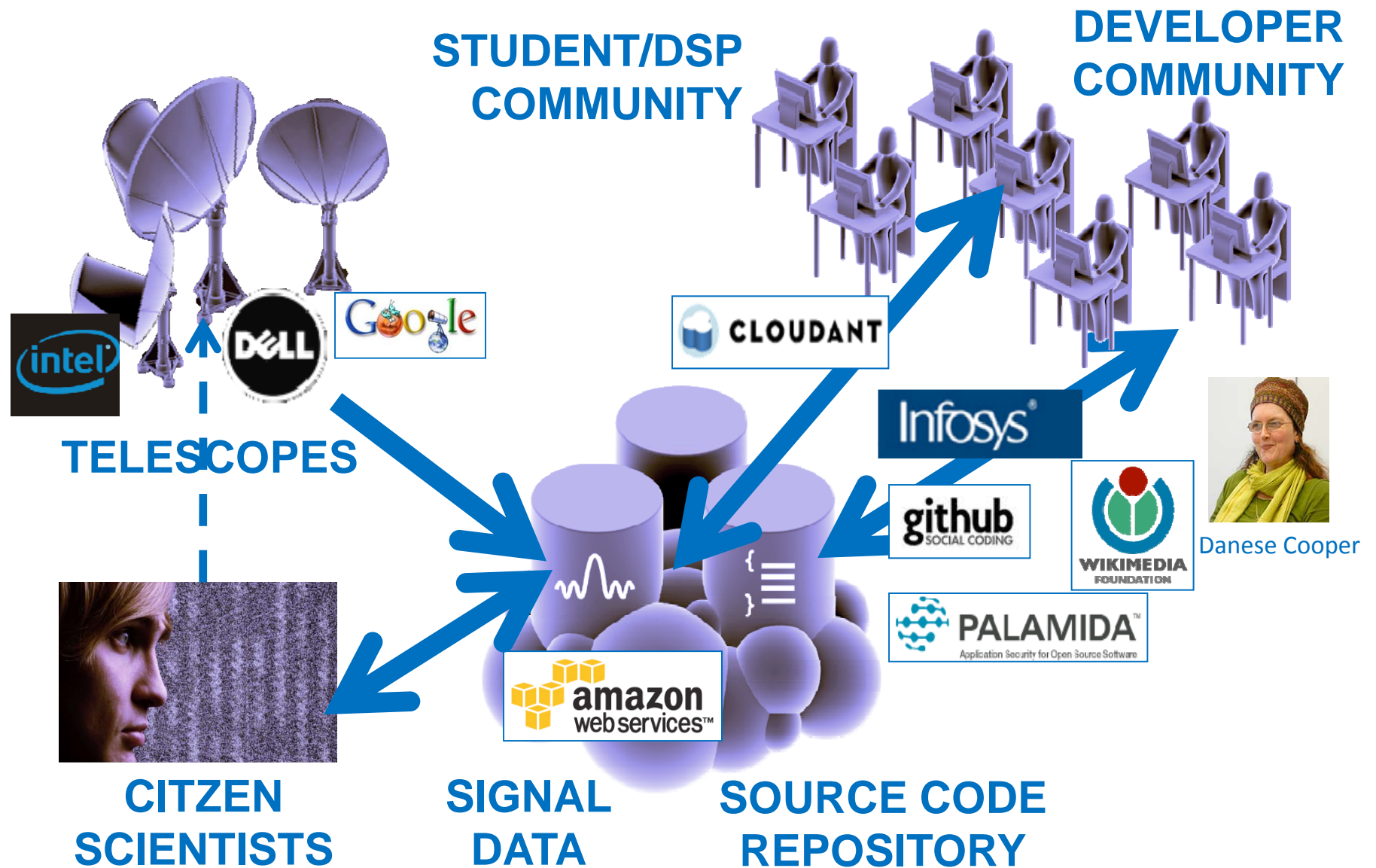


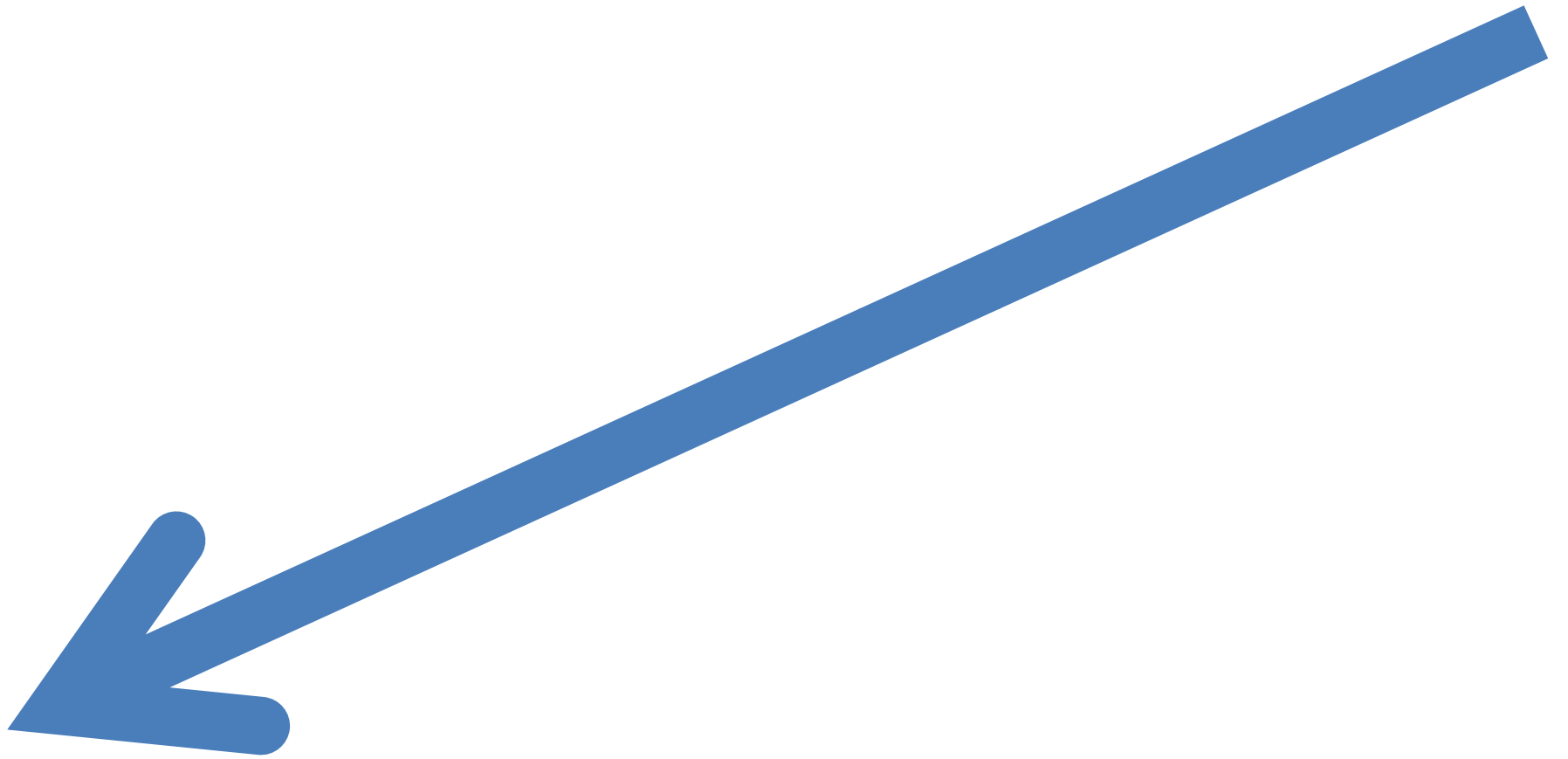
**TED Wish by Jill Tarter:**

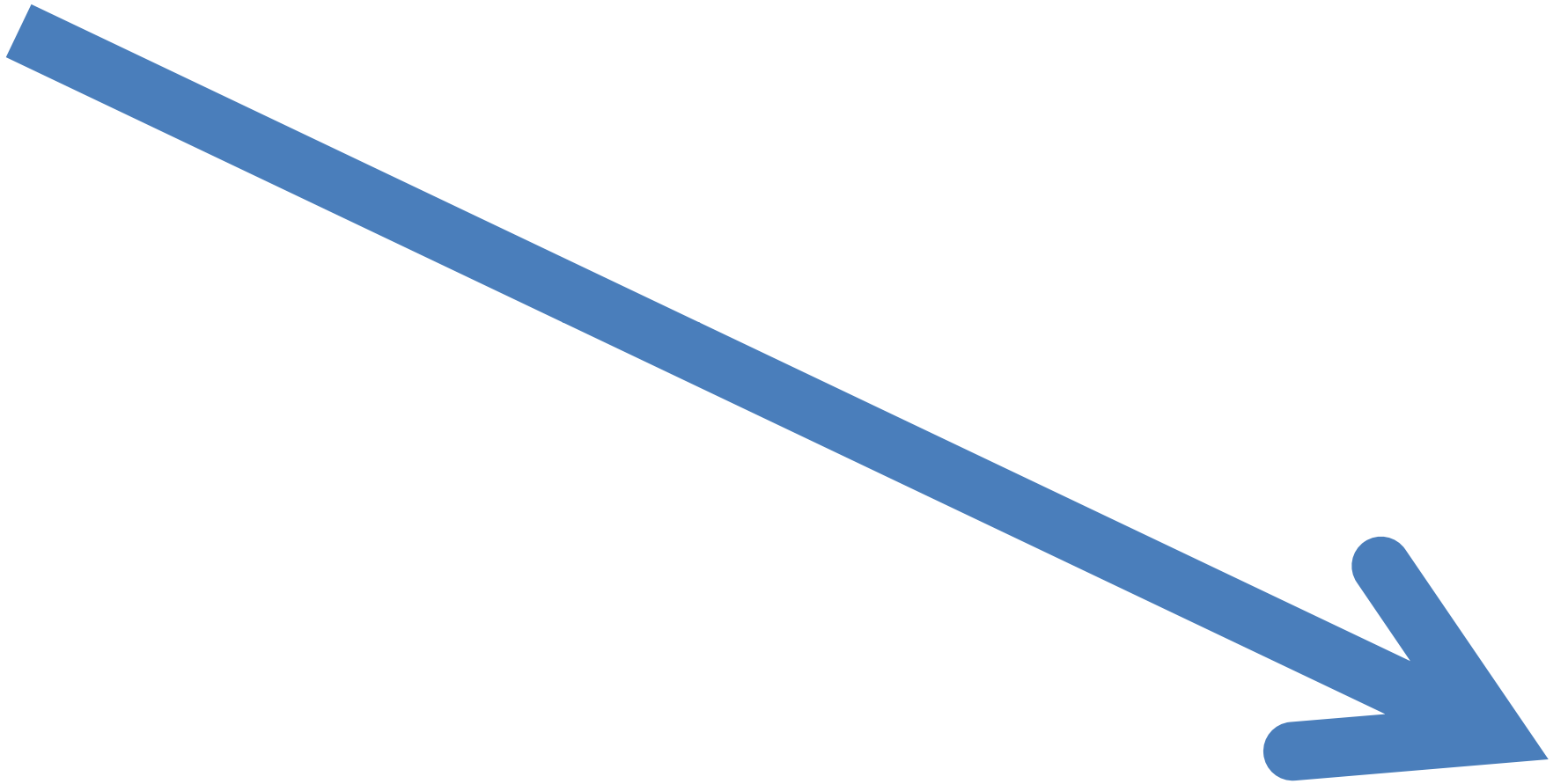
“I wish that you would empower Earthlings everywhere to become active participants in the ultimate search for cosmic company.”

setiQuest



# Building the setiQuest community







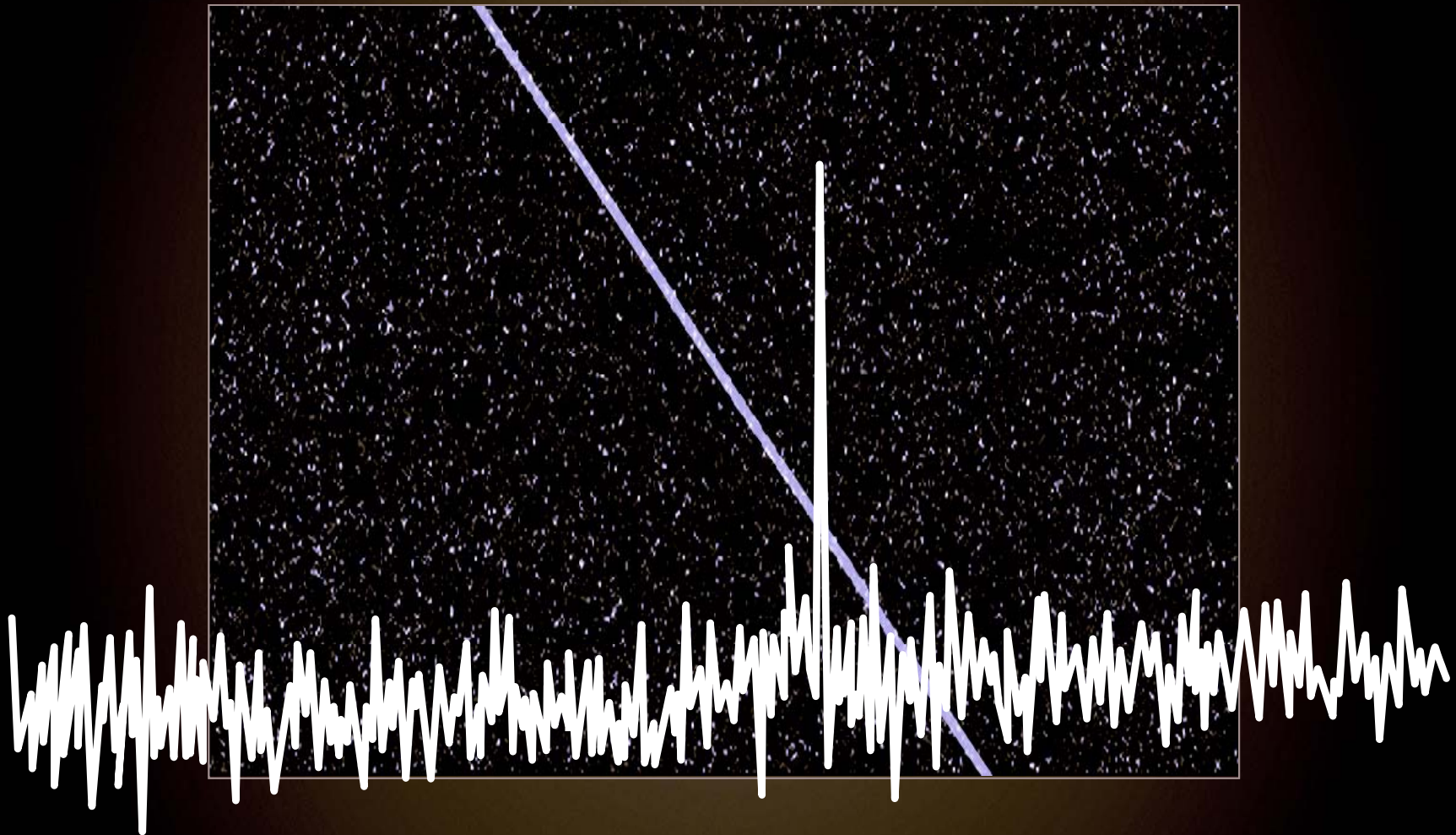


# setiCode

## Open Sourcing our Detector Code

- SonATA is an all-software sub-Hz spectrometer supporting 3 x 100 MHz – developed by many programmers over many years
- We need constant renewal to remain state of the art
- We want to search for more signal types
- We need more minds

# Voyager 1 Signal: 106 AU Away



Our software is good at what we do



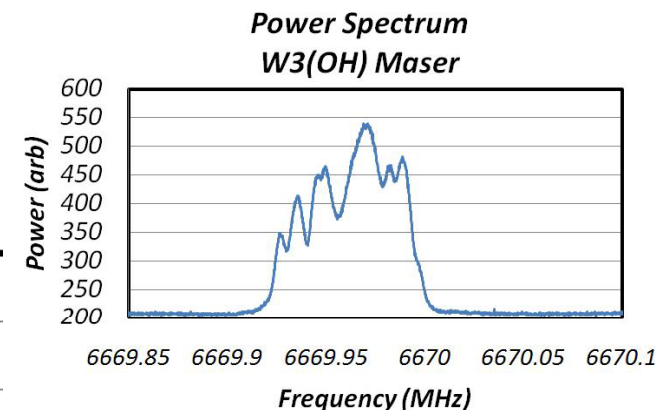
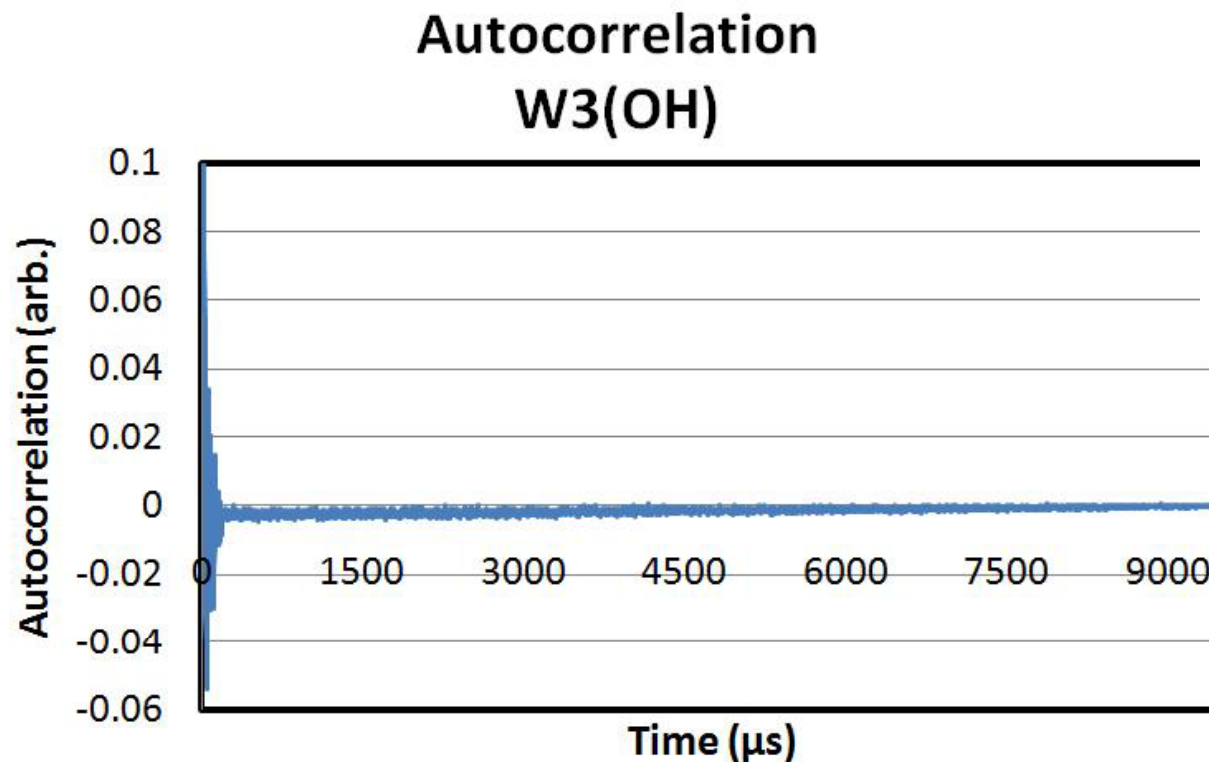
# setiData

## Free Archive of Time Series Data

- Today: ~200 GB of 8 MHz Beamformer Time Series on 10 sources. Growing fast.
- Expand with multi-antenna capture,  
12 -> 84 antpols
- Hosted by Amazon Gift
- Anyone with a brain and a computer can analyze the data in new ways!

# First setiData Results

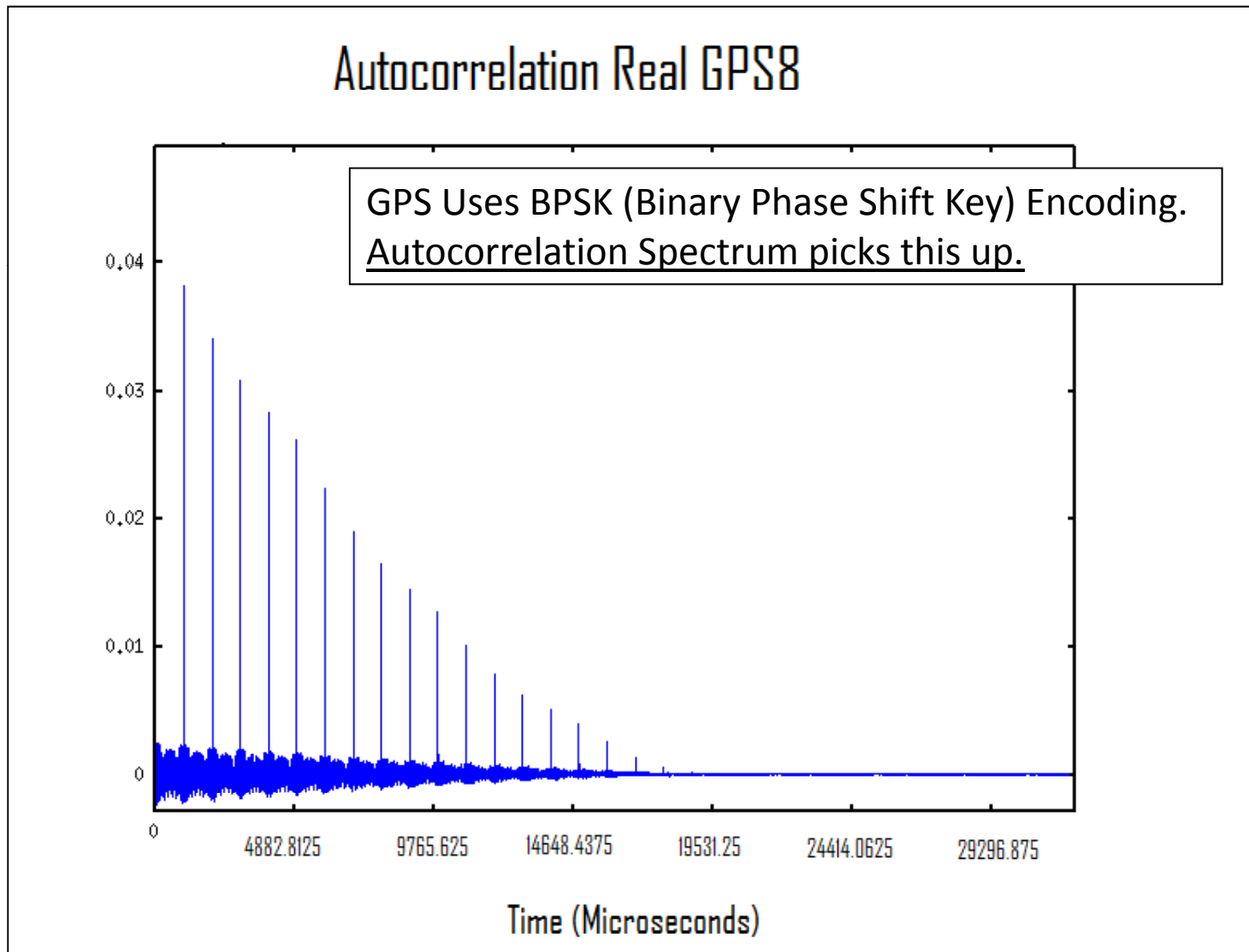
G. R. Harp, R. F. Ackermann, S. K. Blair, J. Arbunich, P. R. Backus, J. C. Tarter, and the ATA Team. 2010. A new class of SETI beacons that contain information. In "Communication with Extraterrestrial Intelligence", ed. D. A. Vakoch. Albany, NY: State University of New York Press.



Modulate a Maser – e.g.  
Amplitude modulation  
with powerful pumping  
source. –  
Tommy Gold ca. 1975

# First setiData Results

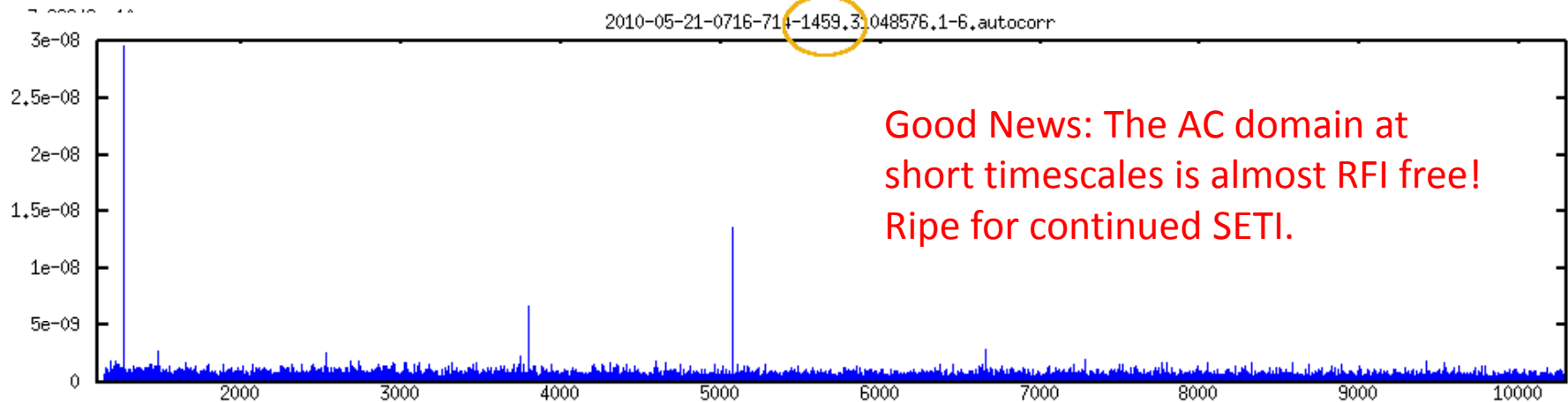
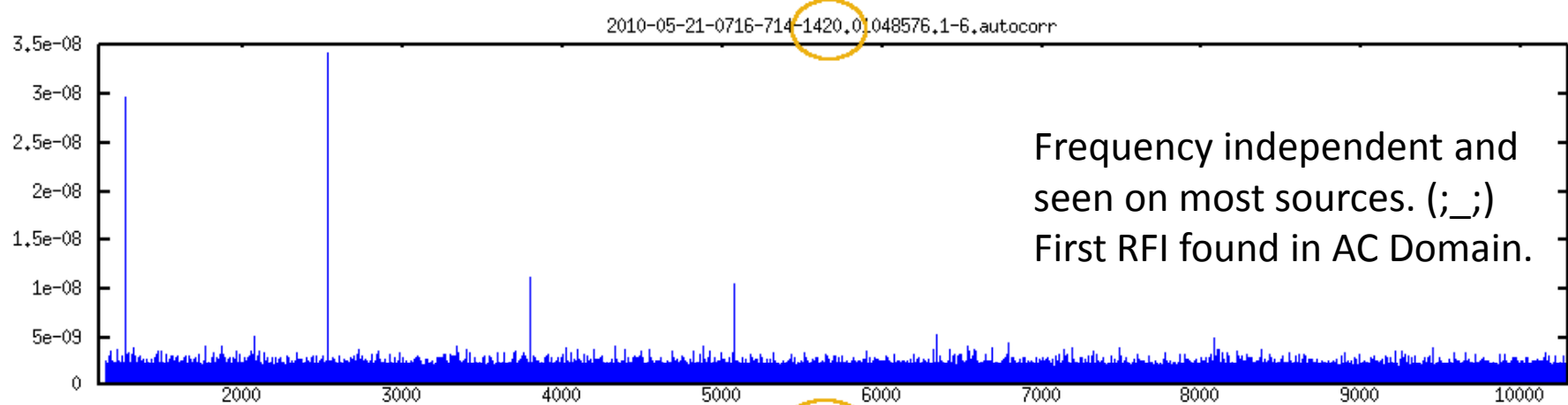
## Proof of Principle



# Extreme Time Domain

## Astronomy

G.R. Harp, R. F. Ackermann, S. A. Meitzner





Autocorrelation Lag ( $\mu$ s) -- That is microseconds, folks!

# setiCitizen

- Make SETI search into an I-Phone App, game, Galaxy Zoo...
- Will be interactive, not passive (seti@home)
- How best to represent SETI observations?
  - Power Waterfalls (2D images) of:
    - Freq Power Spectrum vs. Time
    - Folded Time vs Time
    - Autocorrelation Power vs Time
    - Matched Filter Power vs Time, Freq, Dilation, or Dispersion
- Creator of Tetris is on our team!
- Audio representation? Etc.

# setiCloud

- Generous donation of compute time from AmazonWS 
- Partnering with cloud-middleware group, Cloudant 
- Bring free cloud computing to the world (to work on SETI algorithms & analysis)
- Lowers barrier of entry; brilliant minds from poor countries.
- Crude beginnings, will improve in next few months

Go To  
[setiQuest.com](https://setiQuest.com)