10 Years of Advances at the SMA

Glen Petitpas, SMA Hilo

2004

- 690 GHz inserts installed and operational.
- 5 day "Correlator Campaign" to shake down remaining bugs.
- Glen arrives in Hilo (!)

2005

- First dual-rx observations 215/658 GHz.
- "690 GHz Campaign".
- Stand-alone web-based script generator and simulator launched.
- 1024 channels/chunk available.
- First fringes with eSMA.
- First "SMA Legacy Project" on ULIRGS (PI: Wilson).
- "Phase Conjugation Bug" discovered/fixed.
- 400 GHz insert installation begins.
- "Deep Impact" coordinated observing run.
- Ray takes over from Jim as SMA director.

2006

- Magnitude 6.7 earthquake in Kona shuts down all observatories. Only us and CSO were spared serious damage as our antennas were designed to be moved around.
- Creation of "Filler Track" queue, allowing us to make better use of short gaps between projects.
- First 400 GHz fringes.
- 2048 and 4096 channels/chunk available.
- Last SMA Postdoc leaves Hilo (Melanie).
- Bandwidth doubler testing begins.
- Alison leaves for ALMA.
- First VLBI run.

2007

- Charlie Katz releases the "SMA Observer Center" for all your observing needs.
- Ryan reworks o-point to run faster. We can now optical/radio point and baseline all in the same night.
- "Daytime Observing" allocated for Tuesdays and Thursdays to allow postdocs easy access to data.
- SMA observing scripts and Script Generator modified to allow multiple loops and large mosaics using offsets.

2008

- 400 GHz inserts fully operational.
- "Passband Visualizer" linked to correlator configuration tool.
- VLBI Phased Array online.
- "100 Years of Astronomy" celebrated. SMA participates in "Around the World in 80 Telescopes" global webcast.
- Phase Monitor online.
- First GRB project allocated starting our first "fast response" observing mode.

2009

- Bandwidth doublers online.
- Danni attempts first weekend observations.
- 690 GHz insert retirement begins.
- eSMA Observing Campaign.
- First "Full Dual Polarization" test observation.

2010

- Shelbi transfers to Cambridge.
- First (very successful) GRB trigger and observation.
- Glen negotiates with UH to use UH Hilo Astronomy students to act as observers for filling short gaps and last minute cancellations.
- More efficient baseline script introduced.
- Final eSMA observations (baseline track to CSO).

2011

- Wideband 200 GHz insert installation begins.
- Ground breaking observation of Eta Carina at 9 degrees elevation.
- Repairs to elevation drives for damage caused by Eta Carina observation begins.

2012

- Hilo Observing begins Mondays and Tuesdays for cost saving reasons.
- First fringes with SWARM.
- Begin porting data to CASA format.
- Major but transparent overhaul to SMA observing scripts adds many features including "smart-restart".
- "Full Dual Polarization" becomes default mode at 345 GHz.
- Wideband 300 GHz insert installation begins.
- Installation of new optical guidescopes begins.
- Wideband 200 GHz insert install complete.
- Hilo observing switched to Tues/Wed bacause of all the Monday holidays.
- First "Large Scale Project" allocated (PI: Eric).
- Government shutdown limits us to minimal staff, but we remain operational throughout.

2013

J F M A M J J A S O N D

Staff	Observing Modes	Software	Hardware	Events