VLA-VHF Update
(cfa-www.harvard.edu/dawn)

• Milestones
  • 03/07: first 2 prototype RX delivered to Socorro
  • 03/09: first light, antenna 6 (W8)
  • 03/16: first light, antenna 17 (E12)
  • 03/21: first fringes, Virgo A (~ 1 km baseline)

• Field testing
  • Greenhill, Blundell, Carilli, Kimberk, Leiker, Perley, & NRAO tech staff

• Focus
  • Estimation of 20 / 92 cm impact √
  • RFI characterization √
  • 200 cm performance ($T_{sys}$, $A_e$)
    • $T_{sys} \sim 200$ (daytime); careful measures TBD
Reward for technicians…
... and scientists

... antenna tip in $T-5$
2-Band Fringes: Virgo A

\[ \text{\approx 100 Jy} \]

Antennas 6, 17

1.56 MHz BW

Two “clean” bands
RFI - What We Expected
RFI - What We Got
Why Pay for Cable?
Fringes on KNMD TV

“continuum” broadcast from Sandia Mtn

Carriers broadcast from elsewhere
Todo

- **Complete 2-band performance measures**
  - confirm improved performance induced in existing P-band receiving system.

- **Study/test RFI mitigation tactics**
  - coordination (e.g., KNMD educational)
  - subtraction
  - high-Q notch filtering

- **Deploy prototypes for 3rd and 4th antennas**
  - Re-engineer as needed to equalize RCP & LCP cals