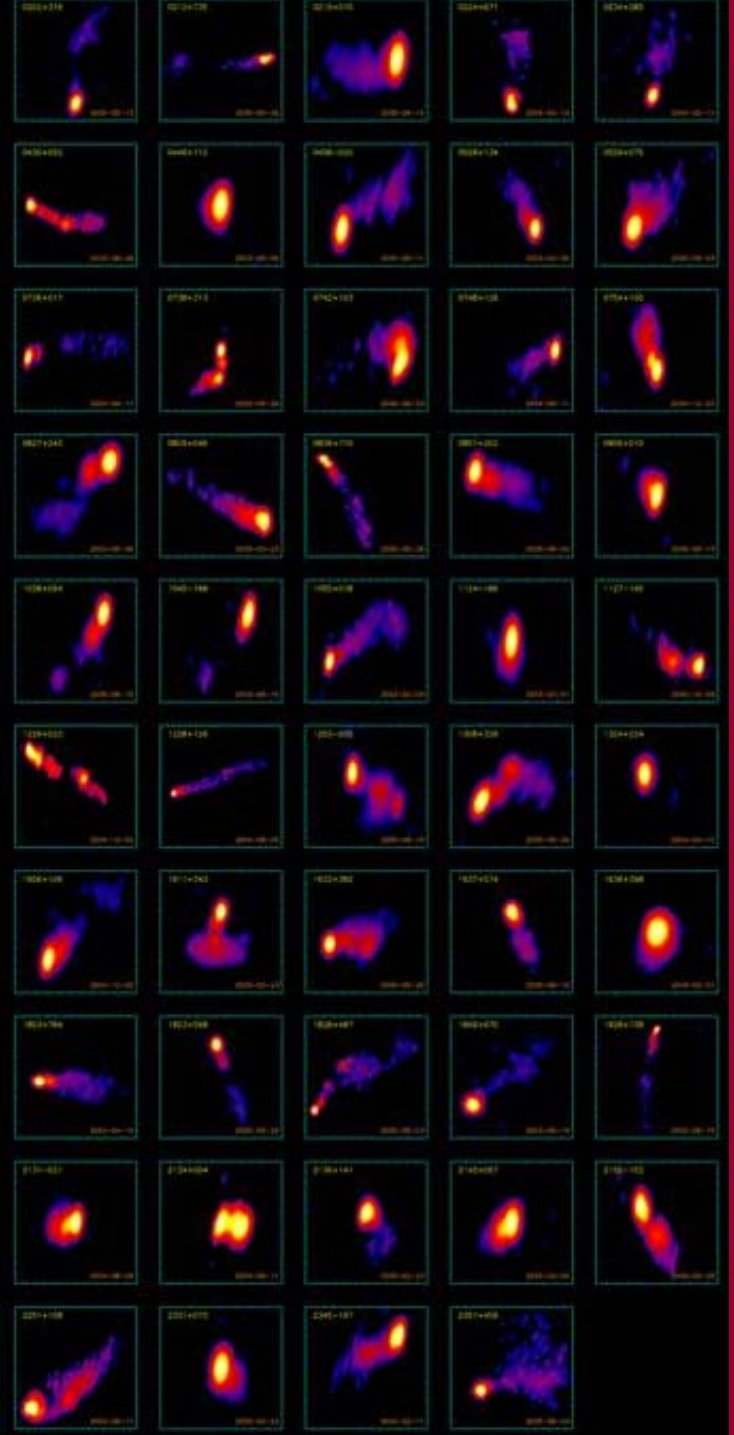

The MOJAVE Program:

Investigating Relativistic Jets in AGN

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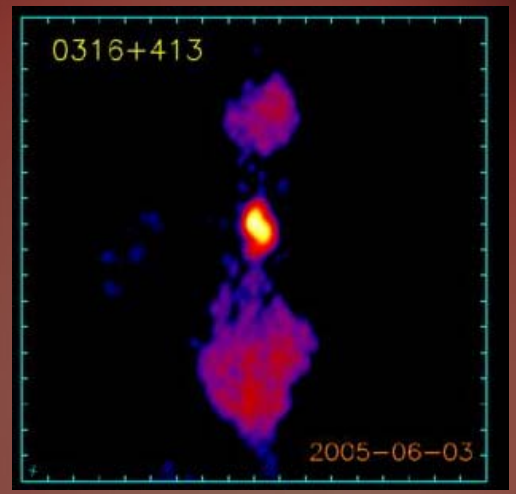
R. Vermeulen (ASTRON)

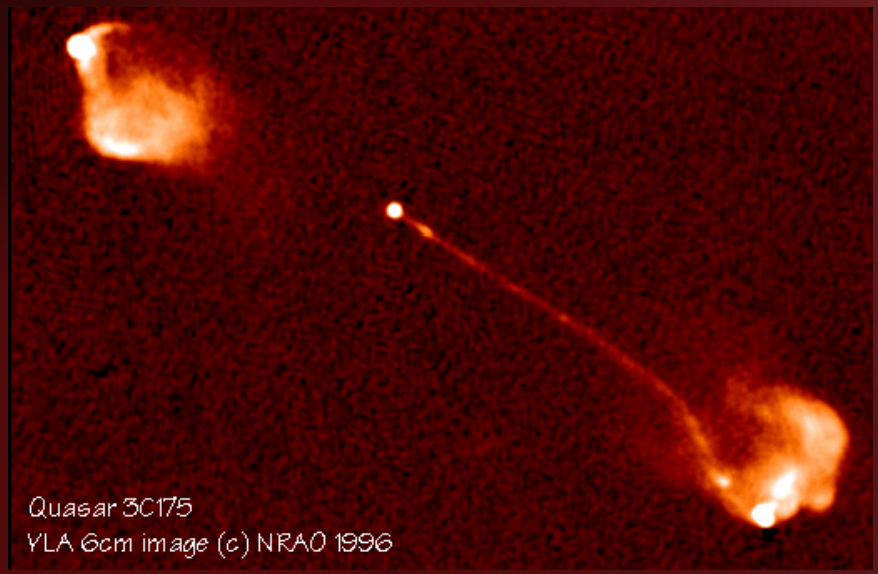
MOJAVE Science

Much to be learned about AGN jets:

- **kinematics**
- **compactness**
- **polarization mechanisms**
- **Faraday effects**
- **optical & gamma-ray connections**



3C 84



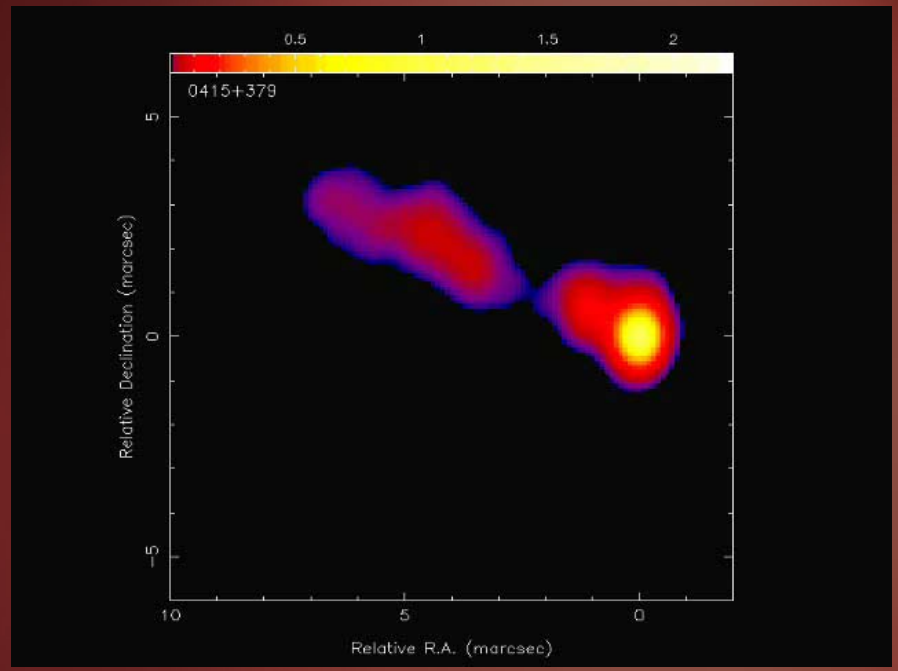
Bridle et al. 1994

Large, well-selected sample needed to quantify selection biases (> 100 AGN)

- **Now possible with VLBA**
- **Complementary surveys: VIPS, VCS, USNO**

The MOJAVE Program

- **Realizes a major design goal of VLBA**
- **VLBA 2 cm survey ('94 – '02)**
- **MOJAVE Phase I: 133 AGN at 2 cm, 4-6 VLBA epochs/source (’02-’05)**
- **Phase II: Multi-frequency VLBA imaging on 191 AGN (’06-)**
- **Single-dish observations (U. Michigan, RATAN-600)**

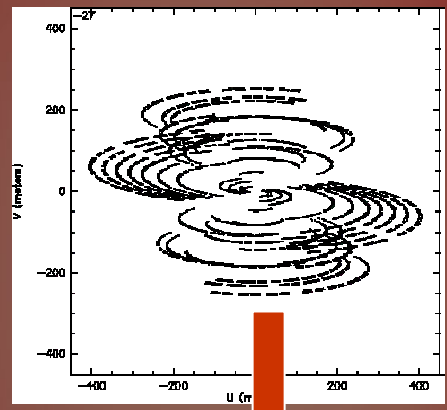


Movie of 3C 111 by K. O’Brien (Purdue)

MOJAVE: Data Archive

- **Interferometric archives pose special challenge**
  - NRAO data archives are currently incomprehensible to non-radio experts

- **MOJAVE archive features:**
  - html-based, script-generated data pages
  - over 1700 fully calibrated images
  - linked to / from NED
  - for non-experts: FITS images
  - for experts: calibrated visibility data



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Summary

Potential legacy impact from MOJAVE:

- Easy-to-understand data archive (FITS images)
- Determination of useful jet parameters for all 'famous' blazars such as 3C 279, Mk 501, BL Lac
- Scientific justification for future space VLBI missions
- Student training in radio astronomy

Project webpage:

www.physics.purdue.edu/astro/MOJAVE