The IRAM node of the European ALMA Regional Center

Frédéric Gueth, IRAM Grenoble
ALMA Regional Center

- Call for proposals
- Support Phases I & II
- User formation
- Service observing
- Dynamic scheduling
- Calibration + imaging pipeline
- Archive
- Helpdesk
- f2f user support
ALMA Regional Center

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Astronomers

ARC

JAO

ARC
IRAM ARC node based on existing expertise with the Plateau de Bure interferometer
Why an ARC node at IRAM?

- Strong IRAM involvement in ALMA construction
- **Already existing center of expertise** in mm interferometry
  - Expertise on pipeline, calibration, imaging, atmospheric phase correction, data analysis...
  - f2f support for PdBI since 15 years
  - Close link with technical groups
  - GILDAS software (incl. CLASS)
- Plateau de Bure f2f support → only delta effort
- IRAM users are all potential ALMA users → continuity of service provided to the community
Why an ARC node at IRAM?

- Strong IRAM involvement in ALMA construction
  - Design phase, 1st project scientist
  - Band 7 cartridges
  - Optics, calibration
  - Digitizer clocks
  - Telescope Calibration software
  - SSR, ASAC, ...

IRAM users are all potential ALMA users

Continuity of service to the community

ARC node @ IRAM
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**ARC node @ IRAM**

**User formation**
- Plateau de Bure
- Visitors
- Schools/Workshops

**Developments**
- New algorithms & soft.
- ALMA software

**User support**
- Helpdesk
- f2f support
ARC node @ IRAM

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**Key goal**
ARC node @ IRAM

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  - Plateau de Bure
  - Visitors
  - Schools/Workshops

- **Developments**
  - New algorithms & soft.
  - ALMA software

- **User support**
  - Helpdesk
  - f2f support

- **Forming IRAM staff**
  - ALMA software tests
  - IRAM staff @ Chile
Developments

- **TelCal** - Telescope Calibration pipeline
  - D.Broguiere, J.C. Roche, R.Lucas, J.Pardo

- **OTF** - On-The-Fly interferometry
  - J.Pety, N.Rodriguez, J.C. Roche, M.Lonjaret, F.Gueth

- **Imaging simulator in GILDAS**
  - See J.Pety’s presentation

- **ALMA commissioning**
  - PdBI software (CLIC) used for holographies
  - Direct participation to CSV (3 months delegation)
    - M.Krips, V.Pietu
Developments

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4-8 October, 2010
Grenoble, France

7th IRAM millimeter interferometry school

Main topics:
Fundamentals of millimeter interferometry; Atmospheric phase correction; Data calibration and imaging techniques; The IRAM Plateau de Bure interferometer (PdBI); The Atacama Large Millimeter Array (ALMA)

Register at www.iram-institute.org and click on interferometry school
November 29 to December 1, 2010
Grenoble, France

Observing with ALMA: Early Science

A workshop to prepare for the first ALMA Call for Proposals

Local organizing committee: F. Gueth (chair), C. Berjaud, K. Zacher

More information at www.iram-institute.org "Observing with ALMA"
Mail contact: alma2010@iram.fr

IRAM
EUROPEAN ARC
ALMA Regional Centre || IRAM
f2f support

• Extend PdBI f2f support to ALMA
  - Use existing infrastructures and procedures
  - Local contact assigned to each project
  - Funding for travel to IRAM (as PdBI: 1 person/1 visit)
  - Must be in place for Early Science = end 2011
Observing time

- No guaranteed time on ALMA
- One single TAC for NA+EU+EA
- A world-wide collaboration
  - EU 33.75%, NA 33.75%, EA 22.5%, Chile 10%
  - In ESO: D~21%, F~16%, E~9%
  - In ALMA: D~7%, F~5.5%, E~3%
- Whatever the actual numbers: expect huge competition
- Timescale: ALMA Early Science: Q1 2011
  Full operations: 2013
Summary

• IRAM ARC node based on synergies with PdBI support
  - Soft. developments
  - User formation
  - Face-to-face support

• ARC node gradually moving from project to operational structure
  - 2011 = pivotal year = start of Early Science operations

• Access to IRAM instruments + ARC node ➔ IRAM community in best possible position to get time on ALMA