# **ALMA Science Day**

- One day meeting at ESO Nov. 8 2002
- Attended by ~100 people
- Program consisting of science, and plans for operations, early science and software
- Short presentations by community
- Open discussion

See ESO ALMA Web site for presentations

# Questionnaire

- Sent to all participants after meeting
- Questions about RSC concept, software plans, enhancements to baseline project, future ALMA meetings
- 28 respondents; >40 pages of text
- Generally consistent with oral comments made during meeting

#### **Main results**

- Most people are in favor of an RSC with a strong degree of concentration, e.g. a strong central node with a network of institutes; support functions need to be in a single location
- Software goals are sensible, but perhaps overambitious; concentrate first on basics
- Most people have not used AIPS++ (5 out of 100) and are reluctant to use it

# Main results (cont'd)

- Preferred additional receiver bands are: 10, 8, 4, 1 vs 10, 1, 4, 8 ASAC priority
  - 10=850 GHz, 0.35 mm
  - 8=490 GHz, 0.6 mm
  - 4=150 GHz, 2 mm
  - 1=30 GHz, 1 cm
- ACA preferred over 2G correlator
- Community meetings should be held annually

### **ESAC** recommendations

- ESAC endorses RSC model with strong degree of concentration
- RSC model and functions need to be further developed; personnel needs to rotate on a regular basis
- Relation RSCs and data reduction software development needs to be clarified (part of RSC? Separate organization, but partly co-located?)
- RSCs need to stay in close contact with ALMA operations (should RSC staff first spend some time in Chile?)

## **ESAC recommendations 2/4**

- ALMA pipeline needs to remain flexible; off-line data reduction should be available for distribution (note: DRUI requirements now available)
- Concerns by the community about AIPS++ need to be addressed
- Capabilities of early science observing should not be oversold

### **ESAC recommendations 3/4**

- Scientific priorities in line with ASAC recommendations, but community favors higher frequencies. Needs to be rediscussed if further selections are to be made (e.g. in connection with EU ALMA proposal?)
- Suggestion to merge bands 4 and 5 in single band 125-185 GHz merits investigation (183 GHz H<sub>2</sub>O line)

### **ESAC recommendations 4/4**

- There should be regular ALMA workshops (e.g. through EU-FP6), both on science and practical matters; community-wide meetings should be held every 12-18 months. The ESAC is willing to help with organization.
- There need to be incentives to attract best young people to work in ALMA in Chile

### **Other ESAC activities**

- Normal ASAC activities, e.g. science examples for calibration
- EU-FP6 proposal organization
  - RADIONET and OPTICON networking activities (coordinator Pierre Cox, with EvD)
  - ALMA construction proposal (to be led by ESO)
  - Encourage community to write MC-RTN proposals

# **Science IPT organization**



Involvement of technical astronomers in ALMA Further suggestions are welcome