ALMA is the world's largest telescope
Funded by ESO (Europe), NINS (Japan), NSF (USA)
At 5000m in the Atacama Desert, Chile



- voluntarily completed an environmental impact study prior to construction
  - the biological and archeological impact of a large infrastructure
- agreed mitigations with the Chilean authorities
  - continuing monitoring of the eco system (every three months)
  - monitoring and restauration of all archeologically significant sites within the ALMA concession
- Work with local authorities
  - economic & social development of the indigenous population ALMA Region II Fund (2004)
  - promote social-economic development in the San Pedro de Atacama region
  - local initiatives through a public call for proposals
  - Allocated \$4.5M to date.
- Community relations major impact on ALMA's standing in the region.
  - in 2008 started investing directly in education in San Pedro county
  - · an English and Science program at local schools that has been very successful.
    - The 1<sup>st</sup> school now one of the 100 top schools in science in Chile

- Development of astronomy in Chile 10% of ALMA time to Chilean astronomers
- ALMA allocates funds annually to develop HQP instrumentation, teaching, outreach and fellowships \$9M
  - Specialized training to promote innovation in engineering and software development
- R&D with the Chilean Universities
  - New detector systems
  - High-altitude health
- R&D in data archiving and data mining
  - The Chilean Virtual Observatory
  - the "cloud" of global astronomy Astro Data and the development of data scientists in the country
  - Government investment in astro-informatics infrastructure and technology
- Development of Chile's telecommunications infrastructure
  - boosts development of academic networks in Chile collaboration with National University Network (REUNA).
  - fiber optic link between San Pedro de Atacama and Calama
  - Improvements of existing telecommunication infrastructure
- Chilean economic benefits
  - the creation of jobs 80% of ALMA staff are Chilean.
  - Contributing to the position of Chile as the undisputed astronomical capital of the world.
  - Contract and procure most services and utilities from the Chilean industry
- Education and public outreach activities