

Operation Concept of ALMA

Ken'ichi Tatematsu[1]

[1] National Astronomical Observatory of Japan

<http://www.nro.nao.ac.jp/alma/J/index.html>

Operation of ALMA (Atacama Large Millimeter/submillimeter Array) will be carried out jointly by Joint ALMA Observatory in Chile and by three ALMA Regional Centers in Japan, Europe, and USA. In ALMA, observations will be done remotely as 'service observation' without attending observation. ALMA operation has some outstanding features, which are different from other existing radio telescopes; ALMA employs 'dynamic scheduling', which makes telescope time efficient by determining the order of observation on the basis of weather, radio transparency, observing frequency, etc, 'pipeline data reduction', which enable researcher other than radio astronomer can receive default reduced data, and 'data quality assurance'. Because researchers will not attend observation, ALMA Regional Centers are assumed to play important roles in supporting for observation preparation and off-line data reduction (additional data reduction when researchers are not satisfied with default pipeline data reduction). ALMA Regional Center will be in charge of call for proposals and ALMA data archive and delivery. ALMA Regional Center will support archive astronomy by using ALMA data, which become open after one year.