

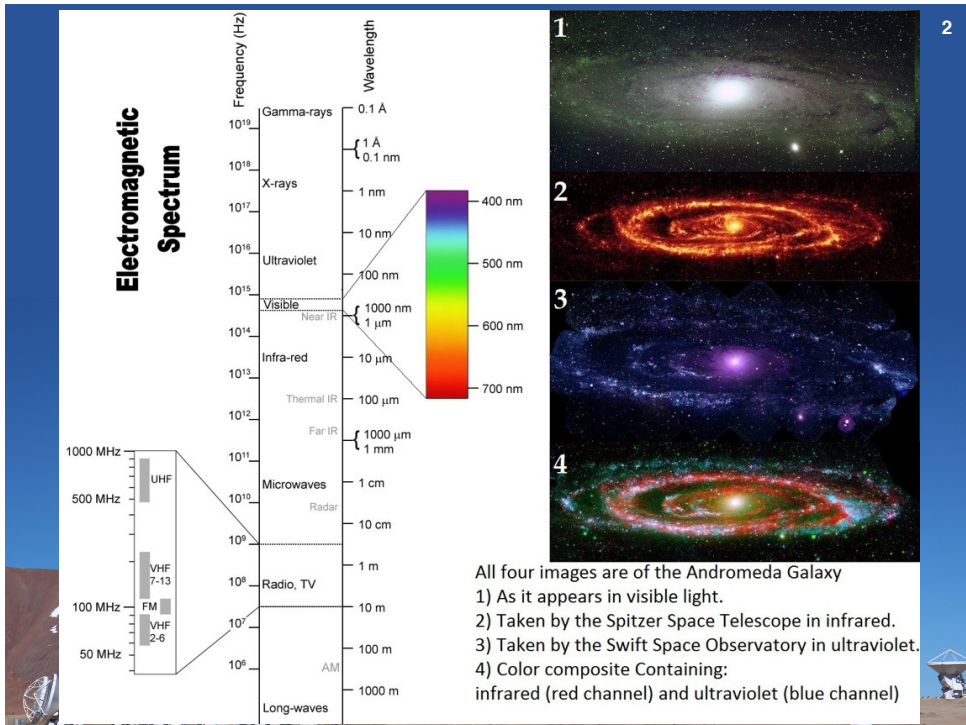
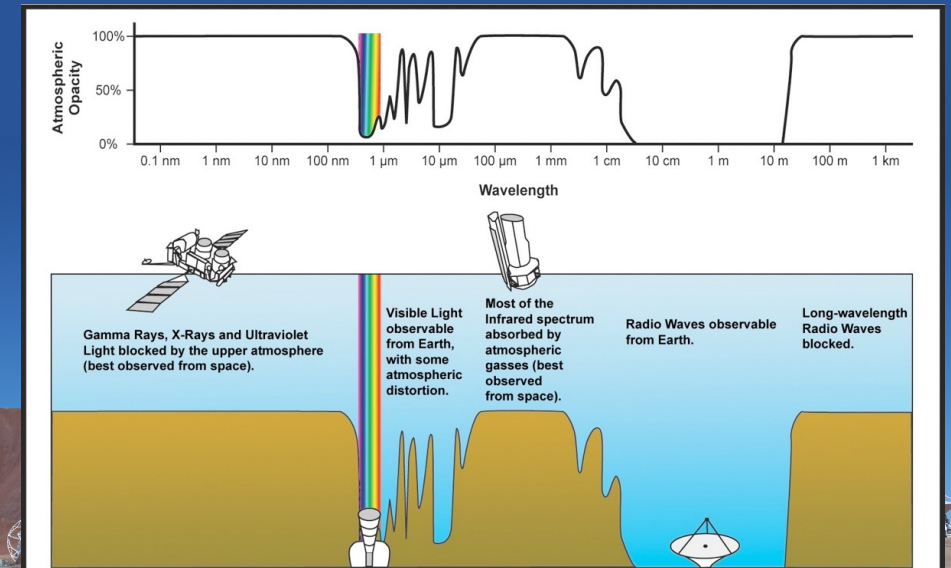
# ALMA暑期學生培訓營

Vivien Chen 陳惠茹  
(National Tsing Hua University)

June 26, 2017 @ALMA summer student training camp



## 大氣層的透明度



## Where is ALMA?

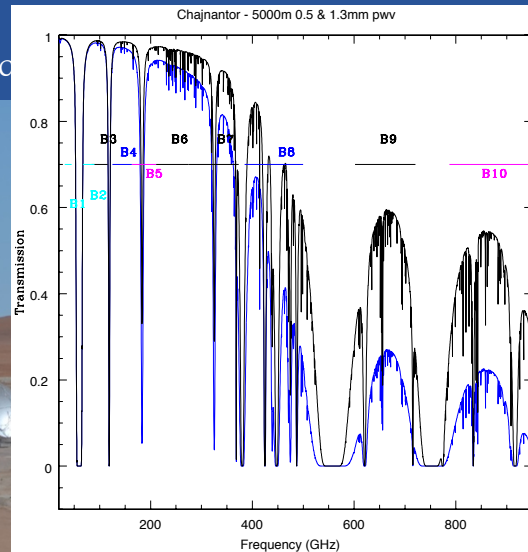
Image courtesy: Stephane Guisard





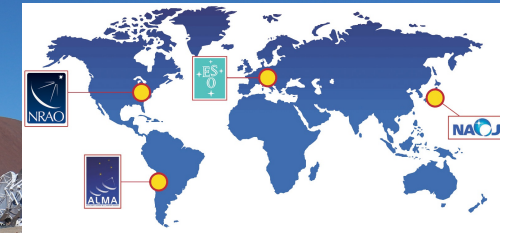
# ALMA at Chajnantor, Chile

► Chajnantor plateau



# Atacama Large Millimeter Array

- International partnership
  - Europe (ESO), North America (NRAO), East Asia (Japan, Taiwan, South Korea), and Chile
  - Cost US \$1.4 billion
- ALMA (66 antennas to be) operating since 2011
  - 12-m: 50 x 12m
  - ACA: 12 x 7m + 4 x 12m
  - 10 receiver bands (30 - 950 GHz)

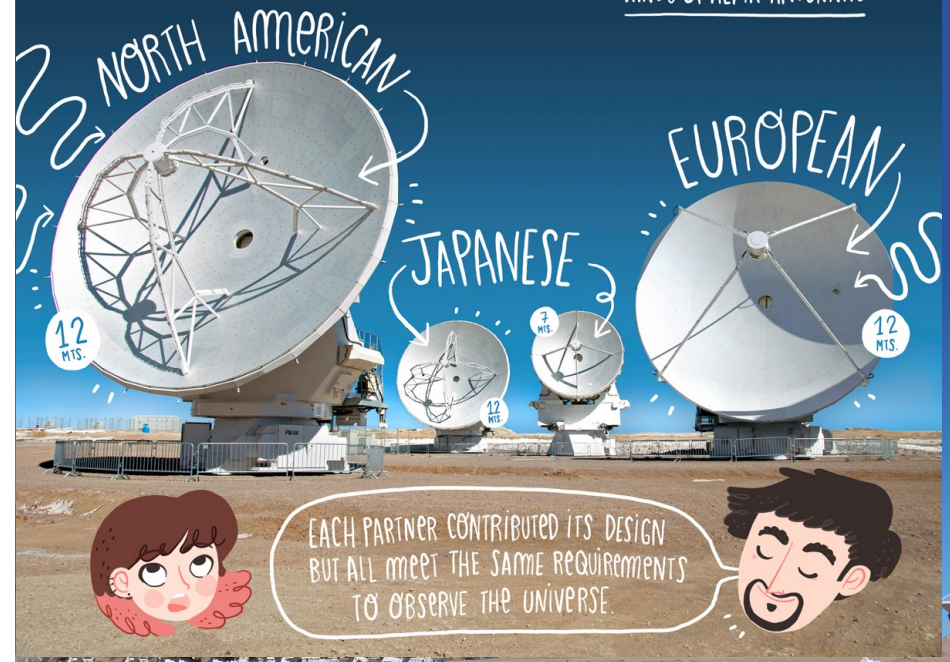


# Still, High Site is to be feared



Credit: J. C. Rojas/ESO

## KINDS OF ALMA ANTENNAS





# How big is a 12-meter?

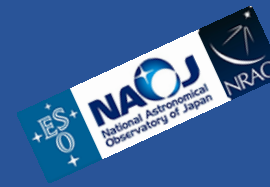


# Even a Song for ALMA~



# UCAT Campus Visits

Date	Campus	Host
7/21 (Fri)	清華大學	陳惠茹
8/4 (Fri)	臺灣師範大學	曾瑋玲
8/18 (Fri)	中央大學	黃崇源
9/1 (Wed)	清華大學	陳惠茹



# Course Plan

- ▶ Day 1: What is ALMA? Linux?
- ▶ Day 2: What are antennas?
- ▶ Day 3: What are arrays?  
What is CASA?
- ▶ Day 4: ALMA data, what next?



# Let's Start the Fun!

Questions? Ask Ivy! 李榆萱

