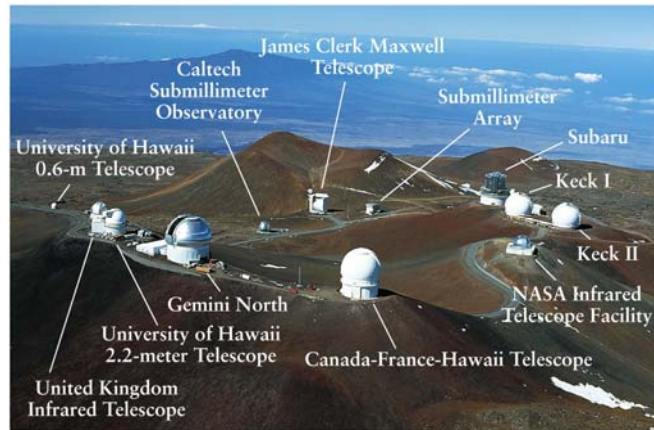


# Observatories



# Location, Location, Location

Dark Skies

## North America at Night

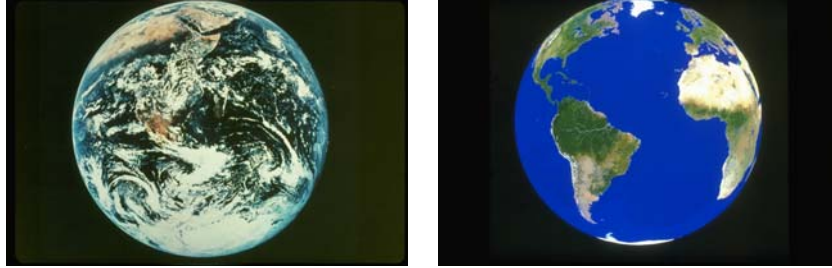


## Location, Location, Location

Dark Skies

Clear Weather

## Clear Skies



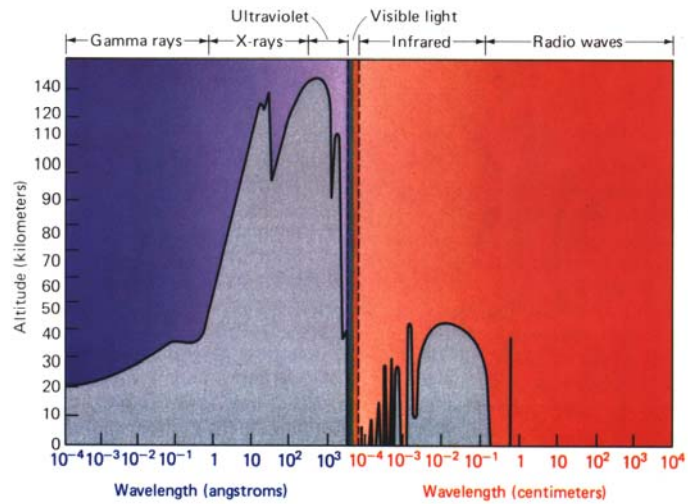
## Location, Location, Location

Dark Skies

Clear Weather

Clean Atmosphere

# Atmospheric Transparency



# Location, Location, Location

Dark Skies

Clear Weather

Clean Atmosphere

Steady Air – seeing

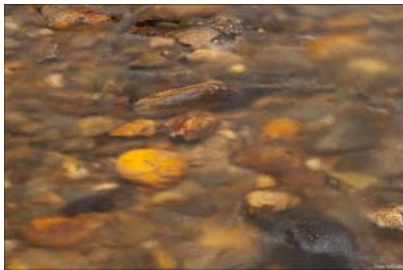
## Atmosphere Effects



“What really got me thinking was the similarity of the effects of the 6" to 10" of water on the clarity of those rocks and the effect of the 60 to 100 miles of the Earth's atmosphere.”

“Take a look at those rocks that are above water, that's the way the Hubble Space Telescope sees objects and everything else in the cosmos, crisp and clear. That's why it's so important to put telescopes above the atmosphere.”

## Atmosphere Effects



“Look at the rocks that are in a smooth section of the water, that's the way Earth-based telescopes see the cosmos during good seeing.”

“Look just to the left of the black rock at the bottom right where the flow is very turbulent, that's the way Earth-based telescopes see the sky on nights of bad seeing.”

Tom Wilson (2013)

## Northern Observatories



## Southern Observatories

