



That Was the Week That Was

AST 105

1 November 2018

Oceans Absorbing Global Warming

- 90% of global warming to date has heated oceans
- Oceans soaked up 13×10^{21} Joules / year (13 zetta Joules) 1991-2016
 - = 150 times electric power production
- This is 60% greater than previously thought
- Implies greater sensitivity to CO₂ feedback than assumed earlier
- **As oceans warm, they absorb less CO₂ and O₂**

Source: https://www.eurekalert.org/pub_releases/2018-10/pu-eoh103118.php

Cloud over Arsia Mons



As seen by Mars
Express

Arsia Mons:

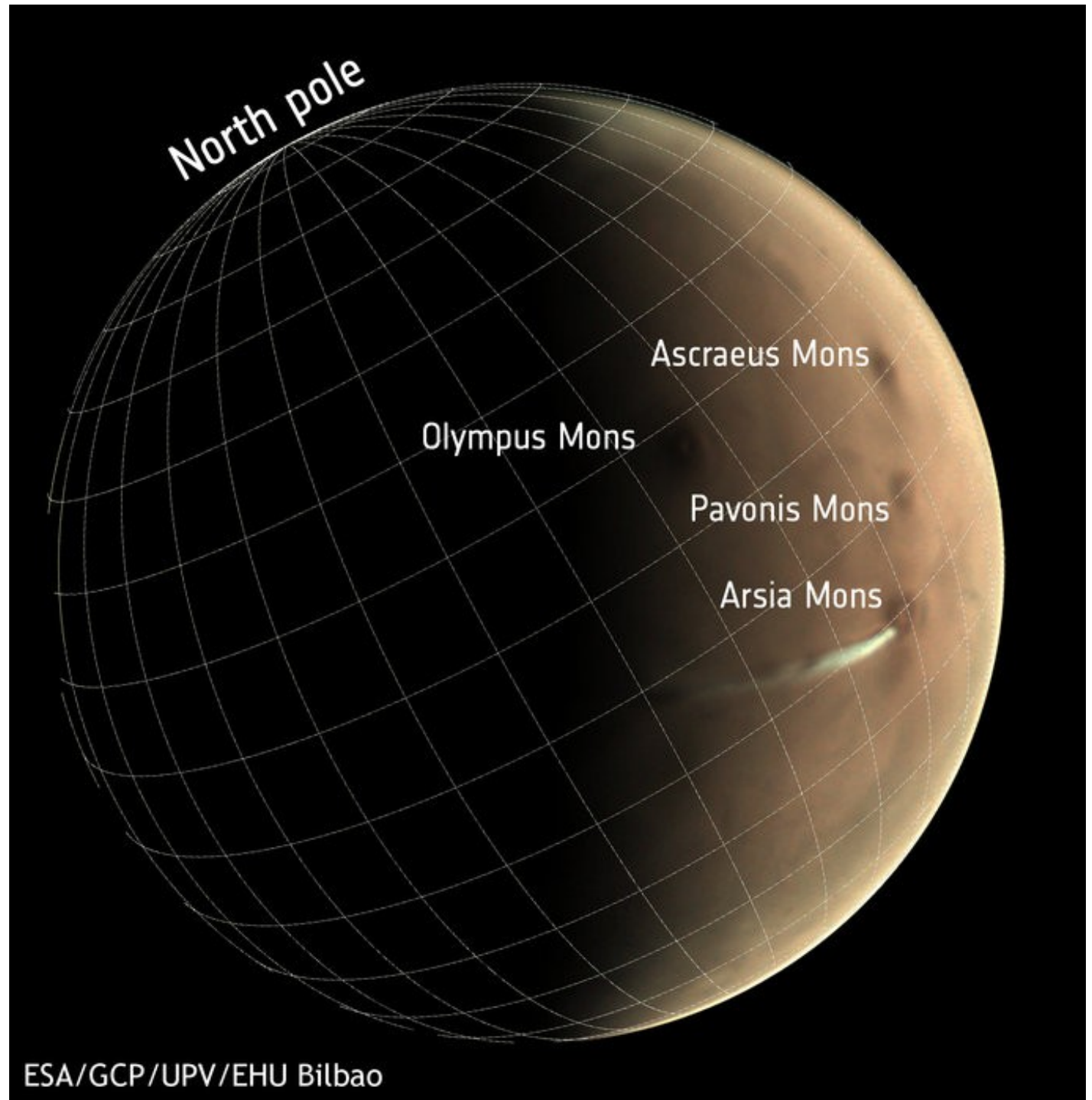
Height: 12 mi

Base: 270 mi

Mauna Loa:

Height: 6.3 mi

Base: 75 mi

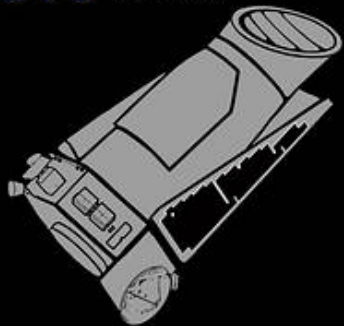


Kepler runs out of fuel

Kepler BY THE NUMBERS

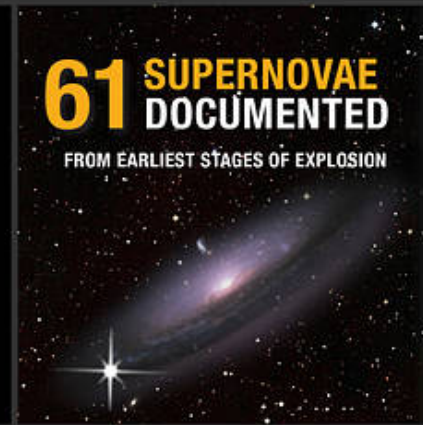


9.6 YEARS IN SPACE



61 SUPERNOVAE DOCUMENTED

FROM EARLIEST STAGES OF EXPLOSION



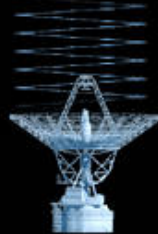
2 MISSIONS COMPLETED

678 GB SCIENCE DATA COLLECTED

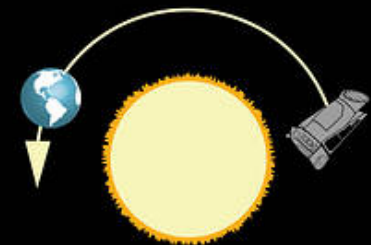
2,946 SCIENTIFIC PAPERS PUBLISHED

94 MILLION MILES AWAY

3.12 GALLONS FUEL USED



732,128
COMMANDS EXECUTED



www.nasa.gov/kepler

As of October 24, 2018

@NASAKepler

Town Meeting for Astronomy Majors and Minors

and students interested in astronomy

The Stony Brook Astronomy faculty will hold a *town meeting* with all of our majors, minors, and anyone who is interested in the Astronomy program.

when: Wed. Nov 7, 2018

1:00–2:30 pm

where: ESS 450

We'd like to hear your thoughts.

Pizza will be provided!

Topics to be discussed:

- Astronomy course offerings
- Major/minor requirements
- Research opportunities
- Undergraduate Astronomy Club
- Graduate school
- Careers

RSVP: michael.zingale@stonybrook.edu



Astronomy Club



ASTRONOMY CLUB

First Meeting: Thursday, 9/6 7PM
Location: Earth & Space Sciences
Room 450

 (Press PH in the elevator)

Come to make friends & learn more
about astronomy!



For more information
Contact: sbu.astro.club@gmail.com



Upcoming Dates

- **Friday November 2:** Astronomy Open Night “[More Results from the Neutron Star Merger GW170817](#)”

Prof. J. Lattimer

7:30 PM, ESS 001