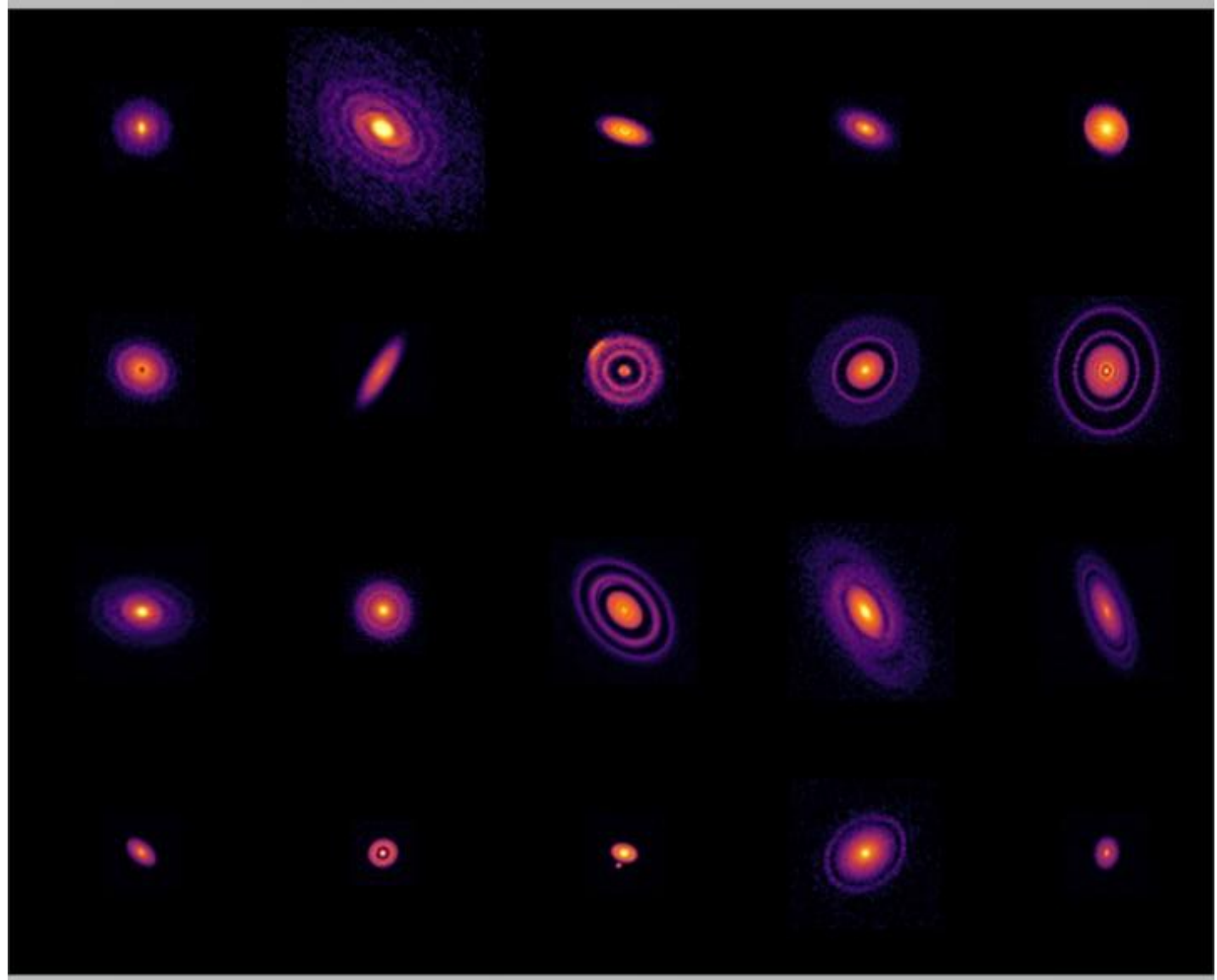


G 4 5 7 / 5 5 7
T O P I C S
(F A L L 2 0 2 6)

W E E K 1

P R O P L Y D S



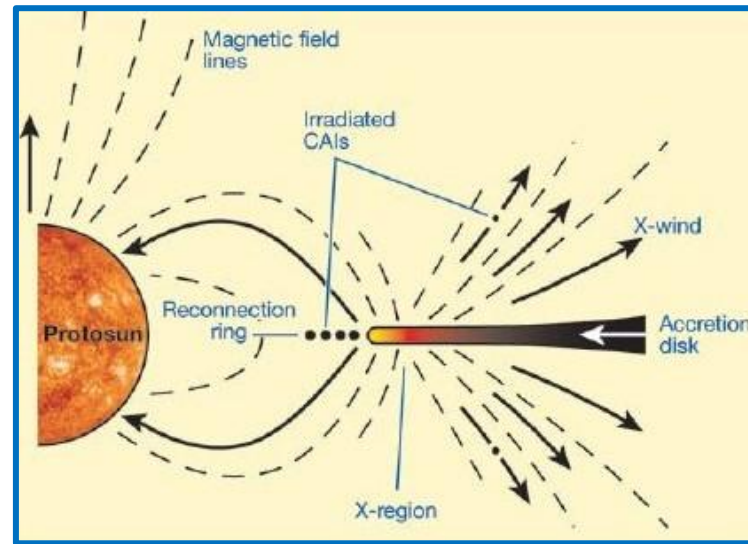
Circumstellar disks imaged with the ALMA telescope

G 4 5 7 / 5 5 7 TOPICS

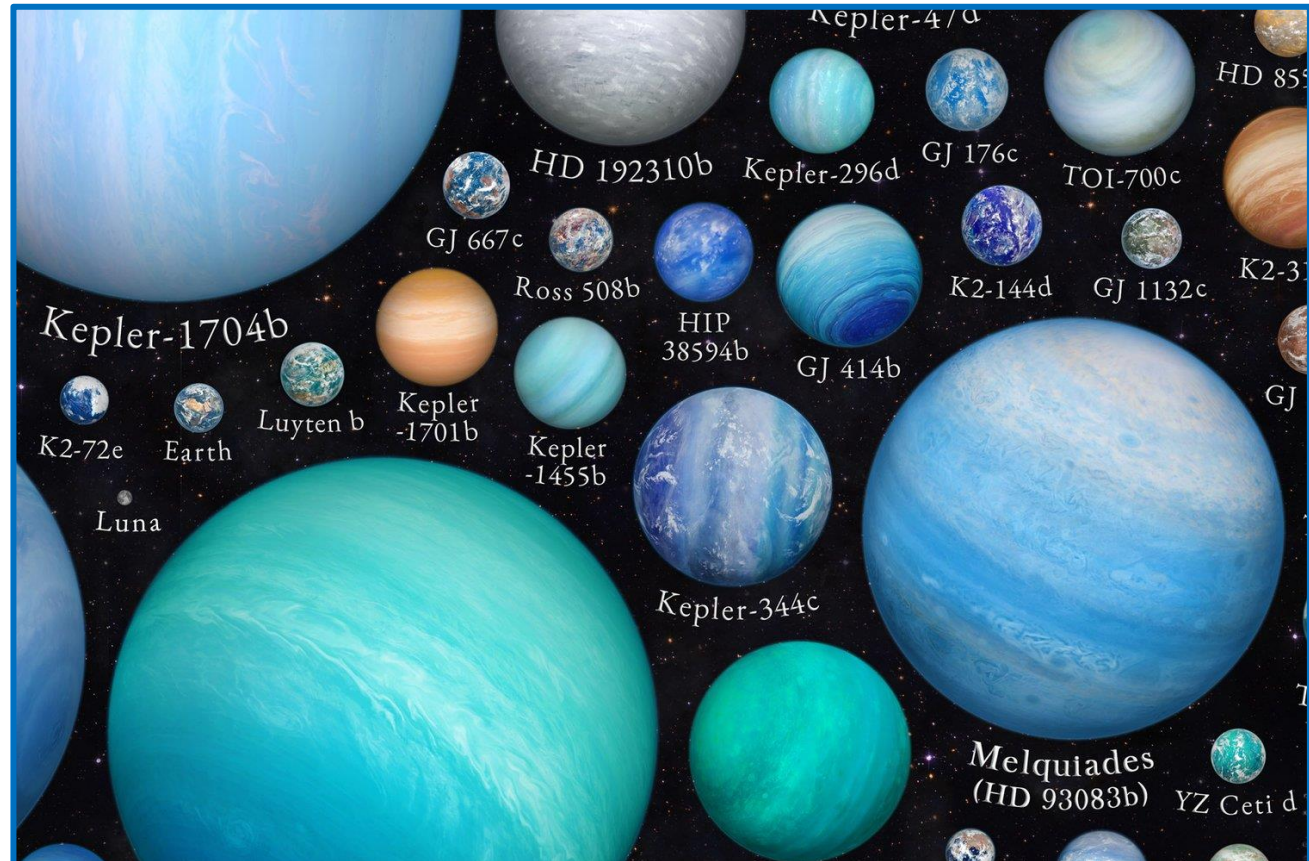
WEEK 2

SOLAR NEBULA & EXOPLANETS

>
**Some of the thousands of
exoplanets that have been found**
(Halcyon maps)



<
Model of solar nebula
(Scott, 2017)

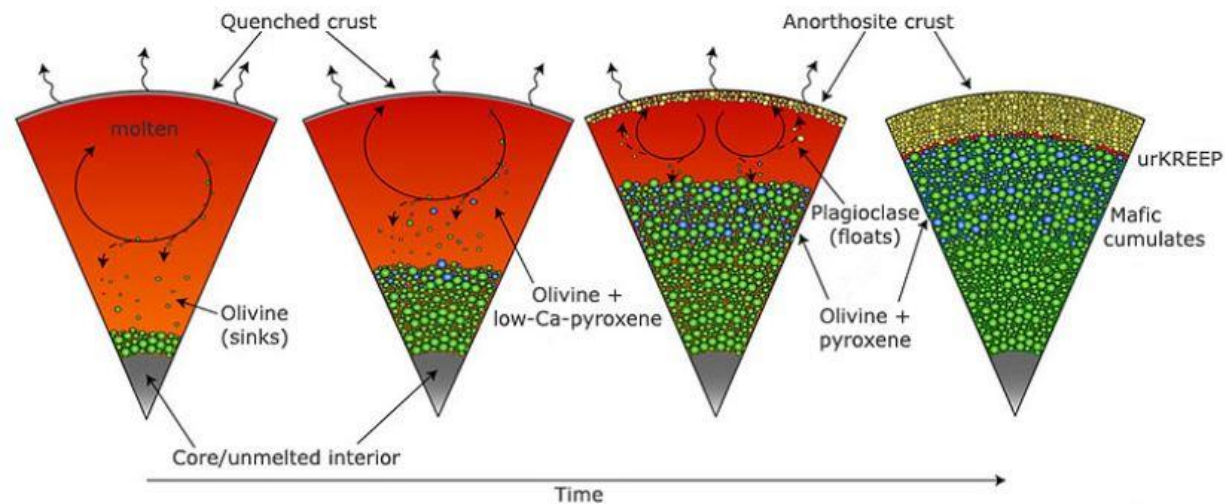


G 4 5 7 / 5 5 7
TOPICS

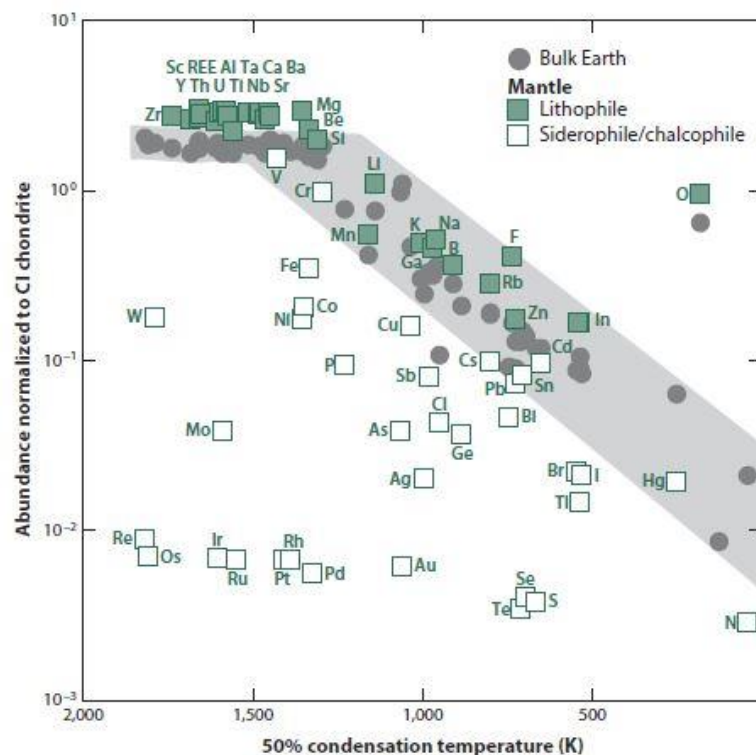
WEEK 3

MAGMA
OCEANS &
MAJOR
EARTH
EVENTS

Lunar magma ocean (Taylor 2022)



(From Jennifer Rapp, www.lpi.usra.edu)



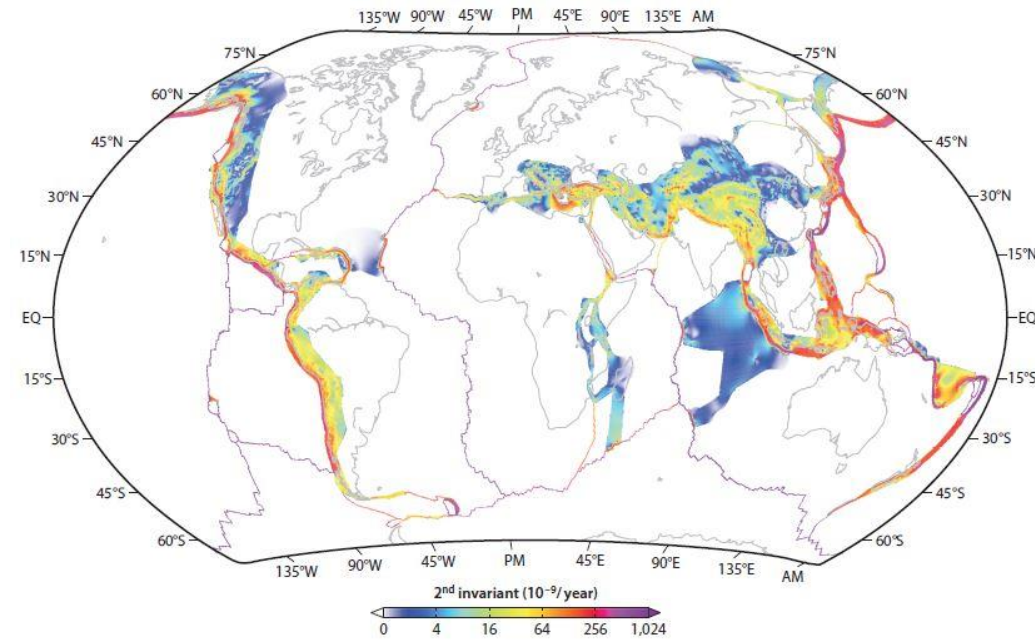
<
**Model of Earth
composition**

(Carlson et al. 2014)

G457 / 557
TOPICS

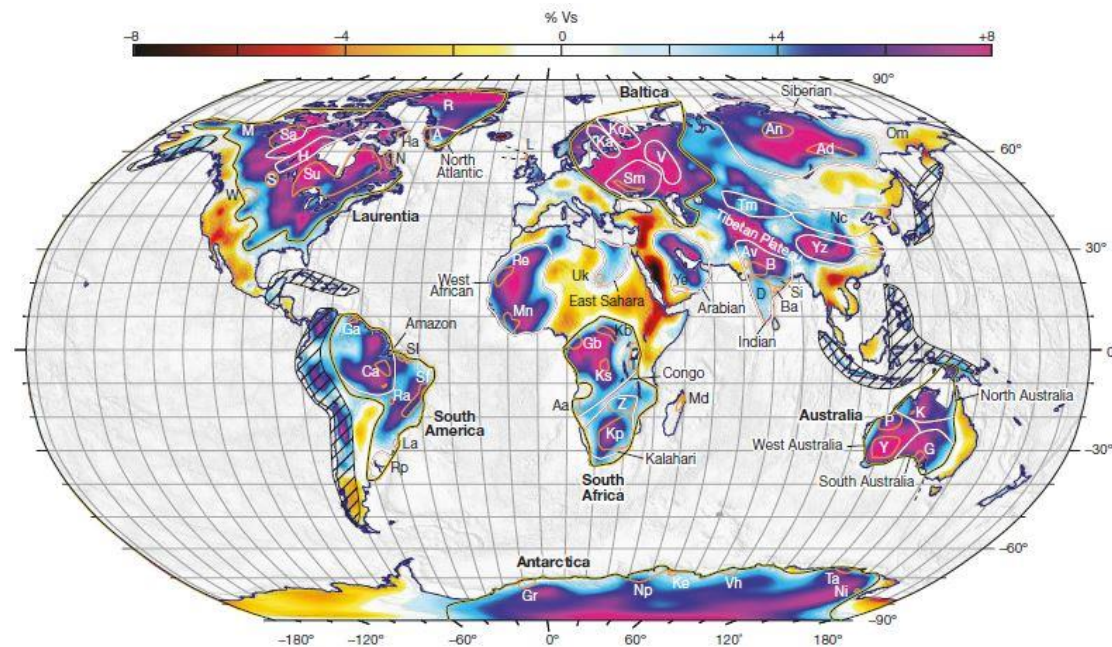
WEEK 4

EARTH PLATE TECTONICS & ARCHEAN CRATONS



<
**Deformation
zones**

(Brown et al 2020)



<
**S-wave velocities
at 150 km depth
reveal crustal
roots**

(Pearson et al. 2021)

G 4 5 7 / 5 5 7
TOPICS

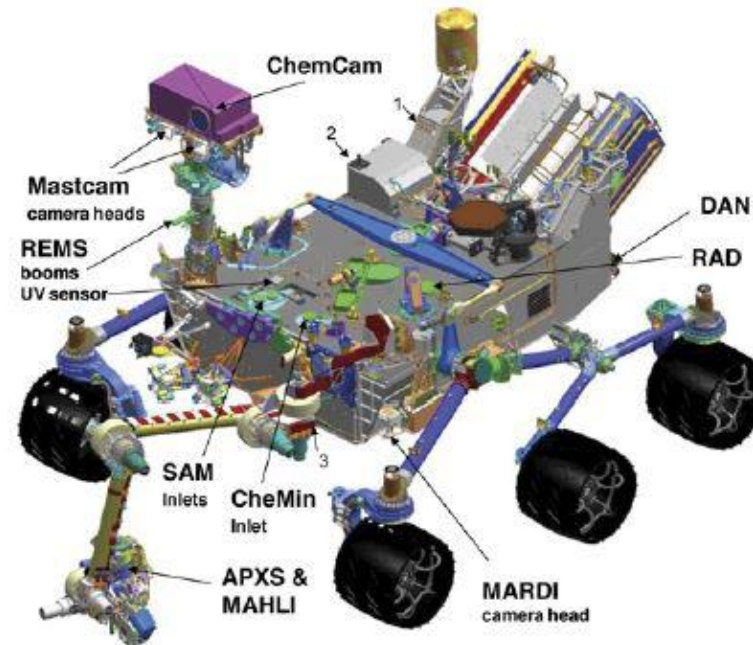
WEEK 5

ASTEROID BREAK UP & MARS ROVER MISSIONS

Left: Ordovician fossil meteorite & nautiloid (Martel 2014 PSRD)
Right: planetary ring around Earth (Science News)



(From Schmitz et al., 2001, *EPSL*, fig. 3, p.4.)



<
Curiosity rover

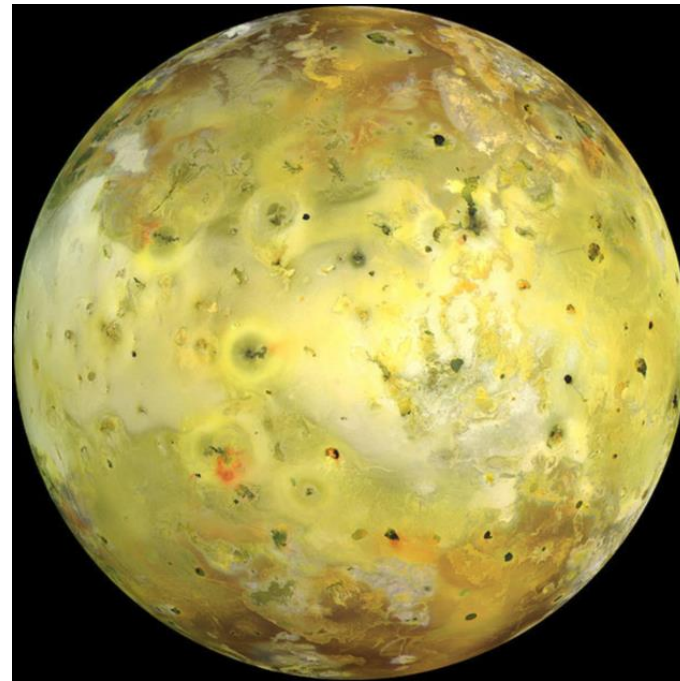
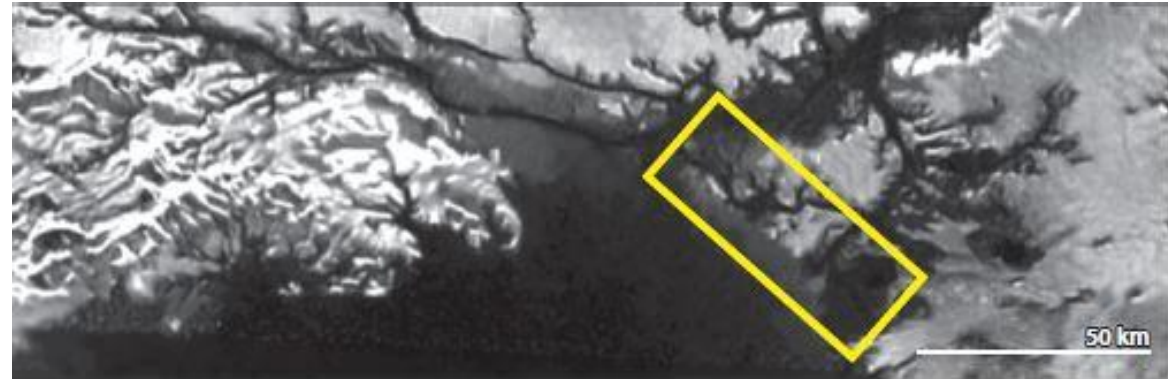
(Grotzinger et al. 2015)

G 4 5 7 / 5 5 7
TOPICS

WEEK 6

JOVIAN
MOONS
(TITAN & IO)

Titan radar image (Hayes 2016)



<
Io

(NASA, Wikipedia)

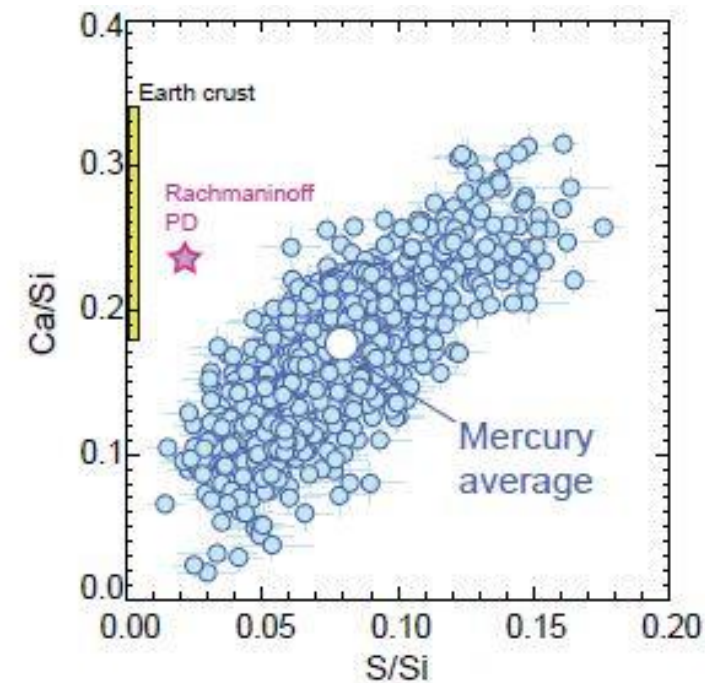
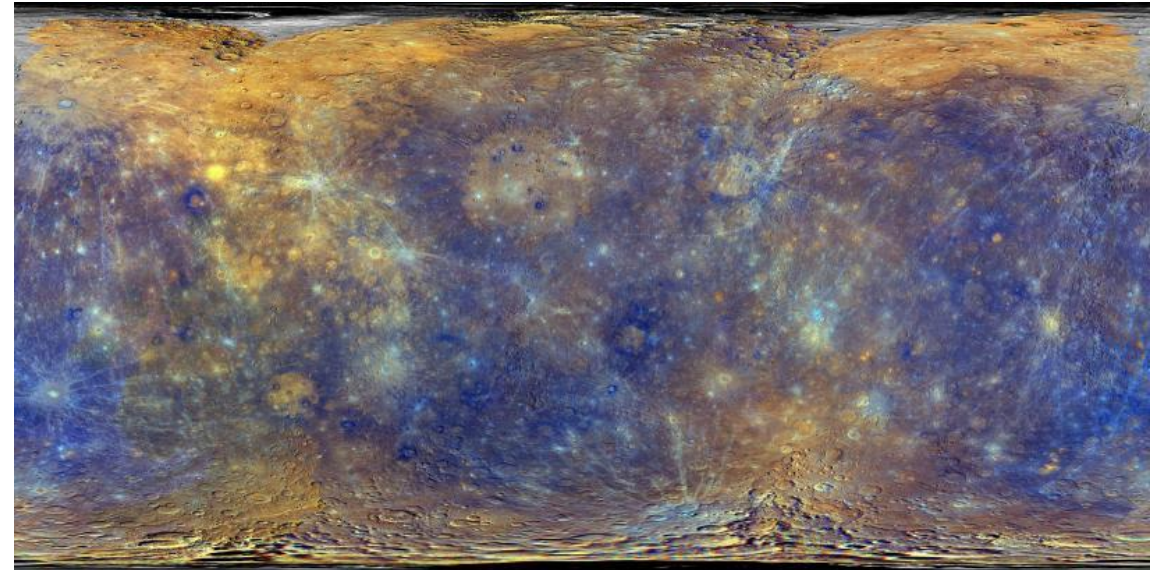
G 4 5 7 / 5 5 7
TOPICS

WEEK 7

MERCURY &
VETERANS
DAY

>
**Mercury false
color map**

(NASA PIA 17386)



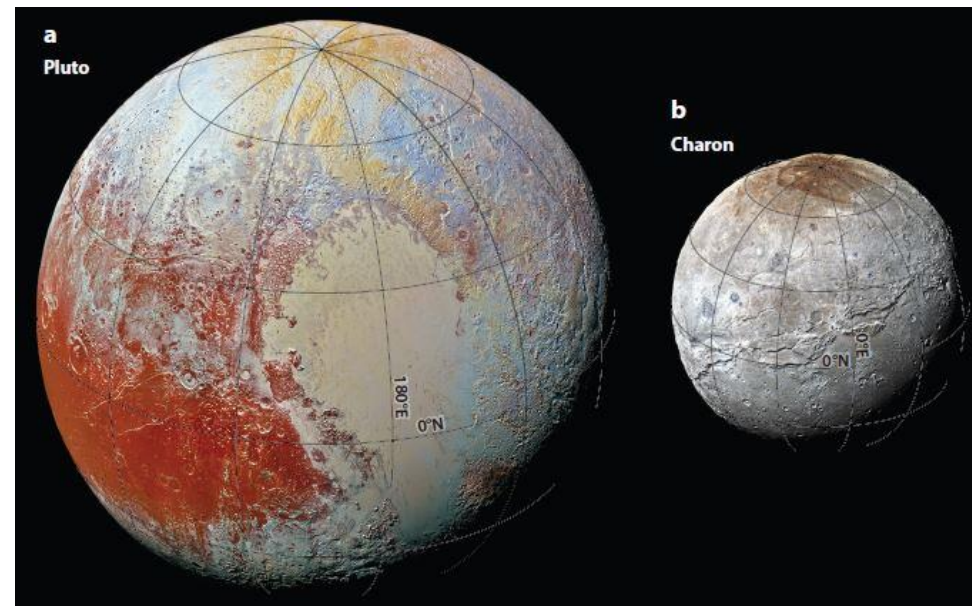
<
Mercury surface composition

(Nittler & Weider 2019)

G457 / 557 TOPICS

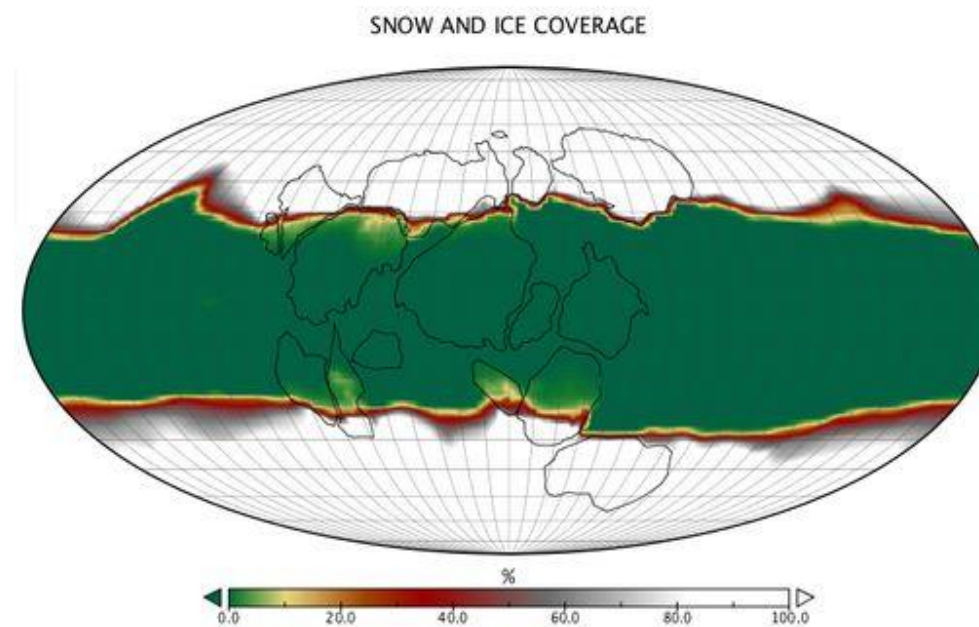
WEEK 8

PLUTO & HABITABILITY



< Pluto system

(Moore & McKinnon
2021)



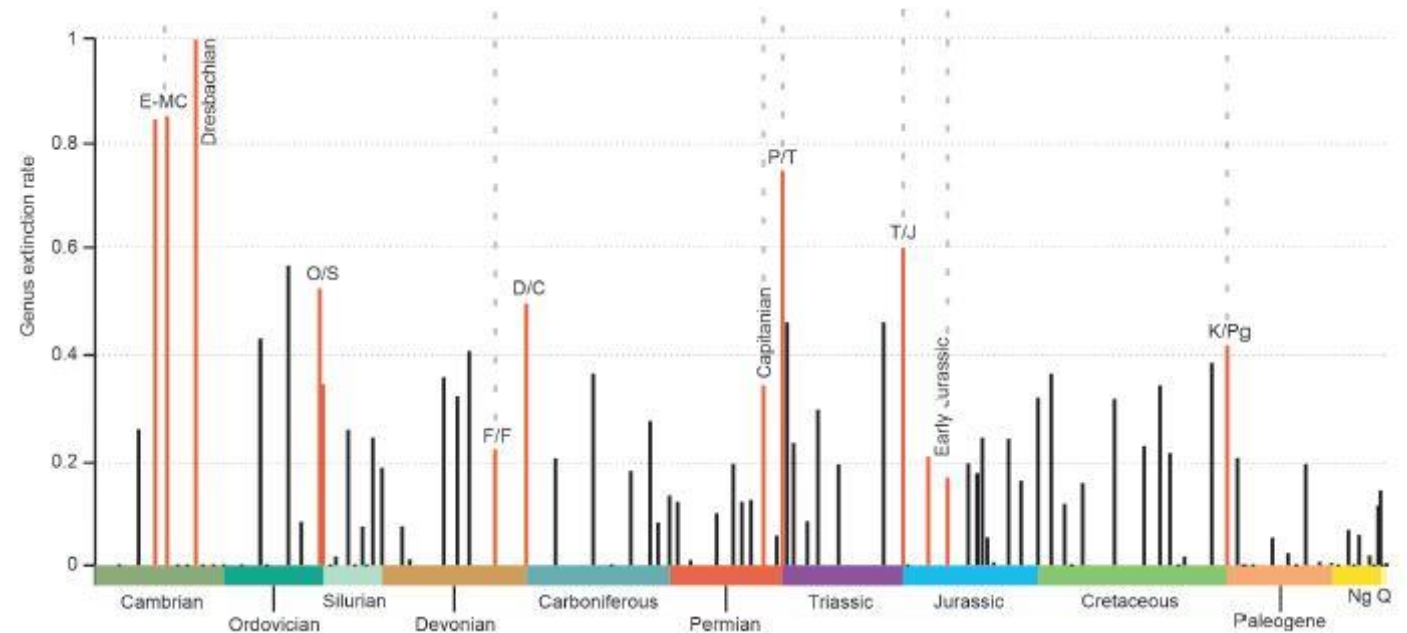
< Earth ice coverage model, 717 Ma ago

(NASA-GISS/Columbia-
CCSR)

G457 / 557
TOPICS

WEEK 9
(START)

HABITABILITY
& CLIMATE



Extinction events (Grasby & Bond, 2023)

G 4 5 7 / 5 5 7
TOPICS

WEEKS 9-10

**YOURS TO
CHOOSE
(3 classes)**