TERRESTRIAL PLANETS, SUPER-EARTHS AND MINI-NEPTUNES

VOLATILE DELIVERY?
TOTAL INVENTORY?
CONSTRAINTS:
ISOTOPIC SIGNATURES
(D/H, OS)

TOTAL INVENTORY?
INTERIOR DISTRIBUTION?
TERRESTRIAL PLANETS, SUPER-EARTHS AND MINI-NEPTUNES

MR: Valencia+ 2006
TERRESTRIAL PLANETS, SUPER-EARTHS AND MINI-NEPTUNES

ENVELOPE COMPOSITION? HOW DID THEY FORM?

DO THEY HAVE WATER? ARE THEY REALLY HABITABLE?

DATA: M & R, BROAD SPECTRAL FEATURES
TERRESTRIAL PLANETS, SUPER-EARTHS AND MINI-NEPTUNES

ENVELOPE COMPOSITION? HOW DID THEY FORM?

DO THEY HAVE WATER? ARE THEY REALLY HABITABLE?

DATA: M & R, BROAD SPECTRAL FEATURES
In resonance: 24: 15: 9: 6: 4: 3: 2
HABITABLE ZONE MOVES INWARDS FOR M DWARFS

Data from Baraffe+ 2013
TRAPPIST-1 PLANETS: ARE THEY REALLY HABITABLE?