



# Mars Exploration Program Overview

Roger Gibbs

Jet Propulsion Laboratory/California Institute of Technology

8/7/18

# Mars Exploration Program Science Goals



# Mars Exploration Program Missions

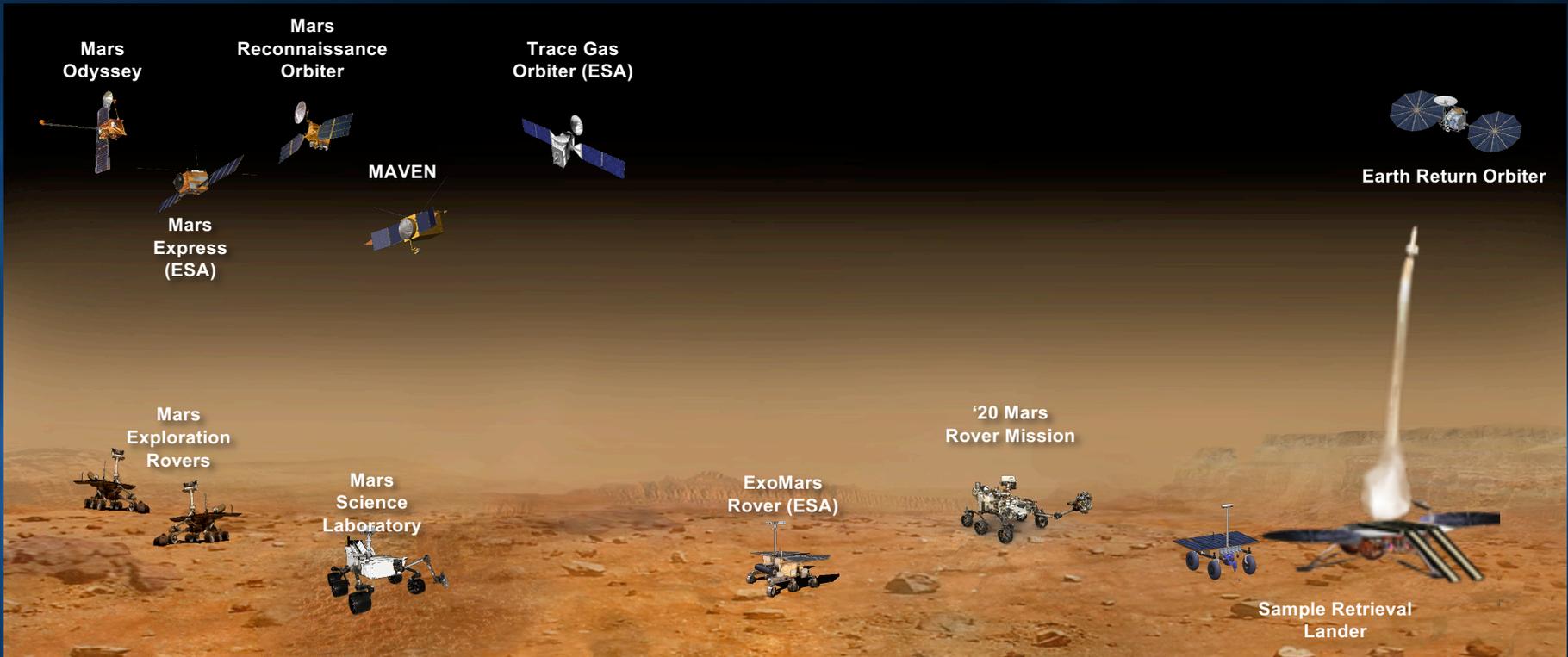
2001 - 2015

2016

2018

2020

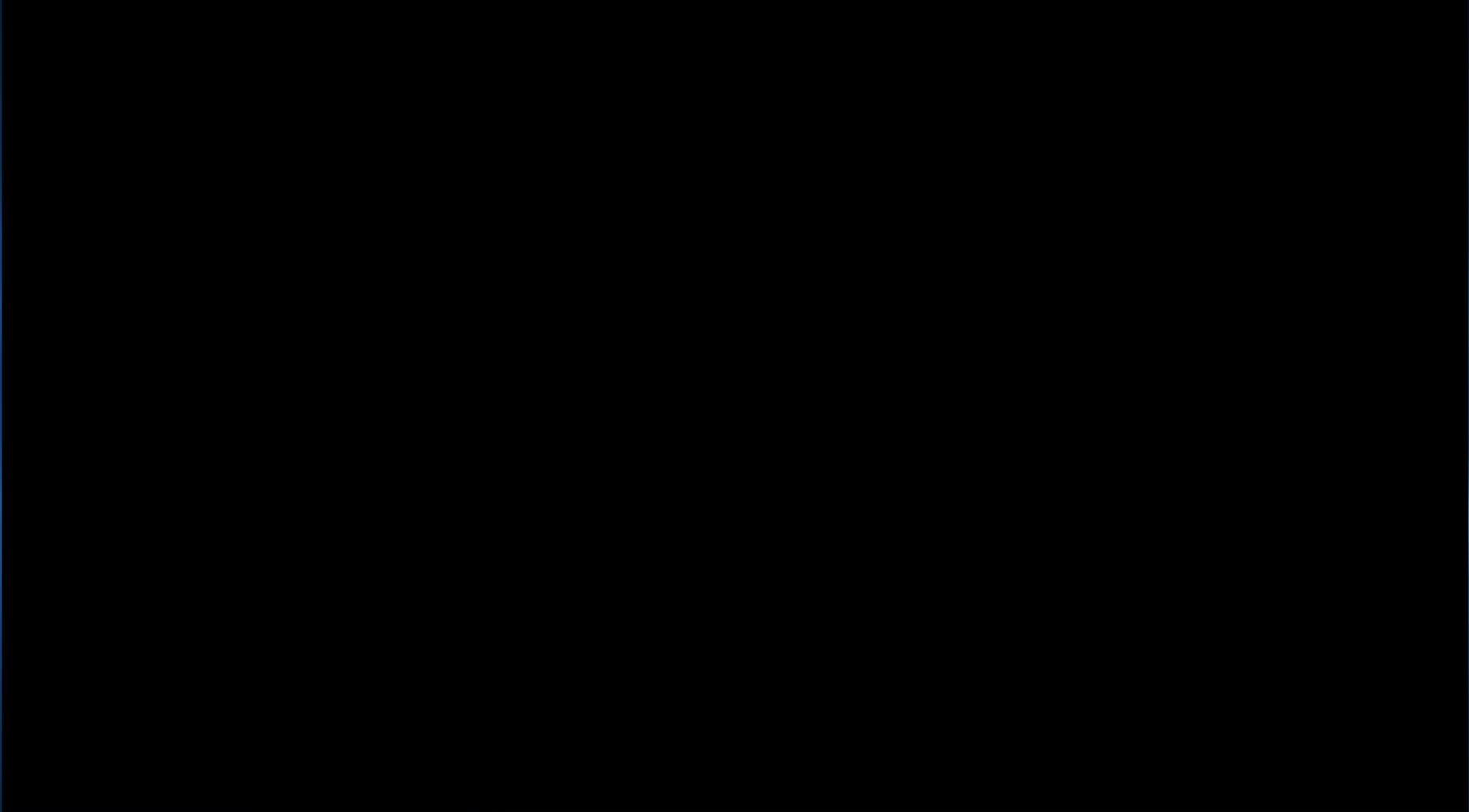
Notional Future  
Mars Missions



Pre-Decisional Information –  
For Planning and Discussion Purposes Only



# Curiosity Landing Video



# Mars Exploration Program Highlights

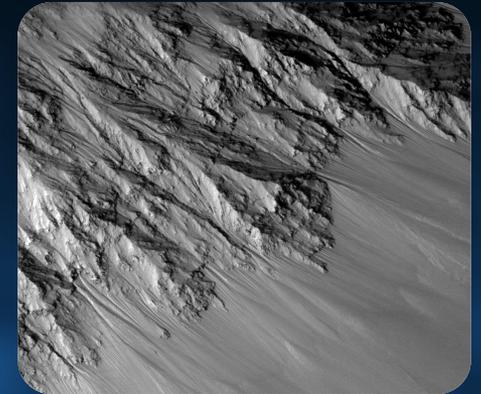
Opportunity: Journey to  
Perseverance Valley



MRO: >50,000 orbits  
Completed Global 6m  
Resolution Imagery



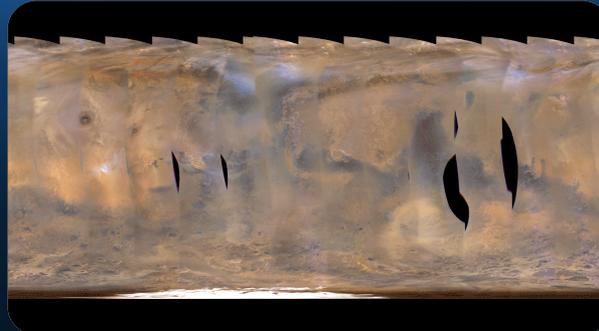
MRO: Continuing  
Observations of Recurring  
Slope Lineae



Curiosity: >5 years  
since landing



MAVEN Tracks Back-to-back  
Regional Storms



Mars 2020 Landing Site  
Finalists



# Why Mars Sample Return?

There are three primary reasons why MSR is of such high value to science.

1. Complex sample preparation, decisions
2. Better Instrumentation
3. Instrument Diversity



In-situ missions limited to a few sample analysis instruments.