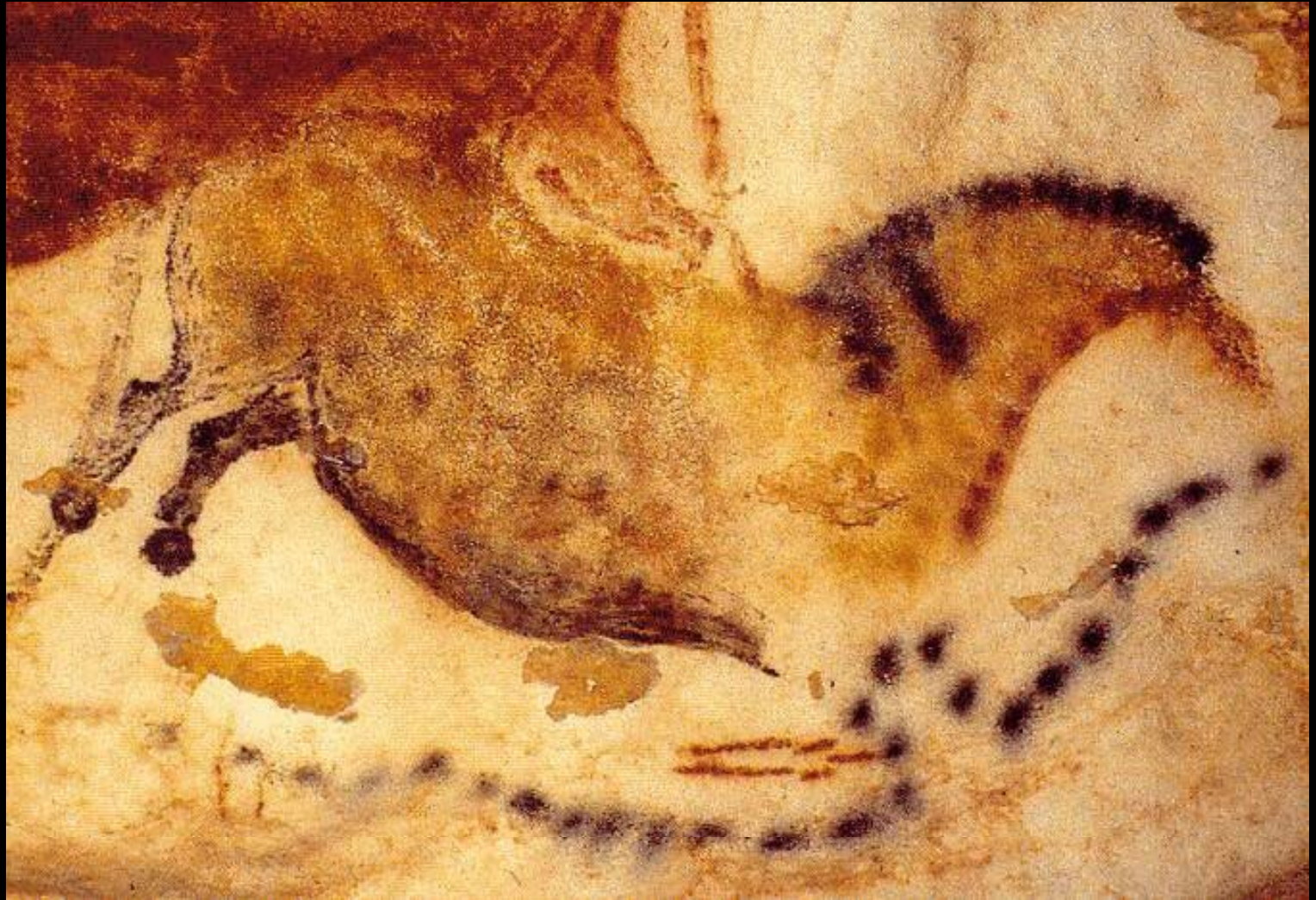


Qu'allons-nous faire dans les étoiles ?

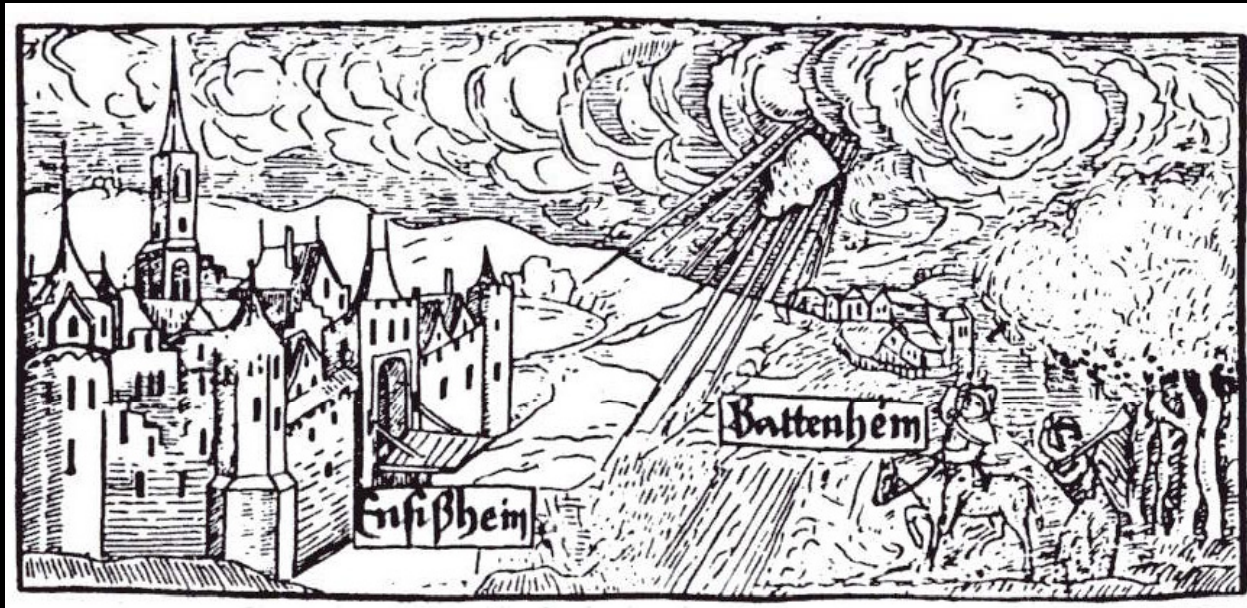
Premiers pas en éthique de l'espace

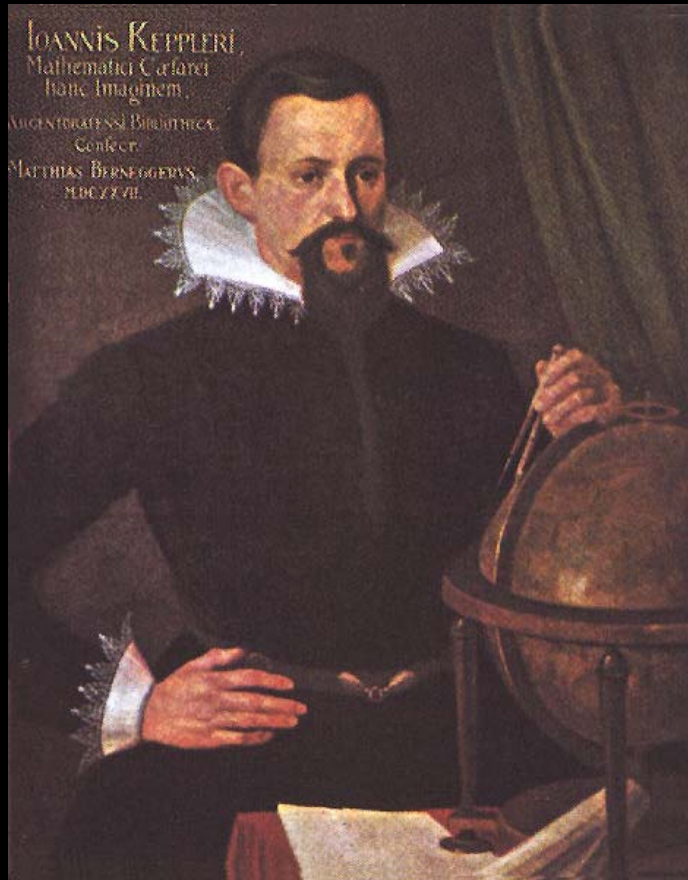
Jacques Arnould

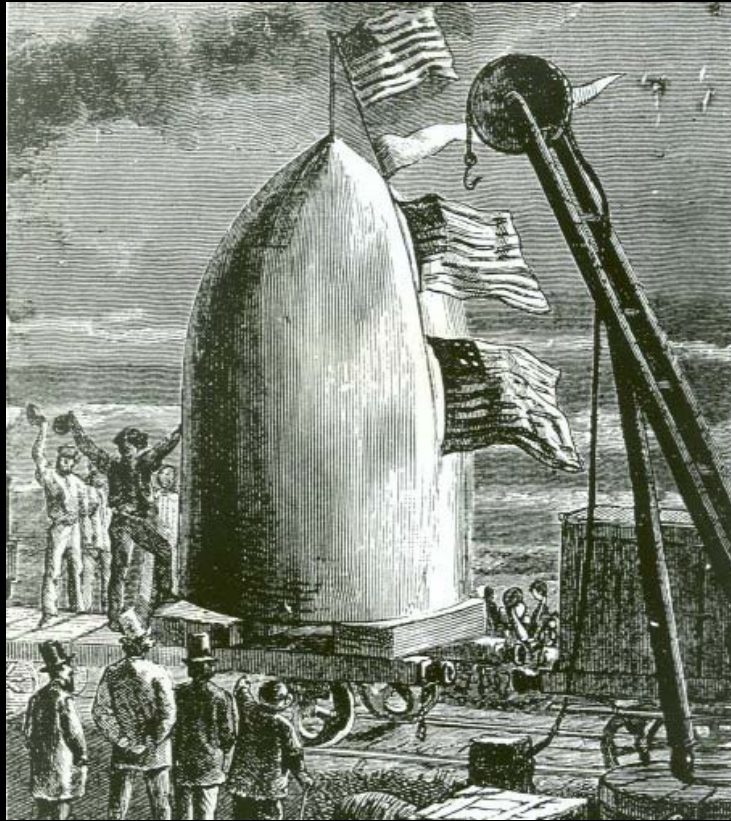




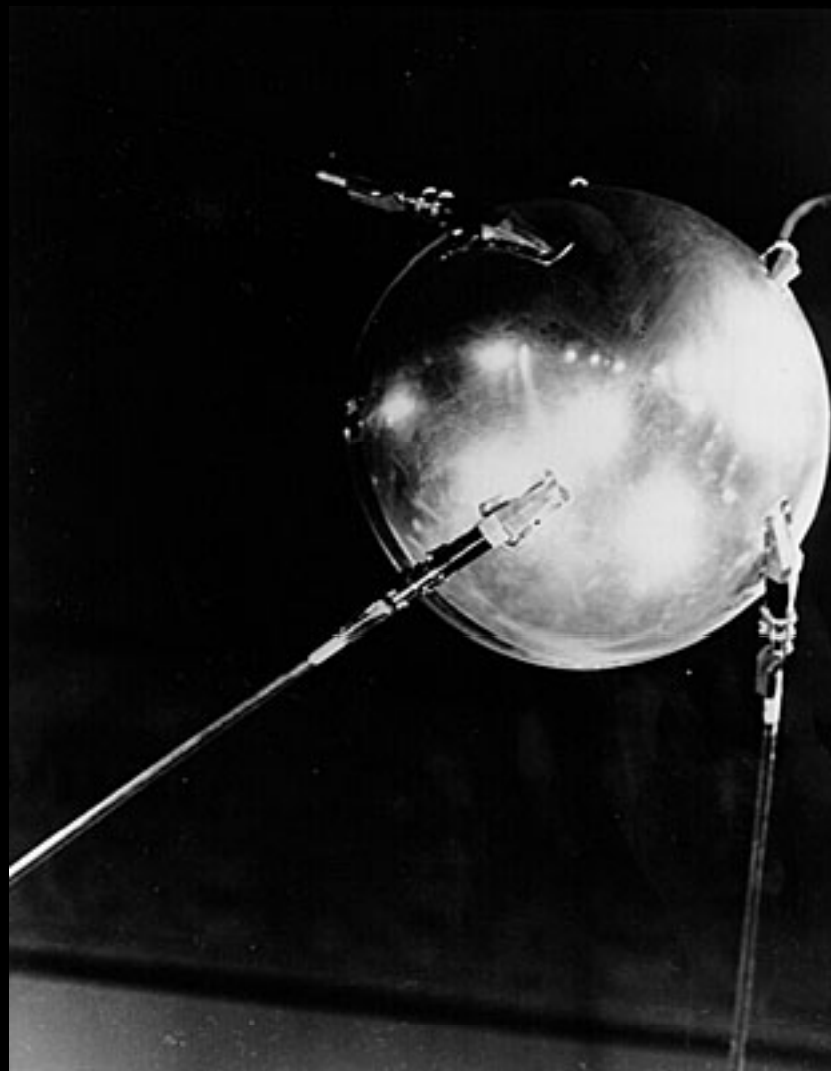


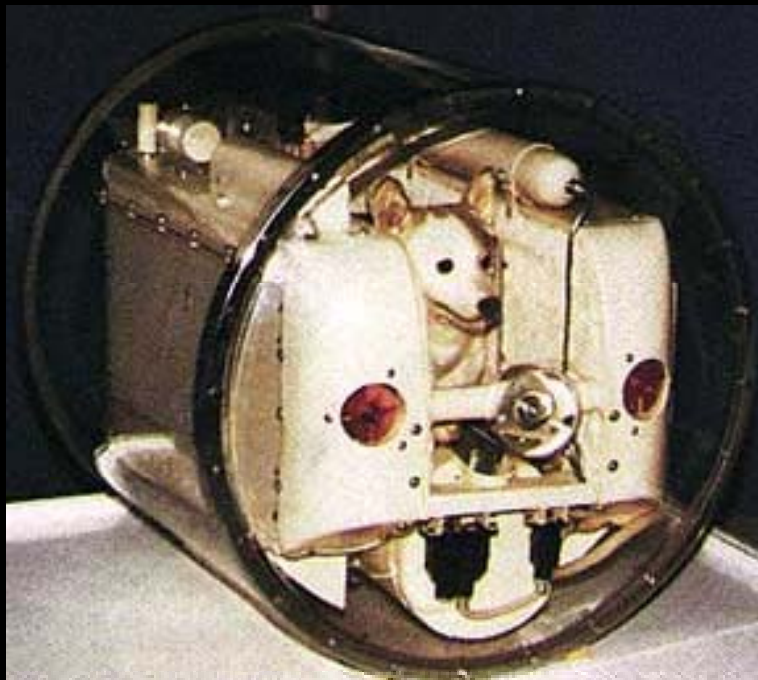






Sputnik,
4 octobre 1957





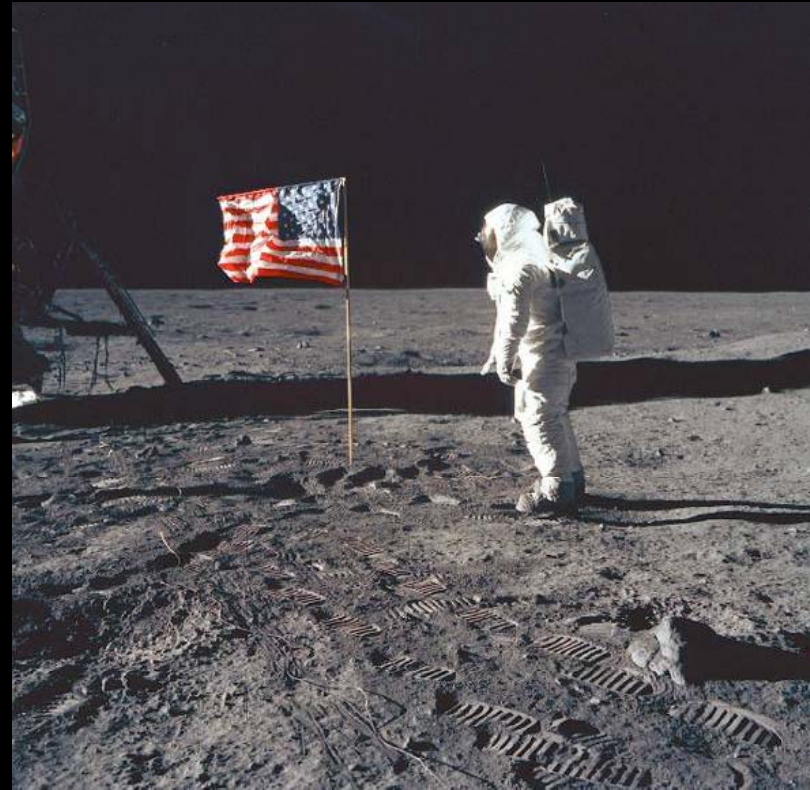
Laika, 3 novembre 1957



Hector, 22 février 1961



Yuri Gagarine,
12 avril 1961



Neil Armstrong & Buzz Aldrin,
21 juillet 1969



Ariane 5

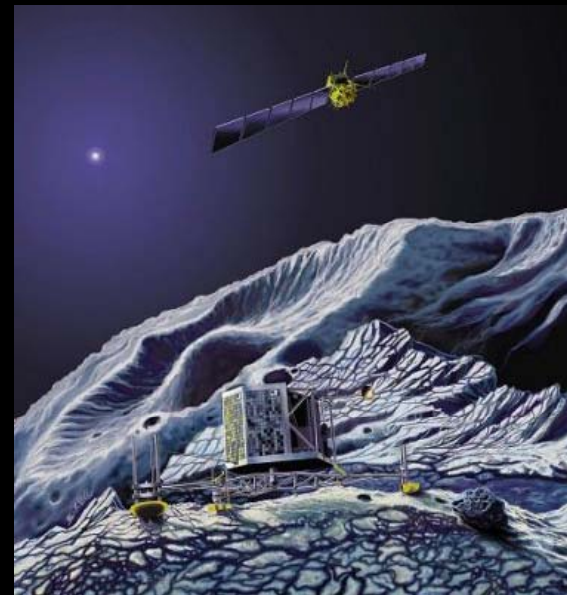
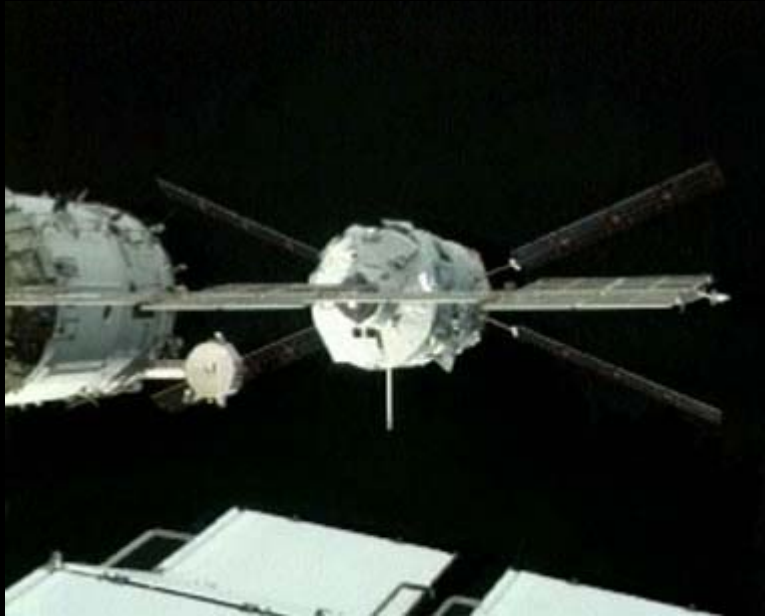


Soyouz



Vega

ATV



Rosetta, rendez-vous avec la comète Churyumov Gerasimenko en août 2014

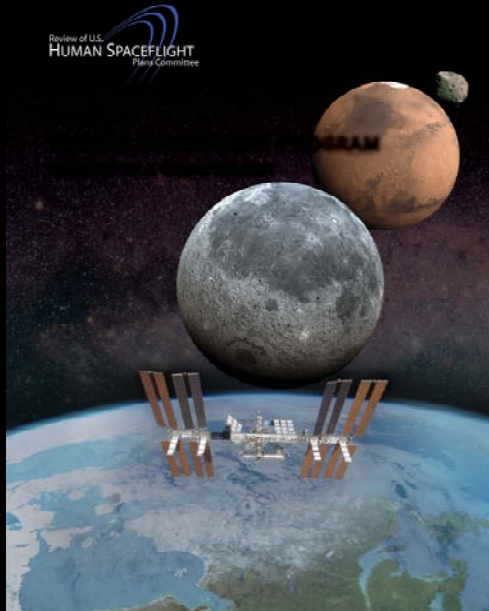




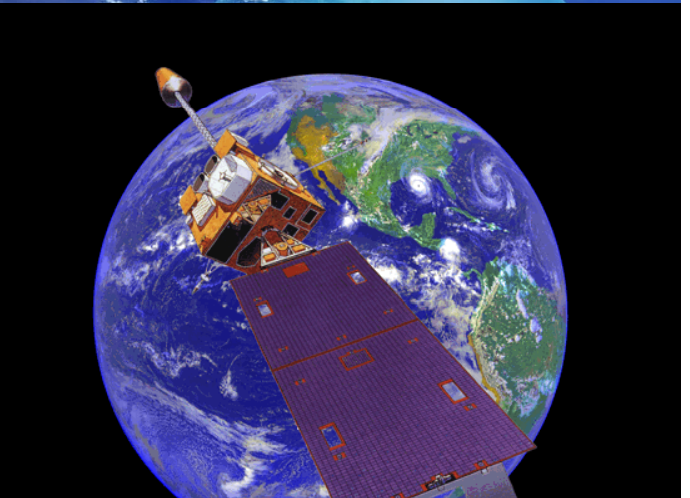
Challenger, 1986



Columbia, 2003

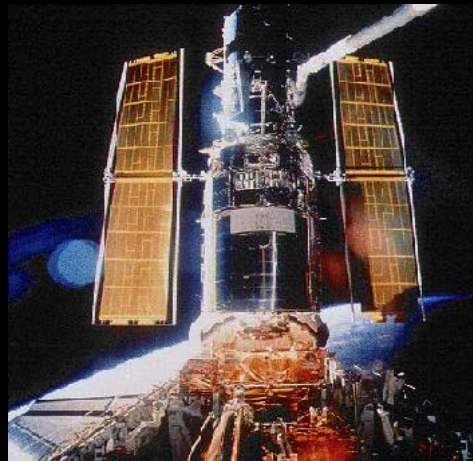


"We explore to reach goals, not destinations. It is in the definition of our goals that decision-making for human spaceflight should begin. [...] there is a danger of choosing destinations and architectures first. This runs the risk of getting stuck at a destination without a clear understanding of why it was chosen, which in turn can lead to uncertainty about when it is time to move on." (*Augustine Report, 2009*)



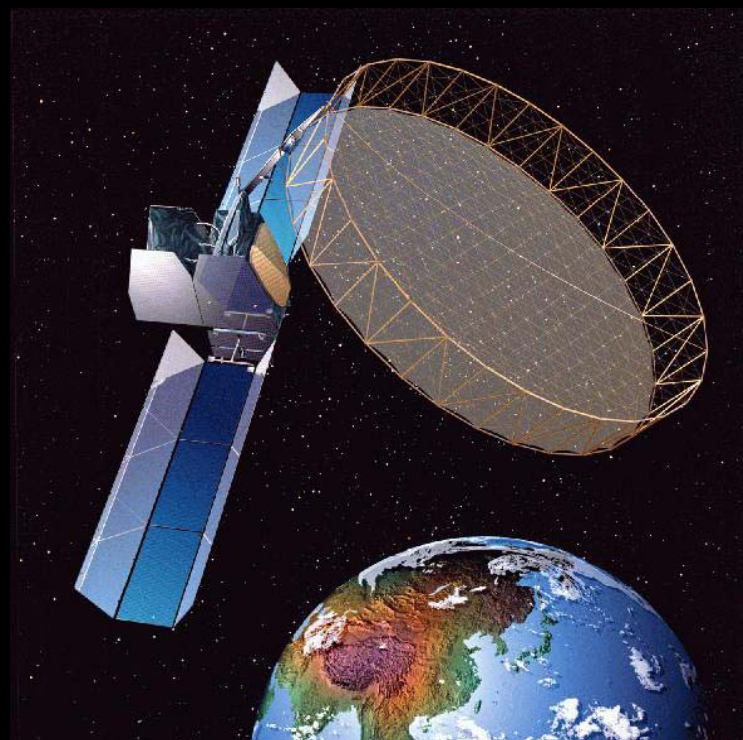
L'espace utile

La logique scientifique





La logique militaire



Le mythe d'Icare

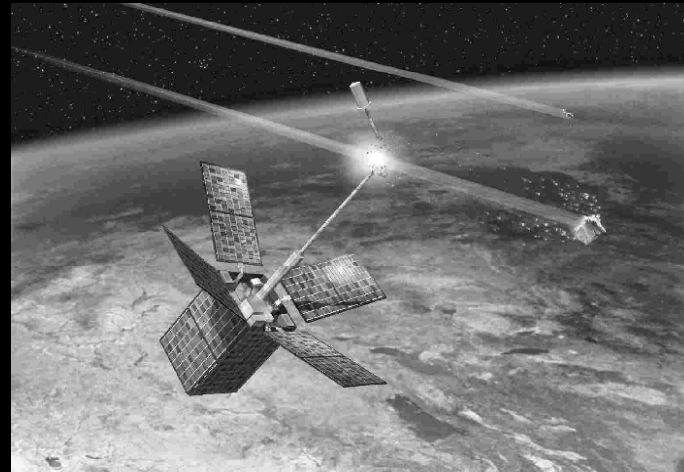


Kaguya...

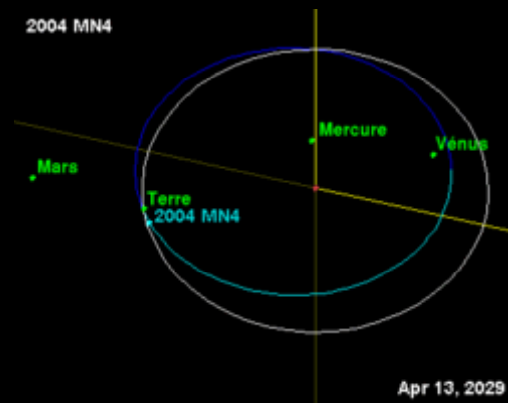


Les principaux défis éthiques

Les débris spatiaux



Si le ciel nous tombait sur la tête



325 mètres

9 janvier 2013 - 13 avril 2029-13 avril 2036

Héritage commun et commerce



cnes



airZeroG

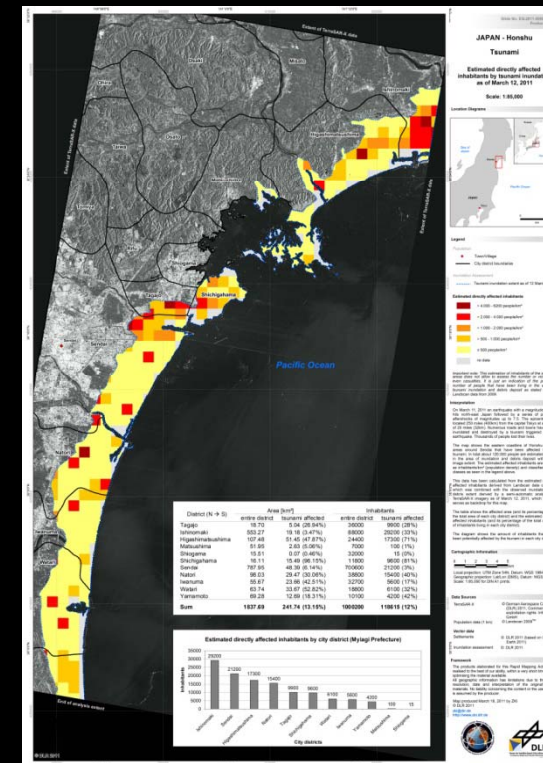
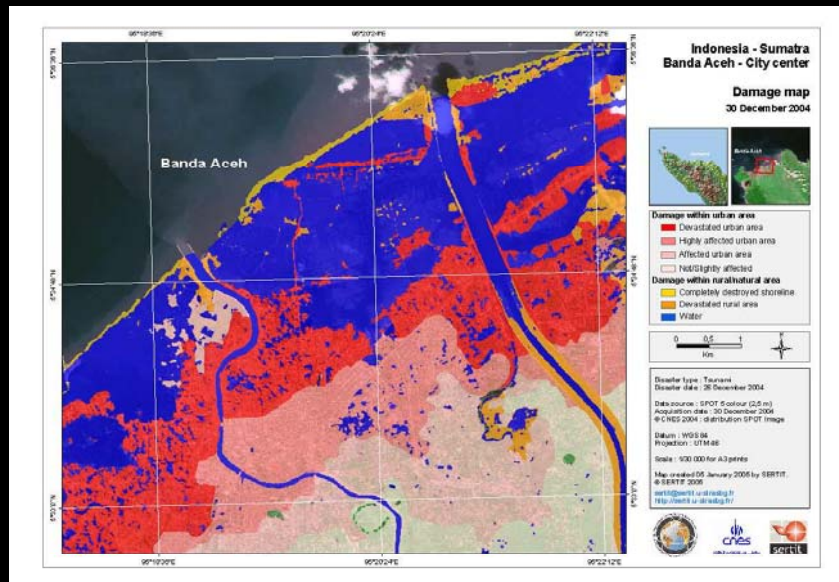




**Télé-
responsabilité**

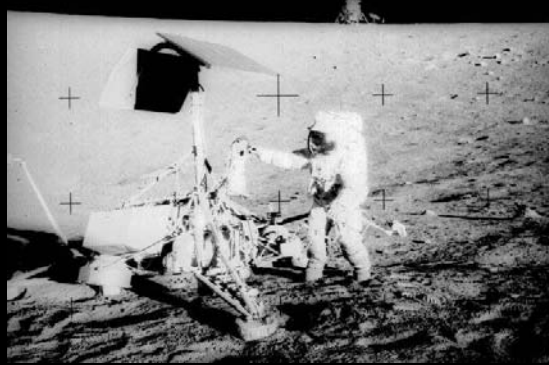


Charte internationale Espace et catastrophes majeures



2002- 2012 : 340 activations

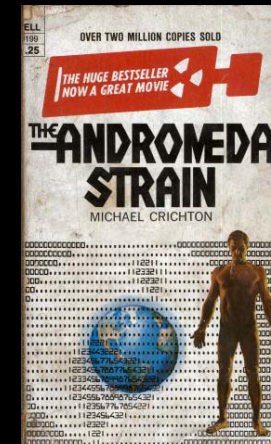
De la vie ailleurs ?

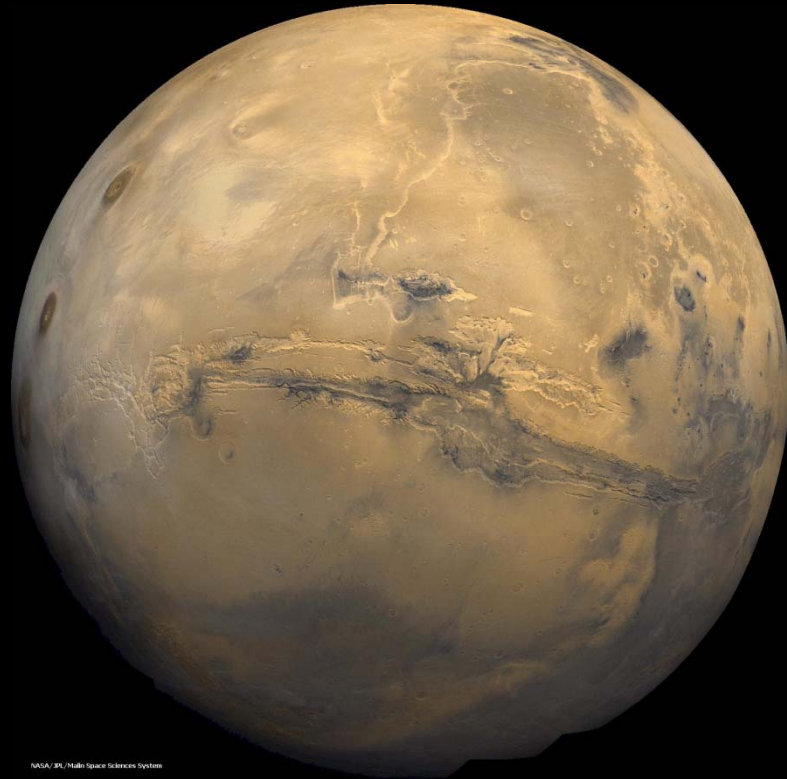


Apollo 12 – Surveyor 3, 1969



Genesis, 10 septembre 2004





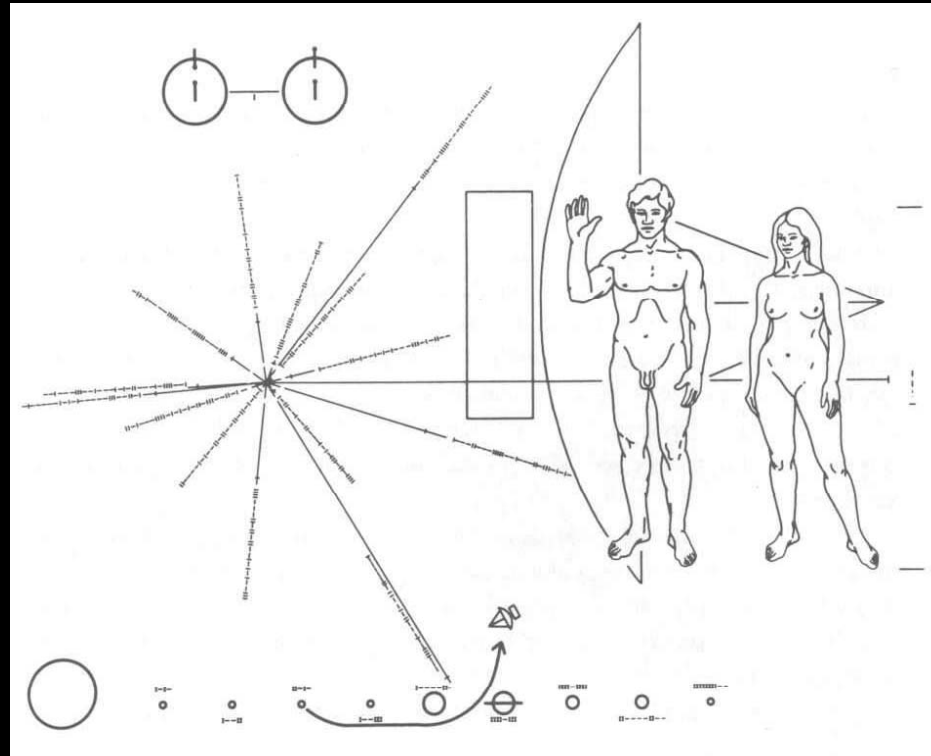
NASA/JPL/Multi-Space Sciences System



?

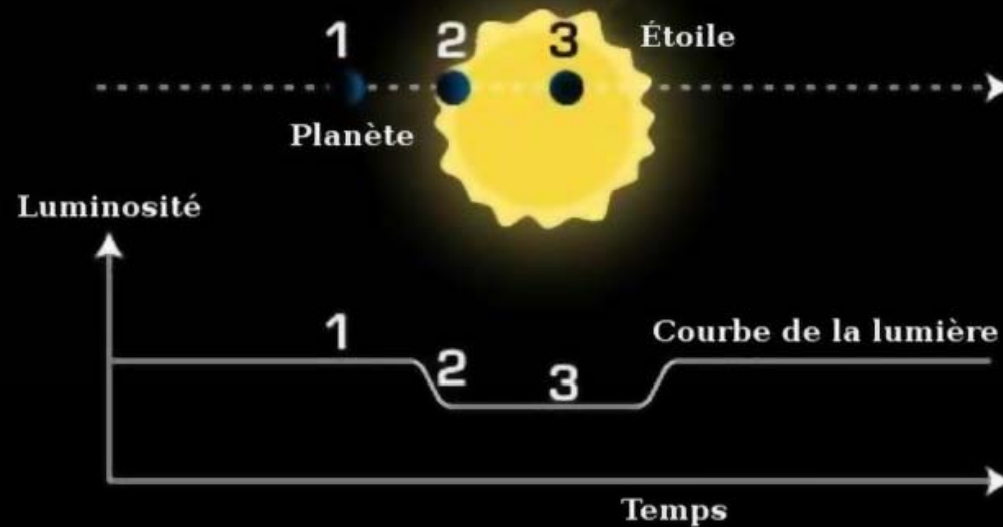


Sommes-nous seuls ?



Pioneer 10, 1972

Les exoplanètes



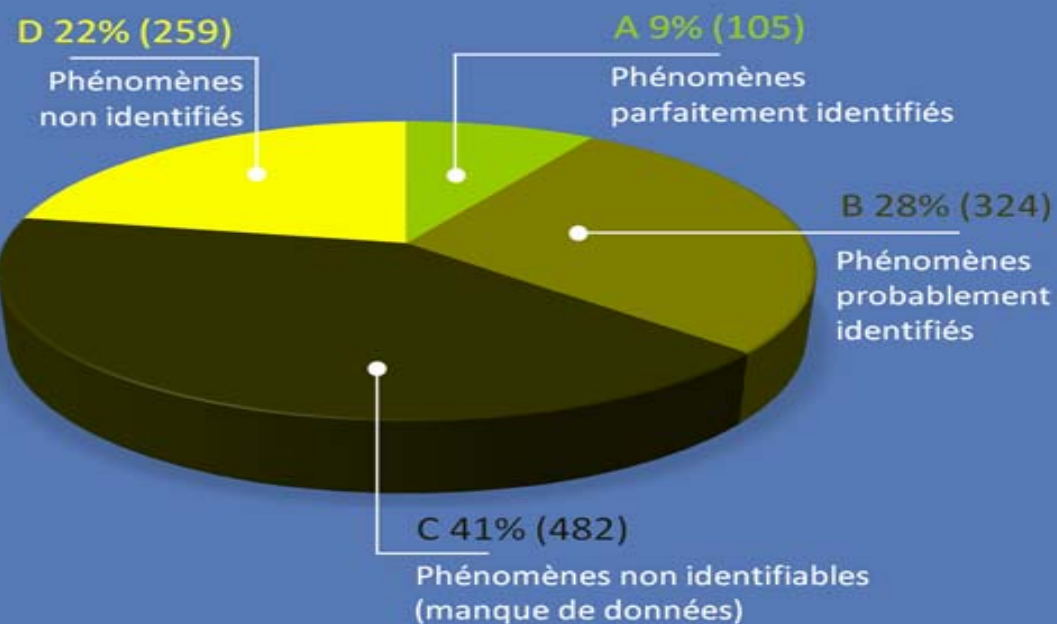
Depuis le 6 octobre 1995 (Michel Mayor et Didier Queloz, de Genève), plus de 900 planètes à la fin de l'année 2013

PAN et autres OVNI





Cas par type de phénomène (28/11/2011)



1150 cas. Sont prises en compte les seules années dont plus de 70% des cas ont été classifiés.

A photograph taken from space showing the Earth's horizon. The sun is setting, creating a bright yellow and orange glow that transitions into a purple and blue sky. The Earth's surface is visible as a dark, curved horizon line.

Merçi