

The Case for Space:

How the Revolution in Spaceflight Opens a Future of Limitless Possibility



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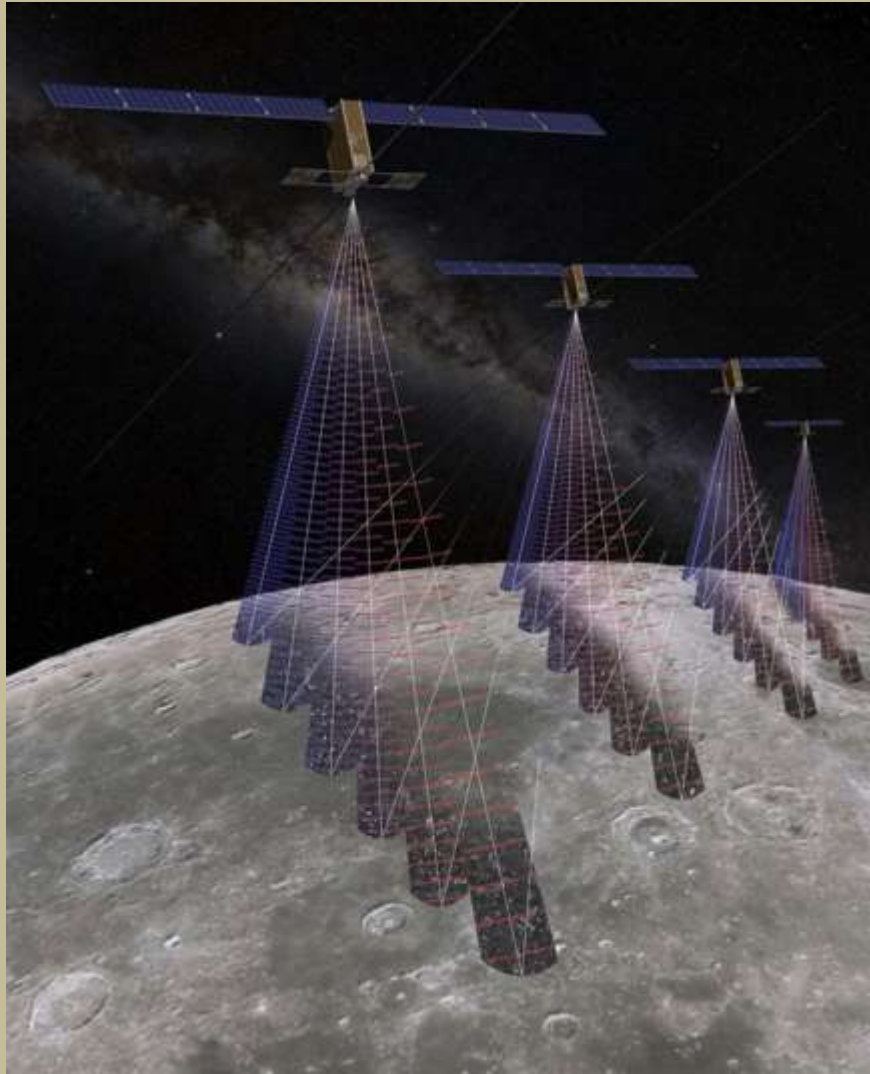
The World has Changed



Not only billionaires are in the game.



The Cubesat Revolution



Flying Everywhere – Through Space





Moon

Phase 1
Base Emplacement

Phase 2
Initial Crew Landing

Phase 3
Recurring Mission

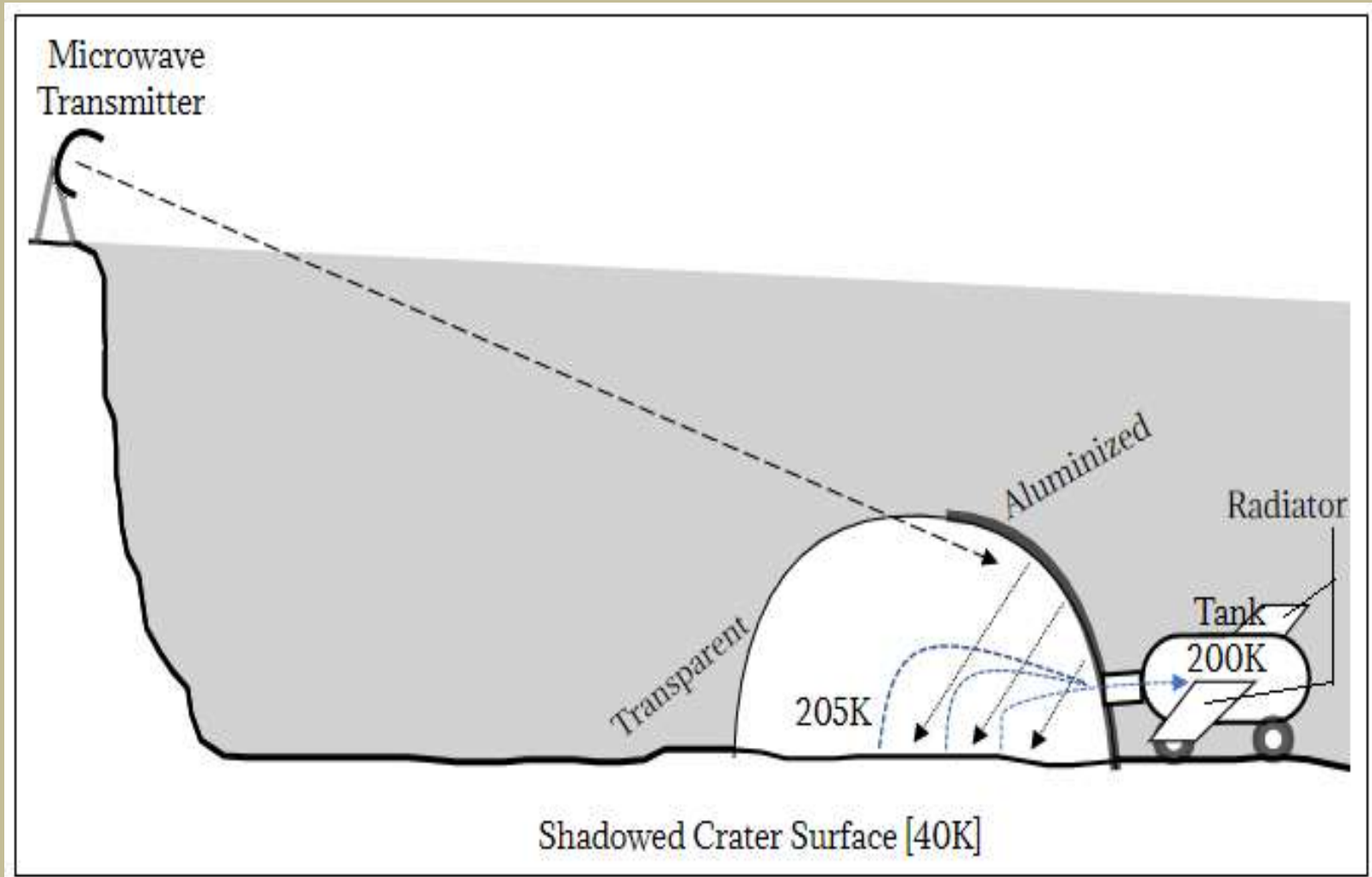


Earth Orbit



Earth

Mining Water Ice on the Moon



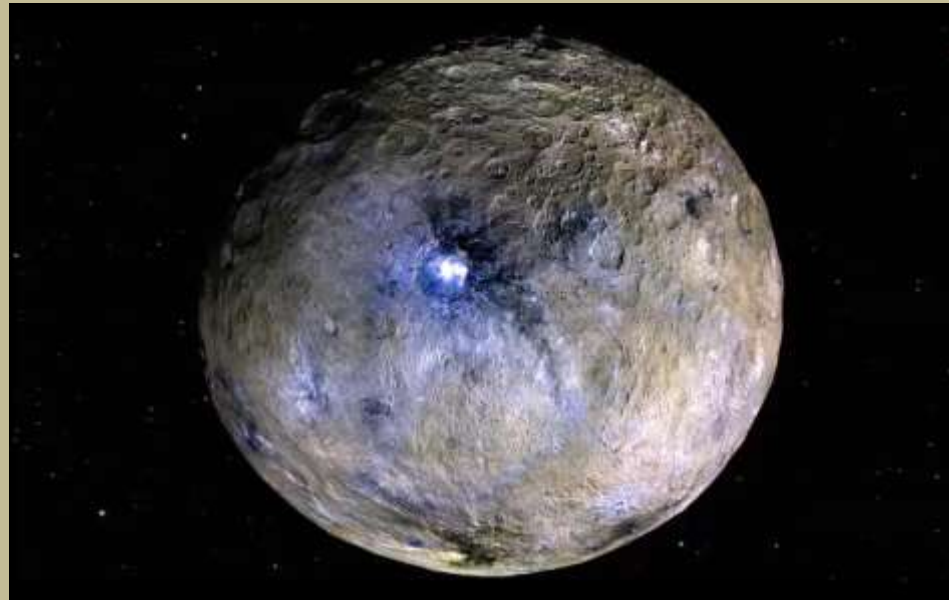
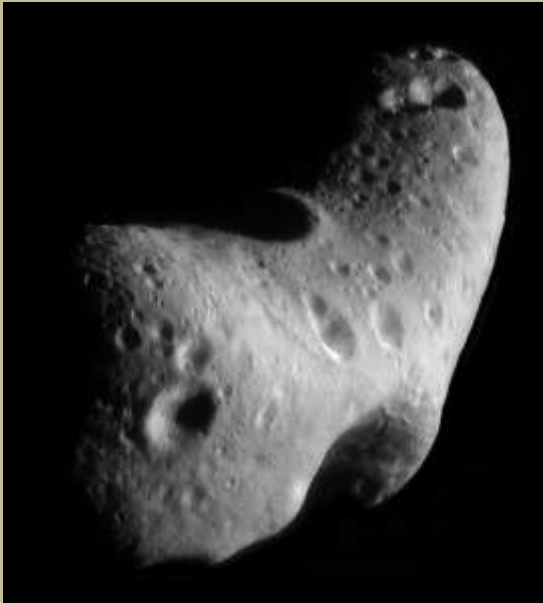
Mars Direct



New Branches of Human Civilization



The Asteroids will be Next.



Value of Components of a Typical Two-Billion Ton Type S Asteroid

<u>Component</u>	<u>Amount</u>	<u>Value/kg</u>	<u>Total Value</u>
Rock	1770 million tons	0	0
Iron	200 million tons	\$0.70	\$140 billion
Nickel	30 million tons	\$13	\$390 billion
Cobalt	1.5 million tons	\$60	\$90 billion
Platinum Group	7,500 tons	\$40,000	\$300 billion

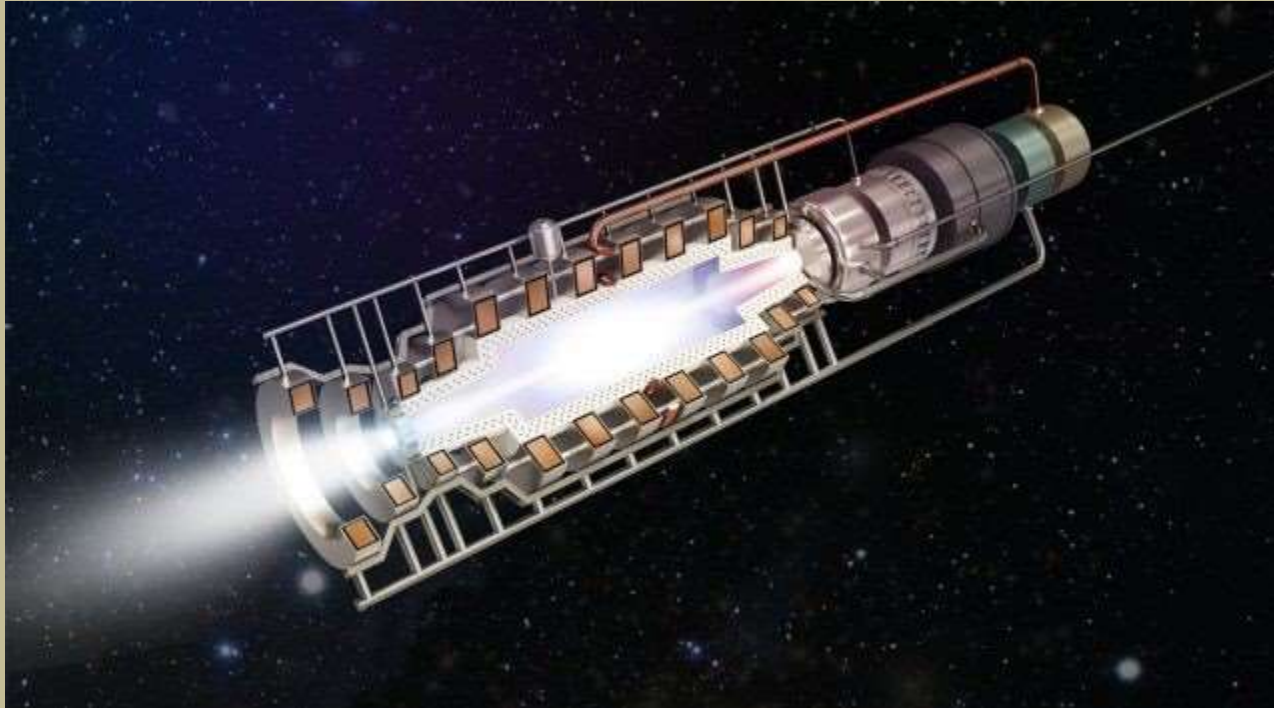
The Our Solar System



The Entrepreneurial Revolution is Spreading to Fusion Power



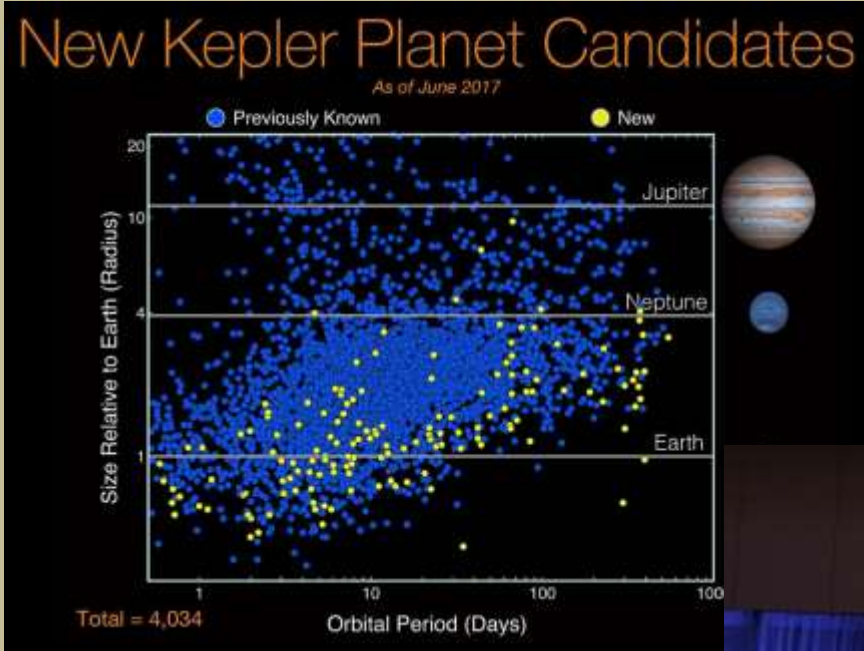
Reaching for the Stars



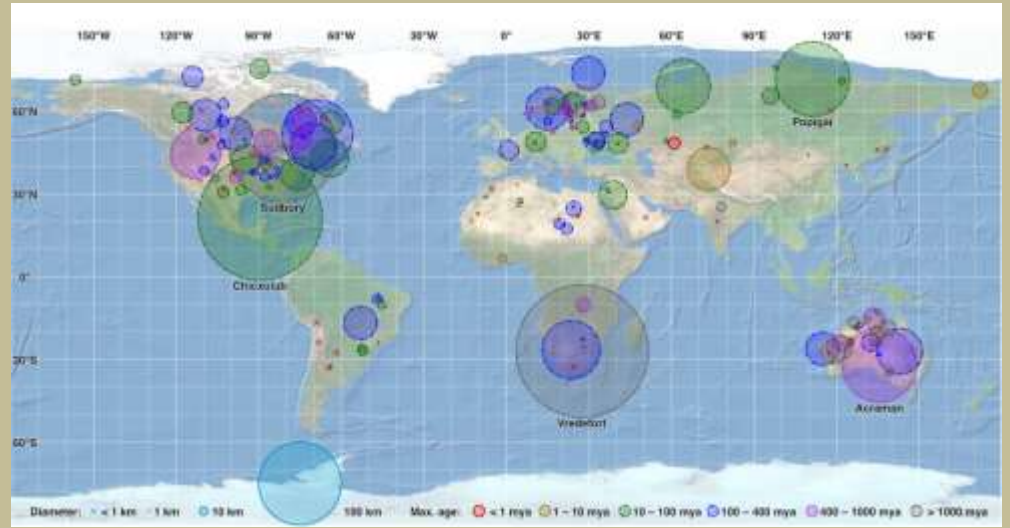
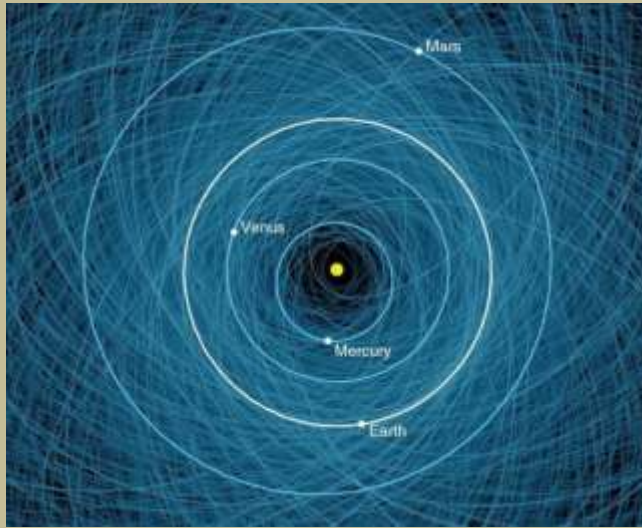
Terraforming: Bringing New Worlds to Life



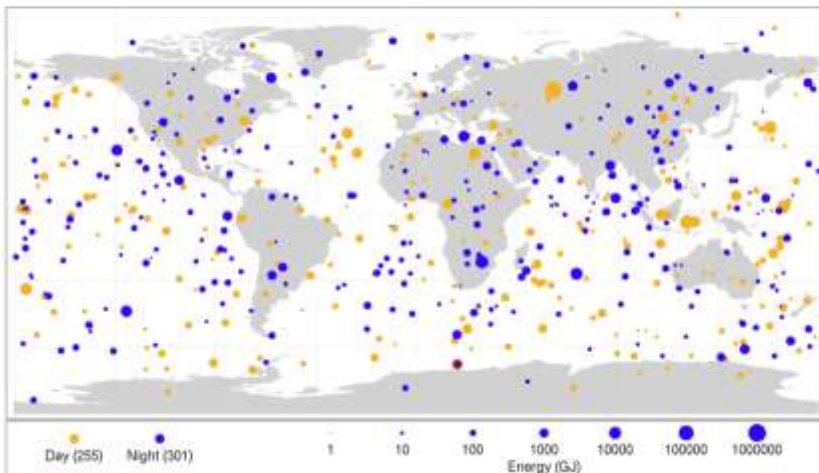
Why: For the Knowledge



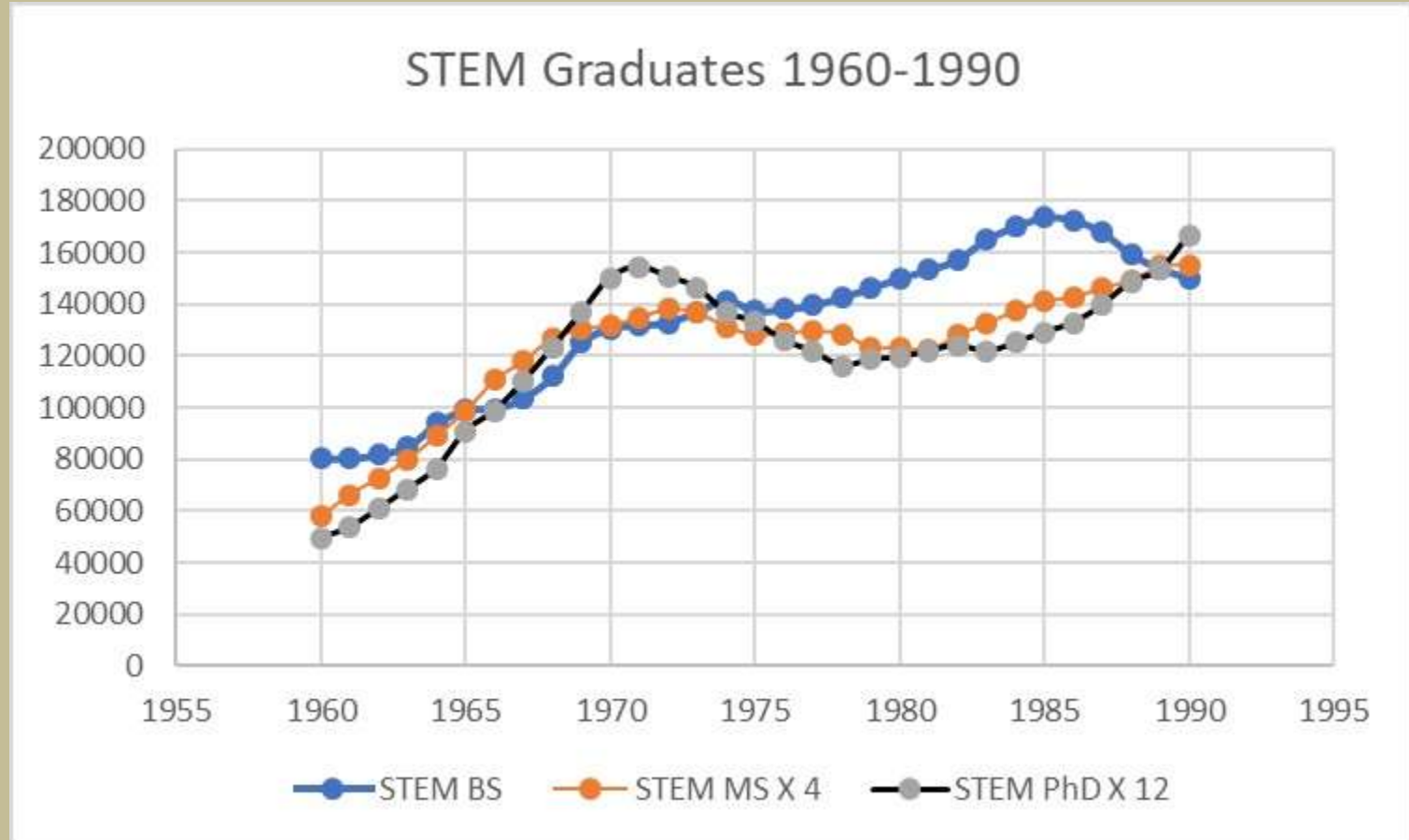
Why: For Our Survival



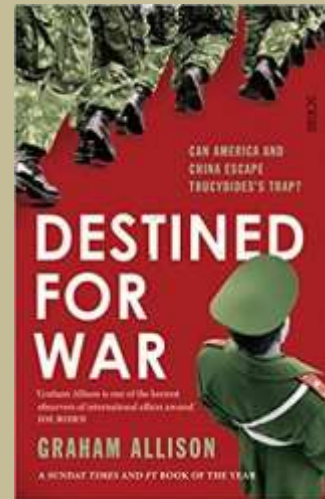
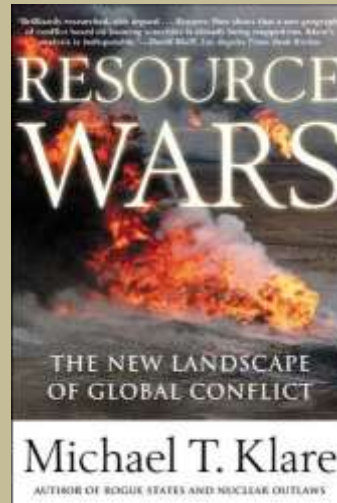
Bolide Events 1994–2013
(Small Asteroids that Disintegrated in Earth's Atmosphere)



Why: For the Challenge



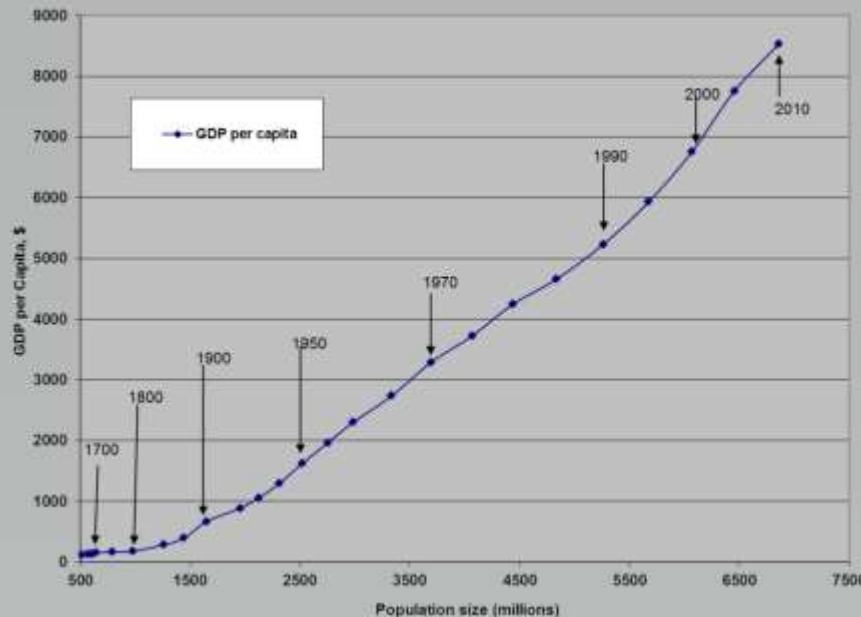
Why: For Our Future



Bad ideas have bad consequences.

The idea of limited resources sets all against all.

GDP per capita vs Population 1500-2010



History has shown it is false.

But we must refute it in a way that all can see.

ROBERT ZUBRIN



THE CASE FOR SPACE

HOW THE REVOLUTION IN SPACEFLIGHT OPENS
UP A FUTURE OF LIMITLESS POSSIBILITY

*"At last, here is the vision we were aiming for when we landed on the Moon.
The Case for Space is the case for the future!"*

—BUZZ ALDRIN, Apollo 11