EO Satellites, Climate Change, Clean Space

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Life on Earth
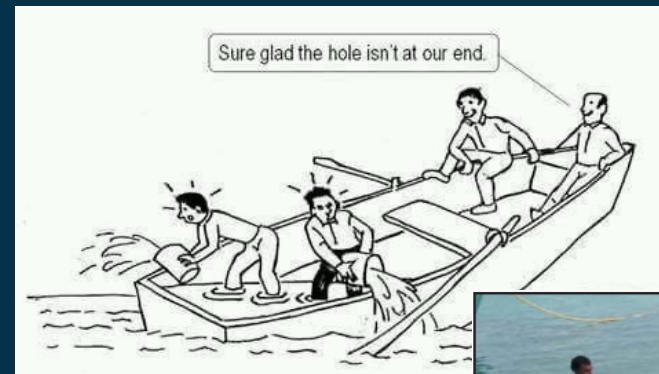

~ 0.25%

not to scale

(Contour thickness exaggerated as a courtesy to viewers)

The Sinking Boat ......

1. immediate action by all

2. ask anyone : you will always get the same identical prediction

3. identity of people does not matter (nationality, race, language)

Nations Unies
onférence sur les Changements Climatiques
COP21/CMP11
Paris, France

Sure glad the hole isn't at our end.

Why ?

Shared awareness of a common, imminent, massive danger.

This is what is missing in the other case

Hence the hesitation to recognise the gravity of the situation

Hence the temptation to post-pone the action

and to accuse the others of having caused it

Ce n'est pas parce que les choses sont difficiles que nous n'osons pas, c'est parce que nous n'osons pas qu'elles sont difficiles.
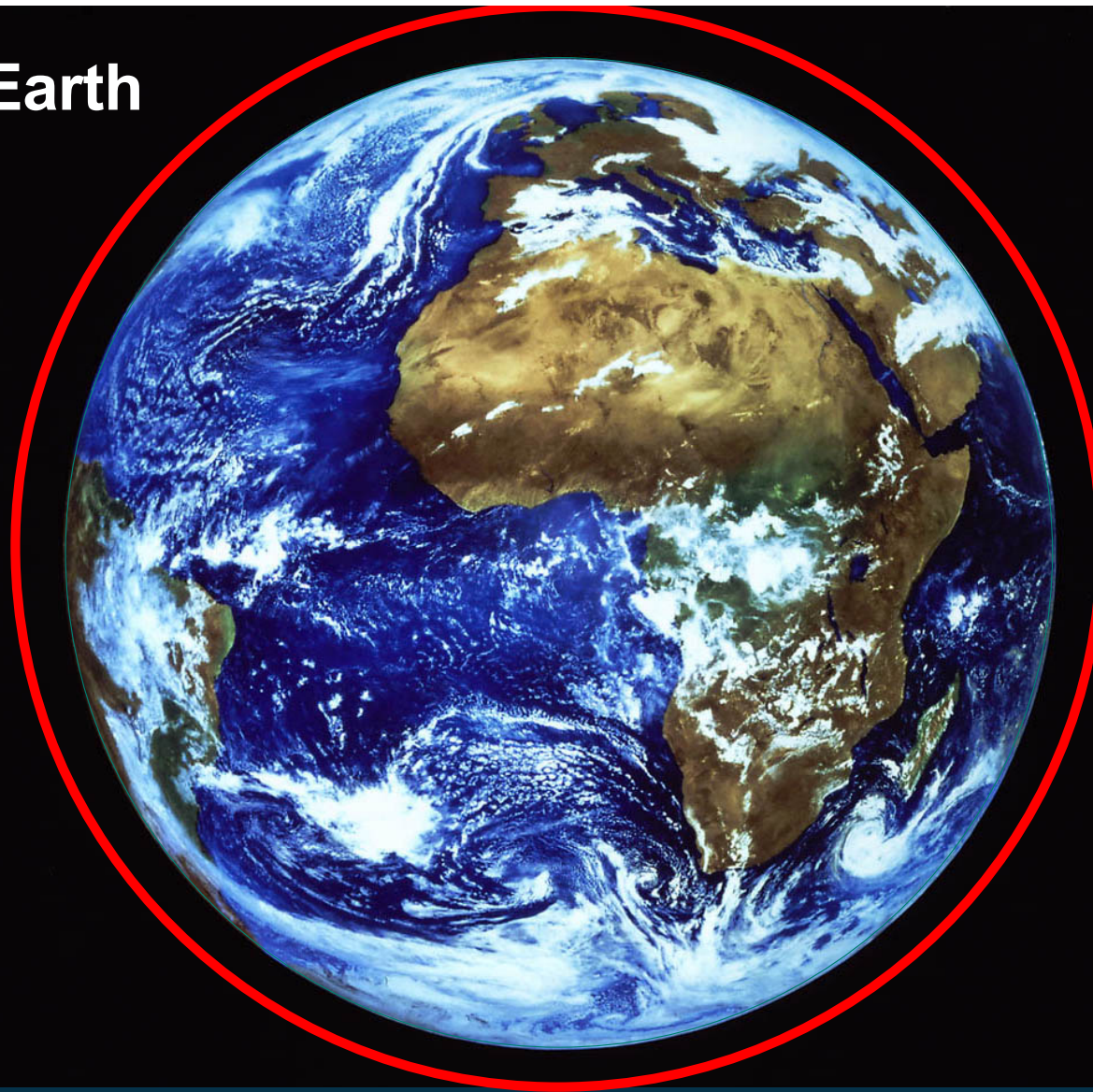
Sénèque
(4 av. J.-C.-65)

What's Key

Satellites are crucial to establish this shared awareness.

The cure ("complex" that it may appear) will then be straightforward.

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Economy on Earth

Clean Earth in a Clean Space

Space is becoming more and more part of the modern economic infrastructure
Space is becoming part of most human activities on Earth

We must preserve Space

A 'non-clean' Space may result in a non-usable Space

Progress is relying on a clean Space, responsible behaviour in Space and usable orbits

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A few Commandments

Satellites end-of-life shall be managed

Demisability: the most effective, safest and cheapest way

For no longer manoeuvrable satellites: removal by ADR

Removal by ADR shall be rendered 'secure' by foreseeing it in the design phase
 => New ESA EO Sentinels will all be equipped with an interface simplifying RVD, grabbing and minimising tumbling

Removal by ADR is not an alternative to demisability but an addition

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The Role of Public Agencies

Lead by Example

Define a Standard (a model, a solution => not something to impose)

Develop Technologies (eg for demisability)

Prepare the European industry

Lead by Example

Lead by Example

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