



Since 1959

Water!

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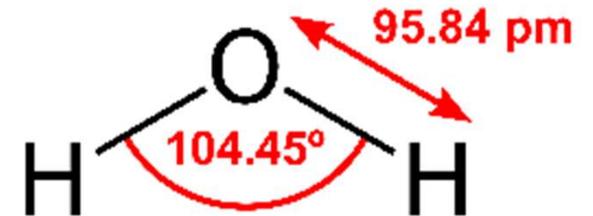
Professor-in-charge



International Centre for Clean Water

Why do we conserve?

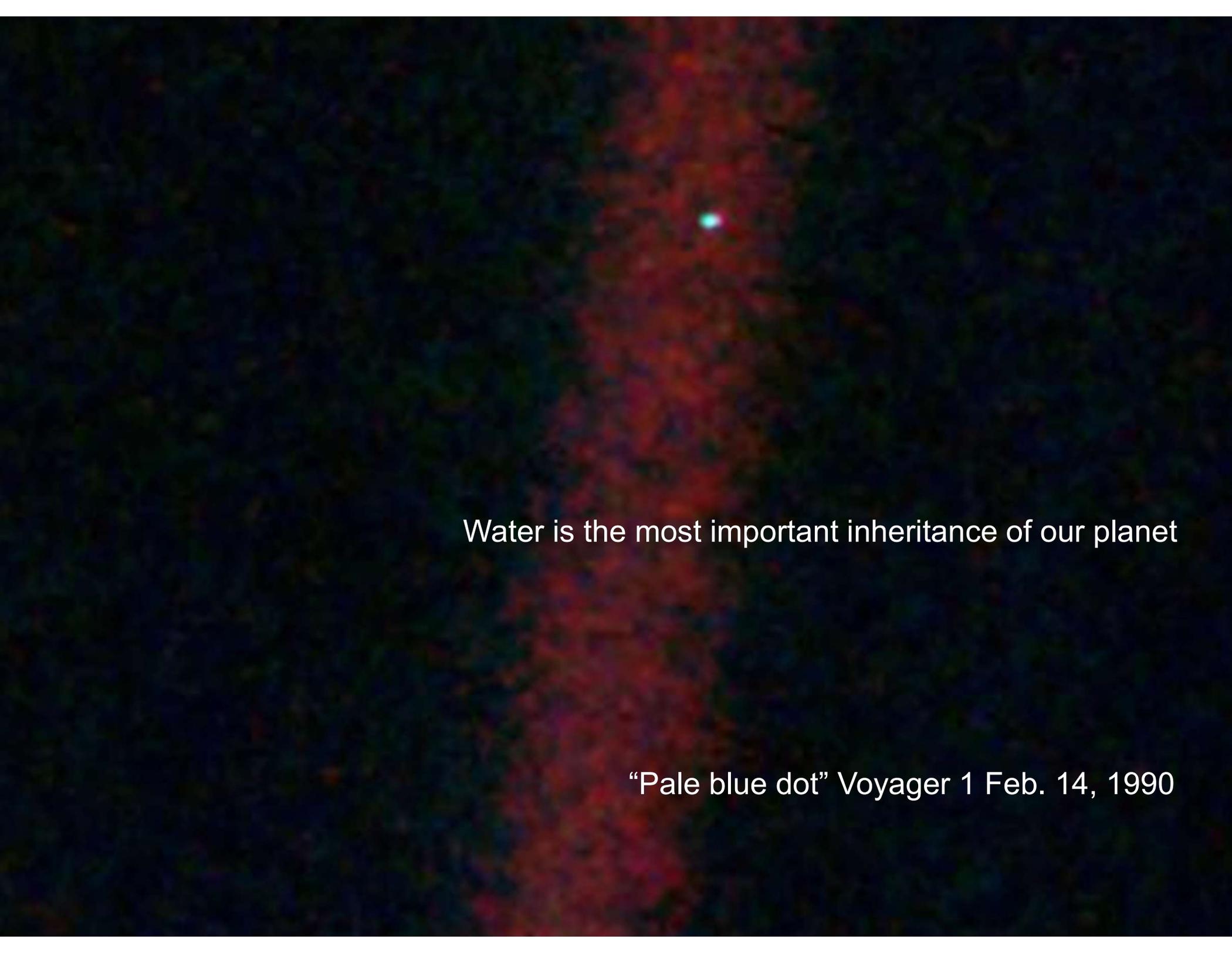
1.386 billion km³
(~1.4 × 10¹⁸ tons)
\$4.31 × 10¹⁴





Earthrise, taken on December 24, 1968, by Apollo 8 astronaut William Andres.

Nature photographer Galen Rowell declared it "the most influential environmental photograph ever taken".

A photograph of Earth as a small blue dot in the vastness of space, taken by Voyager 1 in 1990. The Earth is a tiny, pale blue speck centered in the frame, surrounded by a dark, starry background. The image is a composite of several exposures, showing a vertical band of stars and a faint, reddish-pinkish glow in the background.

Water is the most important inheritance of our planet

“Pale blue dot” Voyager 1 Feb. 14, 1990

The truth

Our economic, social and cultural outcomes can be traced to water.

Water is the simplest and simultaneously the most complex problem of humanity.

Everything simplifies to water.

There is water in everything we do.

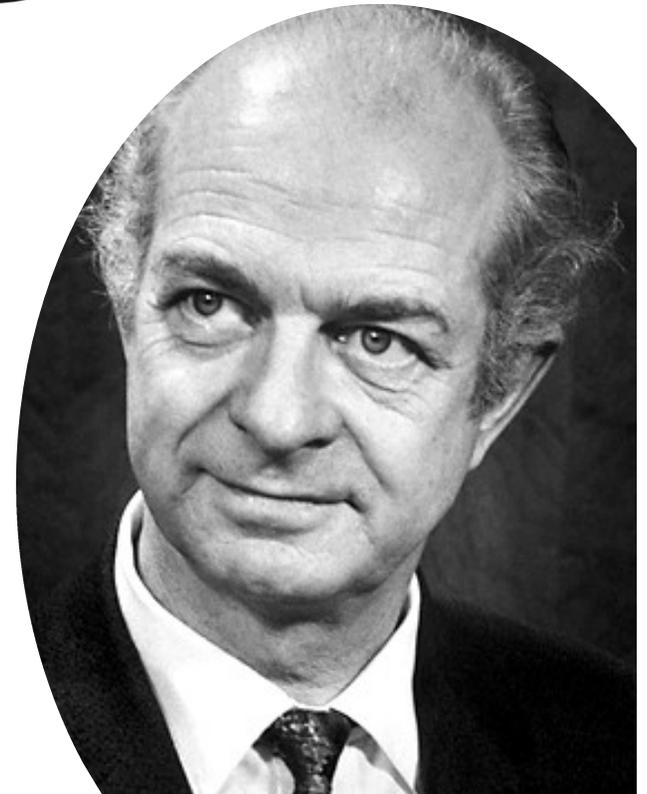
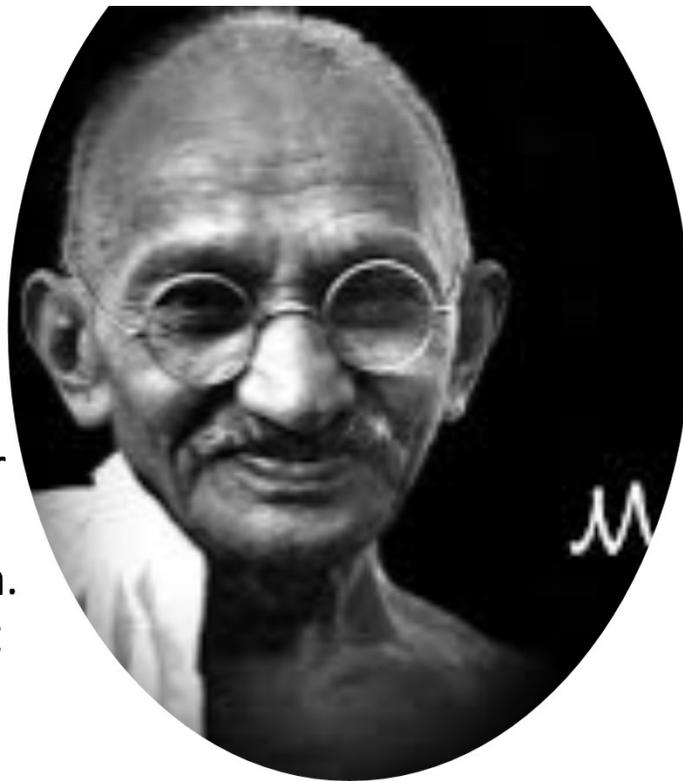


The earth, the air, the land and the water are not an inheritance from our forefathers but on loan from our children. So, we have to handover to them at least as it was handed over to us.

M. K. Gandhi

Life is a relationship among molecules and not a property of any molecule.

Linus Pauling



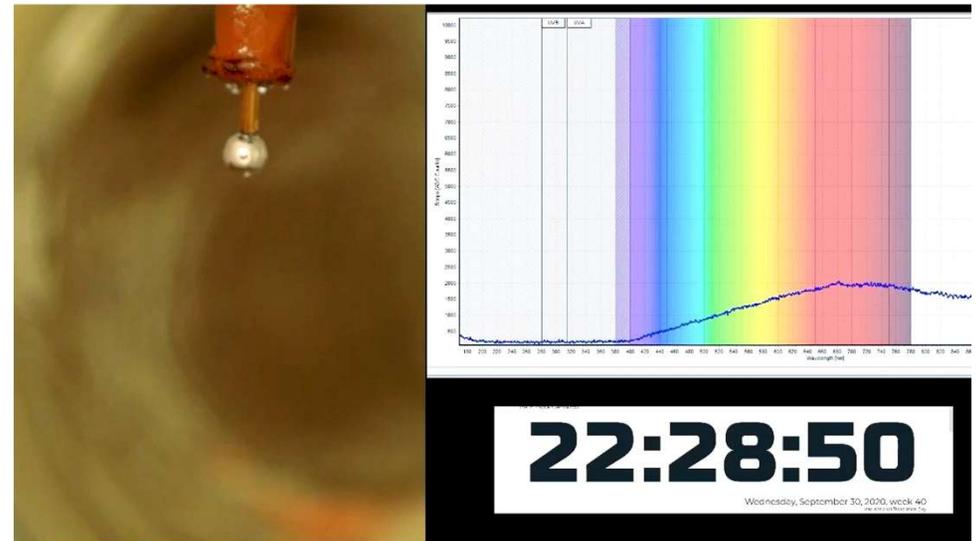
Water continues to fascinate science

Elastic ice



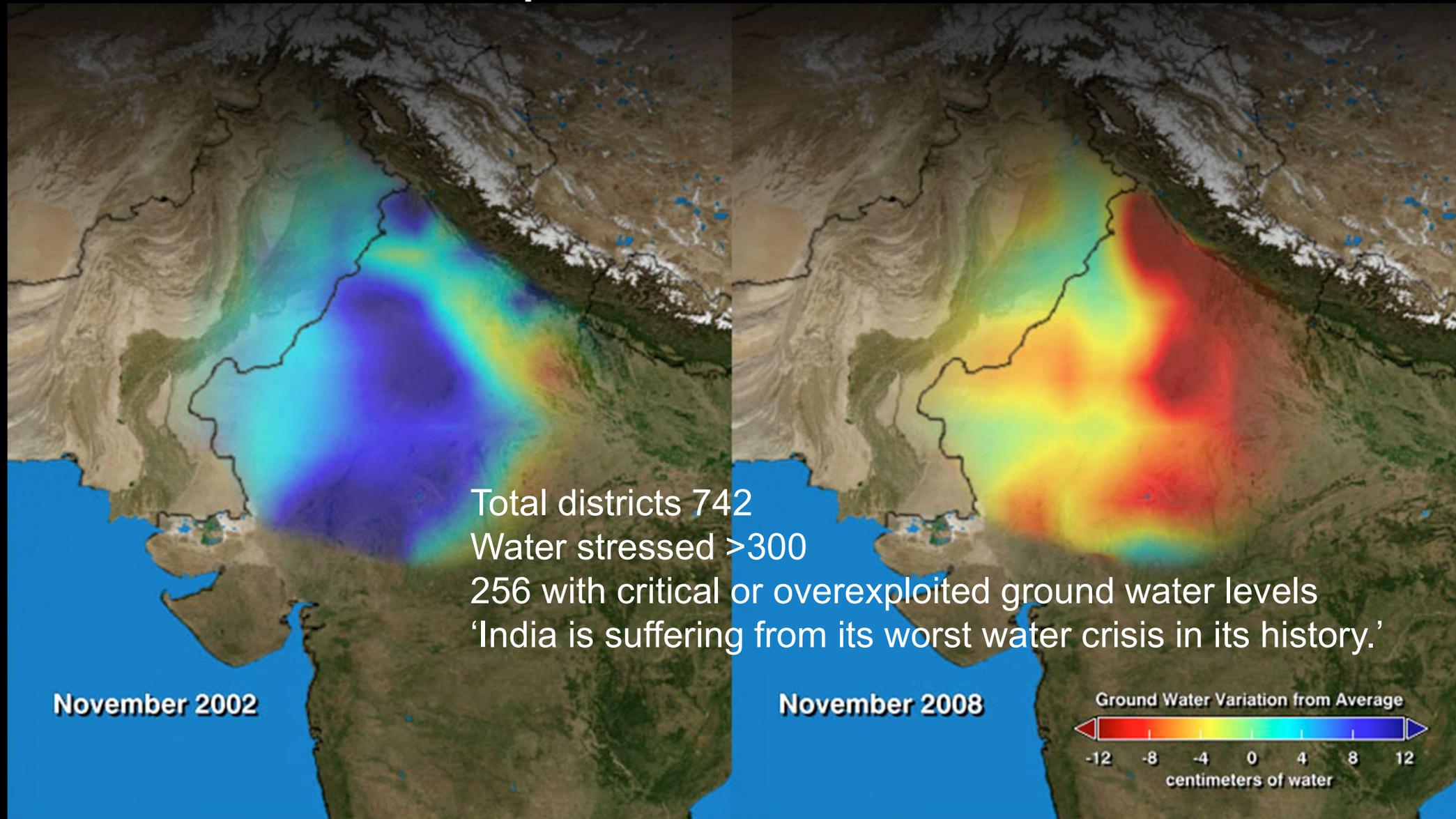
Xu, P. *et al.*, *Science*, **2021**, 373, 187–192

Metallic water



Mason, P. E. *et al.*, *Nature*, **2021**, 595, 673–676

Groundwater depletion



Data from NASA

No river is free of pollution

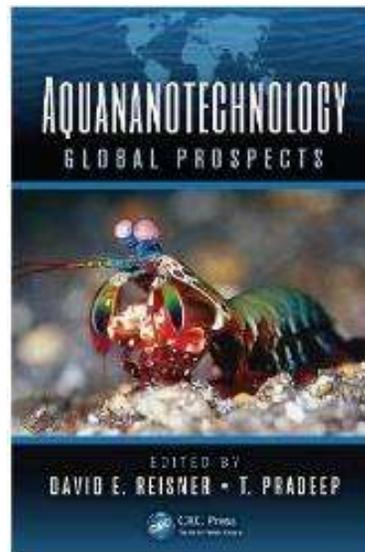


<https://www.livemint.com/news/india/delhi-cpcb-raises-concerns-on-pollution-in-yamuna-river-11607261448670.html>

Dec. 6, 2020

Affordable clean water is a problem of advanced materials

- New adsorbents
- New sensors
- New catalysts
- Novel phenomena
- New devices



Nanomaterials can solve real problems



ACS Sustainable Chemistry & Engineering Editorial, December 2016