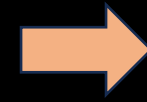


NO WATER NO FOOD

Alain Gachet

Ingénieur des Mines
Président de RTI Exploration

**Climate change + growing population will result in
Rising water demand + shrinking surface water supply**



**FAMINE
TSUNAMI**



5.3 billion

**Two-thirds of the world's population
will be living in an area of severe water
and food stress by 2050 (UN).**

Inter-ethnic conflicts and society fragmentation induced by drought and famine



Copyright
Hans sylvester



Ultimate consequences : Mass migration of populations leading to broader conflicts



Copyright
Hans sylvester

Broader conflicts and wars



Author under protection in Northern Chad by MINURCAT



What can we do to alleviate drought and hunger?



Copyright
Hans sylvester

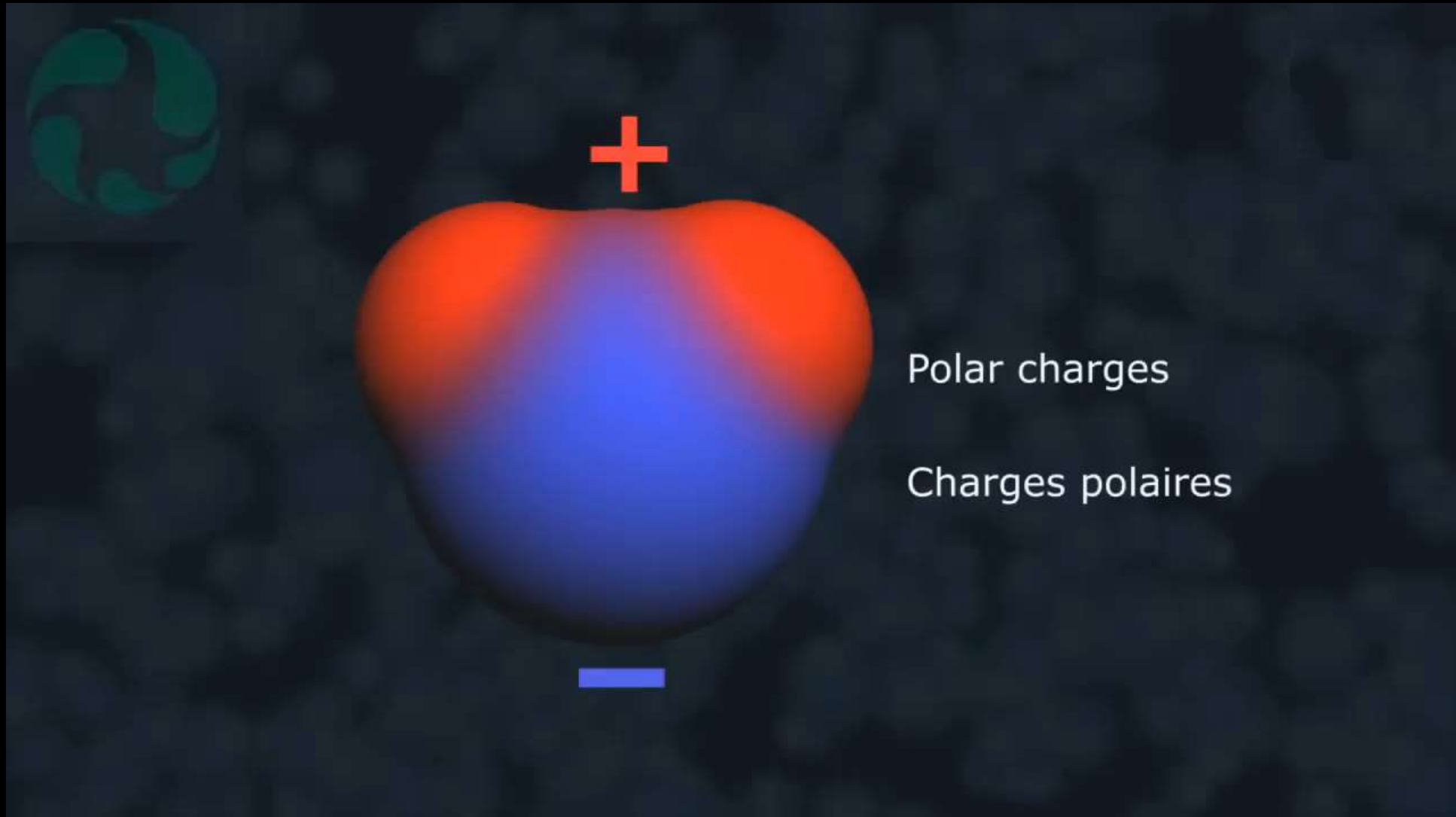
25 years ago I understood that water was the key factor to feed humanity
The only commodity on earth to convert despair into hope



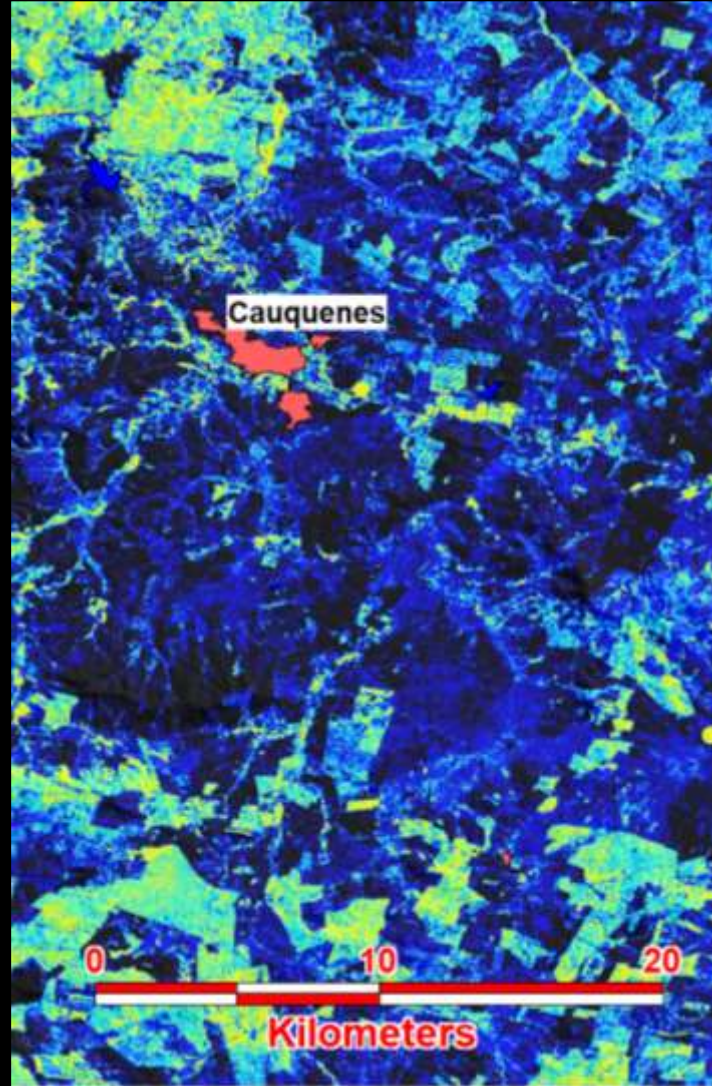
25 YEARS AGO
I HAD A DREAM

TO FIND WATER
TO HEAL THE WOUNDS
OF HUMANITY

**This dream led me to the heart of the extremely strange
and ... attaching behaviours of the water molecules**

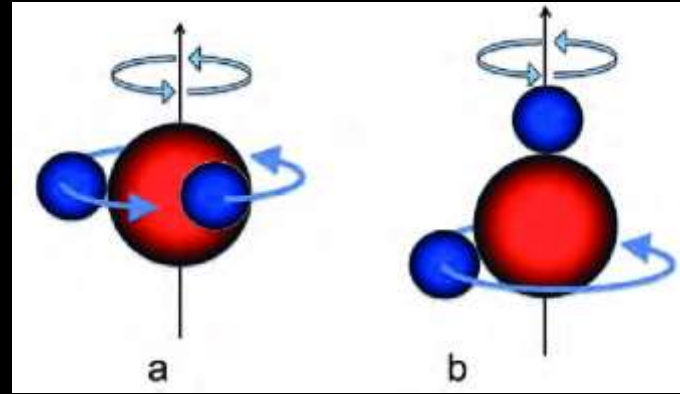
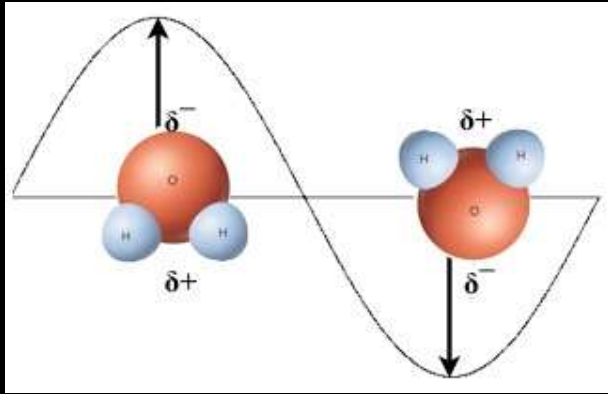


Quantum physics became the architect of my dream



$$\begin{aligned} &8 + 7,800 \\ &0,329 < \gamma \\ &= 66817,3 \\ &168 + 12,648 \quad \left(\frac{1}{5} \right) \\ &5 + 7 - 2 \\ &2,168 + 7,8 \quad \left(\frac{1}{5} \right) \\ &5 + 9 - 2 \\ &12,648 + 7,8 \quad \left(\frac{1}{7} \right) \\ &= (7 + 9 - 2) 5,3 \\ &71 \quad \mu_2 = 0,50 \end{aligned}$$

By understanding in my kitchen, the water molecules agitation accelerated by microwaves in a microwave oven

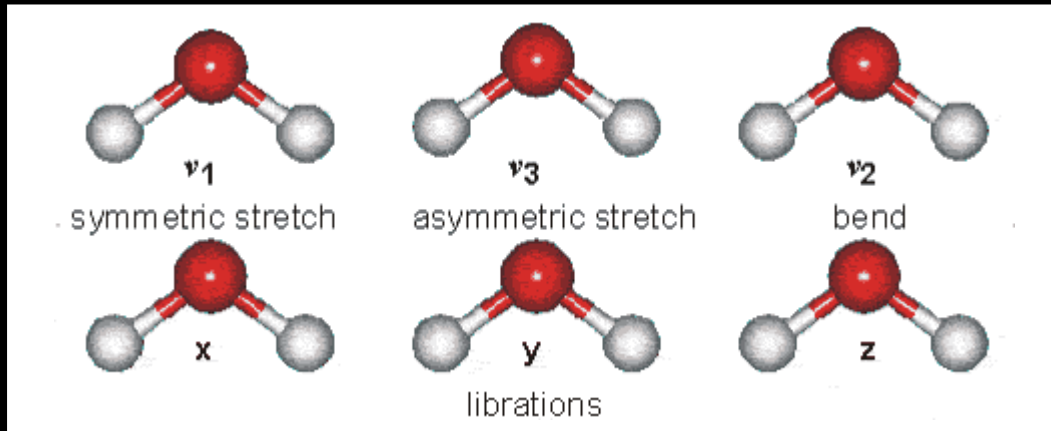


What is happening in a Microwave oven?

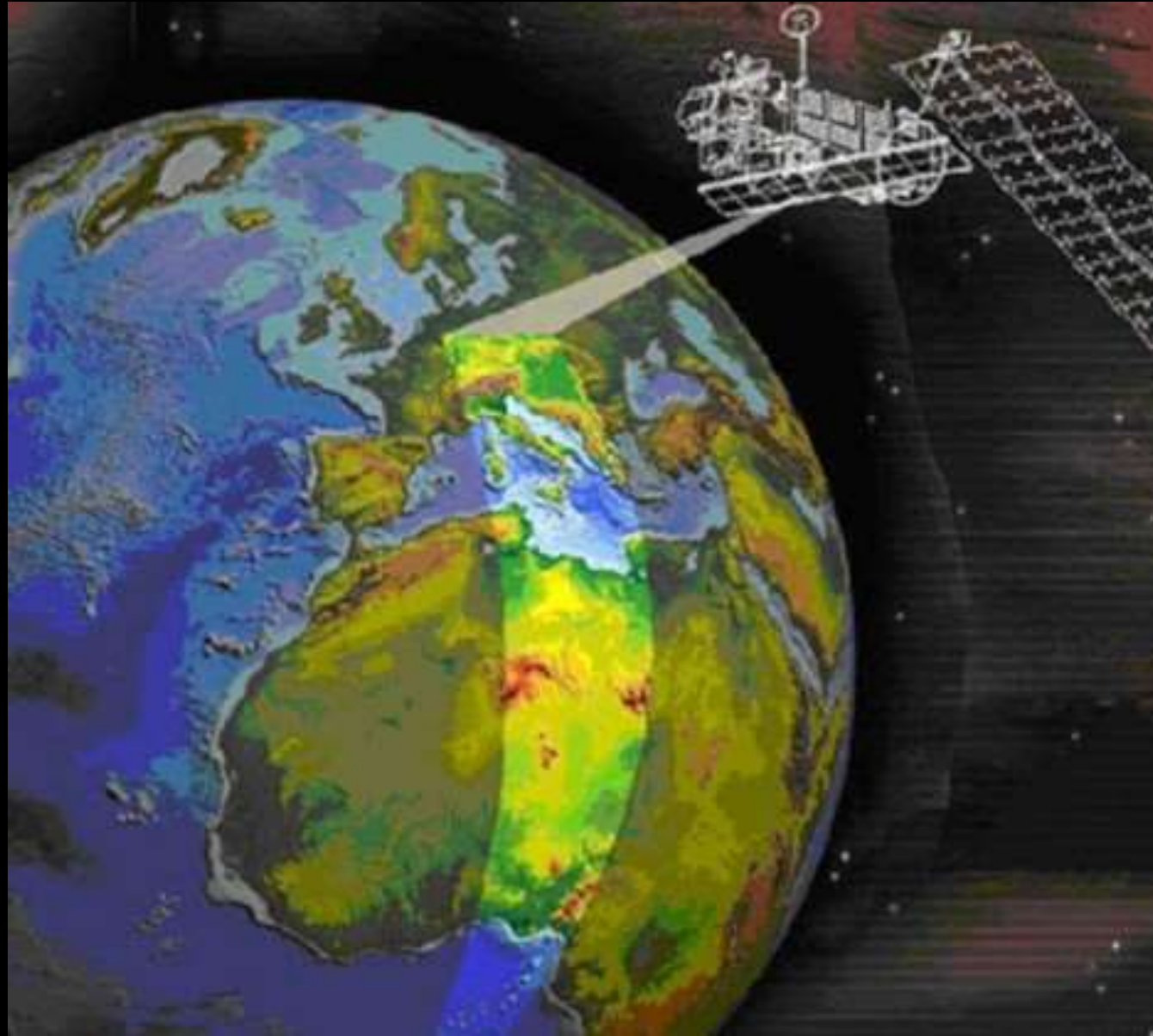
Your food is heated by accelerated water molecular agitation in your plate : how?

The water molecules are now stimulated by microwaves from 4 to 5 billion times per second, impacting each other.

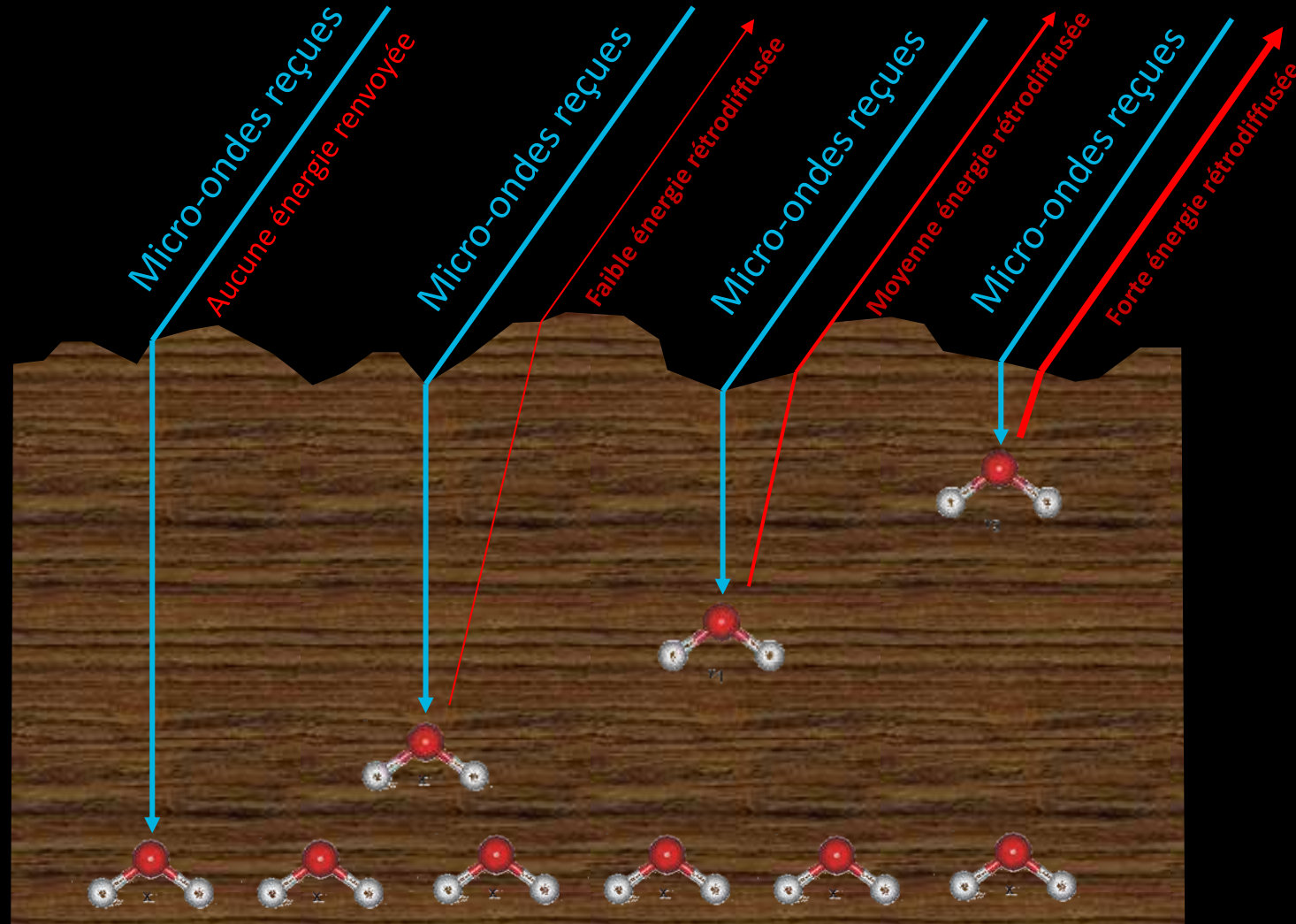
Each impact creates energy transfers which heat the food in your plate



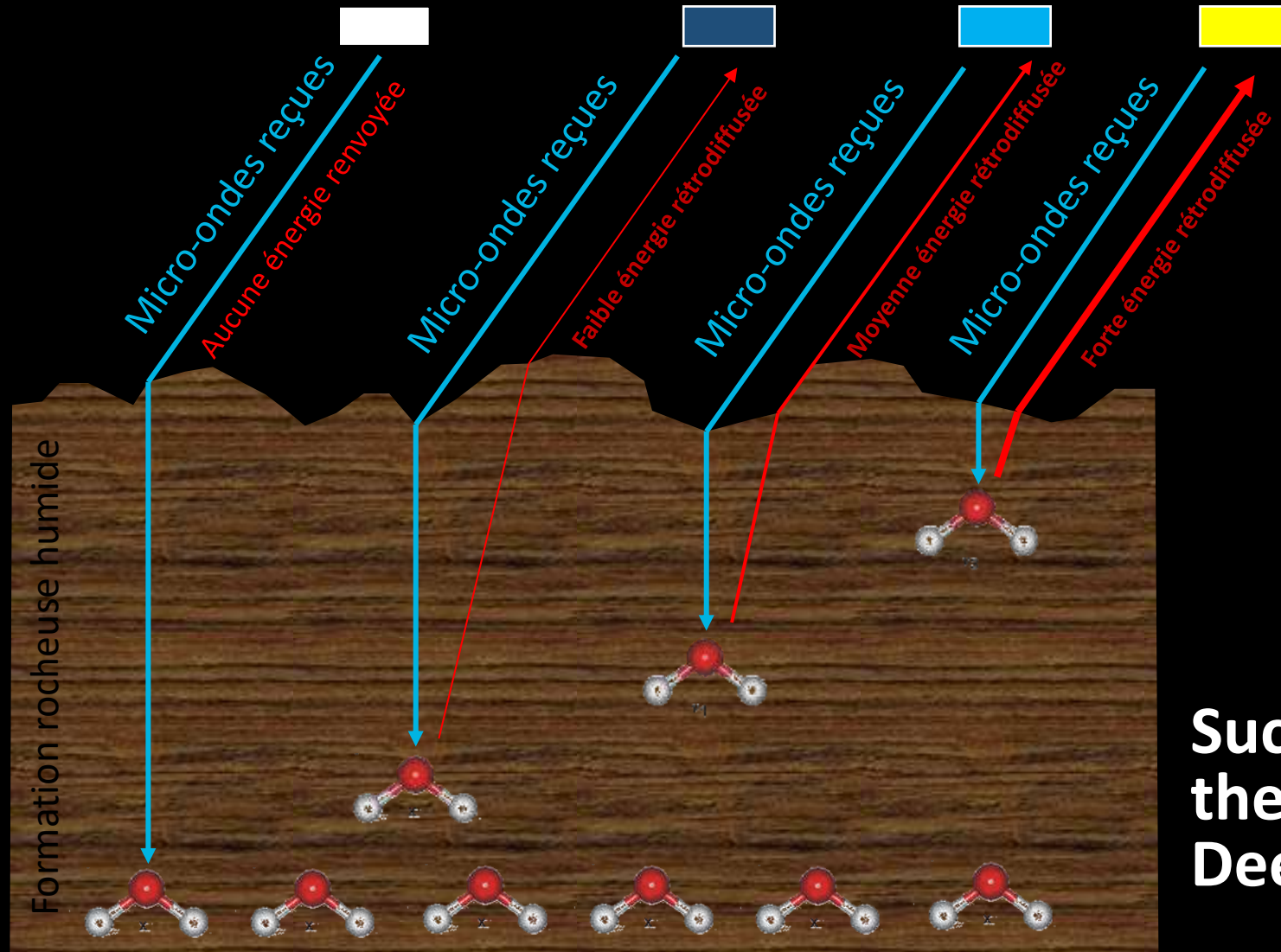
But we can do the same, on greater scale, with the radar satellites
by scanning the surface of the earth from 800 km high



The microwaves sent by the radar beam, penetrate underground to create agitation of water molecules trapped in wet soils, all over entire countries



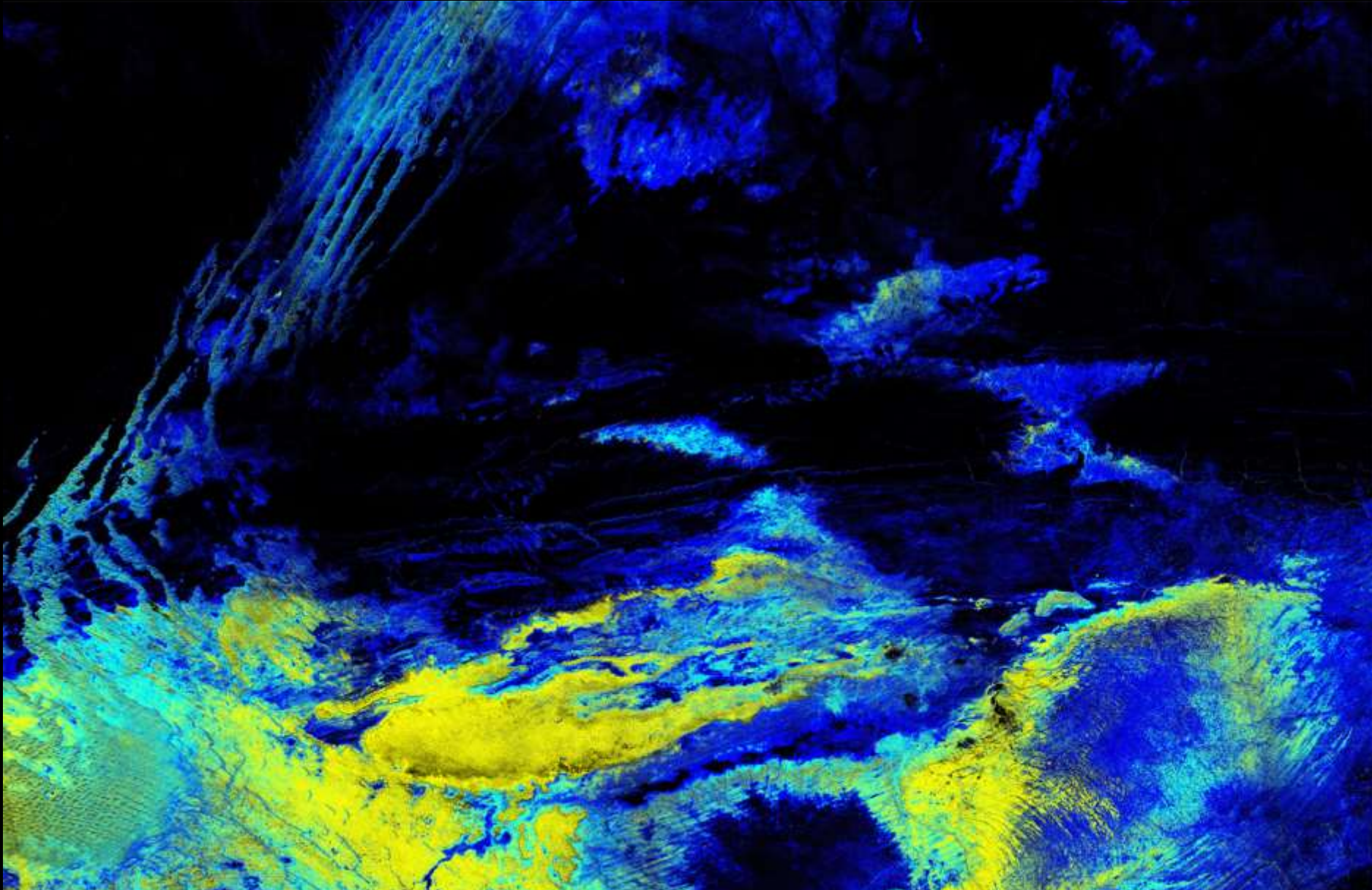
I created the WATEX™ System to convert water molecules agitation energy into colour coded maps from yellow, blue and black => Quantum Physics ($E = hn$)



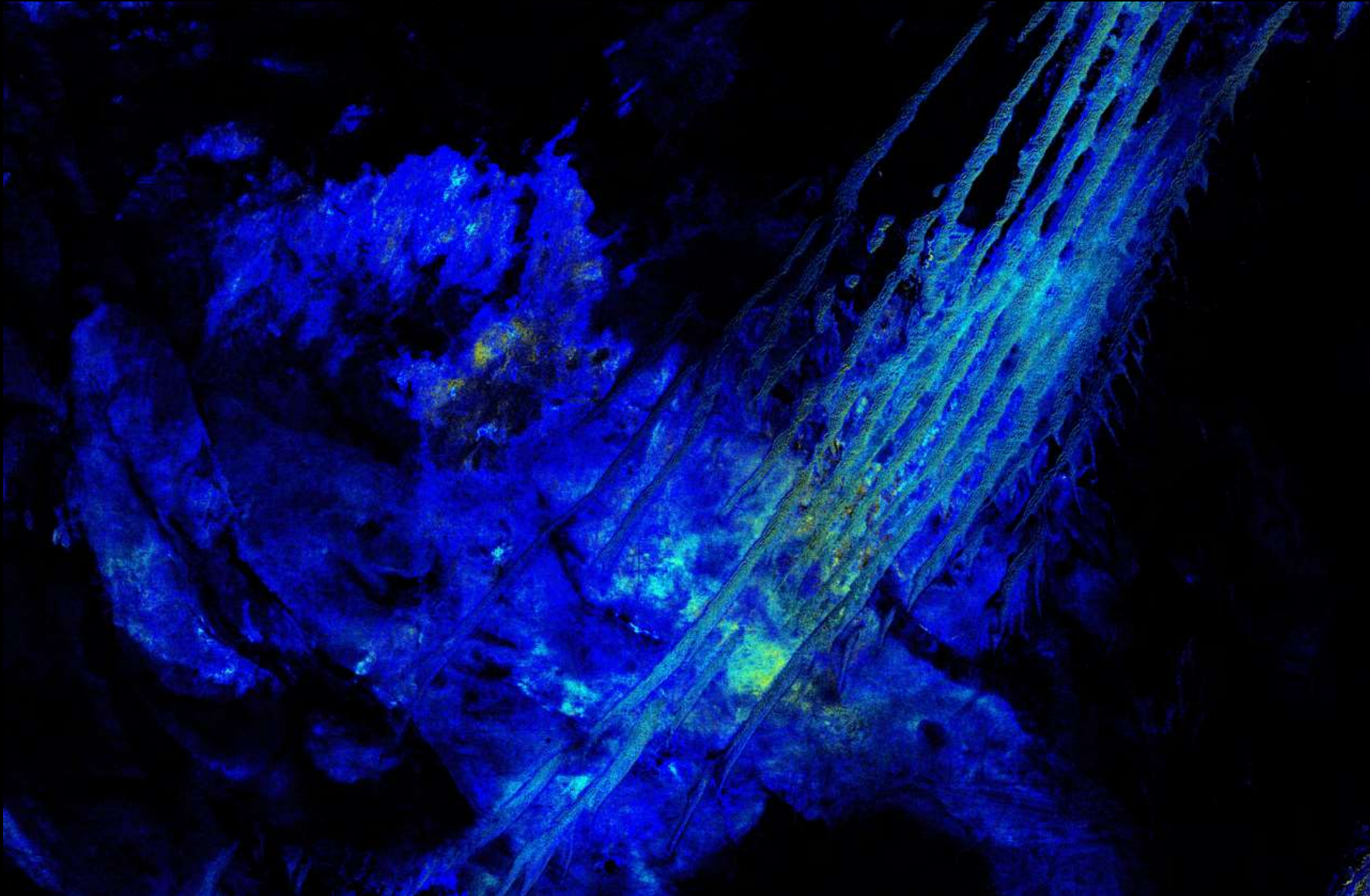
Each impact creates energy transfers back to the satellite

Such return of energy infers the presence of groundwater Deeper in the soil

And suddenly the world uncovered its treasures : spectacular underground galaxies created by the dance of groundwater molecules



The immense beauty and generosity of Nature revealed by singing and dancing groundwater molecules under Mauritania



Uncovering the invisible gifts offered by Nature

deep water reserves = Water for the future

NASA OBSERVATION CONCLUDES THAT :

DEEP WATER

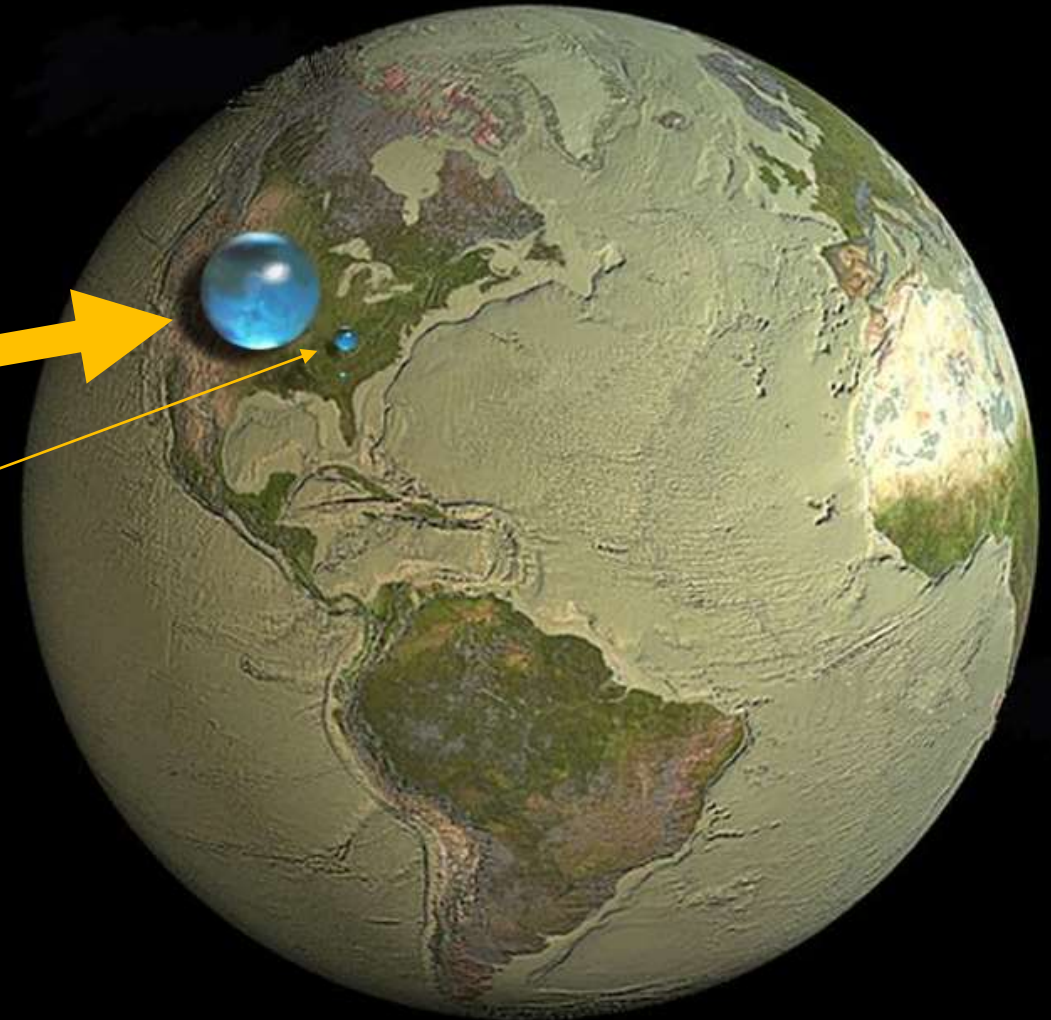
10.530.000 km³

97%

RIVERS AND LAKES

93.113 km³

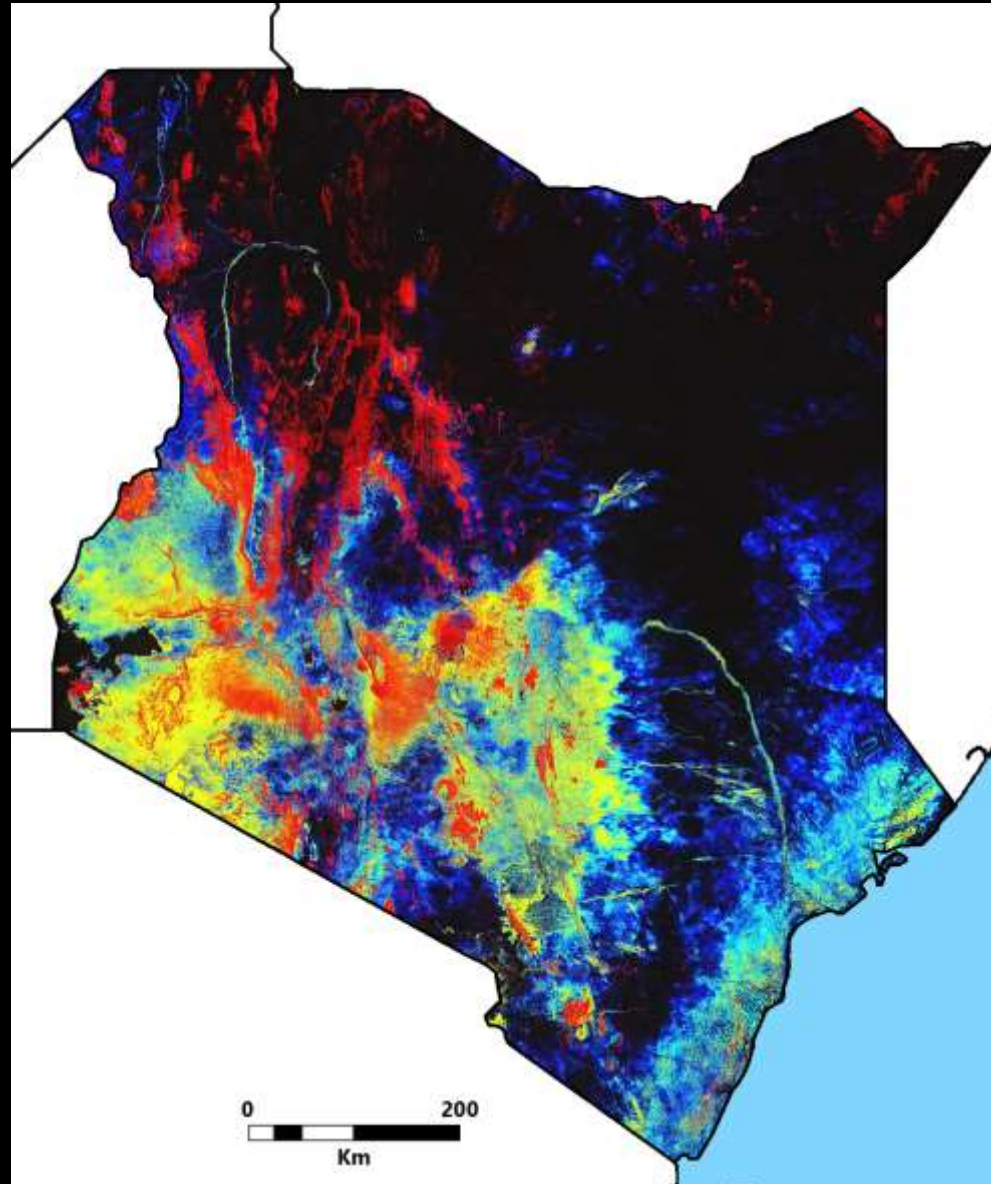
3%



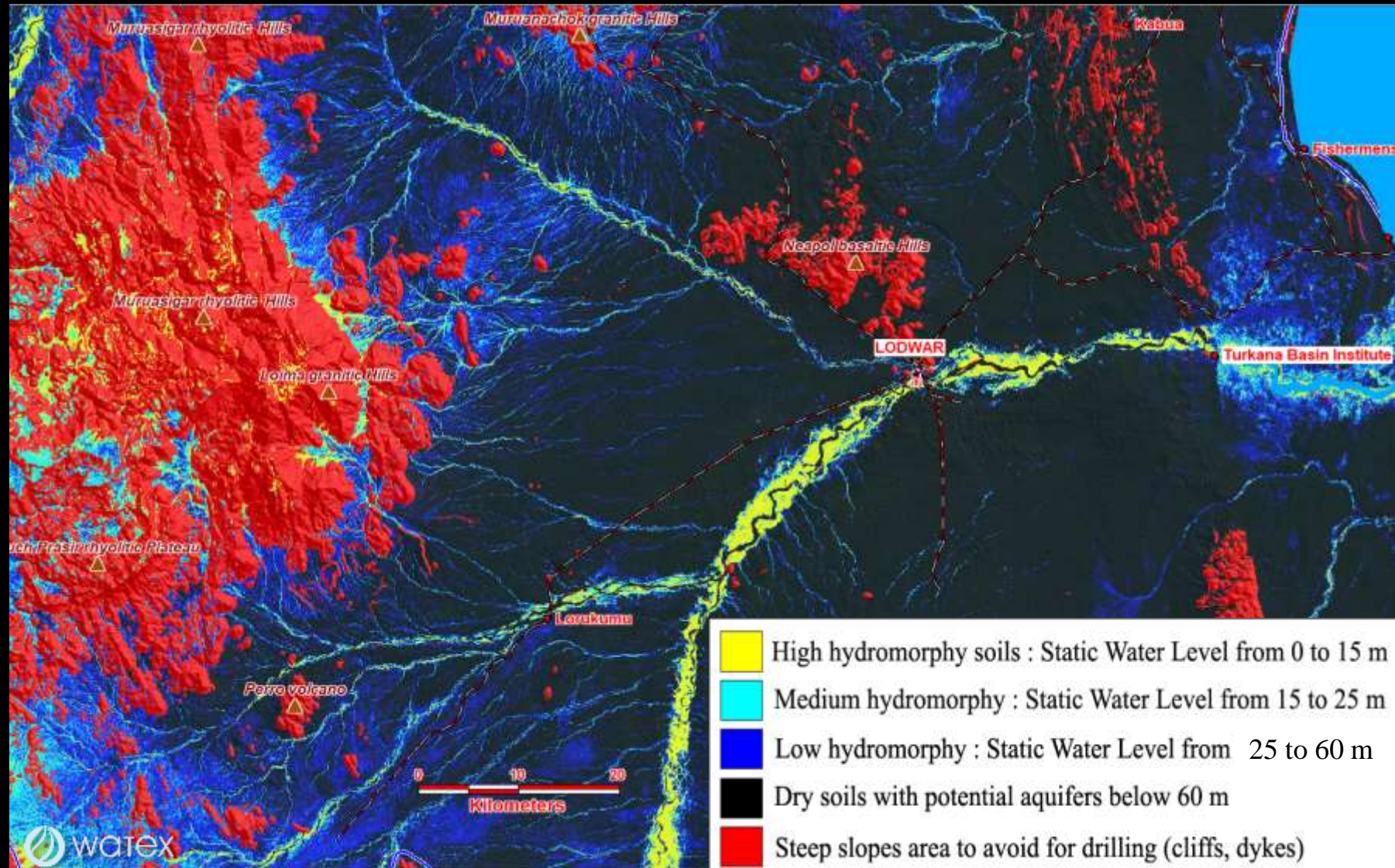
Gift of Nature converted into maps : The WATEX™ System revealed the invisible water stored underground in Kenya.

KENYA groundwater mapped from 5 m to 60 m not visible from surface

This map of North Kenya, tells where and how deep to drill with a success rate of 98%



From this WATEX™ image of North Kenya (July 2021)



We converted the dream into reality



We knew exactly where to drill and in 3 days, RTI unlocked the water of a gigantic aquifer in North Kenya



Fast drilling for Decentralized Autonomous access to drinking water and small-scale irrigation



Fast low-cost clusters of prosperity to supply water and food to communities and their cattle



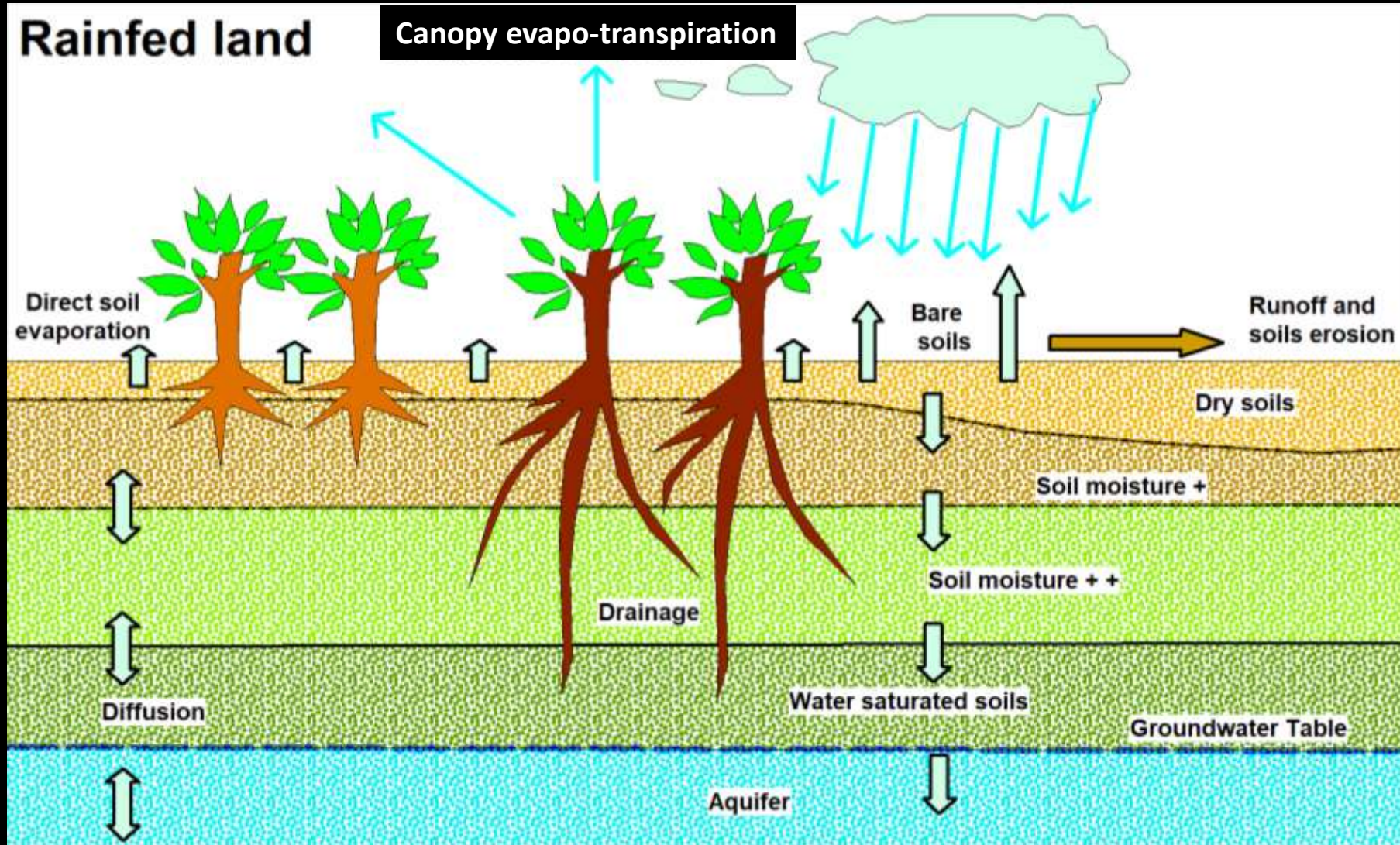
REFORESTATION

A nation that destroys its soil destroys itself.
Forests are the lungs of our land, purifying the air
and giving new strength to our people.

Franklin D. Roosevelt

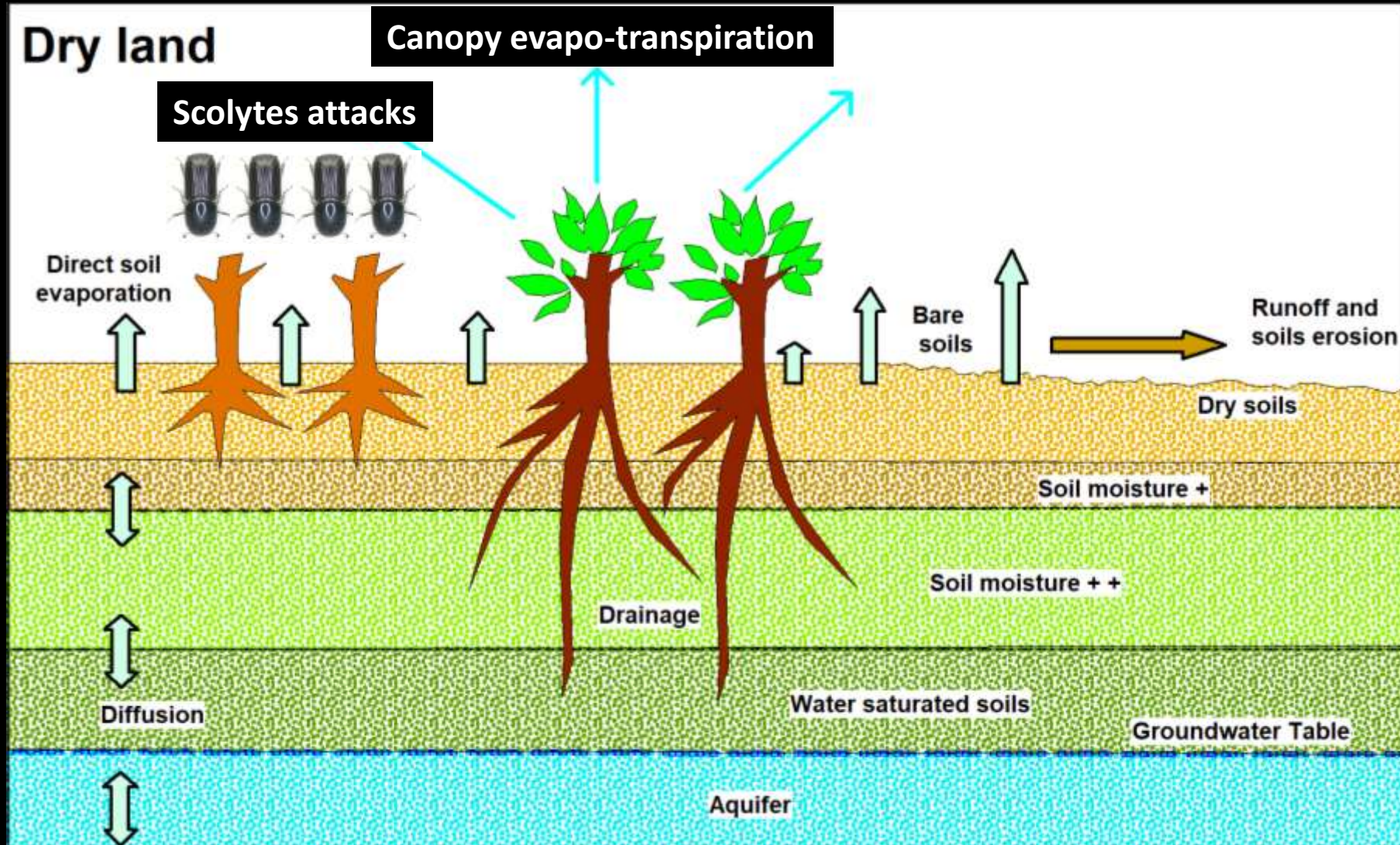
Reforestation why?

Vegetation cover and soils protect groundwater from evaporation and promote aquifer recharge



Climate change is making some trees more vulnerable than others.

Trees can survive drought and insect attacks only if their roots reach the saturated zone: dry trees are vulnerable to fires.



Reforestation what? Long root trees can resist drought

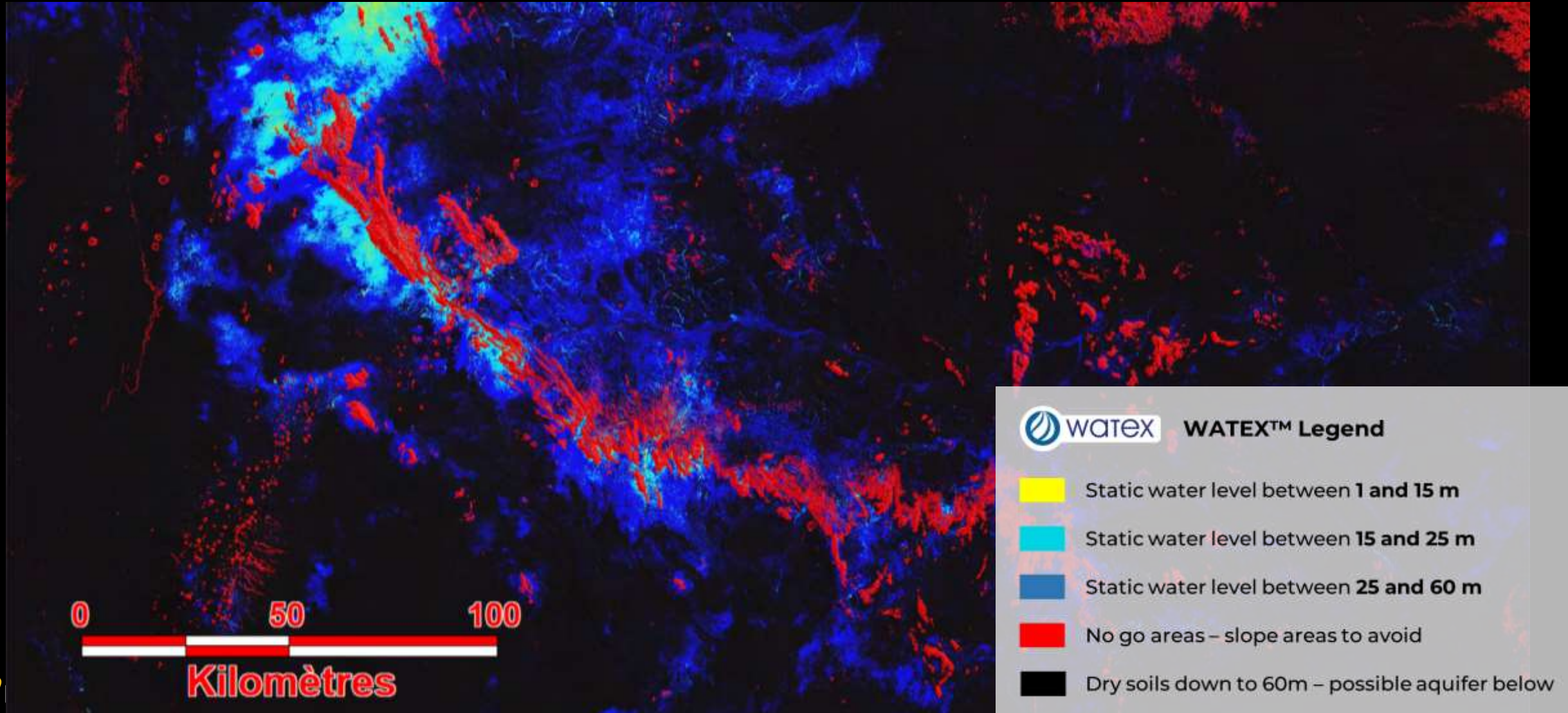
Acacias are fast-growing, well-adapted to dry and hot countries, and have an ability to germinate easily when cut. They require minimal management

- **Tamarin** (food)
- **Caroubier Ceratonia Siliqua** (food)
- **Acacia senegalensis** (Arabic gum)
- **Acacia Mesquite** (food for livestock and 20 m long roots)
- **Acacia cachoutier** (Cachou)
- **Acacia Nilotica** (Medicinal use)
- **Shea tree** (The extensive root system is essential for surviving the dry seasons of savannah climates. It can withstand heavy fires)
- **Boswellia** (Incense tree)
- **Arganier** (25m long roots)

Ban Monoculture : spruce, eucalyptus, cannot feed humanity

Reforestation where?

Reforestation should only be done where the roots can reach the water within 20-30 m of the surface : avoid black and red areas.



RTI projects achieved since 2004

NIGER



2019-2021

**NIGER
DEEP WATER PROJECT
over 720 000 km²**

**CHAD -
SUDAN**



2005-2008

**CHAD-SUDAN
Drilling of 1,800 wells in Darfur
over 200 000 km²**

**IRAQ &
Kurdistan**



2011-2017

**IRAQ
Post war reconstruction
over 430 000 km²**

**COSTA
RICA**



2018

**COSTA RICA
WATEX™ inventory
over 50 000 km²**

KENYA



2013-2021

**KENYA
Discovery of 4 giant aquifers
of about 66 trillion freshwater
over 50 000 km².**

**ETHIOPIA
Somali
Region**



2014

**ETHIOPIA
DEEP WATER PROJECT
over 50 000 km²**

Dr. Gachet inducted in the HALL OF FAME by the Space Foundation April 2016, in Colorado Springs

« Head in the stars, feet in the dust with Buzz Aldrin »



“Do what is necessary”

“Do what is possible”

“And suddenly you realise you are doing the impossible”

St Francis of Assisi

Thank you for your attention

