



REPUBLIC OF TUNISIA
Ministry for the Higher education
and Scientific Research



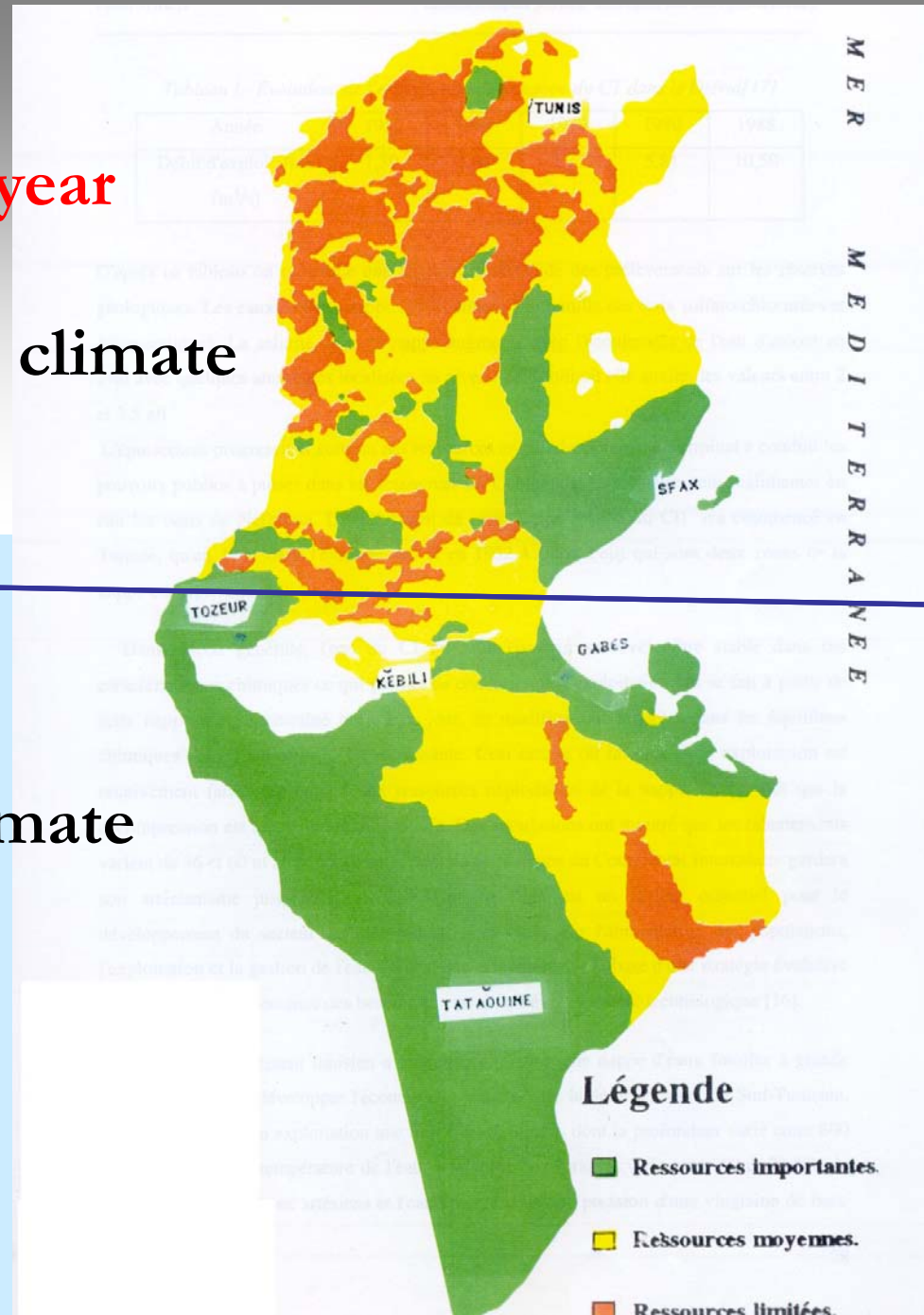
17th Meeting of COMSATS Coordinating Council, 19-20 Mai 2014 IROST, Tehran, IRAN

BEN AMOR Mohamed, Professor
Director of the Laboratory Natural Water treatments

400 m³/per/year

Semi-Arid climate

Desert climate

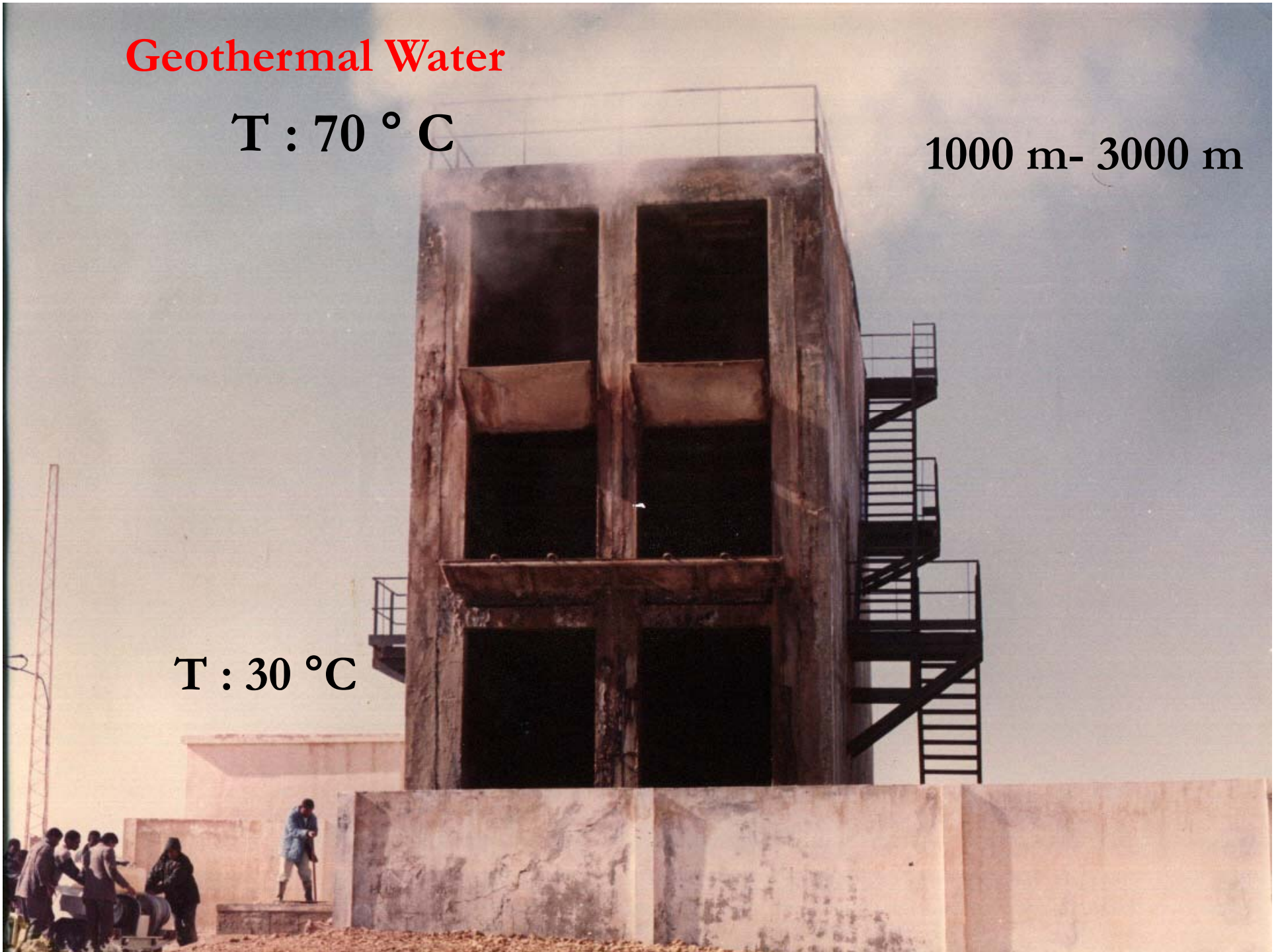


Geothermal Water

$T : 70^{\circ}\text{C}$

1000 m- 3000 m

$T : 30^{\circ}\text{C}$



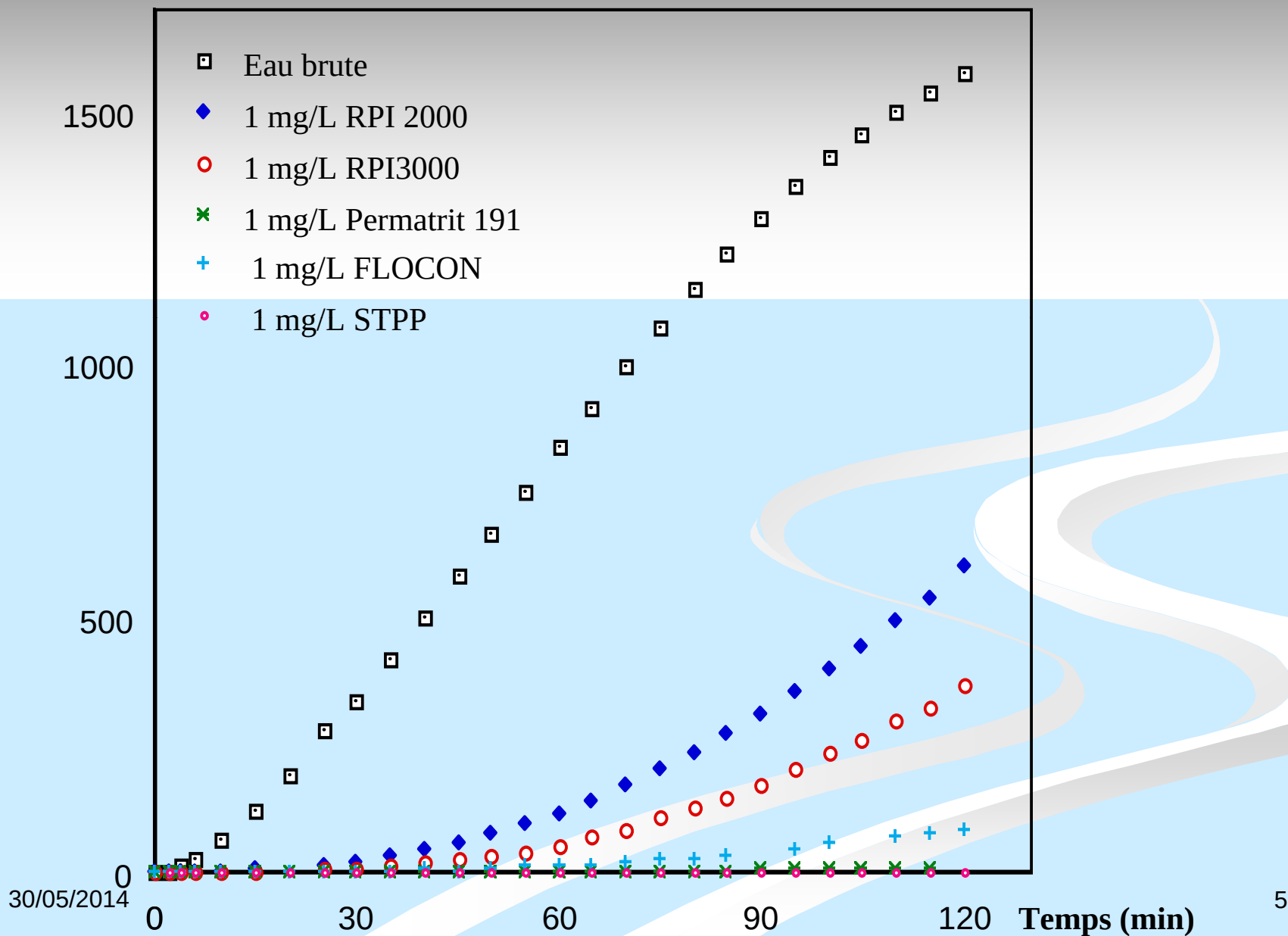


Irrigation water pipeline

3 or 4 Years

Caracterisation and optimisation of Chemical Compounds

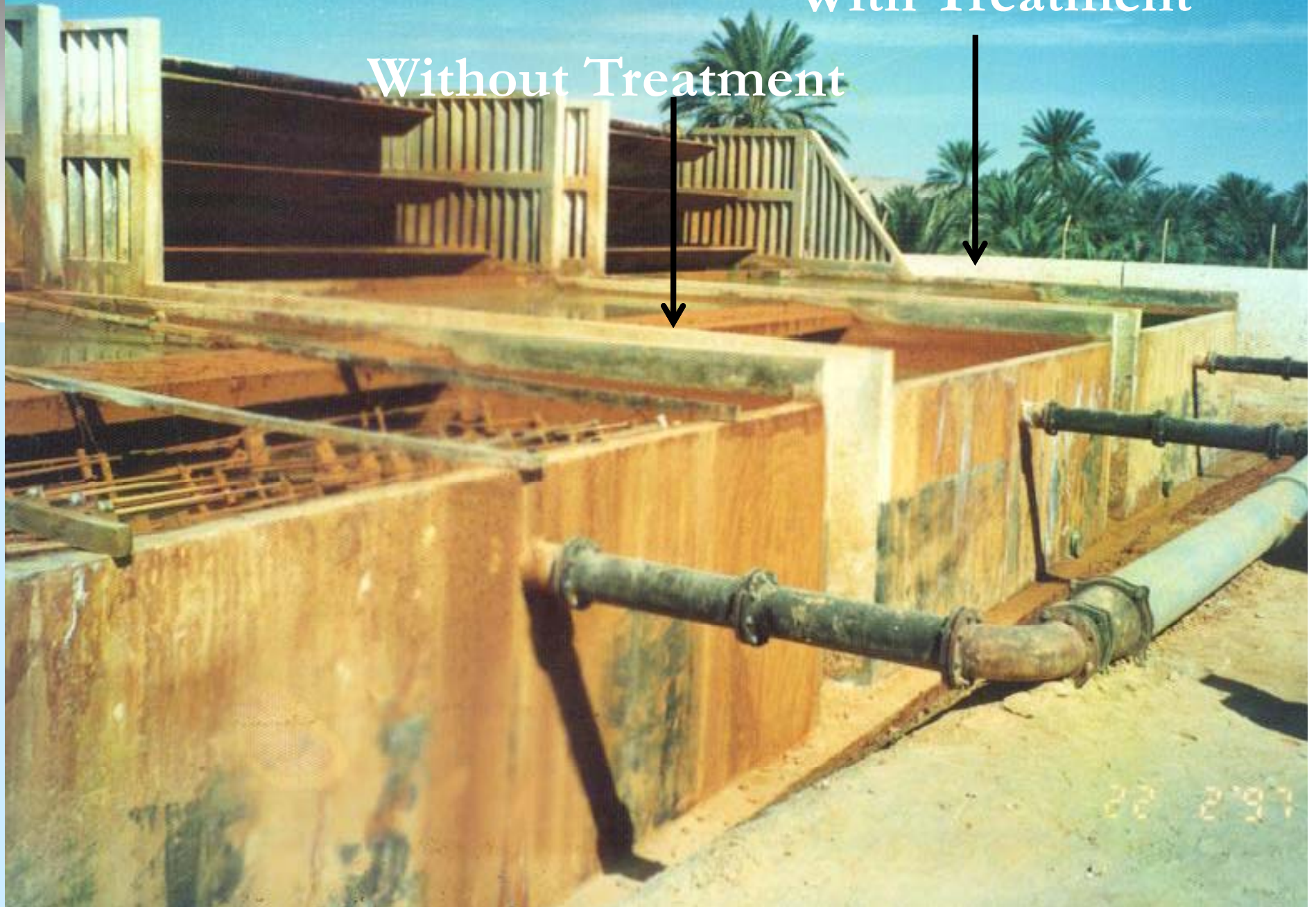
Masse déposée ($\mu\text{g}.\text{cm}^{-2}$)

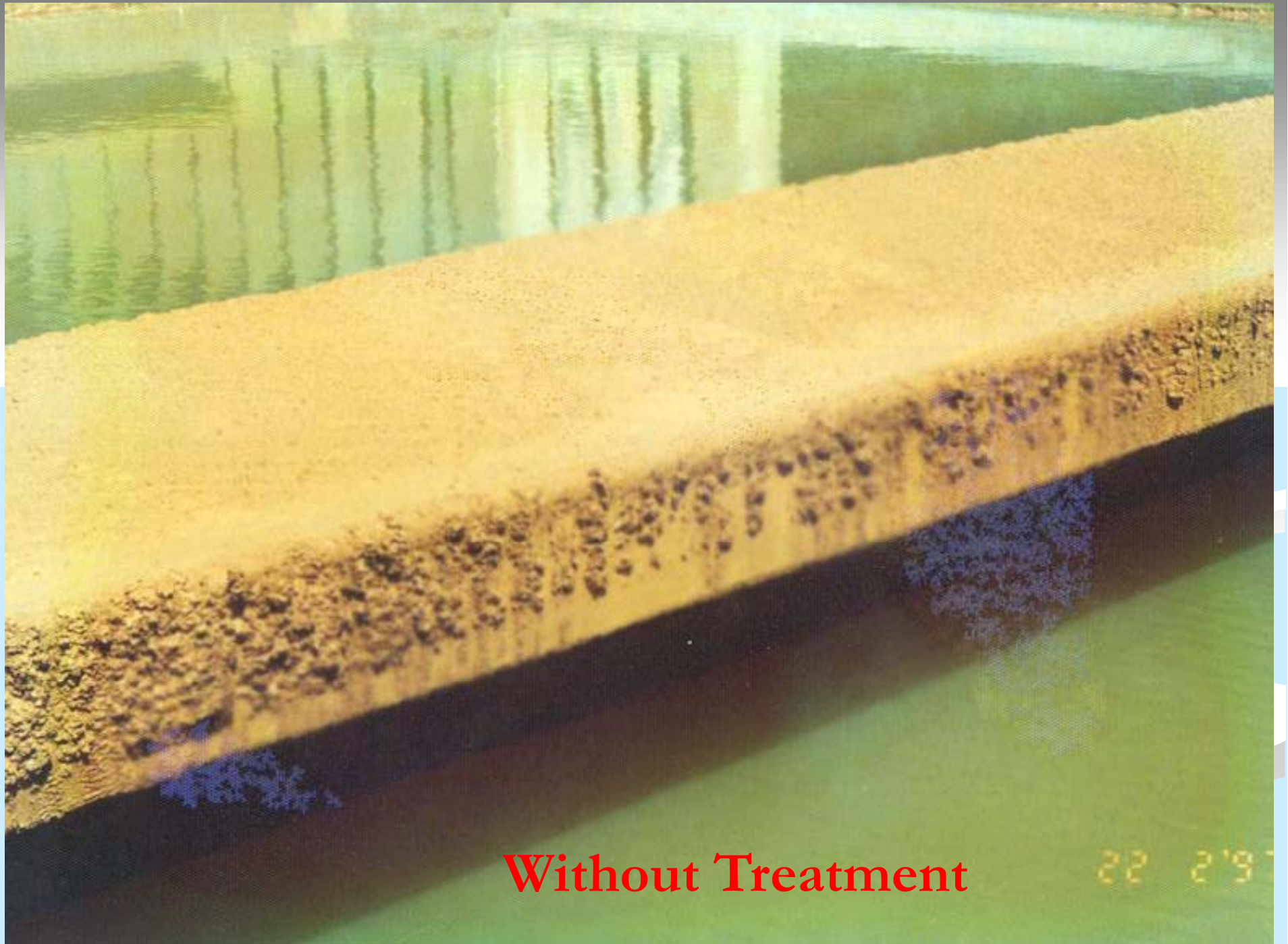


Cooler waterfalls

With Treatment

Without Treatment





Without Treatment

22 2'9"



With Treatment

22 2'9



Without Treatment

15 50

With Treatment

15 5'97



Without Treatment

16 5'9"

Cost 1 Dollar / 1000 m³

With Treatment

15 9'97

Drinkable water



Dissolve Calcium Carbonate

Precipitated Calcium Carbonate



Drinkable water pipeline

17/5/2006 18:46

30/05/2014

Drinkable water pipeline





30/05/2014



Arrivals of drillings

➡ Important fall of water

Cover R1000 tank

First action

- To decrease the outburst of CO₂:
- To drown the water arrivals in the covers and the breeze charges.

Drowned arrivals: cover R1000



Drowned arrivals: cover R1000



Second action

To decrease the outburst of CO₂ more:

Cover the breeze loads.

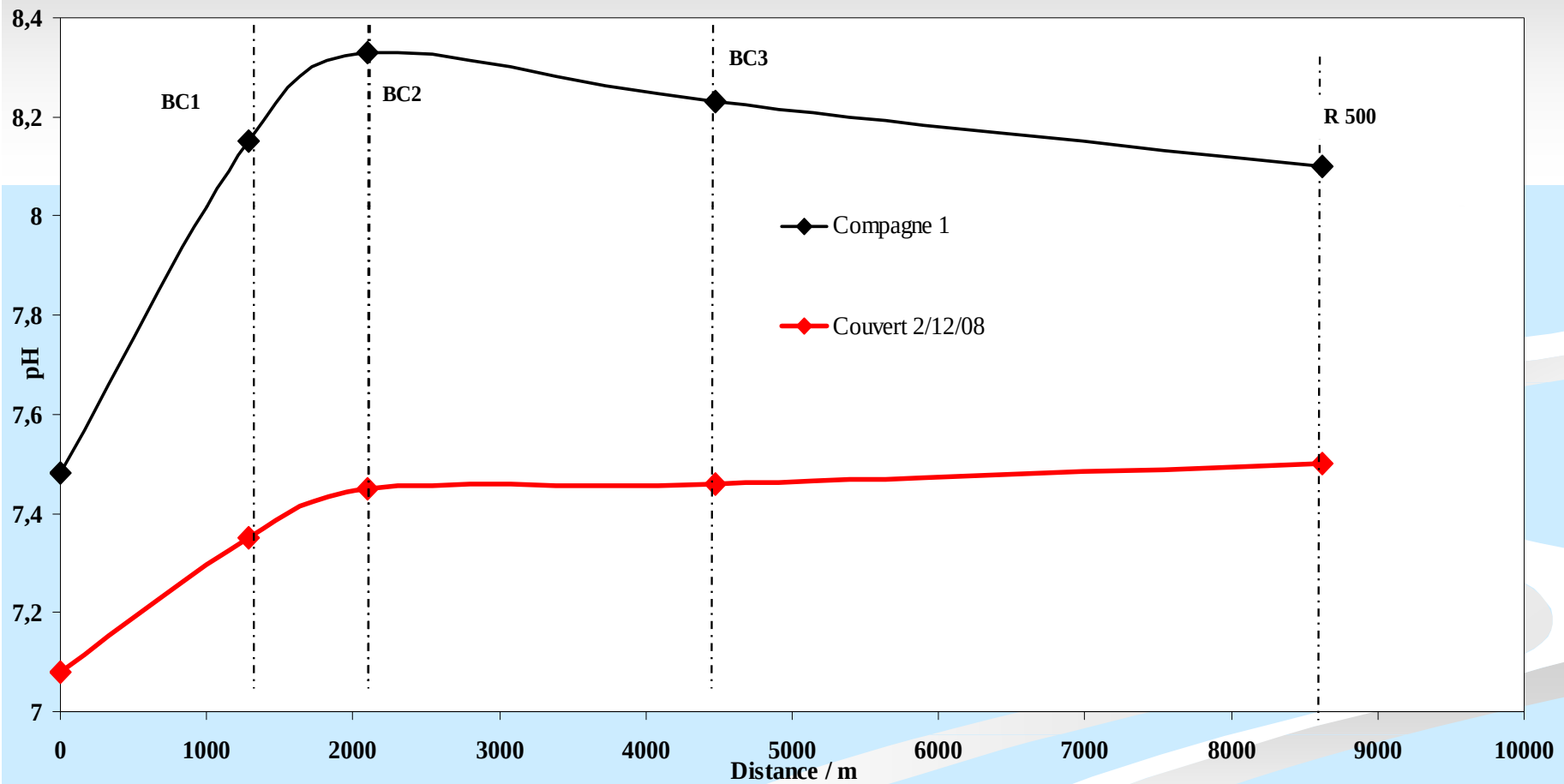
Cover R1000



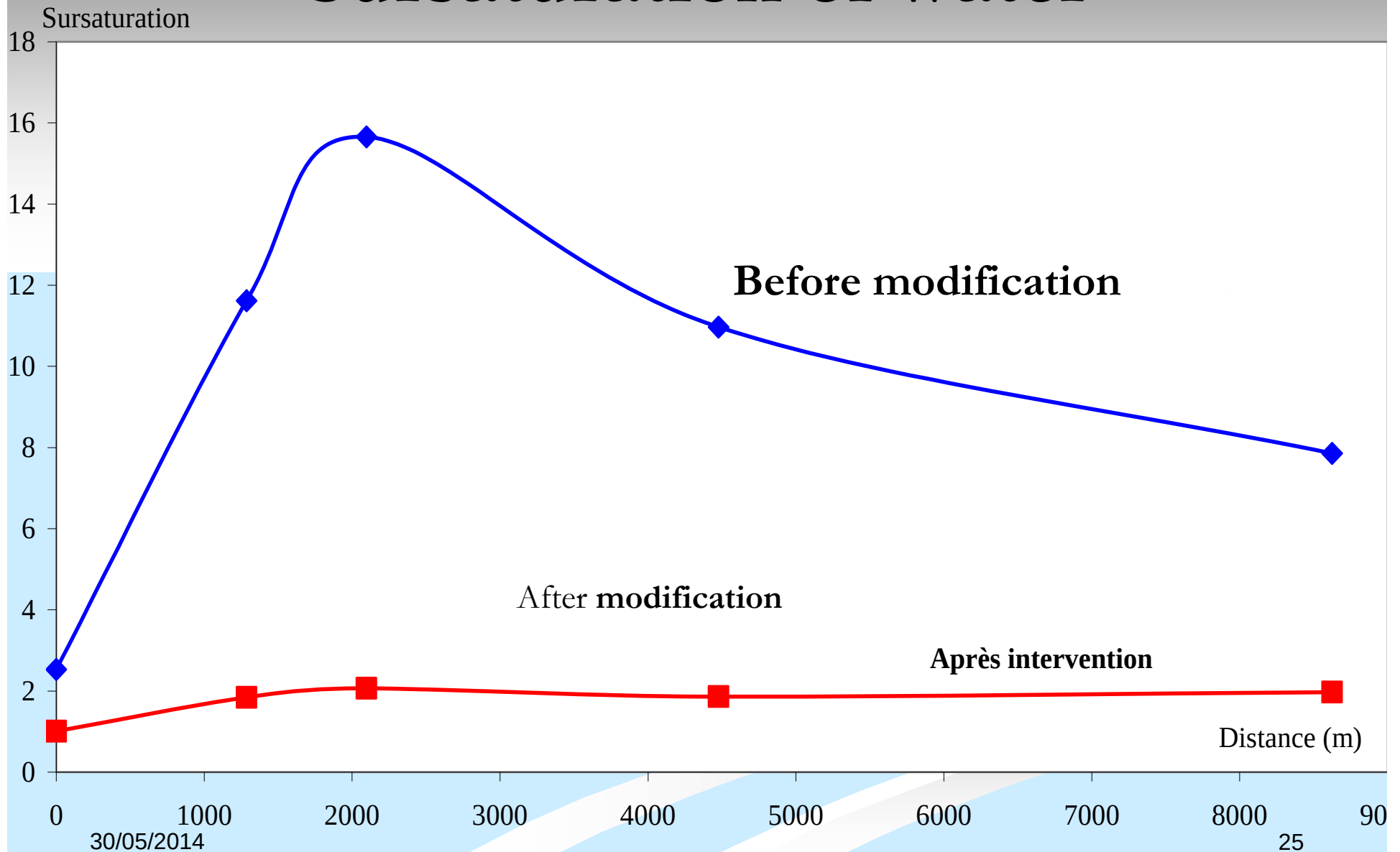
Cover BC



pH of water



Sursaturation of water



BC 2 (2007)



BC 2 (2014)



BC 2 (2007)



BC 2 (2014)



BC 2 (2007)



BC 2 (2014)



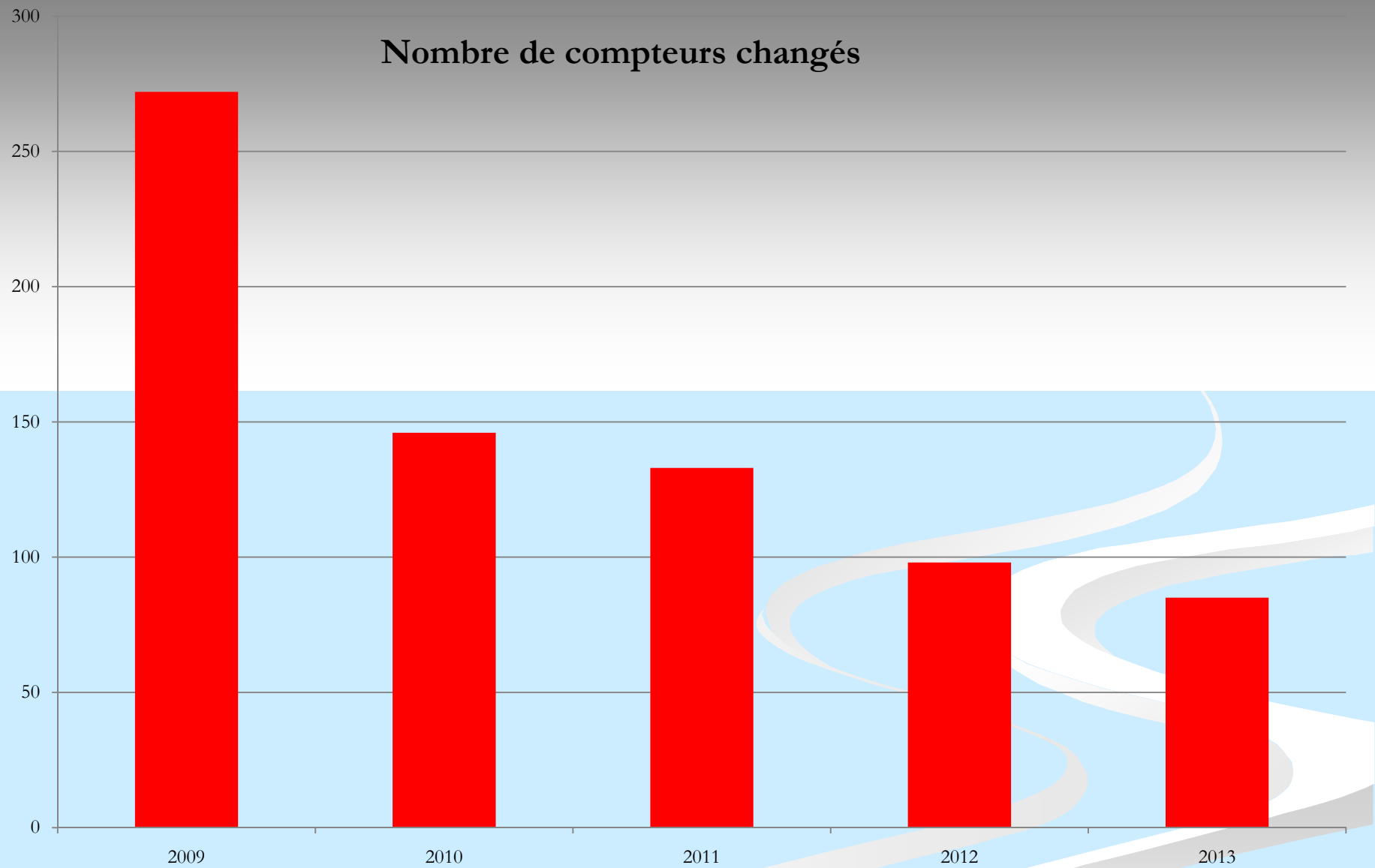
BC 2 (2007)

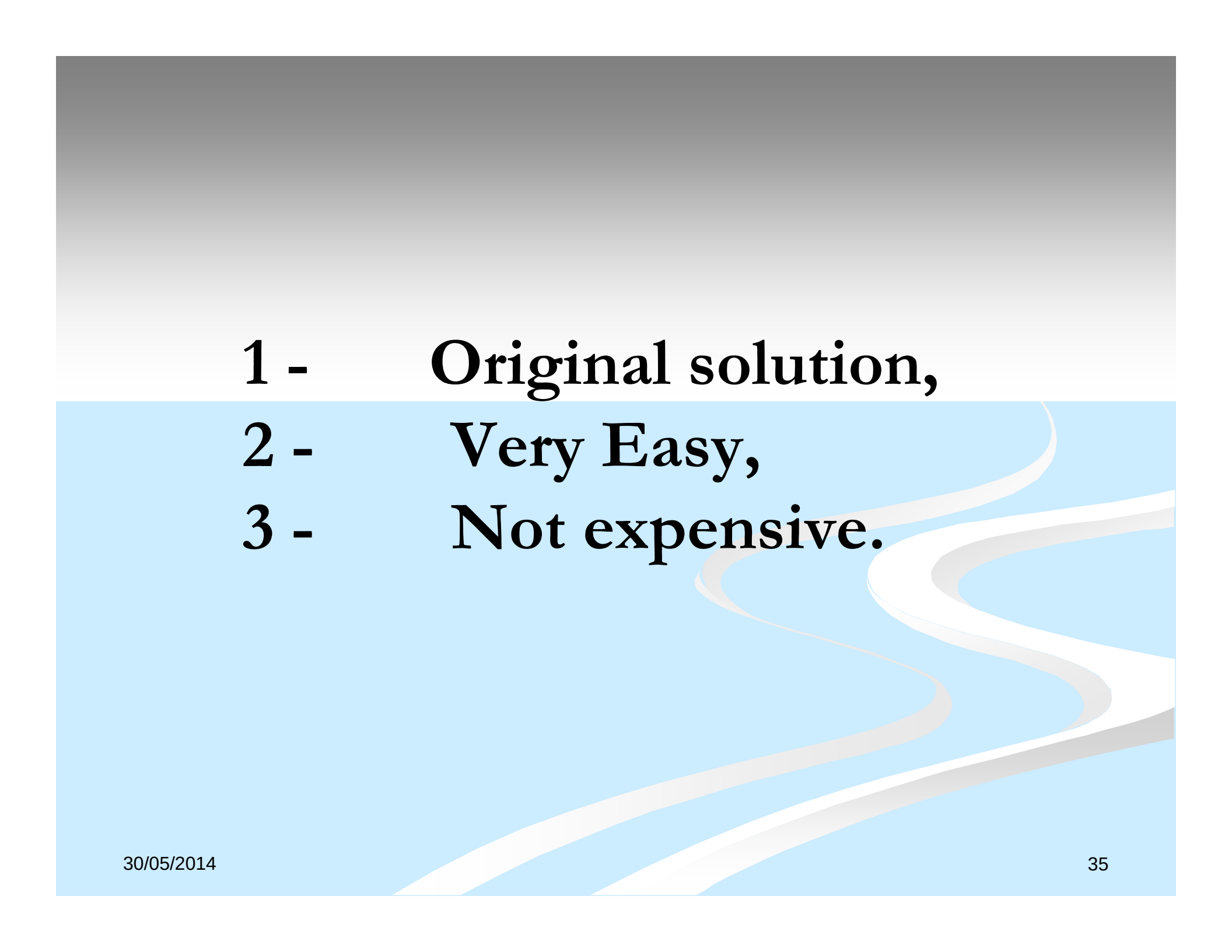


BC 2 (2014)



Nombre de compteurs changés



- 
- 1 - Original solution,
 - 2 - Very Easy,
 - 3 - Not expensive.

**1st : This thematic can be develop
with the excellence Centers of
COMSATS.**

**2d : CERTE can be a focal point of
COMSATS, to developped many actions with
african member conrties and to promouved
new member in COMSATS .**

THANK YOU FOR YOUR ATTENTION

شكرا لاهتمامكم