Bewustzijn he

Gistperceptie onder

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Samenvatting

Introductie

Algeria is situated in northern Africa, bordering th
Sea, between Morocco and Tunisia. Algeria has the

eeft aandacht no

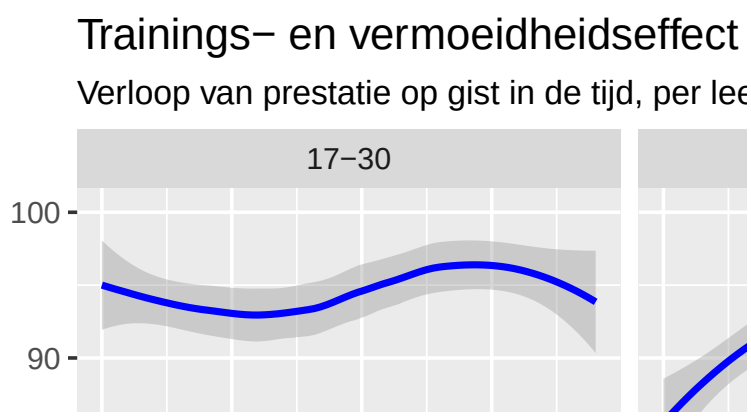
dualtaskcondities

van den Besselaar[2], Eva Bal

nstmatige Intelligentie, Neder

.uu.n

Hot Springs

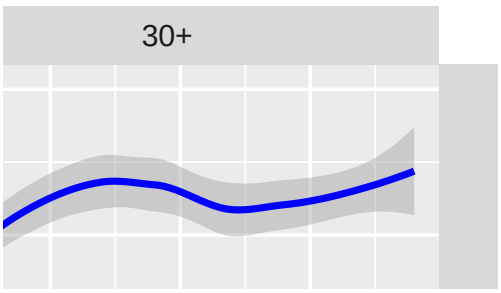


e Mediterranean
9th-largest reser-

odig

kels[3], Kiki Piekartz[4]
rland

eftijdgroep en geslacht



Discussie

- Utilizations
  greenhouse
- Heat-pump
  ling purpos
- Tilapia fish
- Greenhouse

Universiteit Utrecht

s of the hot water in Algeria are balneology, space and
heating.

in a primary school (NW Algeria) for heating and coo-
es.

farming in south of Algeria (Ghardaia and Ouargla).

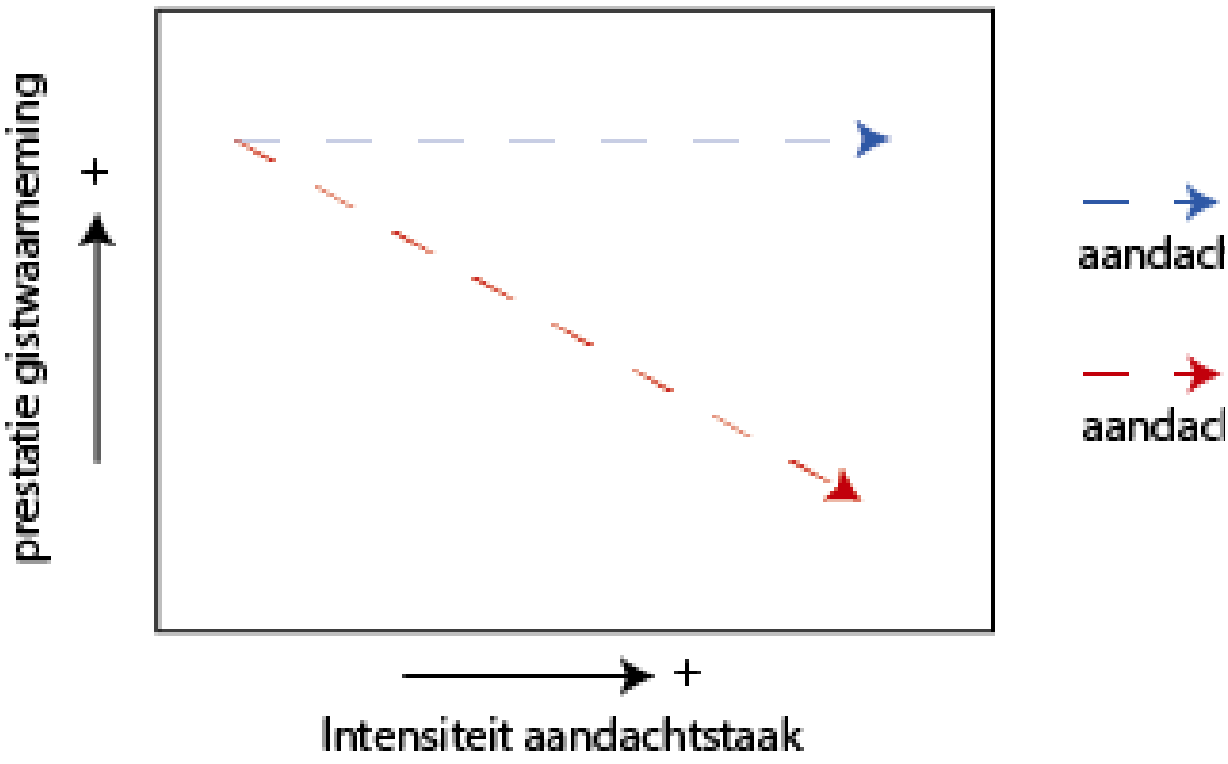
es for melon and tomato cultivation in South of Algeria

ves of natural gas in the world. It ranks 16th in prove

- Geothermal exploration program started in 1967 Comapny SONATRACH.
- From 1983 onwards the geothermal research has b the Renewable Energies Center of Algeria.

Hypothese

The geology of Algeria (Figure 1) is divided into t ral units: the folded Tellian Domain in the North, Platform in the South.



d oil reserves.

by National Oil

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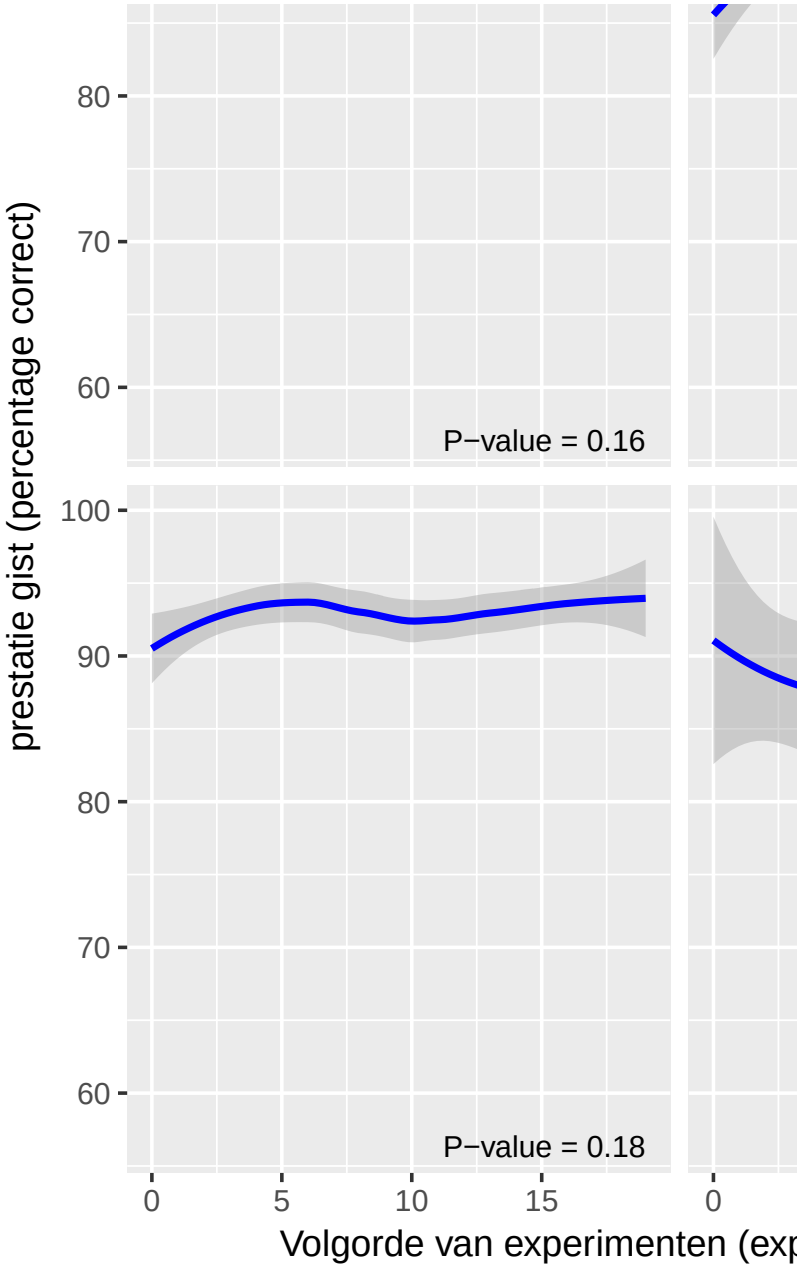
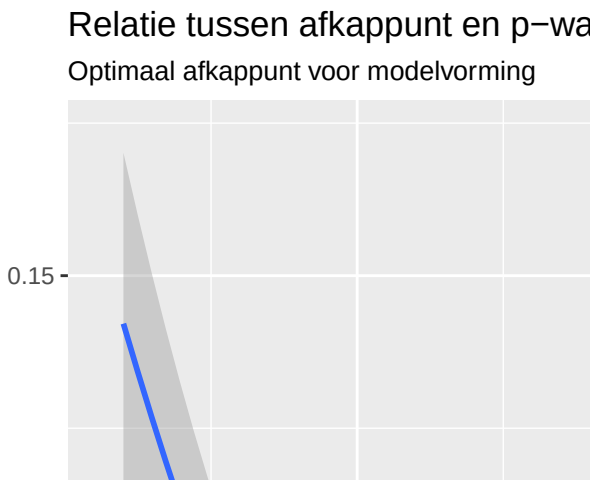
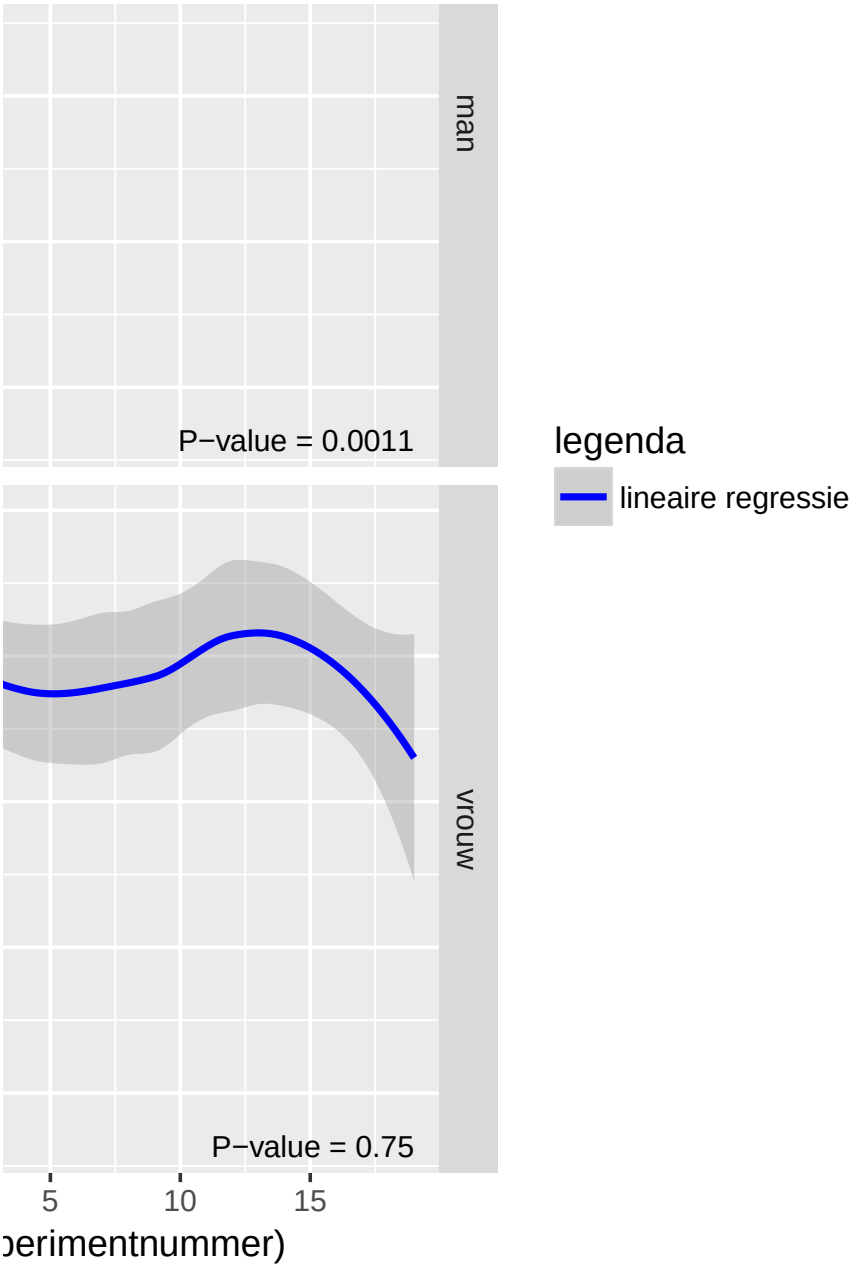
nt geen voorwaarde

ht voorwaarde



Figuur 3: Temperatures of the main h





perimentnummer)

not springs of the northern part of Algeria

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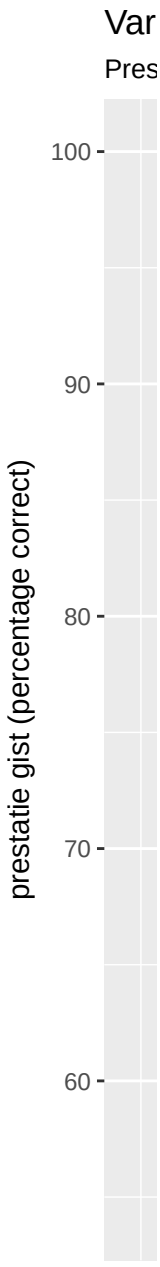
- Future proj (NE-Algeri

The total ener

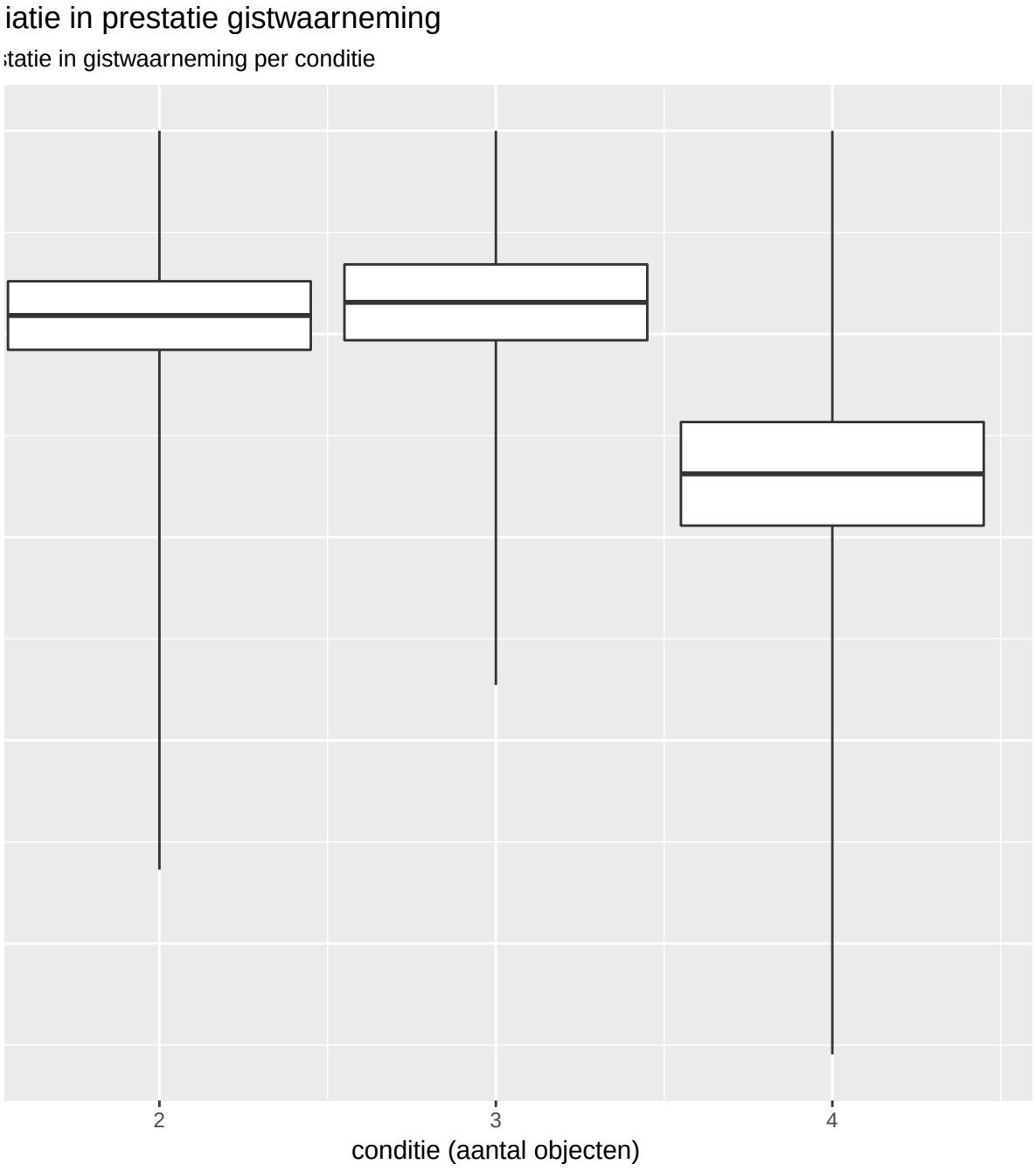


F

ıd Touggourt).

jects: binary-cycle geothermal power plant in Guelma a); heat-pump in Khenchla (NE Algeria).

gy use for geothermal is about 1,778.65 TJ/yr.



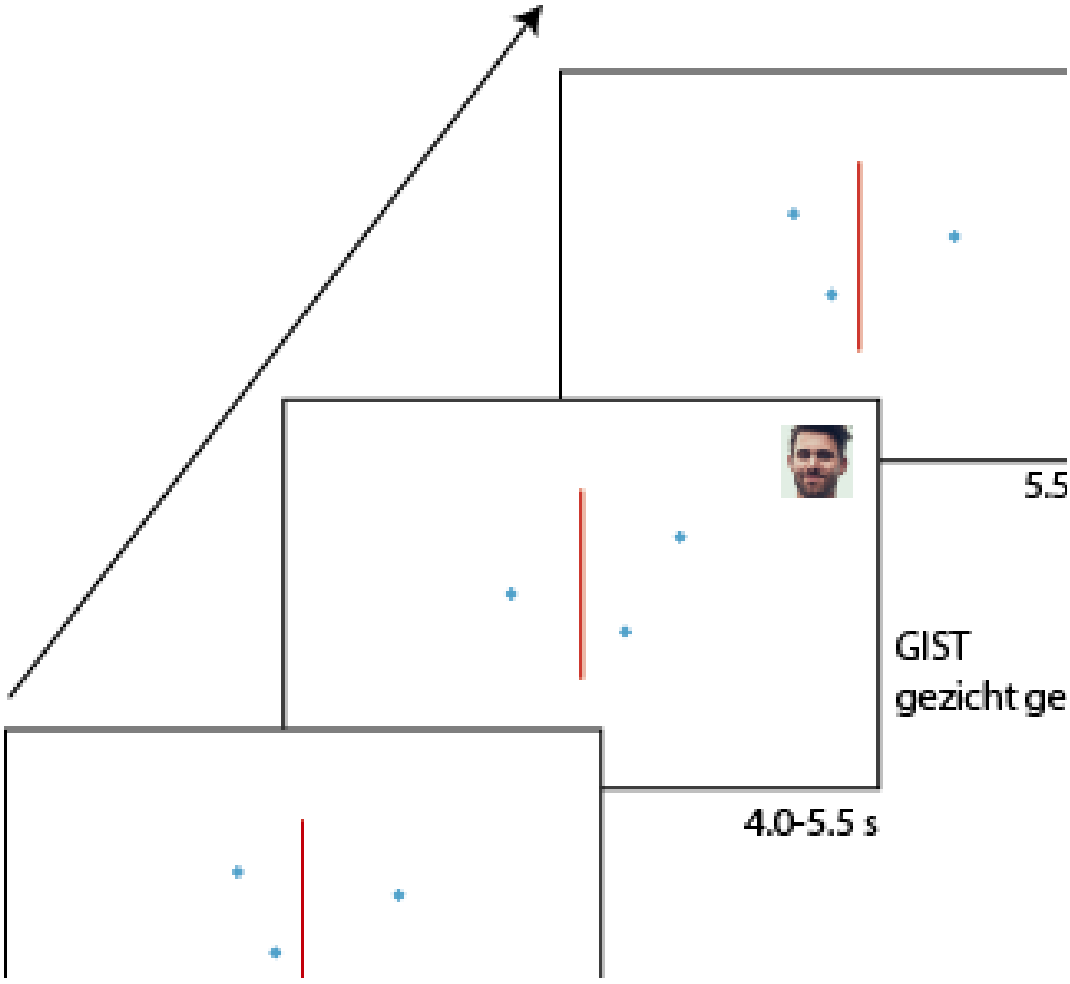
iguur 6: Location of Algerian geothermal uses sites

Figuur 1: Major geotectonics units of West Africa modified fro
and Quaternary; 2: Alpine molasses; 3: Tertiary thrust sheet; 4:
5: Secondary plicative; 6: Primary plicative; 7: Primary tabu
and Precorce Cambrian of Sahara; 9: Cenozoic magma; 10: Me

Methode

Heat Flow

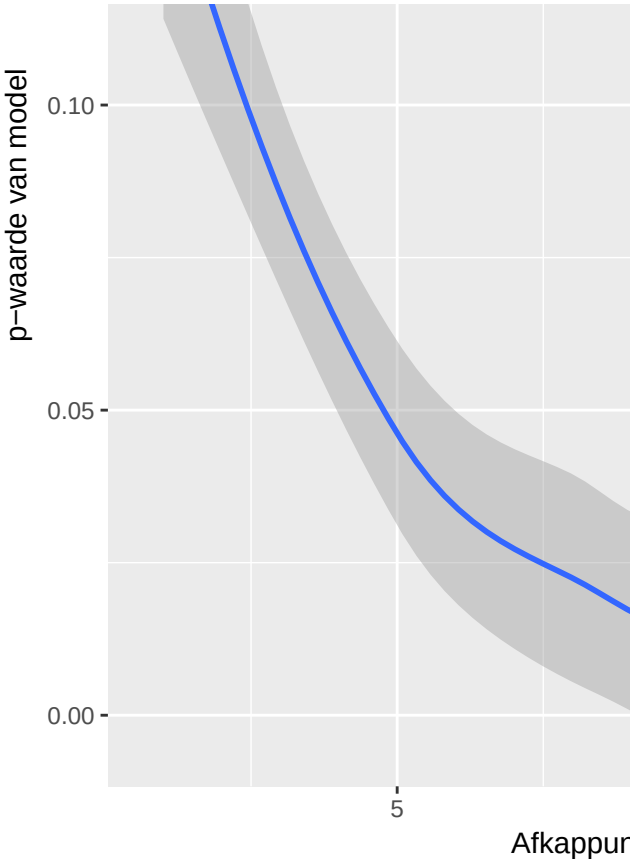
- Average heat flow values are 82 ± 19 mW/m^2
- Very high heat flow values (90-130 mW/m^2) in Sou
  gar Precambrian basement).



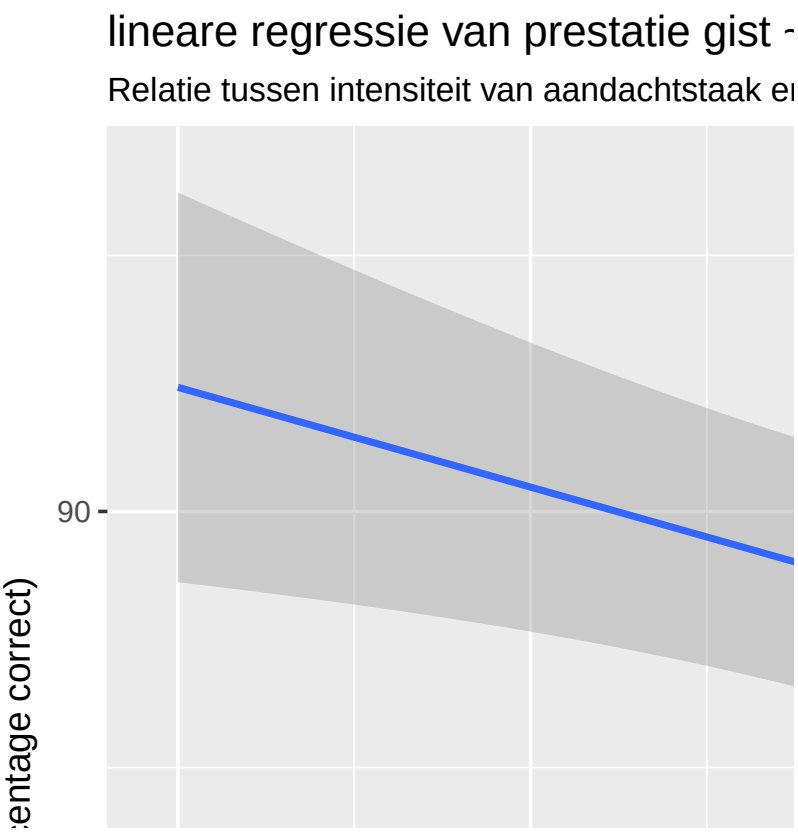
m Fabre. 1: Tertiary
: Secondary tabular;
lar; 8: Precambrian
gafault.

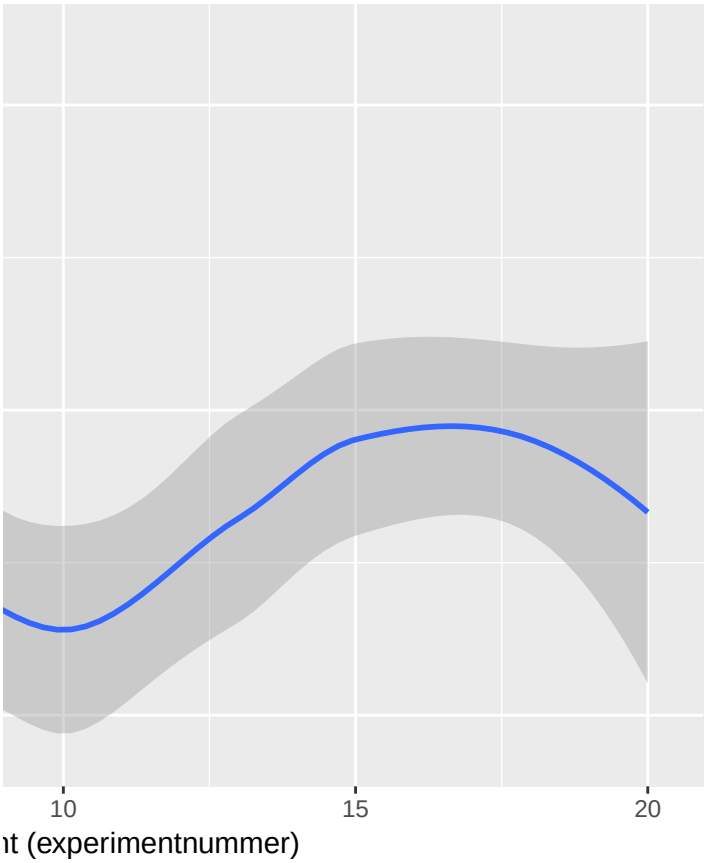
ıth Algeria (Hog-

durende 30 ms

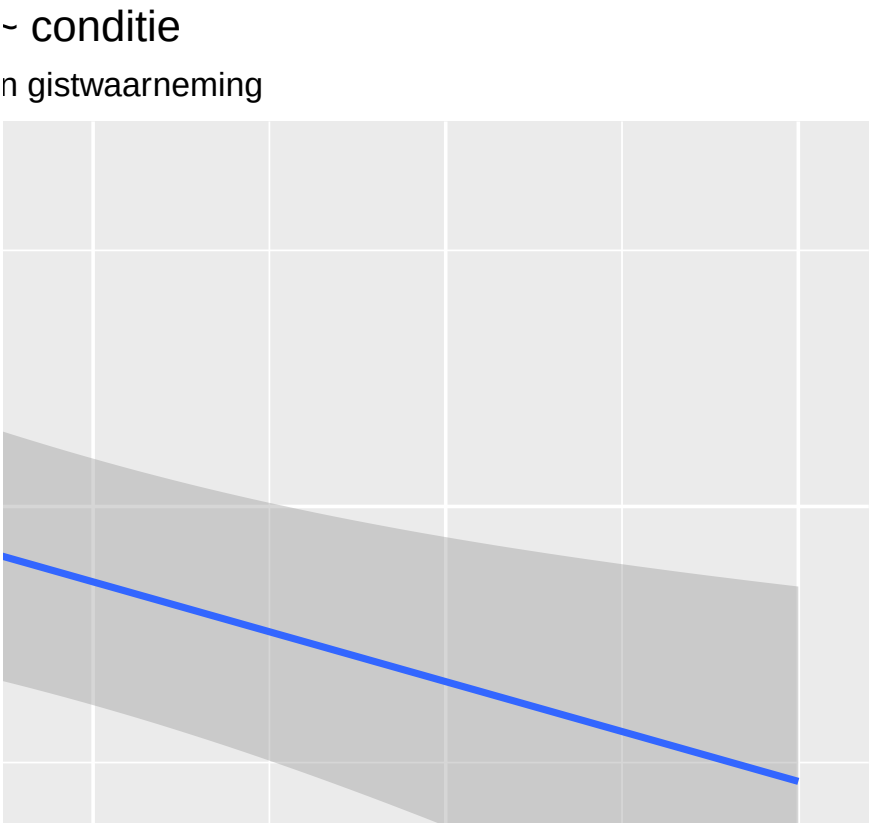


Figuur 4: Total Dissolved Solid (TDS) of Algeria

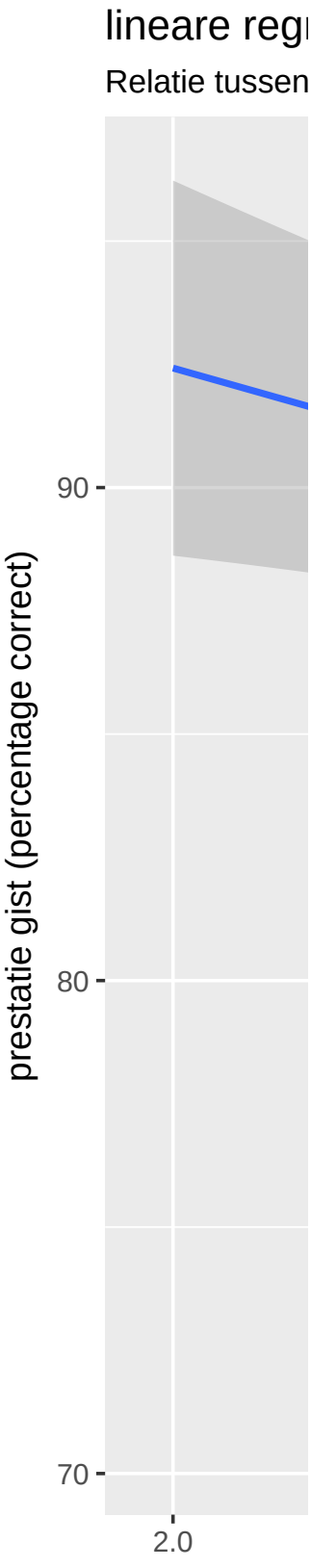




of the main hot springs of the northern part



Geotherma

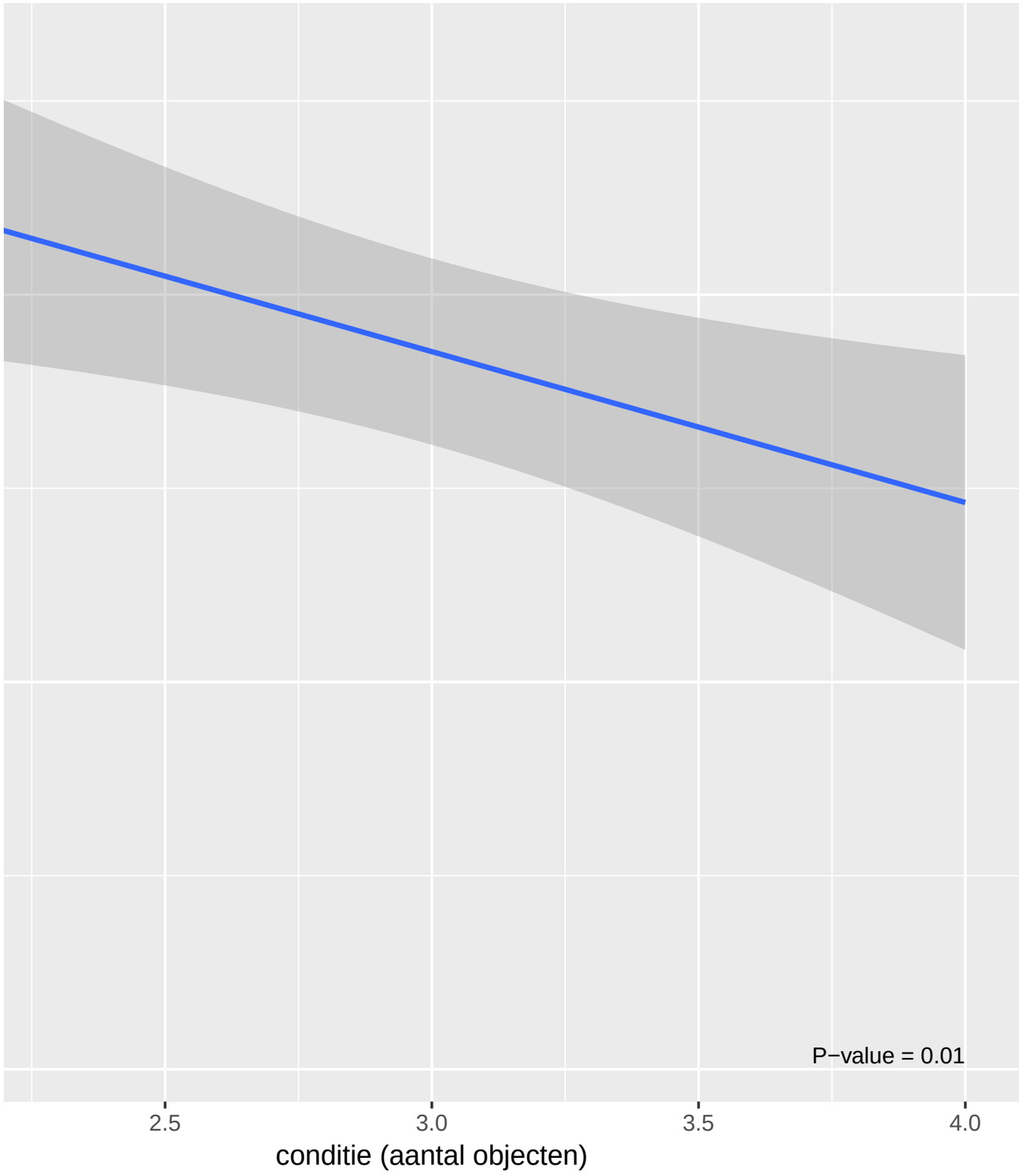


Figuur 7: (a) Id

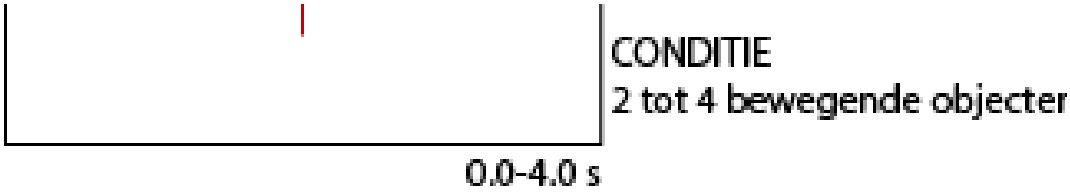
al Conceptual Models

ressie van prestatie gist ~ conditie

intensiteit van aandachtstaak en gistwaarneming



lealized northern Algerian geothermal system characterized by he-



Figuur 2: (A) Temp. vs. depth for different reg

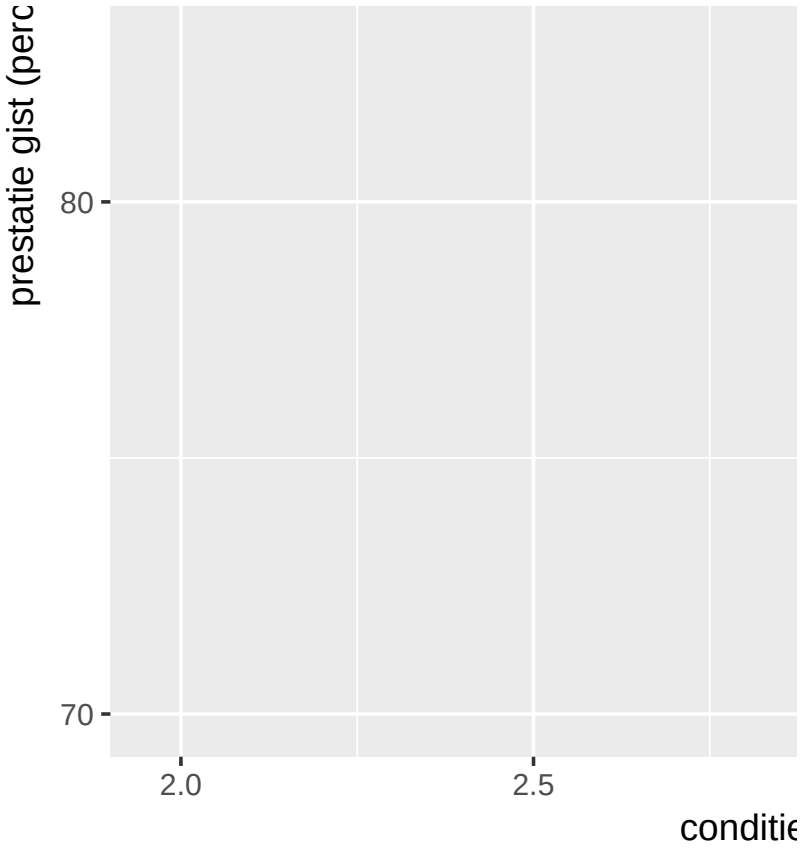
Resultaten

1. The Tlemcenian dolomites in the NW-Algeria: th related to the Plio-Quaternary volcanic rocks; b type.
2. Carbonate formations in the NE-Algeria: area is 1 flow rates (>100 L/s); highest temperature in Alge

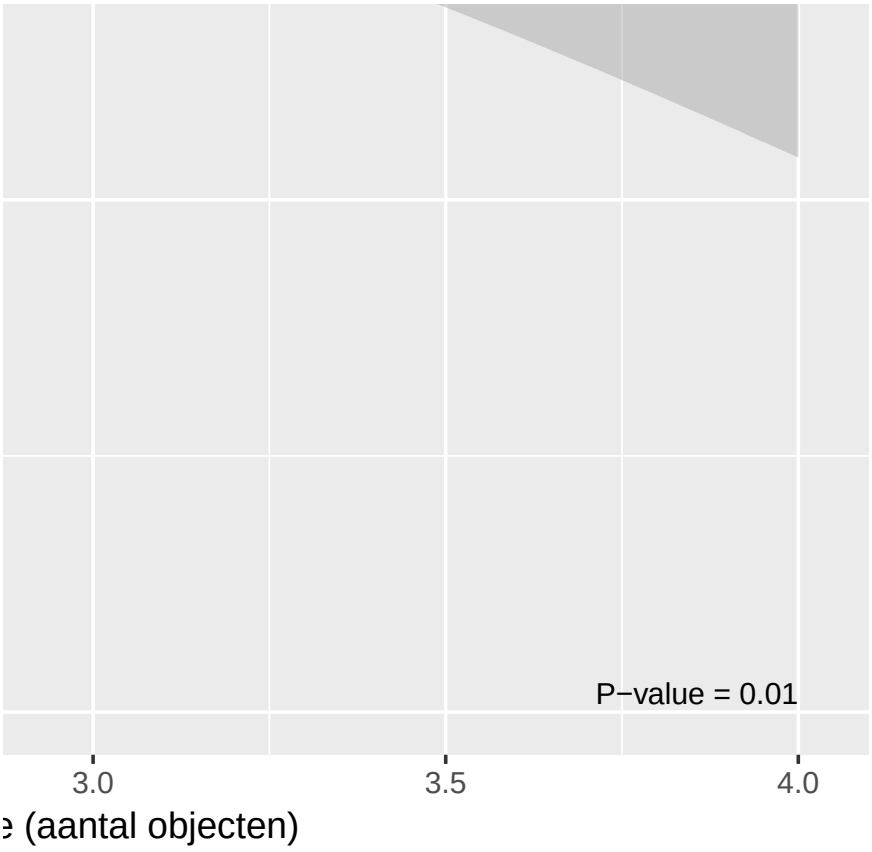
ions.

ermal waters are
icarbonate water

.5,000 km^2; high
ria (98 °C).



Figuur 5: (A) Mixing model to illust
meteoric and crustal sources of gases i
Photo of the concretions of Hammam M
concretions on successive conduits reac



rate the relative contribution of magmatic, n NE Algerian geothermal discharges. (B) Ieskhoutine (NE Algeria). The height of the hes 30 m.

ating of the filte system, characte

Conclusi

Despite being efforts to exp has adopted n investors to f electricity pro abundant geot not totally use

Literatu

ered meteoric water. (b) Idealized southern Algerian geothermal rized by basement heating of the sedimentary basin

es

a petroleum- and gas-rich country, Algeria is making loit its renewable energies. The Algerian government ew renewable energy laws and financial support for the acilitate the exploitation of the renewable energies for oduction and direct utilizations. Algeria has relatively thermal resources especially in the northeastern parts but ed.

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