

Für Mensch und Umwelt

Umwelt   
Bundesamt

# *EIONET NRC Soil Meeting*

- Dr. Frank Glante
- “Soil State, Soil Monitoring“

# Beispiel: Ackernutzung

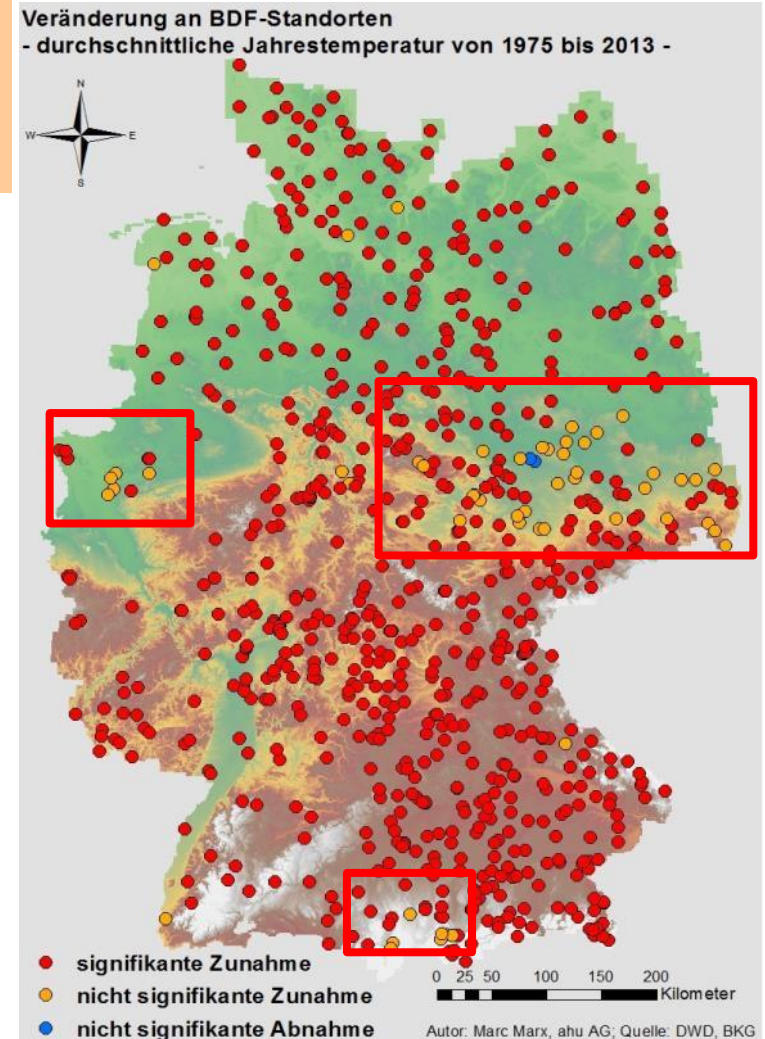
Langfristige Entwicklung der Kohlenstoffgehalte von Ackerstandorten:

Ergebnisse der bundesweiten Boden-Dauerbeobachtung und Dauerfeldversuchen?

*Schilli, C.; Marx, M.; Körschens, M.; Kastler, M.; Marahrens, S.; Glante, F.; Lischeid, G. & Rinklebe, J.*

Overall Increase of average Temperature

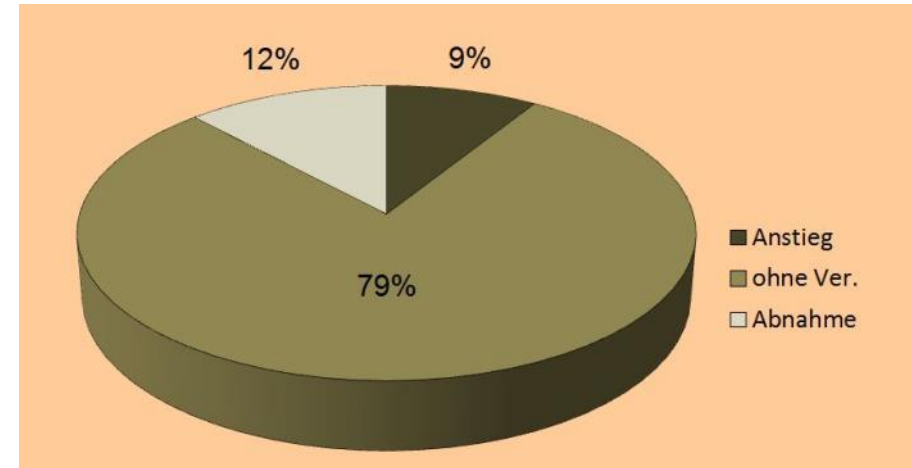
Exceptions definable



# Changes in TOC-Concentration

216 BDF's under arable soil with more than 4 replicates longer than 10 Years

- Every 5th (46 von 216) showed changes in TOC



- No overall increase or decrease is shown

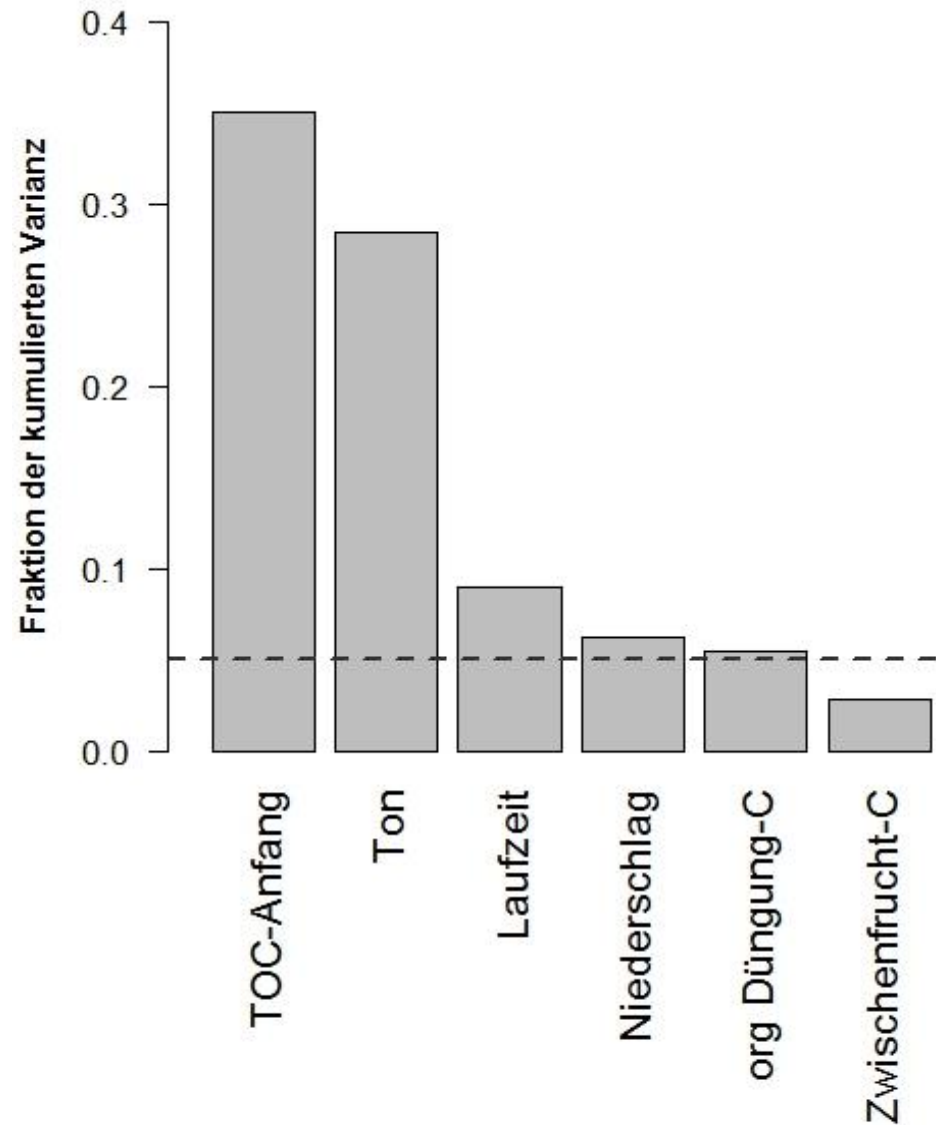
# Changes in TOC-concentration

Nr= 35

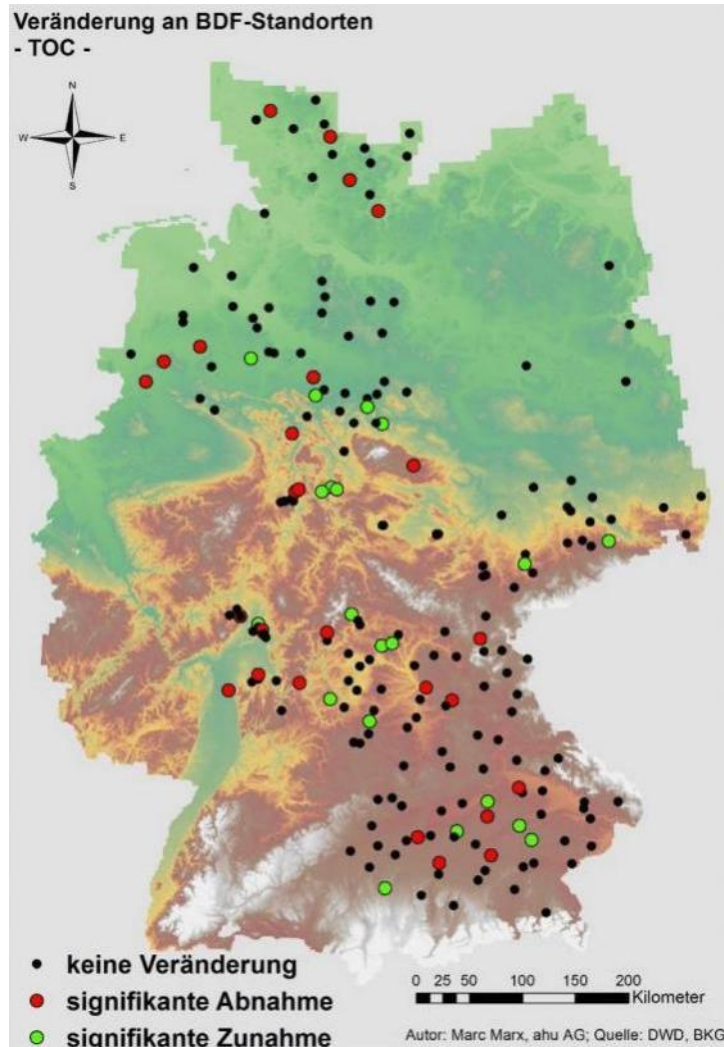
Calculated varianz = 90%

Main effect:

- TOC-Niveau
- Silt content
- Time of observation
- precipitaion
- organic fertilizier



# Changes in TOC-concentration



No significant trend

No full picture because of data gaps

Especially information about soil  
management

# World Soil Day 2015



**Soil – A source of life**  
Closing event of the  
International Year of  
Soils 2015

Berlin, 3 December 2015

<https://www.umweltbundesamt.de/themen/boden-landwirtschaft>