

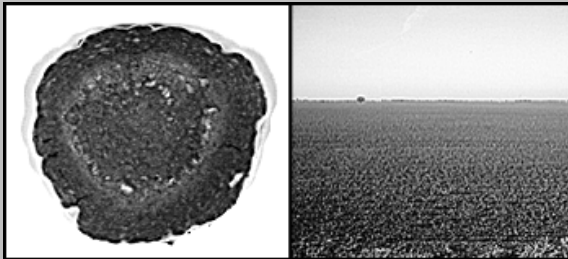
# Kansas Is Flatter Than a Pancake

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- 2 A Technical Approach to Pancakes and Kansas
- 3 Materials and Methods
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  - Kansas
  - Pancake and Kansas
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- 5 Conclusion

- Often heard about Kansas: “This state is as flat as a pancake.”
- How flat is Kansas? and ...
- How flat is a pancake?



- Compare using mathematical techniques

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- Flattening ratio:  $f = \frac{(a-b)}{a}$
- Perfect flatness:  $f = 1$

- 1 Pancake purchased at International House of Pancakes
- 2 Collected macro-pancake topography through digital image processing
- 3 Another topographic profile made using a confocal laser microscope

## Profile of Kansas taken from DEM data from USGS

Extracted surface transects and flatness estimates from both samples using a geographic information system



# Results

First analysis Kansas is clearly flatter

# Results

Pancake flatness approximately 0.957

# Results

Kansas's flatness approximately 0.9997

# Conclusion

Kansas is considerably flatter than a pancake.