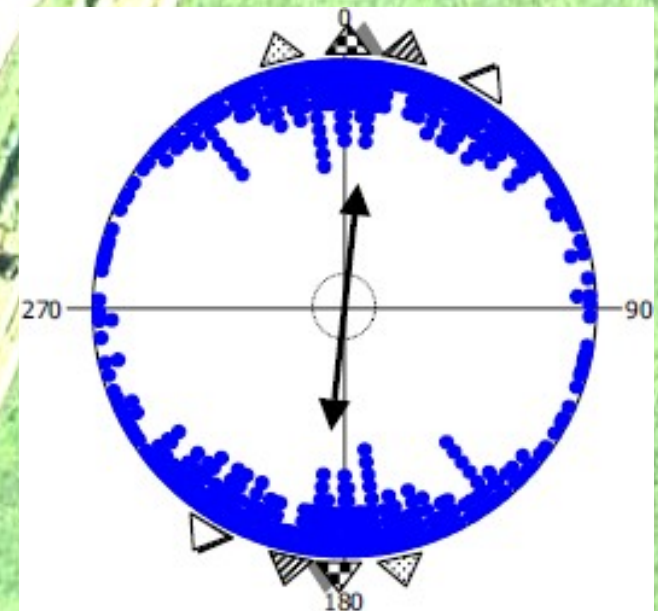


- Statistical Google Earth image analysis shows significant N-S alignment in grazing/resting cattle and deer
- Researchers suggest magnetoreception as most likely explanation
- Results need experimental verification



## Magnetic alignment in grazing and resting cattle and deer

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We demonstrate by means of simple, noninvasive methods (analysis of satellite images, field observations, and measuring “deer beds” in snow) that domestic cattle ( $n = 8,510$  in 308 pastures) across the globe, and grazing and resting red and roe deer ( $n = 2,974$  at 241 localities), align their body axes in roughly a north-south direction. Direct observations of roe deer revealed that animals orient their heads northward when grazing or resting.

cattle in satellite images provided by Google Earth. In this manner we received scan-sampling data on alignment of animals in diverse localities across the globe and in diverse times, making it unlikely that effective direction of each of the factors (wind, sun, and temperature) was a common key factor of the alignment in all places and times. Second, we observed alignment in grazing and resting roe deer at different times of the day (even at night).