

# MAG - ‘Climatology’

*overgoor*

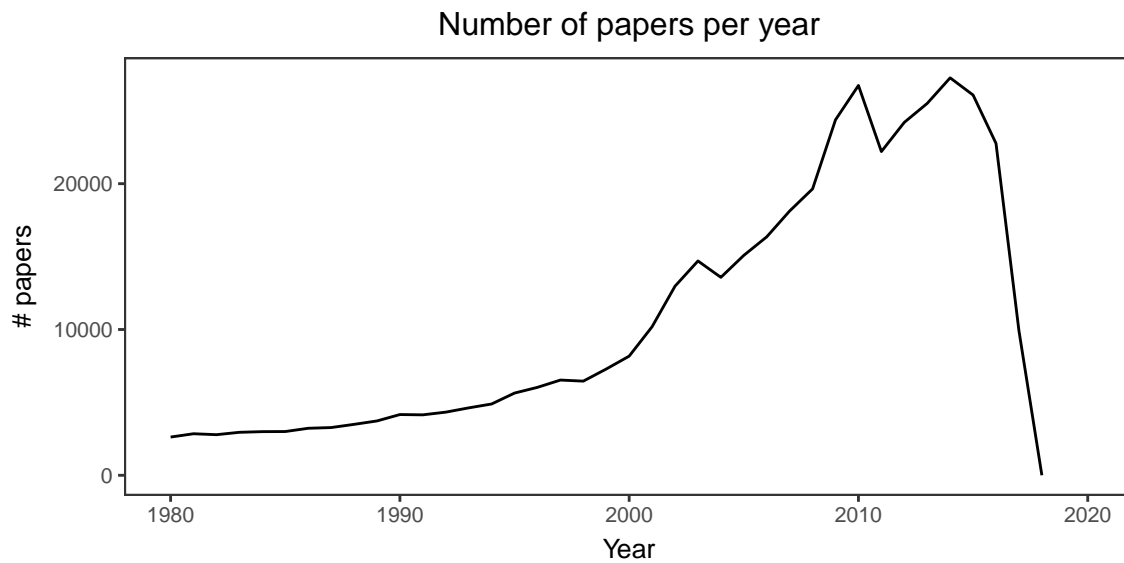
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## Read Data

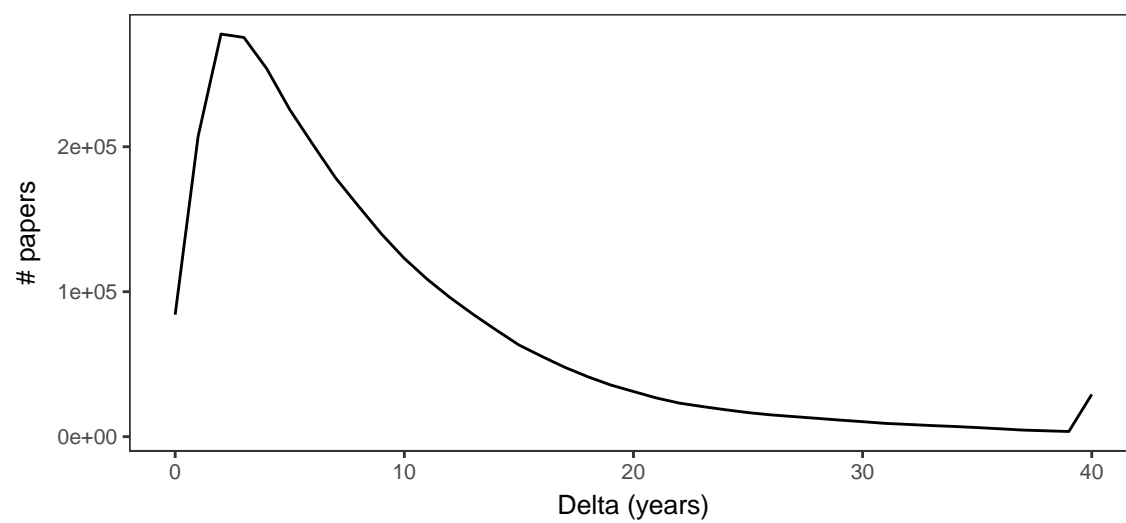
### Plots

#### Role of Year



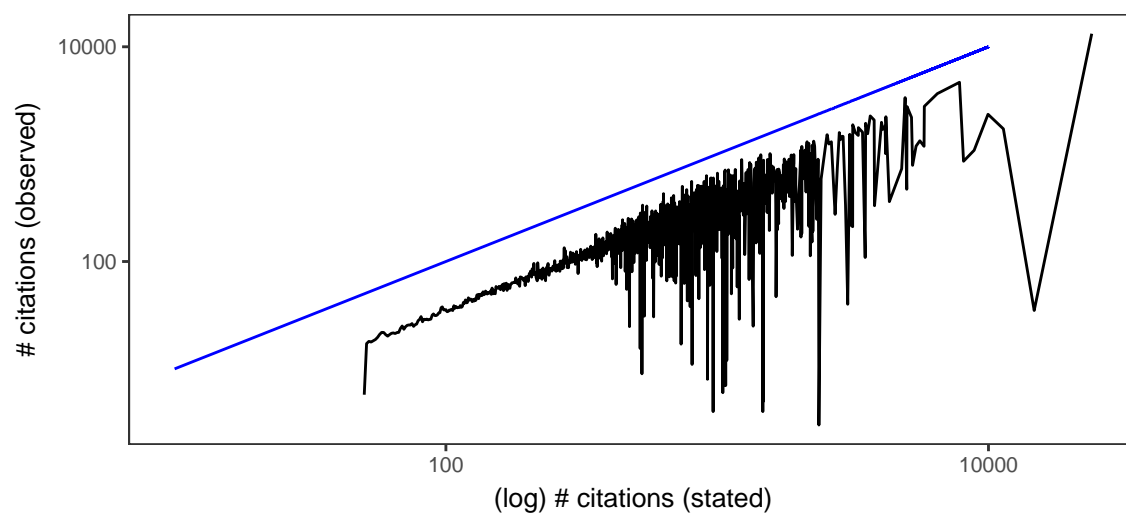
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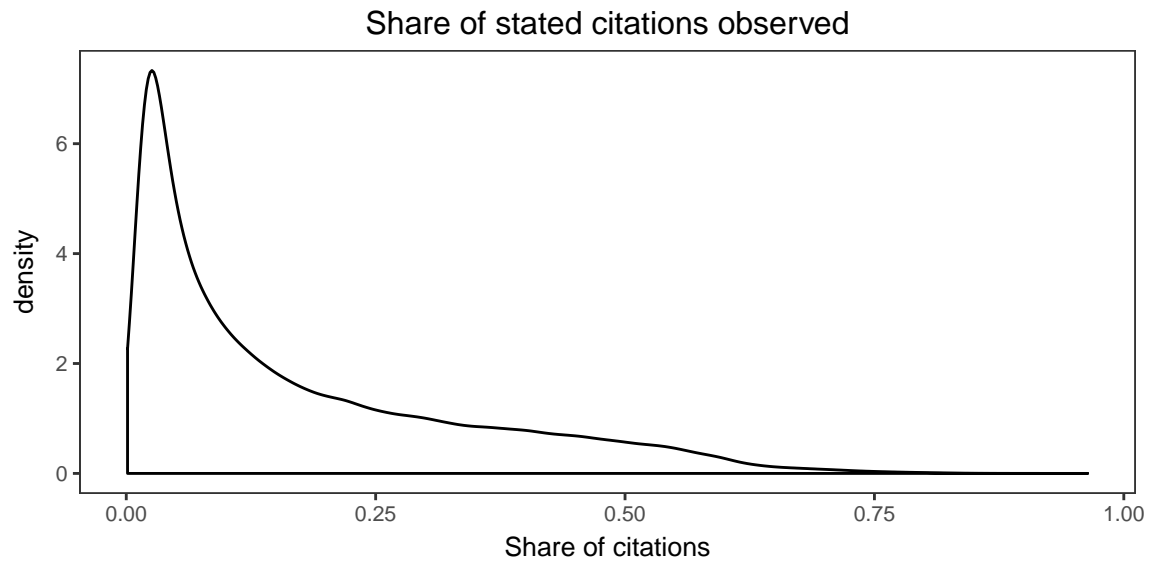
Distribution of Years to citation



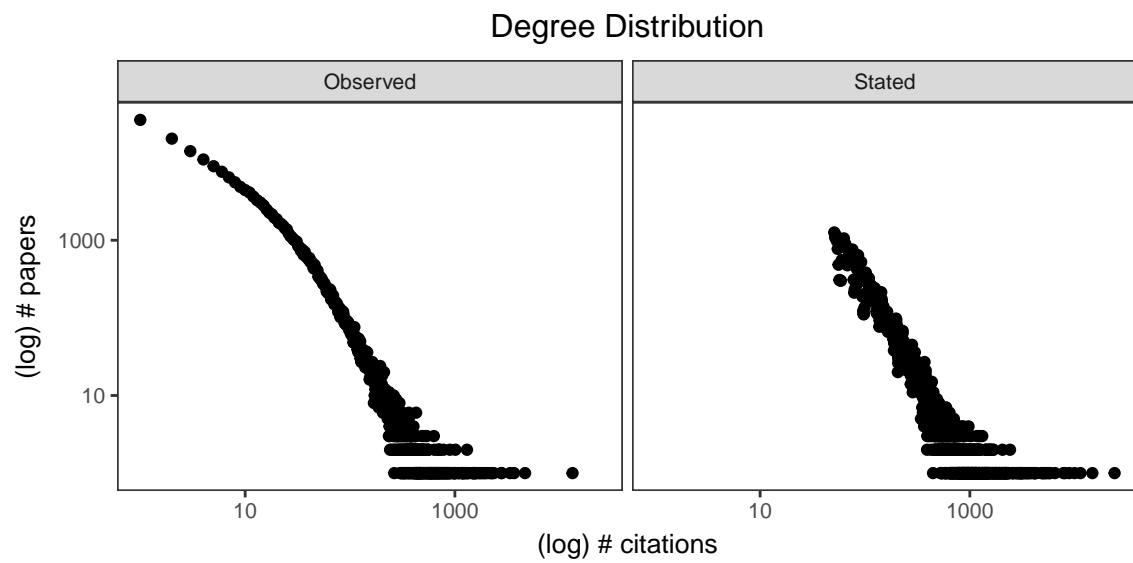
Share of citations observed

Citations – Stated vs Observed (grouped)

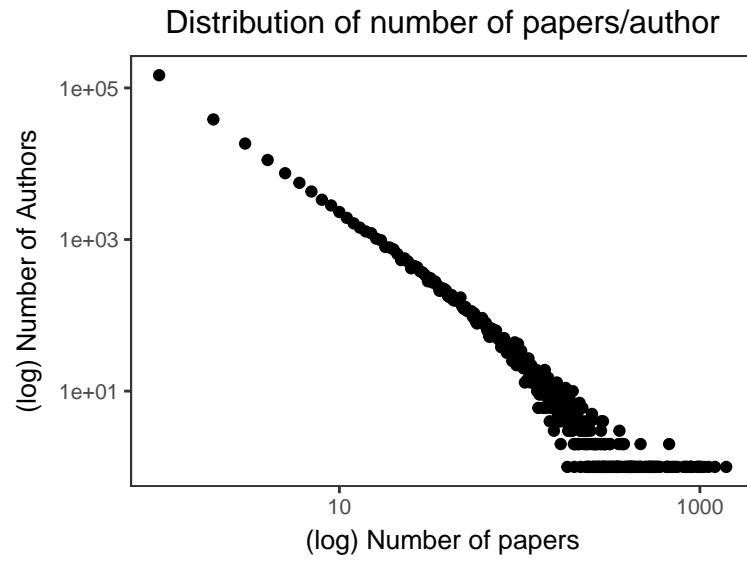




## Degree distribution



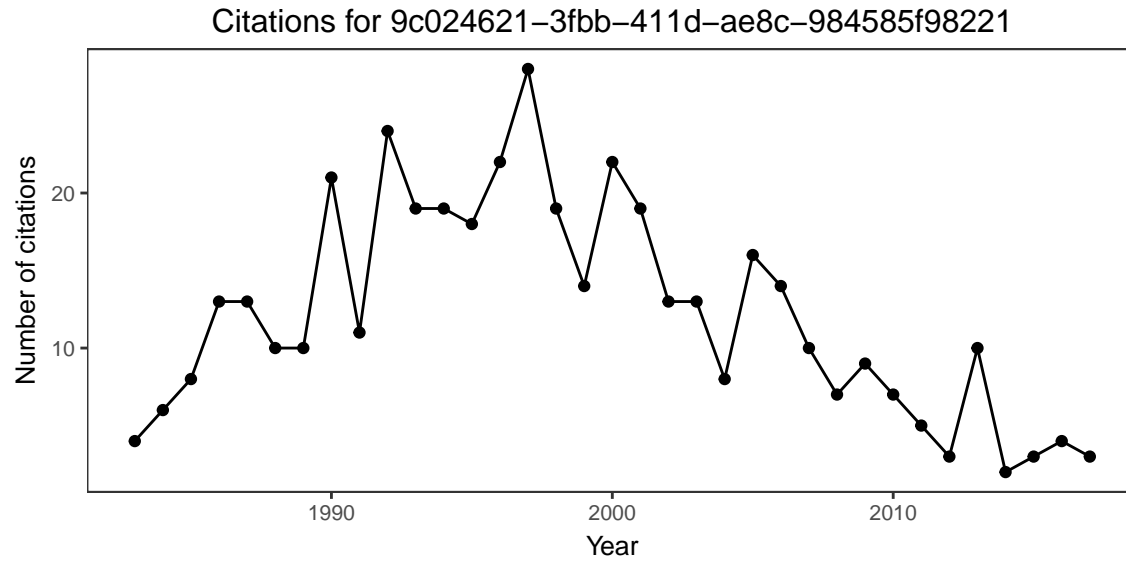
## Author distribution



## Keyword distribution

keywords	n
climate change	38570
seasonality	33465
pacific ocean	15323
sea surface temperature	14418
climate	14368
north america	13163
north atlantic	12576
atmospheric circulation	12270
climate variability	11833
temperature	11154

## Individual paper's timeline



## Model

Data construction process:

- sample 1000 citations
- for each actual citation, sample 24 non-cited papers (from before publication date)
- for each of the (paper,option) pairs, compute features (n citations, years since, has same author)

```
##
## =====
##                               Dependent variable:
##                               -----
##                               y
##                               (1)      (2)      (3)      (4)
## -----
## log(n_citations + 1)  1.025***  1.357***  1.367***  1.384***
##                      (0.026)  (0.036)  (0.039)  (0.041)
##
## log(delta_years)      -1.107*** -1.063*** -0.935***
##                      (0.055)  (0.060)  (0.061)
##
## has_same_author      5.335***  4.835***
##                      (0.329)  (0.310)
##
## n_same_keywords      1.650***
##                      (0.109)
## -----
## Observations          1,000      1,000      1,000      1,000
## Log Likelihood        -1,911.823 -1,617.338 -1,355.304 -1,243.572
## =====
## Note:                  *p<0.1; **p<0.05; ***p<0.01
```