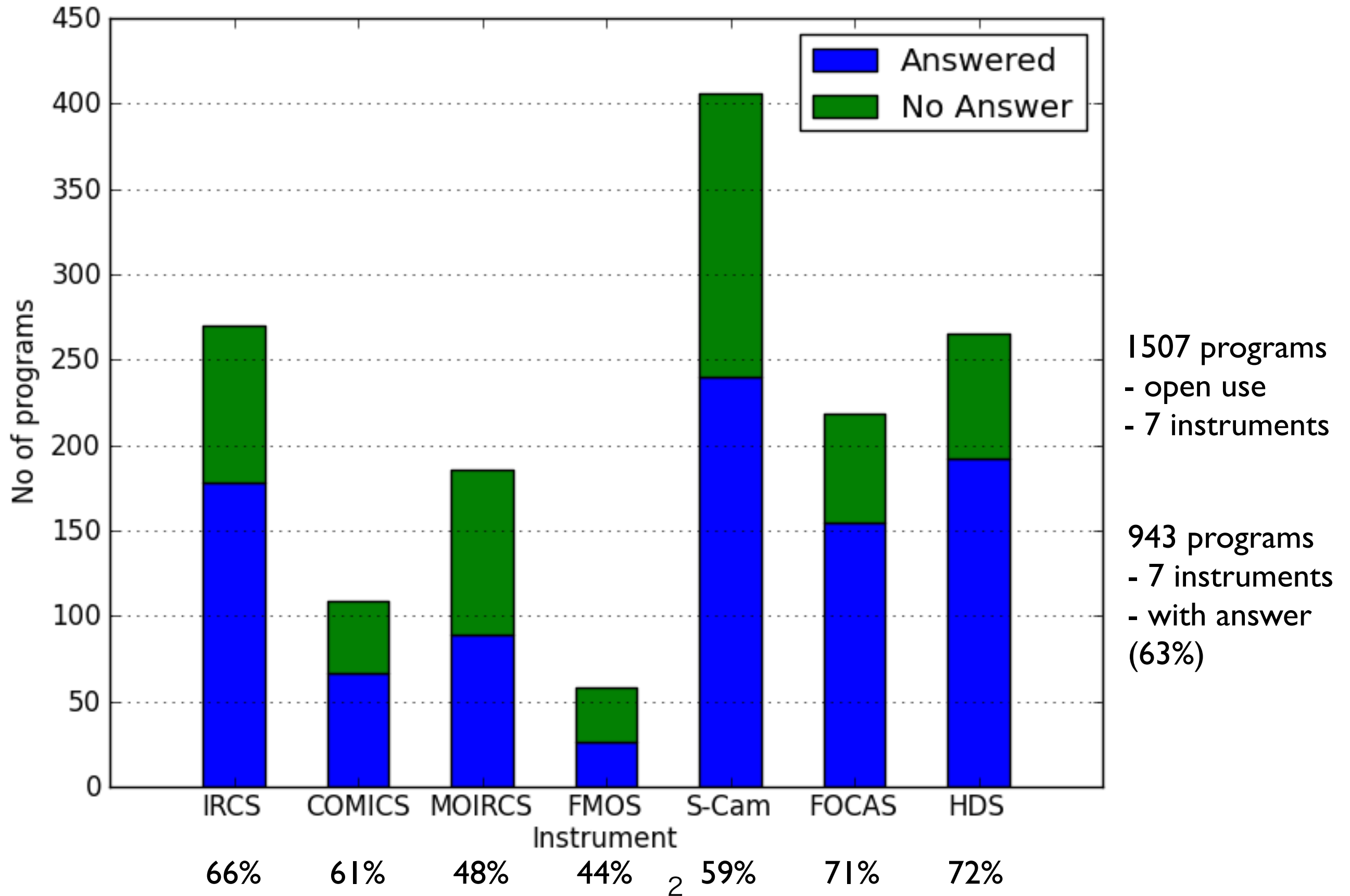


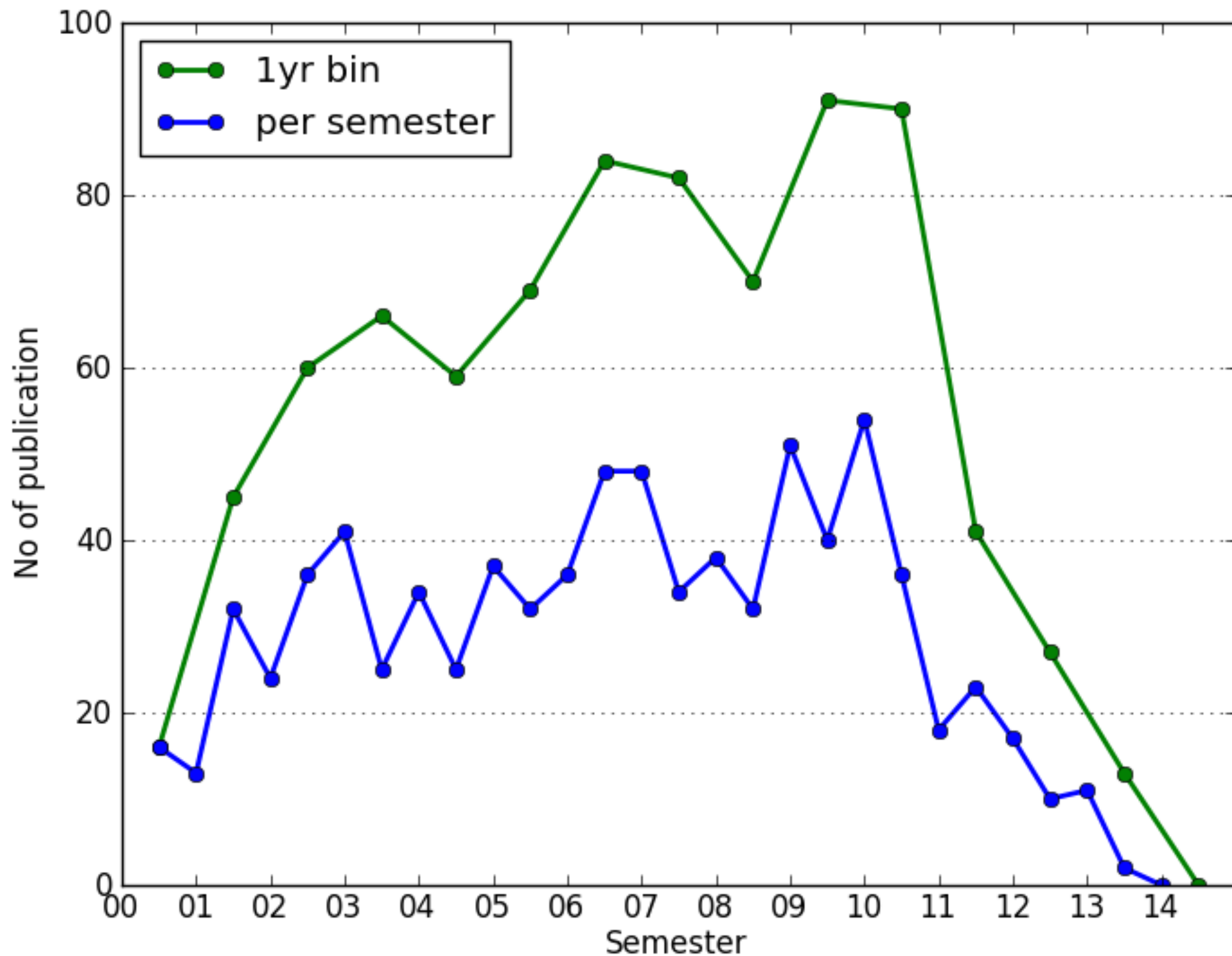
Output from each Subaru instrument  
- Analysis of Subaru publication survey -

Masaomi Tanaka  
2014/11/26

# No of programs



# No of publication



838 programs  
- open use  
- 7 instruments  
- with answer  
- with data

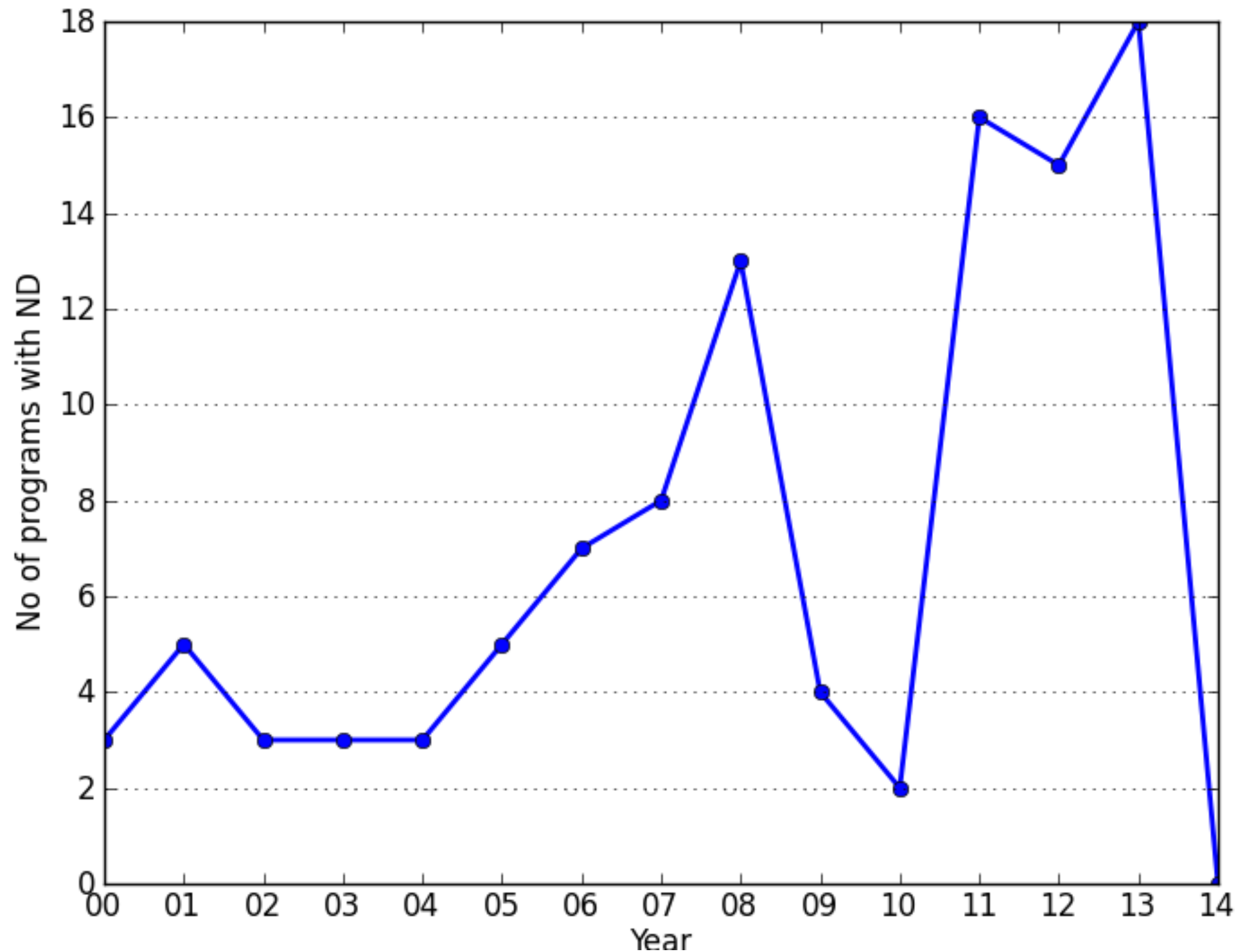
105 programs  
- with no data

813 publication  
(with duplication)

524 publication  
(without duplication)



## No of programs with “No Data”

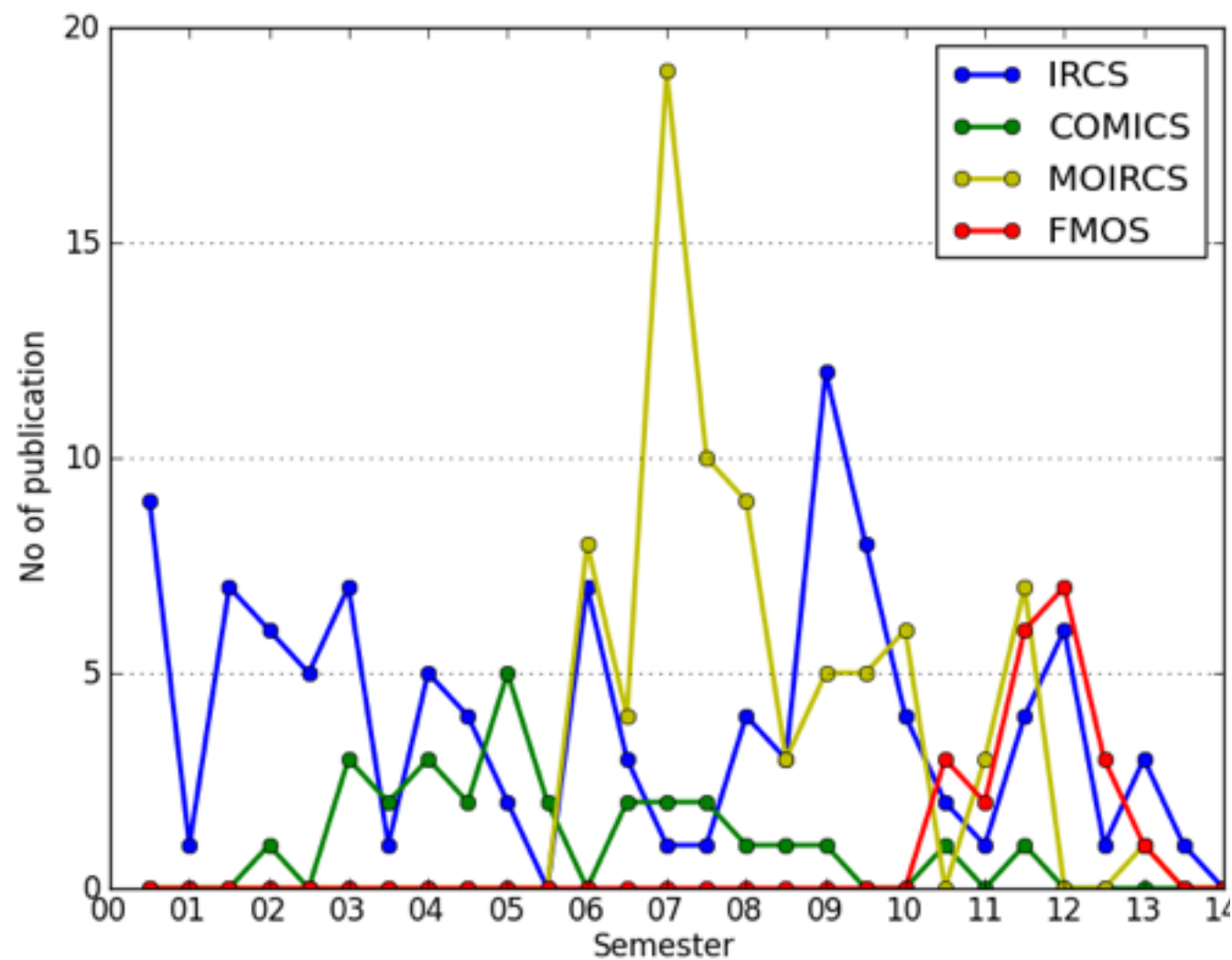


838 programs  
- open use  
- 7 instruments  
- with answer  
- with data

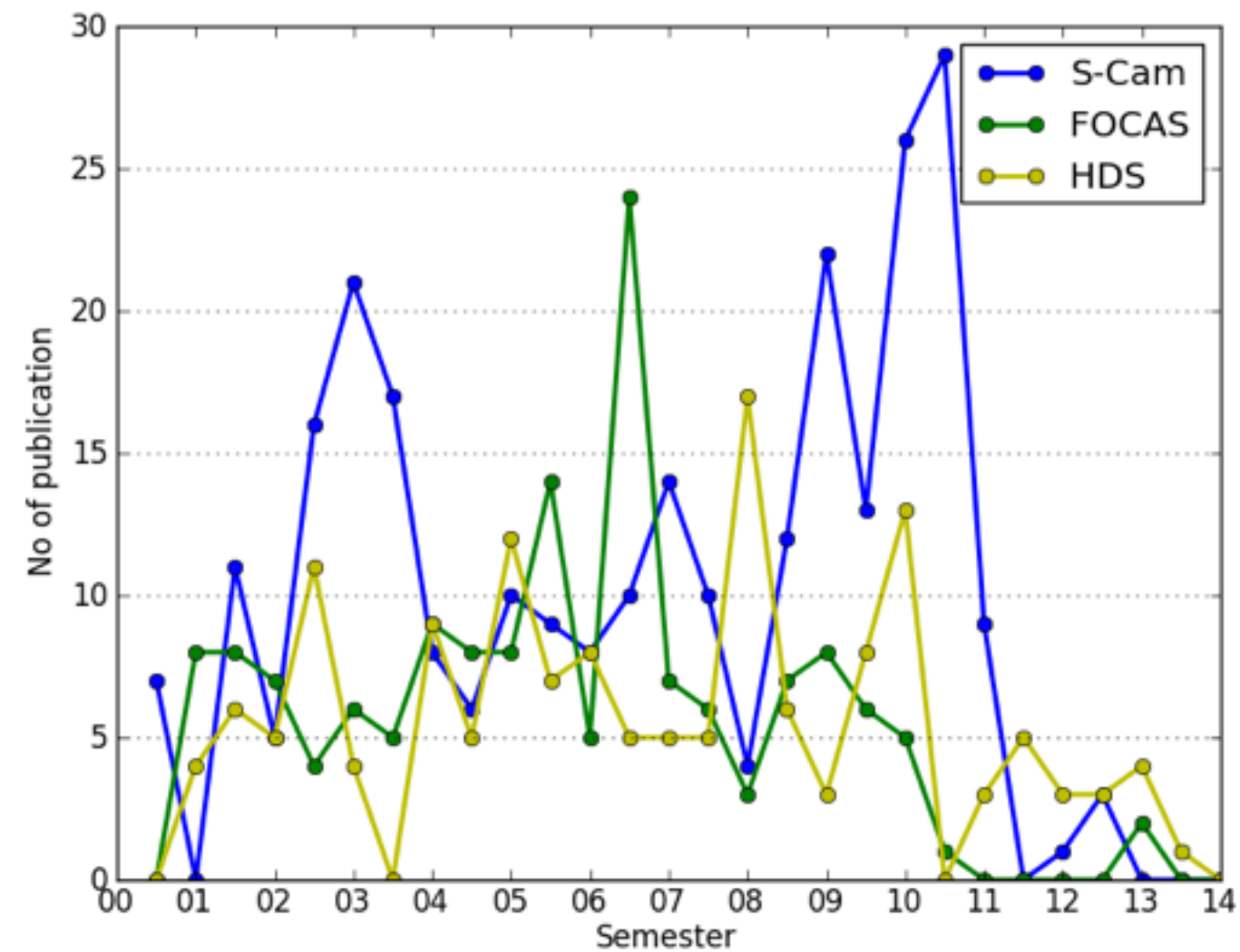
105 programs  
- with no data

# No of publication for each instrument (semester)

IR



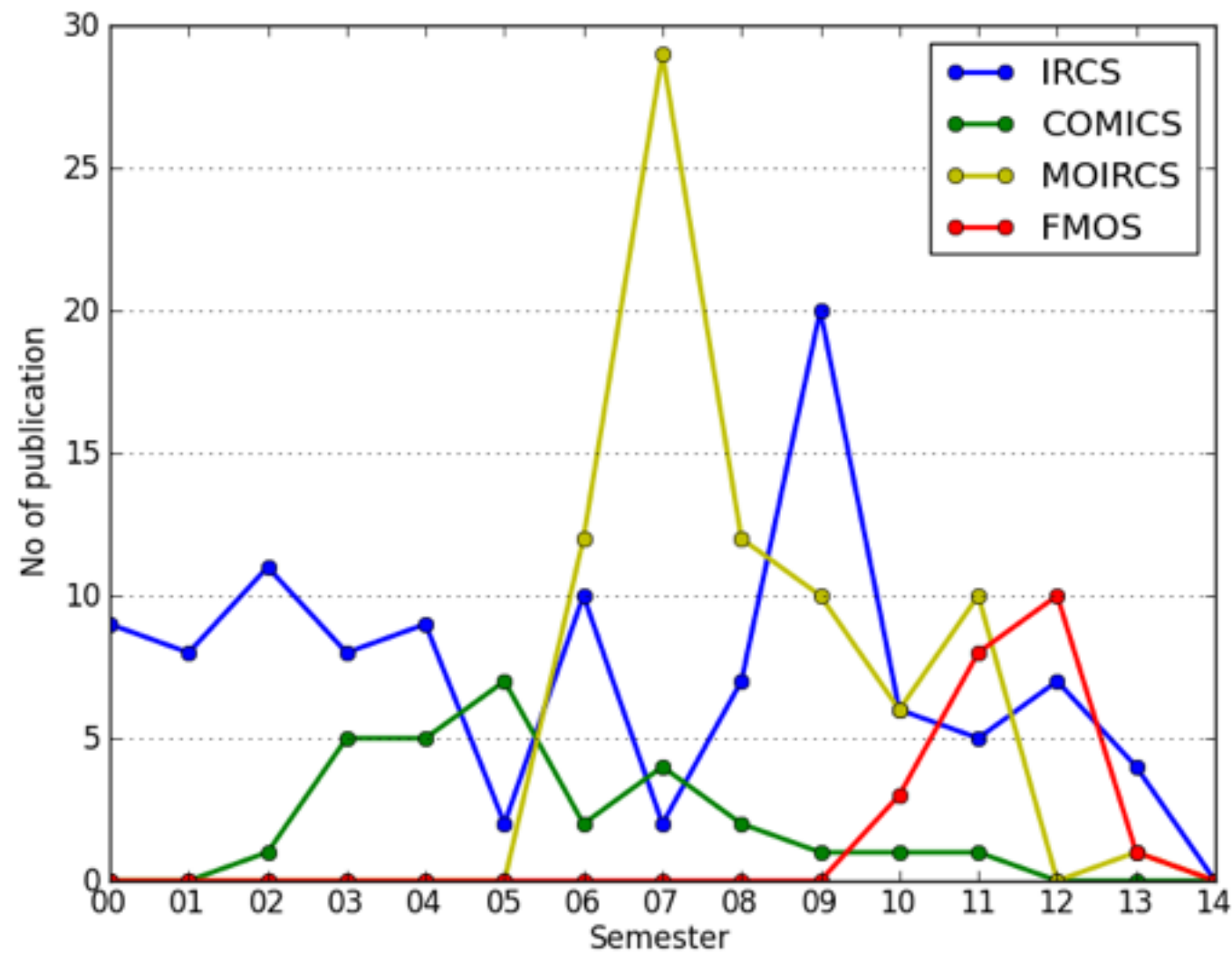
Opt



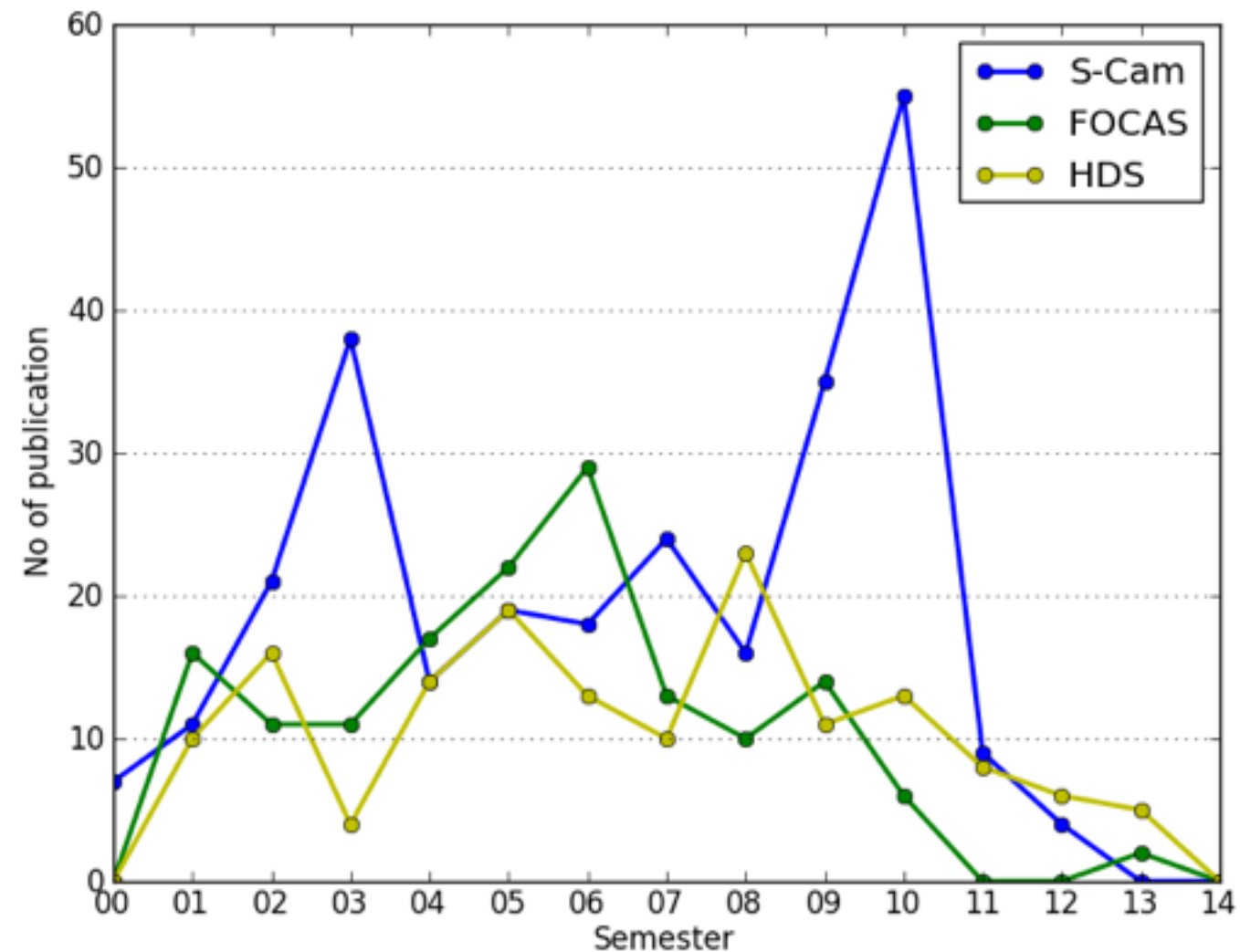
with duplication

★ No of publication for each instrument (1 yr bin)

IR



Opt



with duplication

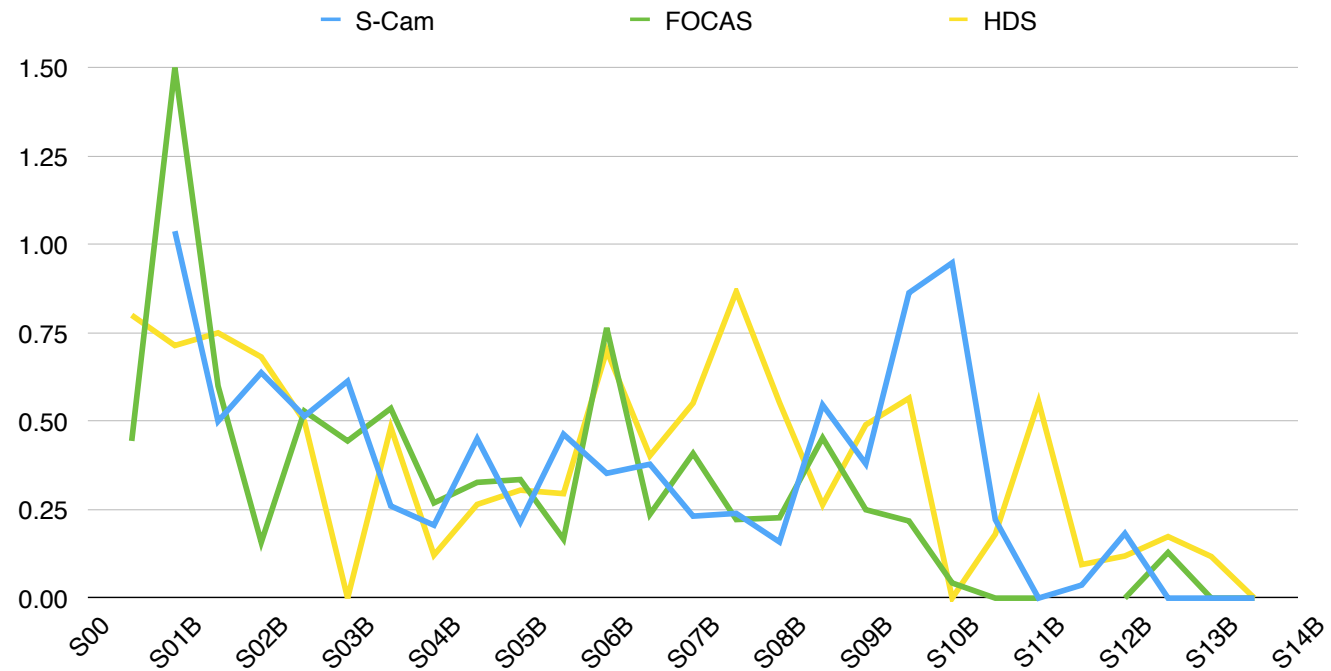
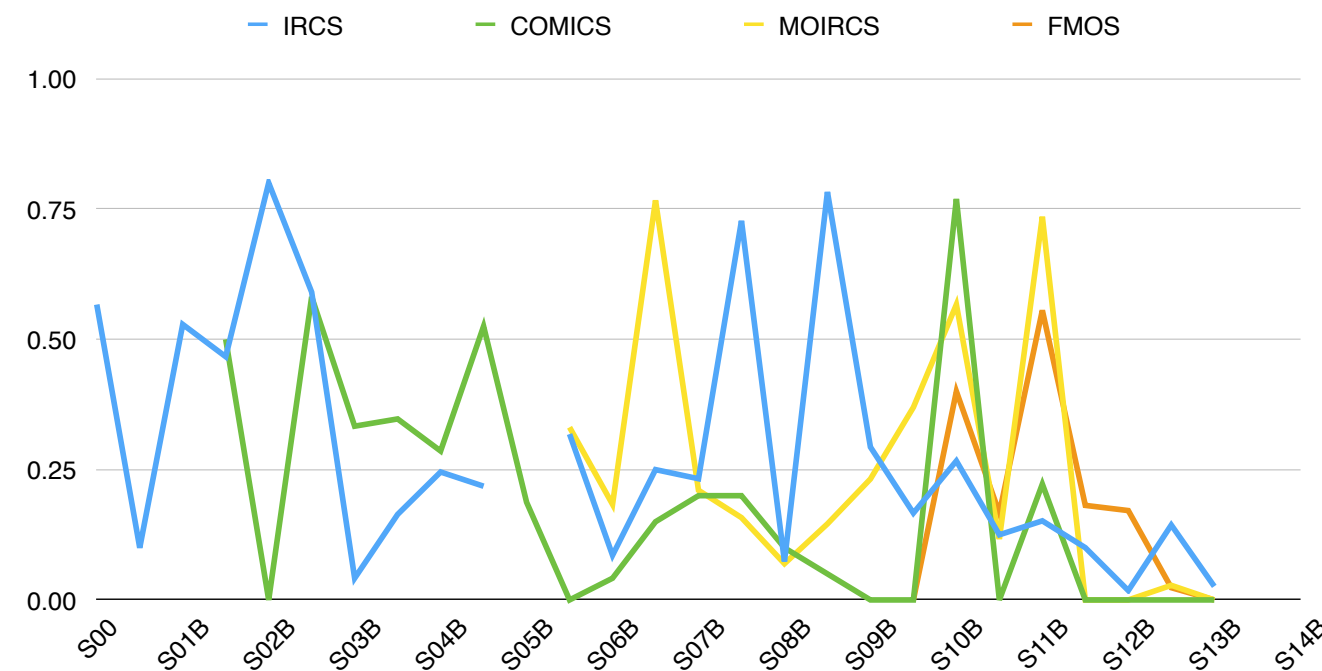
# Removing duplication (same publication by different programs)

## Weight

- Number of publications divided by number of programs used for the publication
  - e.g., if four programs were spent to produce a paper, the weight of the paper is 0.25
  - e.g., a program has produced two papers. One paper is based on two programs and another is based on three programs. Number of publications for the program is  $0.5 + 0.33 = 0.83$ .

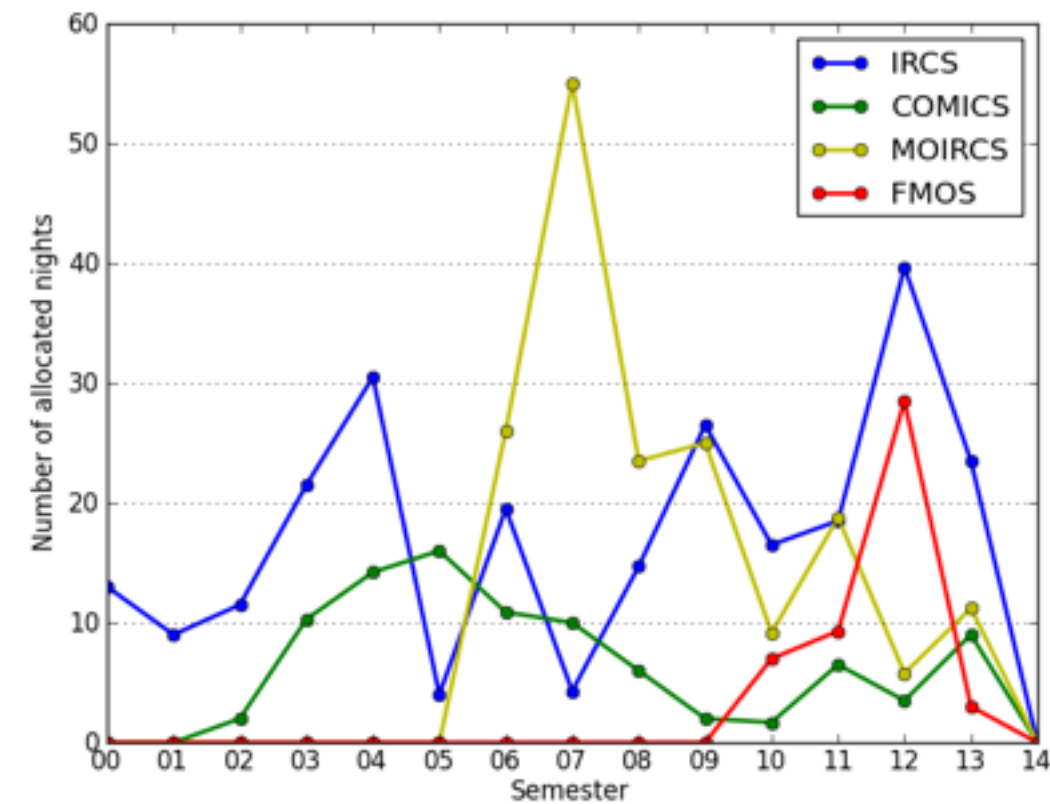
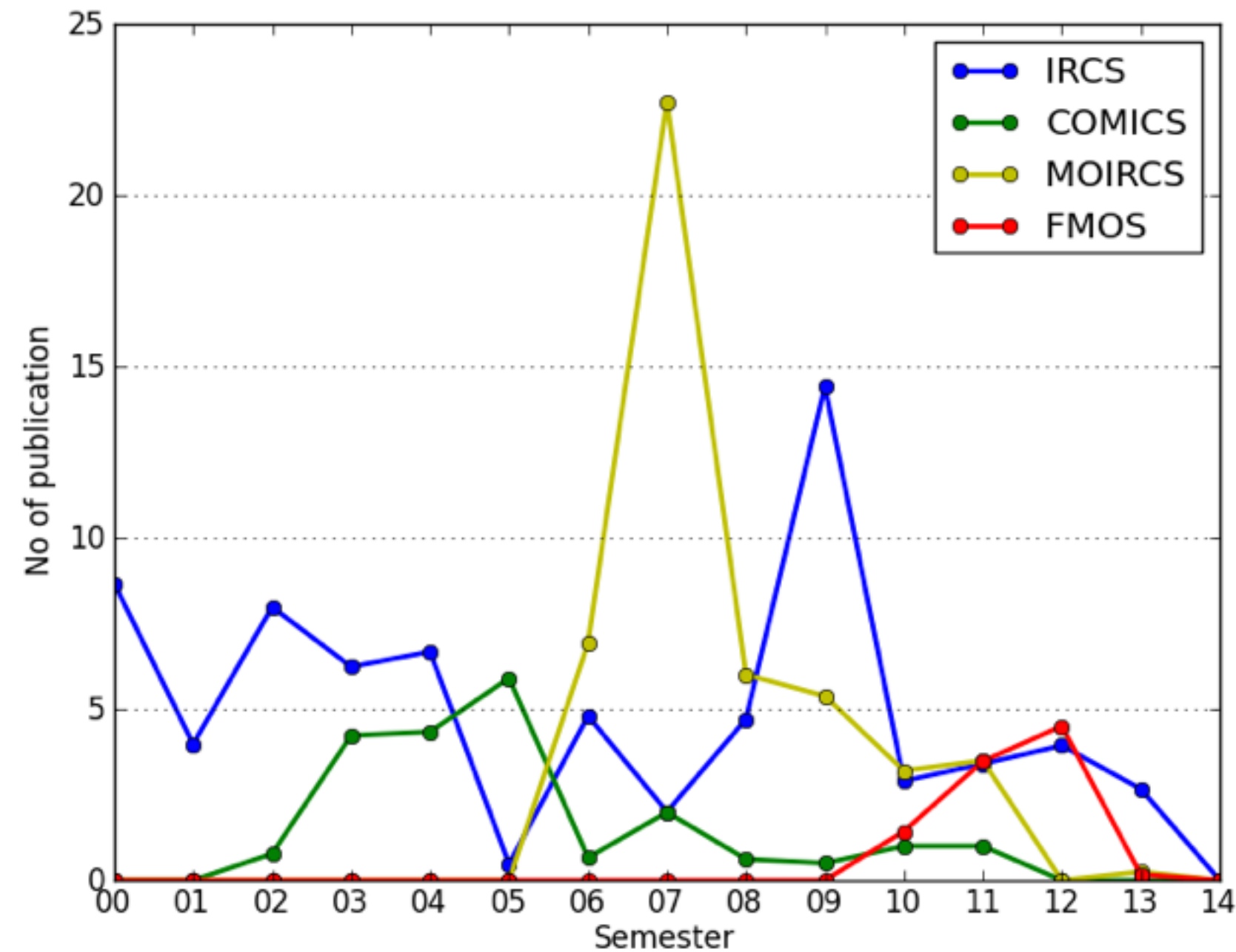
(+weighted by allocated nights)

+ then divided by the number of total allocated nights





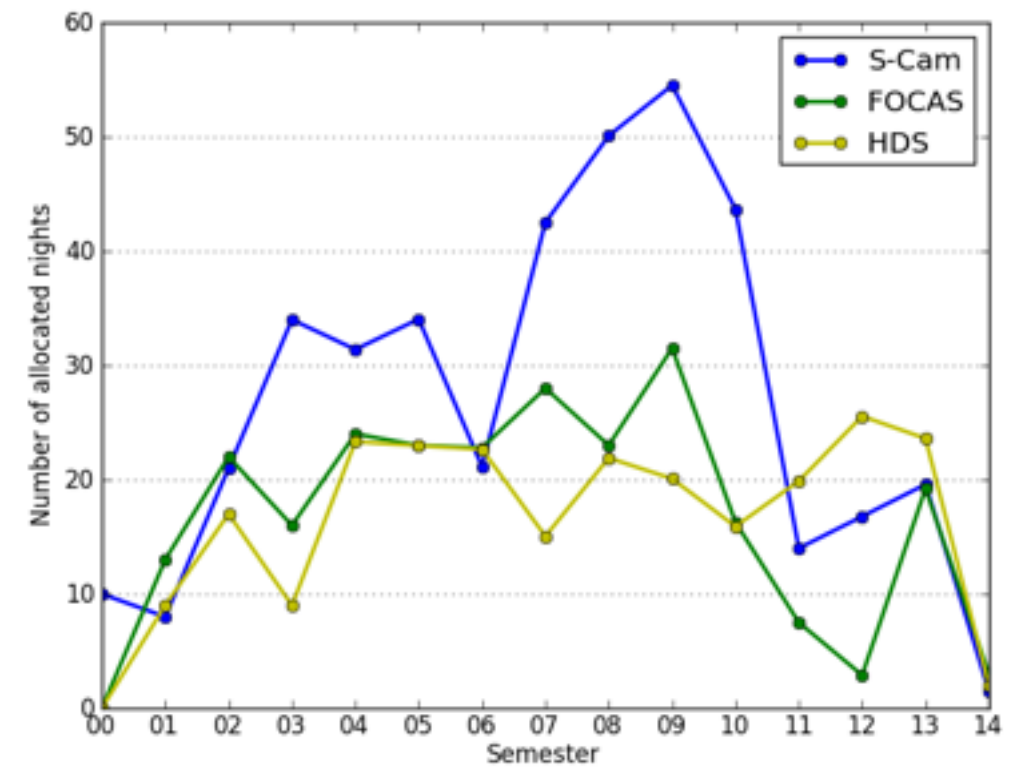
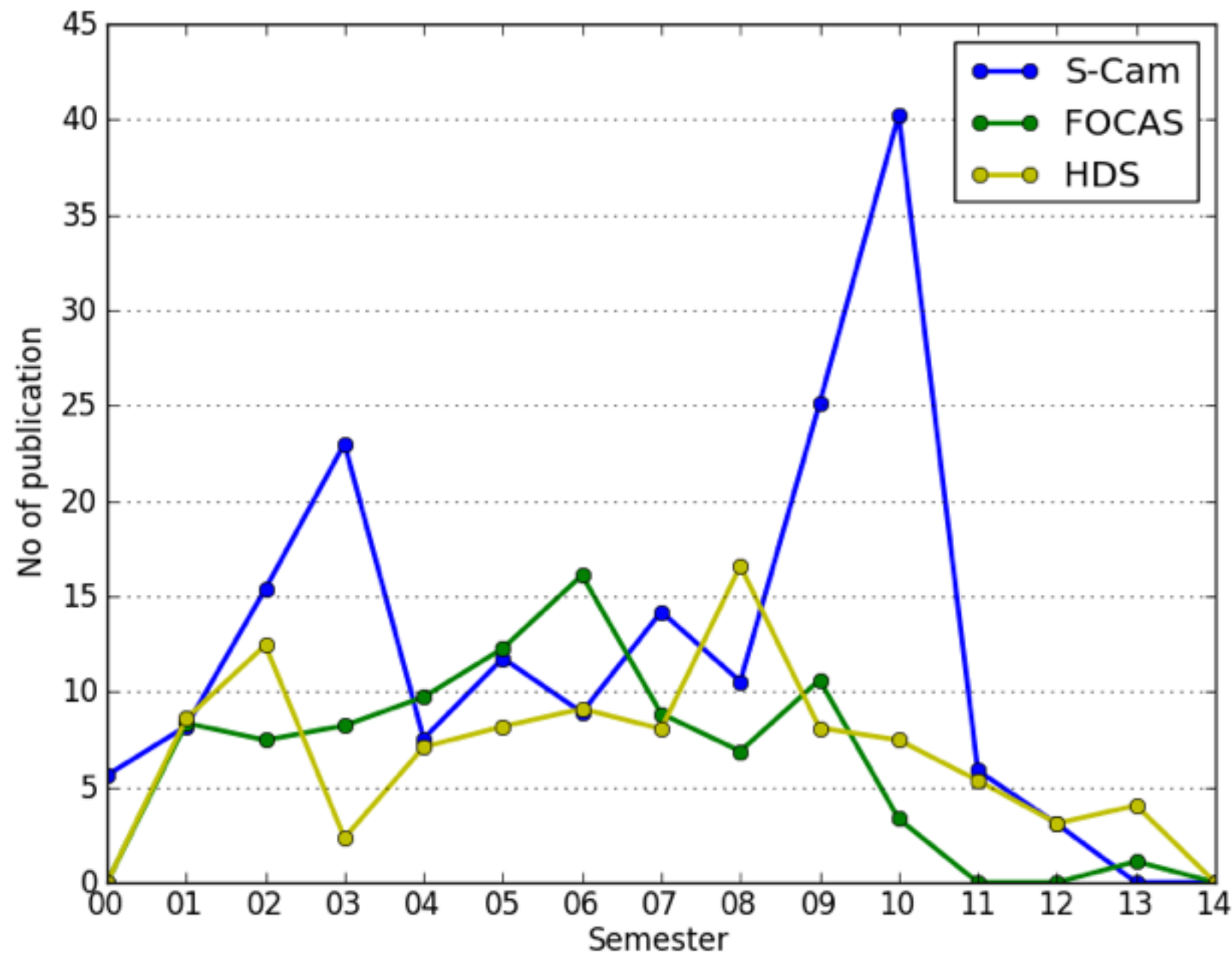
# No of publication: IR instruments (w/o duplication)



allocation

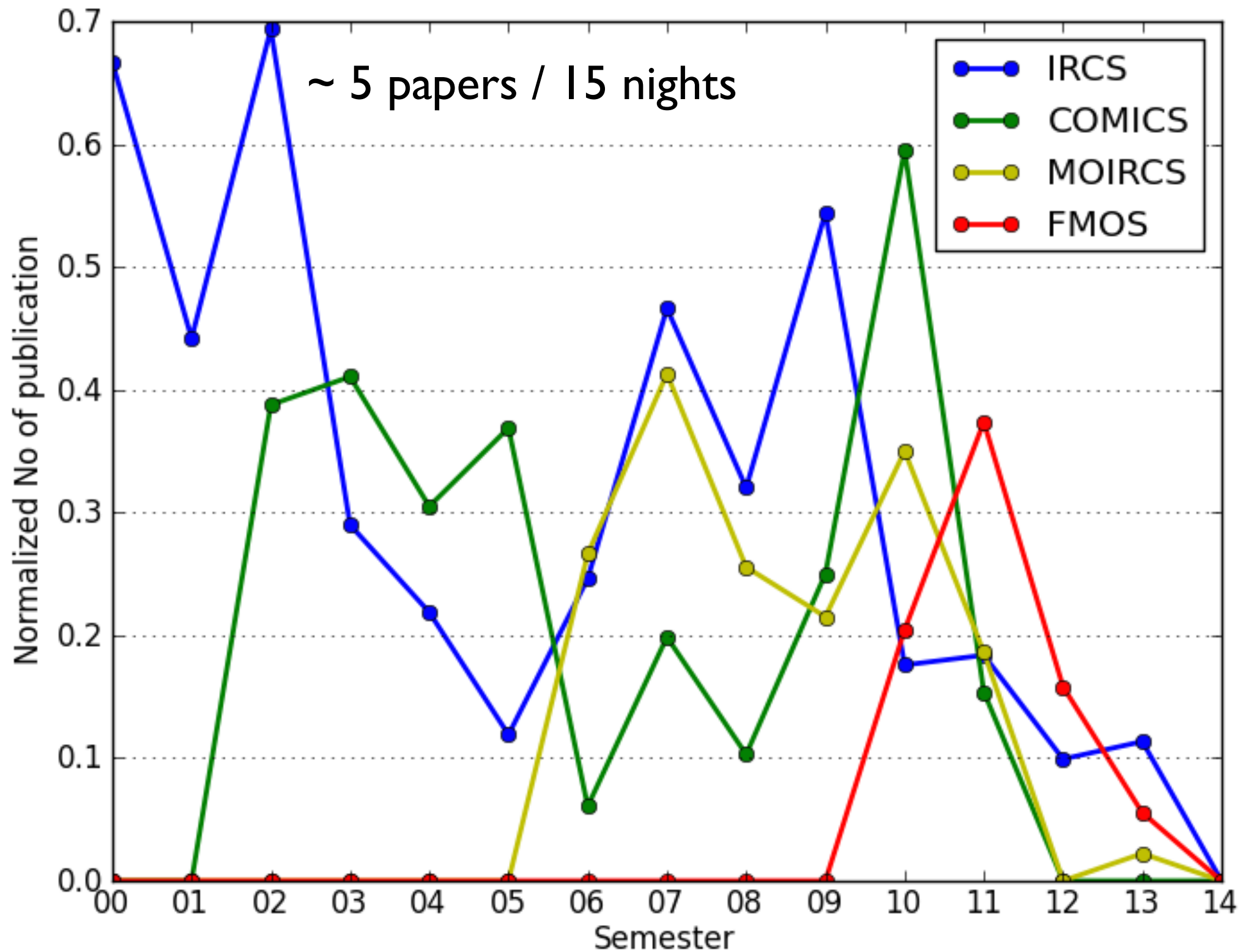


# No of publication: Opt instruments (w/o duplication)

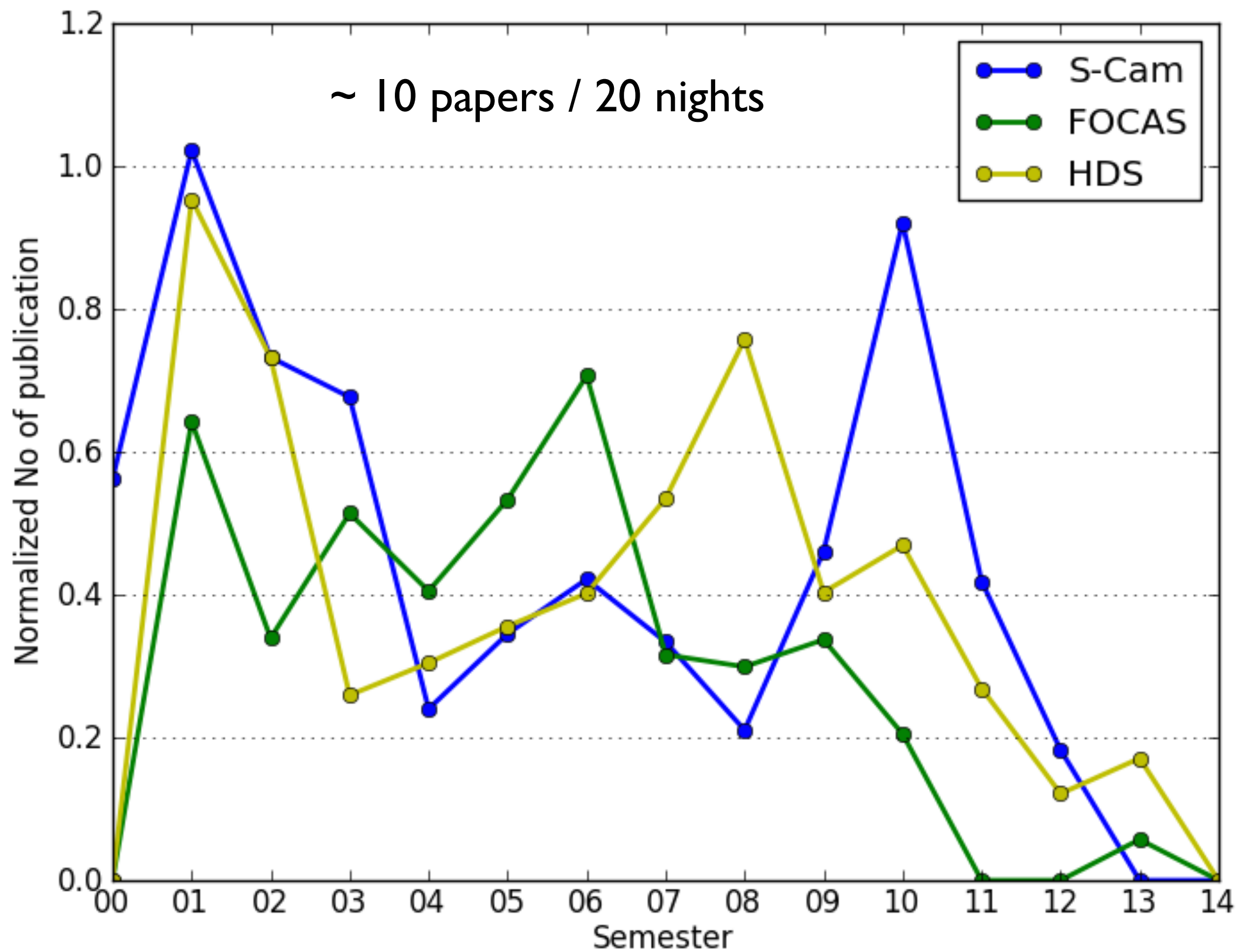


allocation

# ★ Normalized by allocated nights: IR instruments

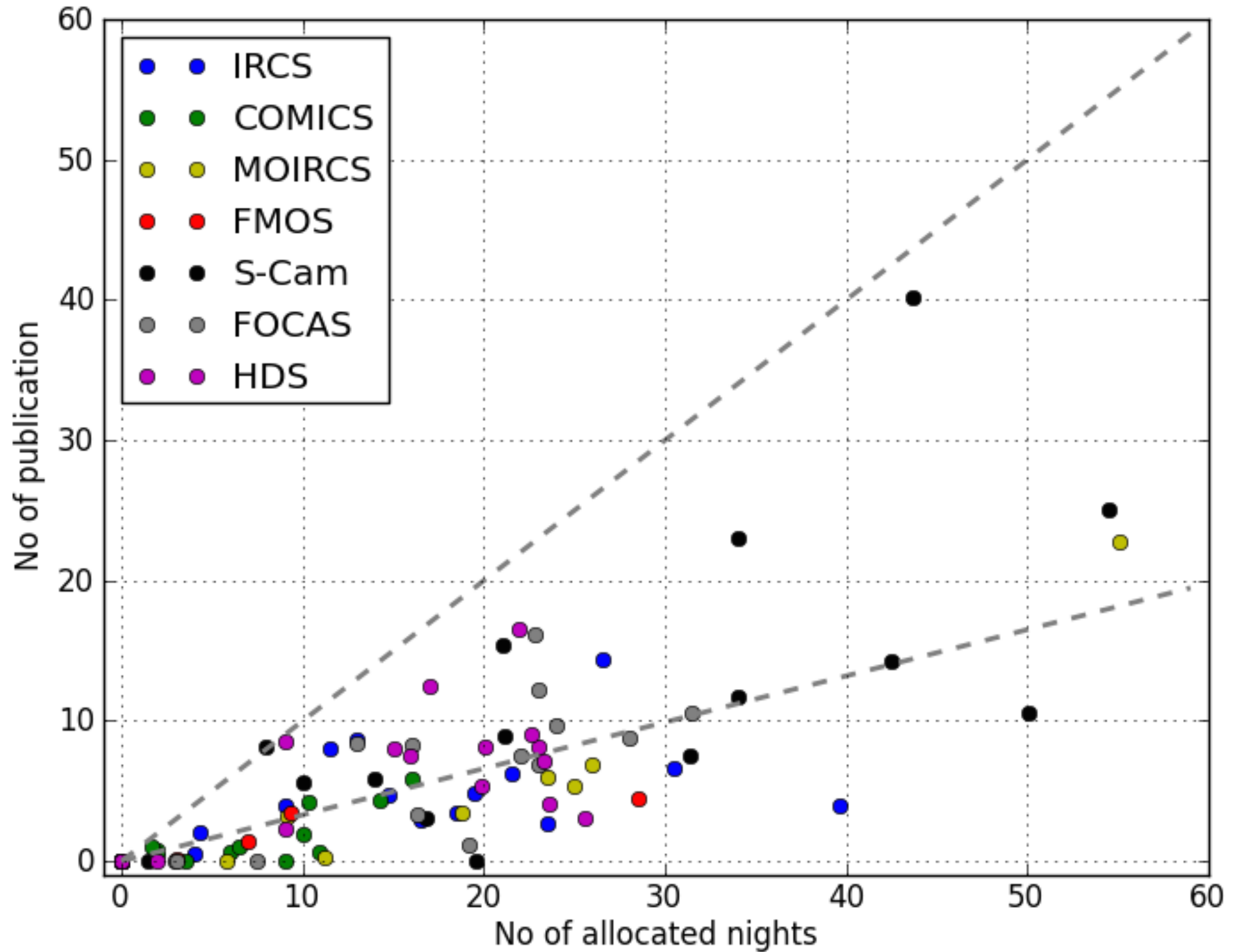


# ★ Normalized by allocated nights: Opt instruments

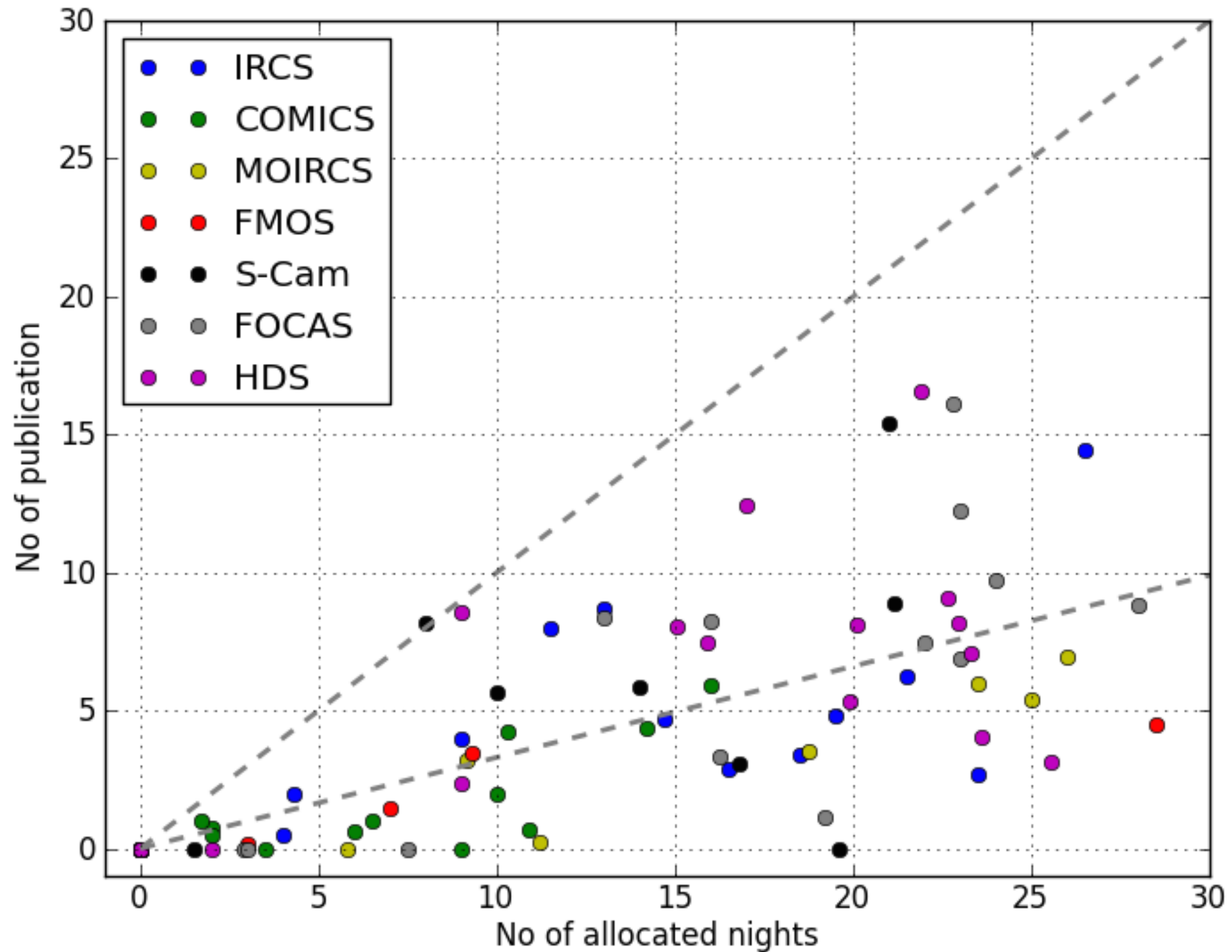




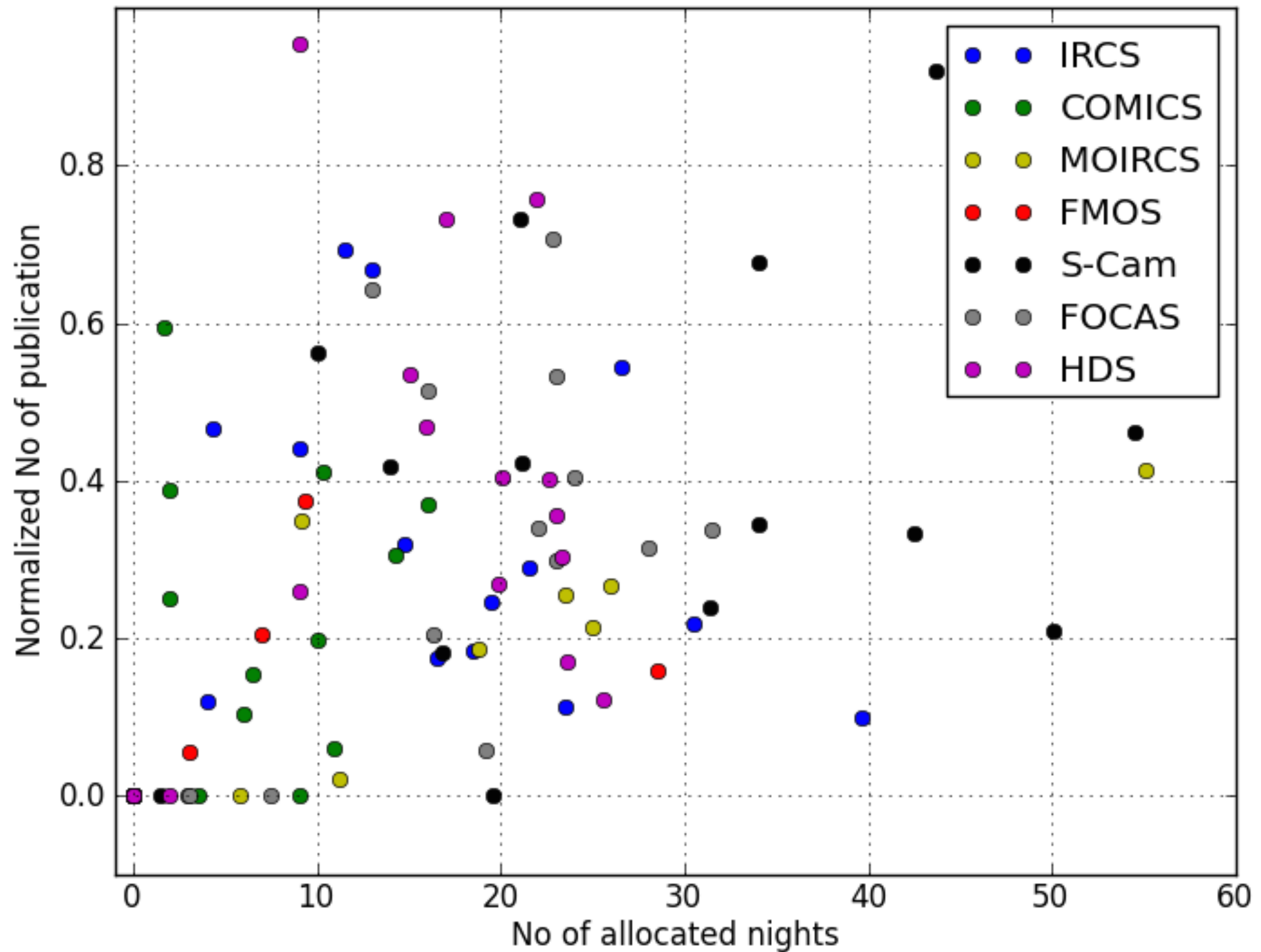
## No of publication vs. allocated nights



# ★ Publication number vs. allocated nights (zoom)

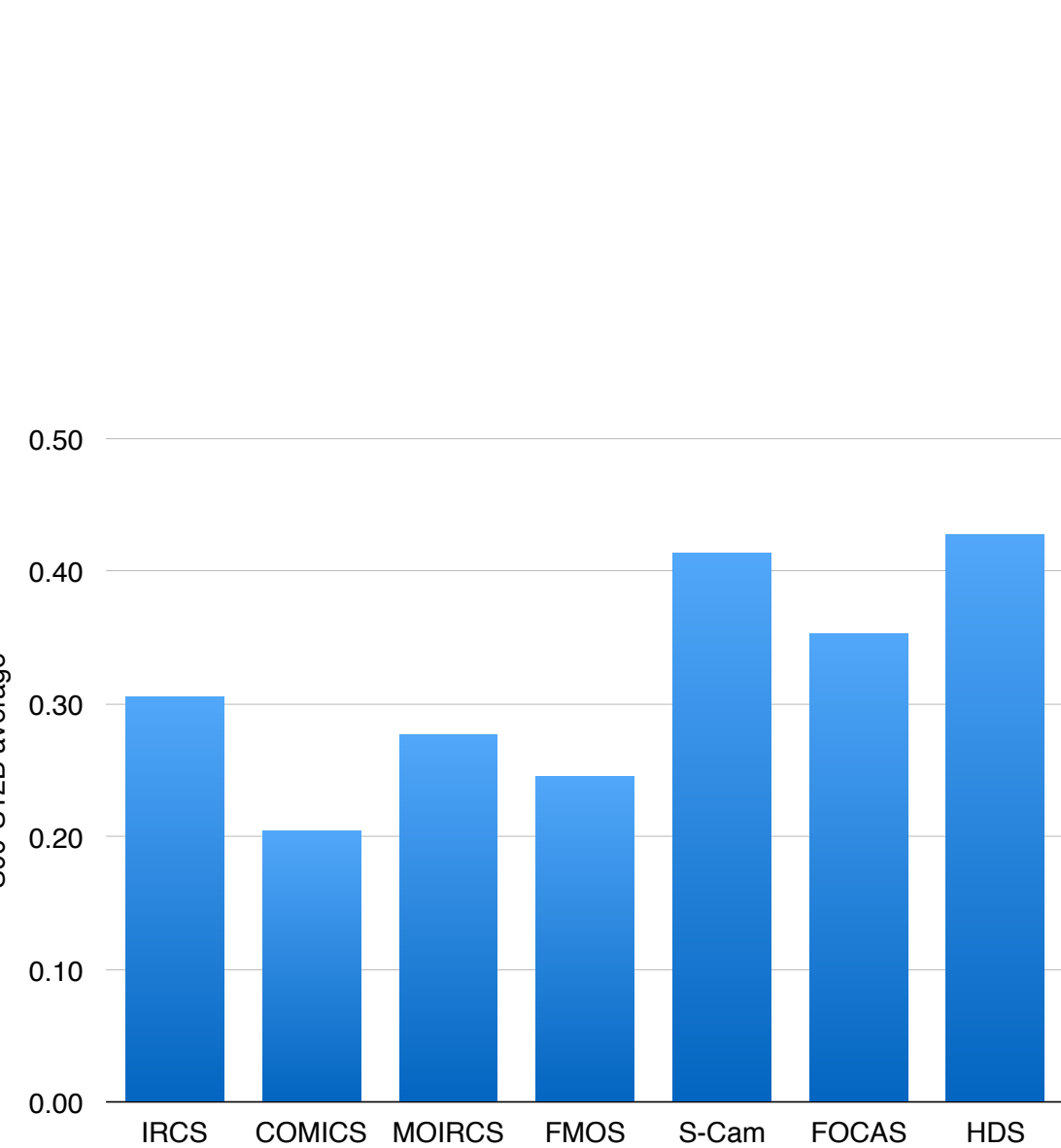


# ★ Normalized publication number vs. allocated nights

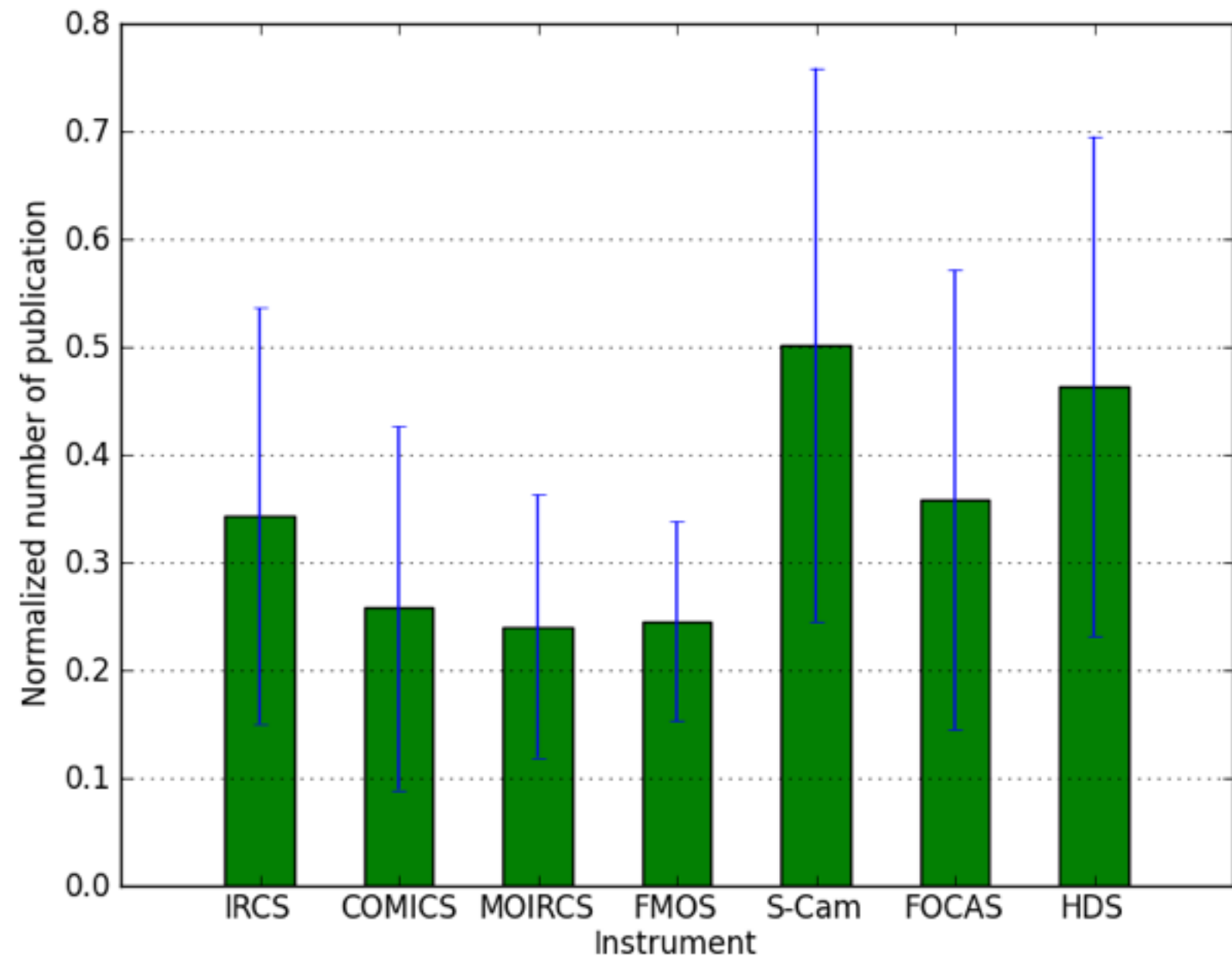




# Normalized publication number (S00-S12)



Iwata-san



Tanaka

IR: ~ 5 papers / 15 nights  
Opt: ~ 10 papers/ 20 nights



## Analysis for each “paper”

\* Assignment to each instrument

(Case A): if a paper is written with 3 FOCAS nights,  
==> 1 FOCAS paper

(Case B): if a paper is written with 1 FOCAS nights  
and 2 S-Cam nights,  
==>

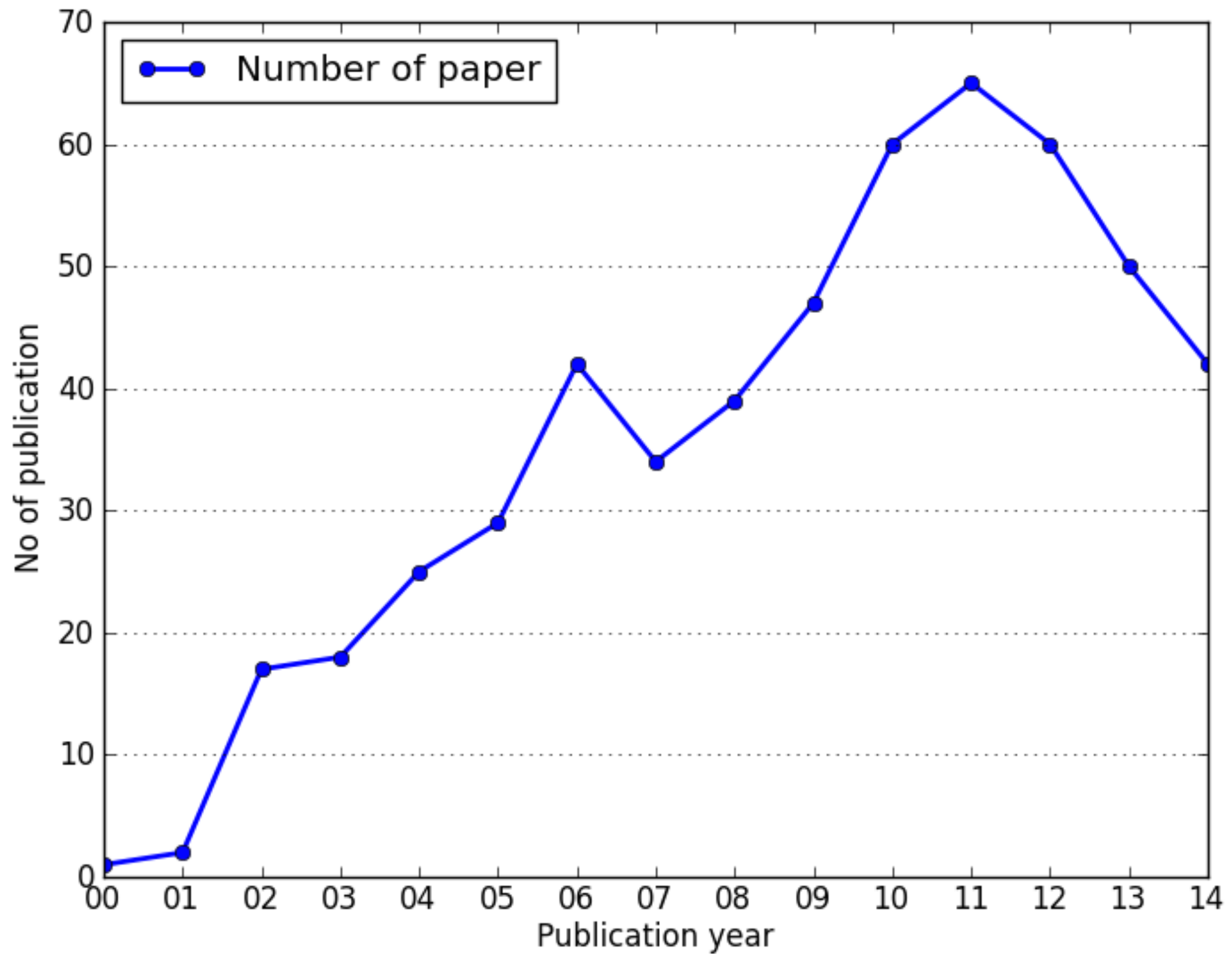
$1/3 = 0.33$  FOCAS paper and  $2/3 = 0.67$  S-Cam paper

(Case C): if a paper is written with 2 FOCAS nights  
and 4 S-Cam nights,  
==>

$2/6 = 0.33$  FOCAS paper and  $4/6 = 0.67$  S-Cam paper

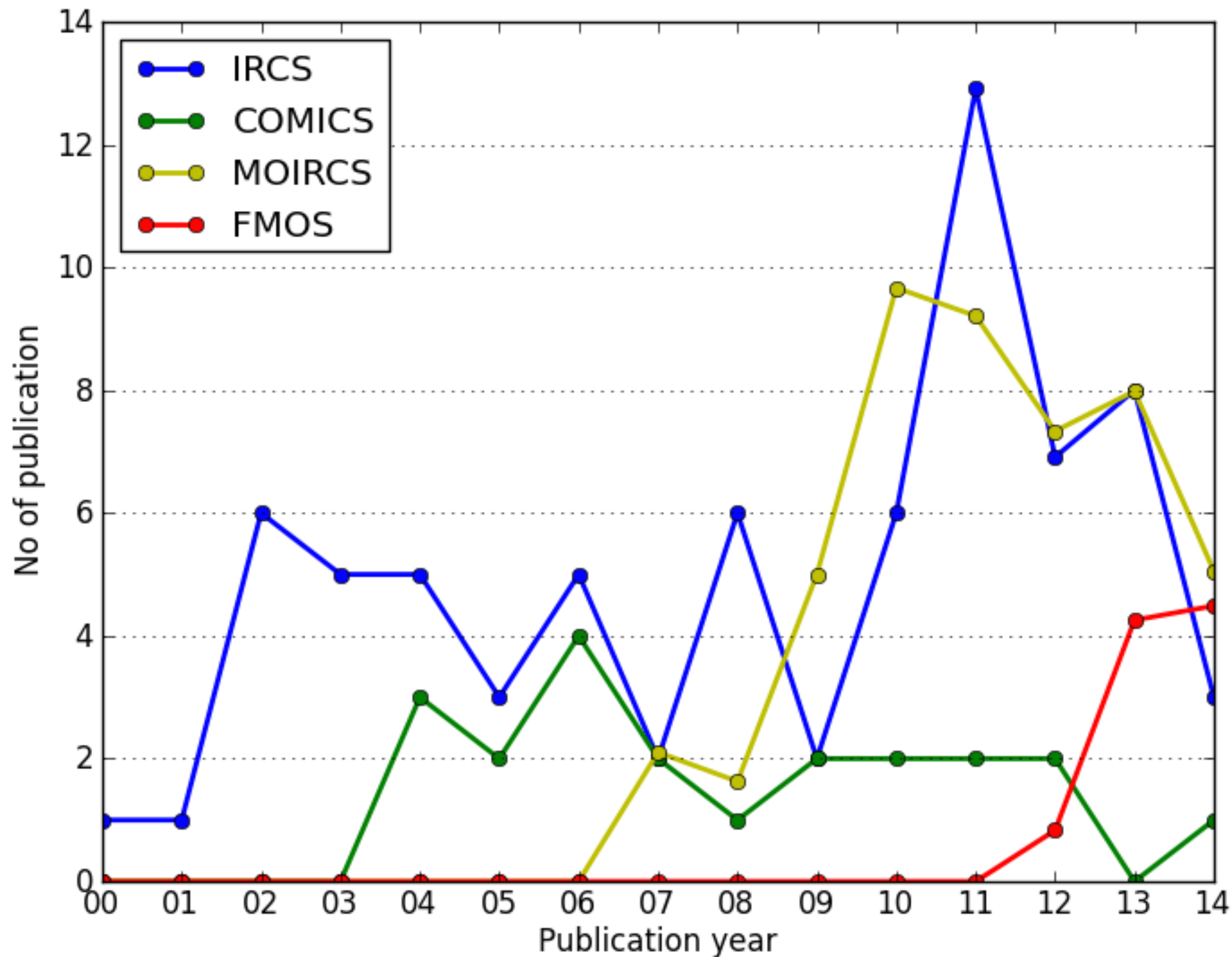


# No of publication (pub. year)



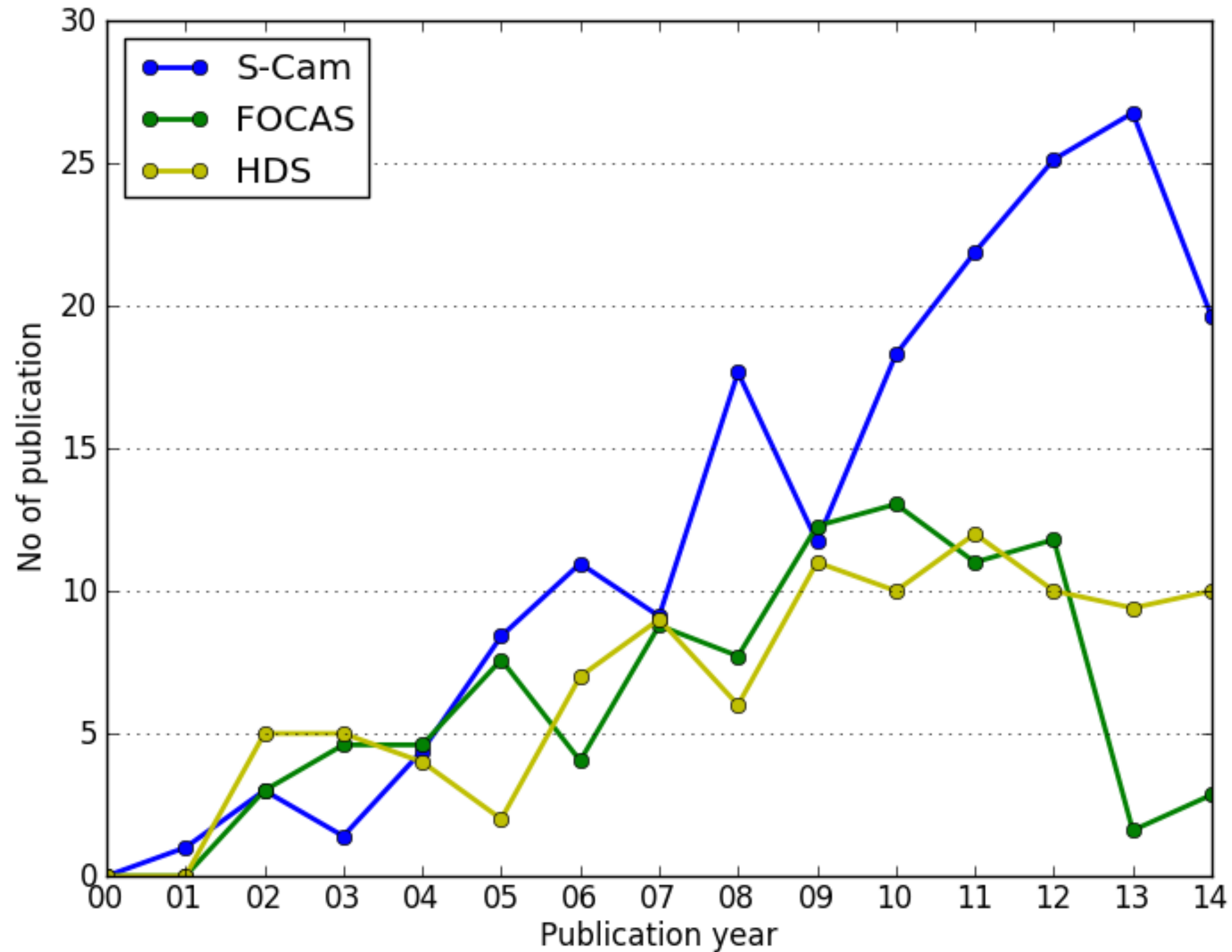


# No of publication: IR instrument (pub. year)





# No of publication: Opt instrument (pub. year)



# Summary

- Analysis for each year (instead of semester)
- No of publication roughly follows the number of allocated nights
- The difference for each instrument is not significant
- Analysis for each publication
  - difficult to separate from “demand”
- Citation survey?? (depends on community size...)