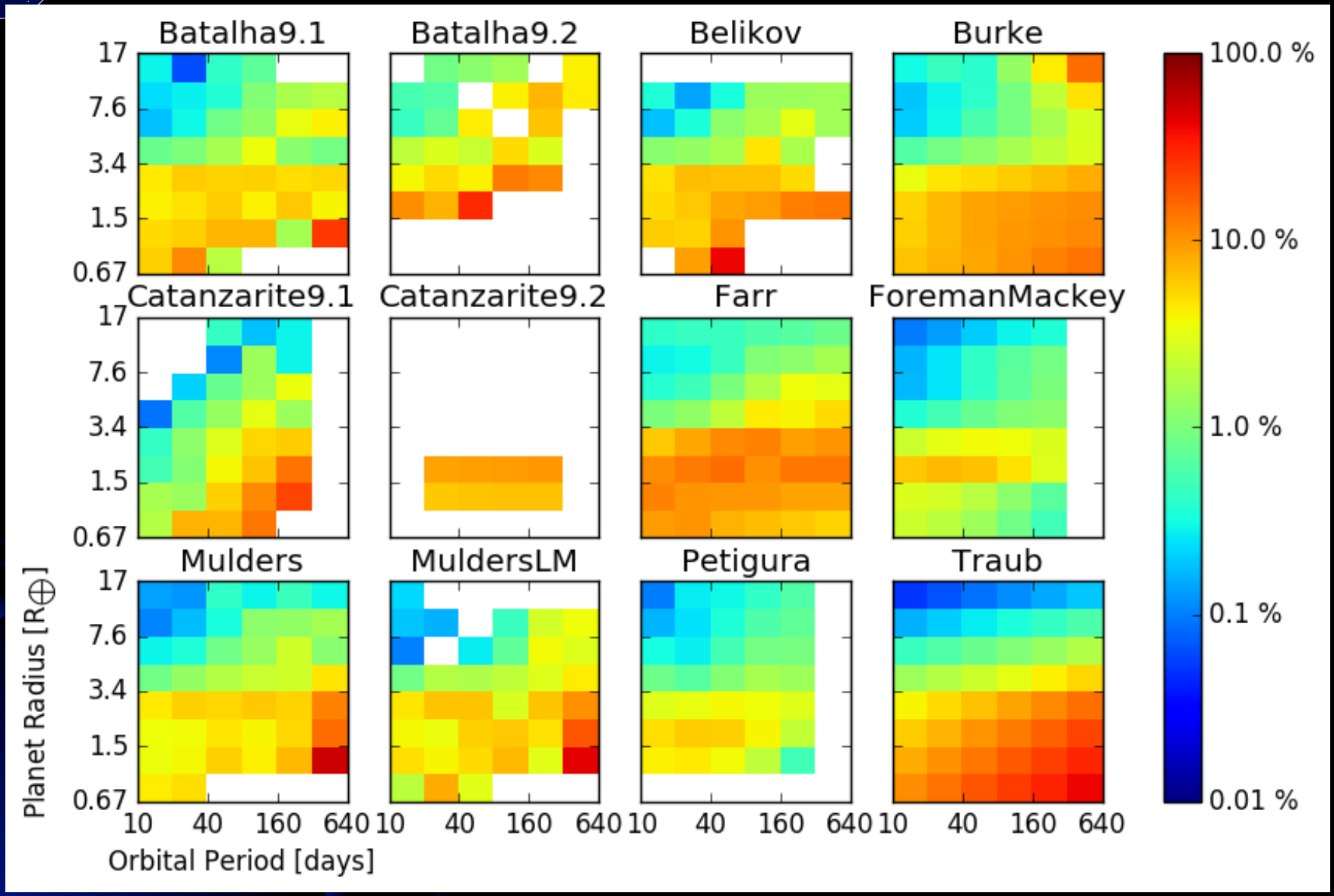
Example: submitted occurrence rates for G-dwarfs



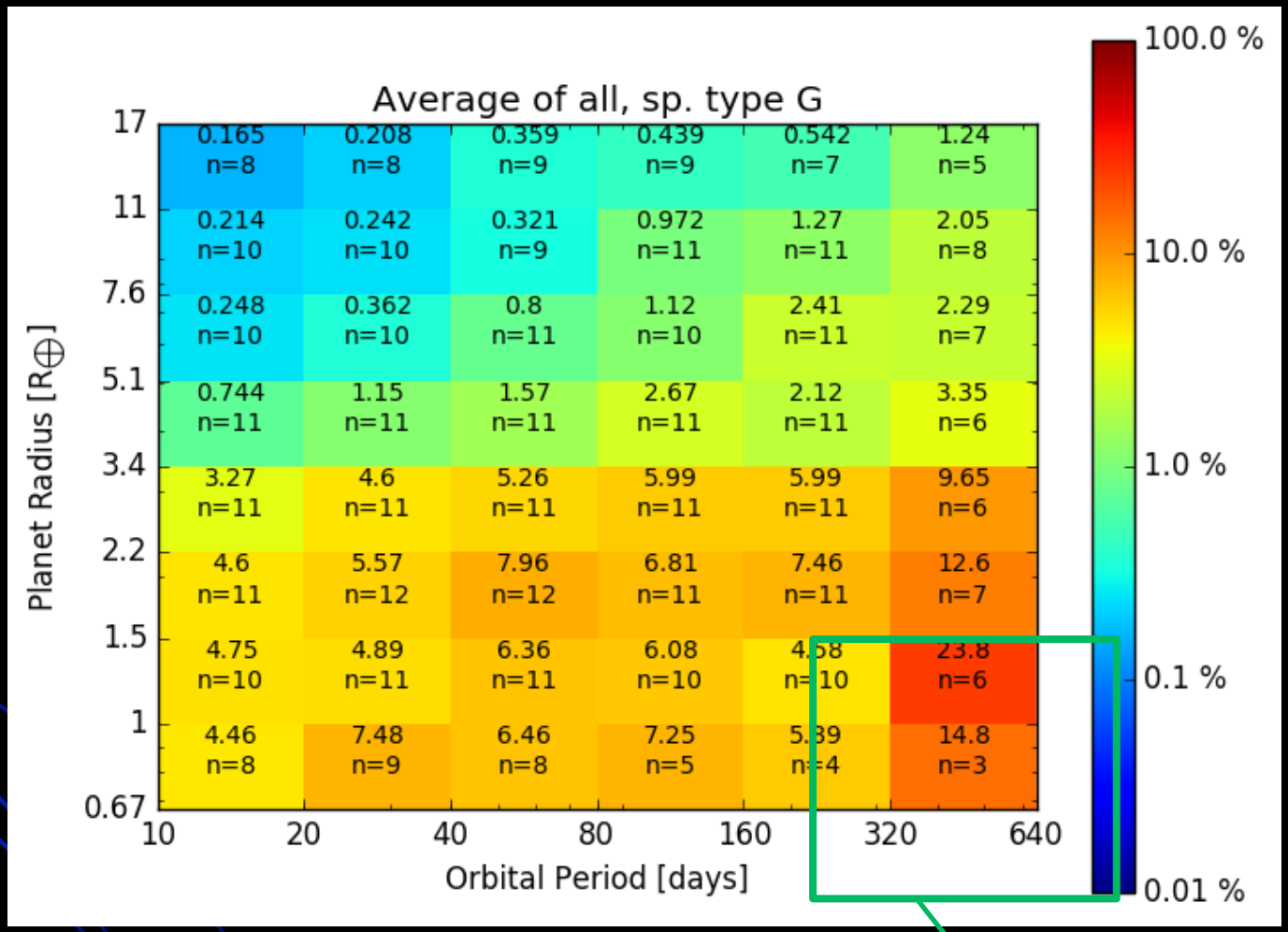
Plots and analysis are generated with the make_plots.py script in the SAG13 Google drive, code by Gijs Mulders.

Closer look at G-dwarf average

legend

% occurrence

# of submissions



Note: this is a simple average across submissions
More sophisticated combination methods are being explored, such as weighting by quoted uncertainties and/or accounting for dependencies

Plots and analysis are generated with the make_plots.py script in the SAG13 Google drive, code by Gijs Mulders.

$\eta_{\text{habSol,SAG13}} \sim 0.58$
(based on best power law fit)

Calculations of habitable occurrence rates

Integrating SAG13 parametric fit

		HZ (from Kopparapu 2013)	
		Conservative	Optimistic
Planet radius range	1.0-1.5	**0.14**	**0.20**
	0.5-1.5	**0.40**	**0.58**

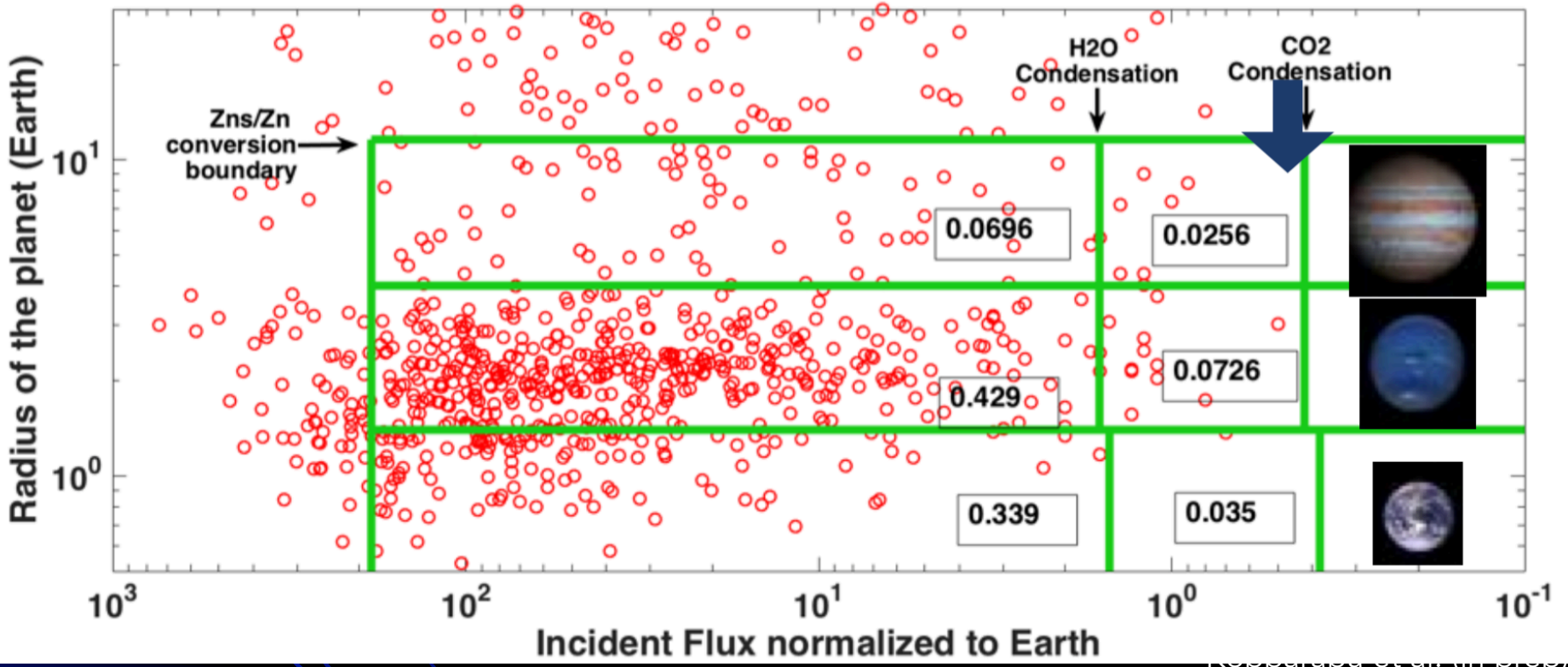
$\eta_{\text{habSol,SAG13}}$

Integrating Burke et al. 2015 parametric fit

		HZ (from Kopparapu 2013)	
		Conservative	Optimistic
Planet radius range	1.0-1.5	**0.21**	**0.30**
	0.5-1.5	**0.69**	**1.0**

1. STDTs will want yields of multiple planet "types." Need to define the boundaries of planet types in radius and semi-major axis (including scaling with stellar type).

Suggestion:



Kopparapu et al. (in prep)