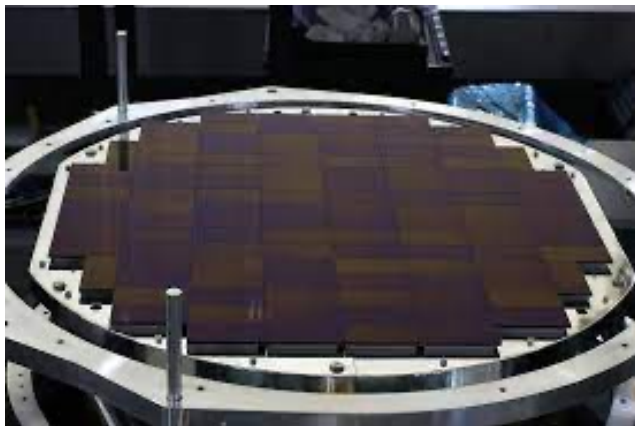


MIRACLES (S21A-114Q)

Mapping of Ionizing **R**adiation on the **C**osmic web with **L**ya Emission and **S**hadow

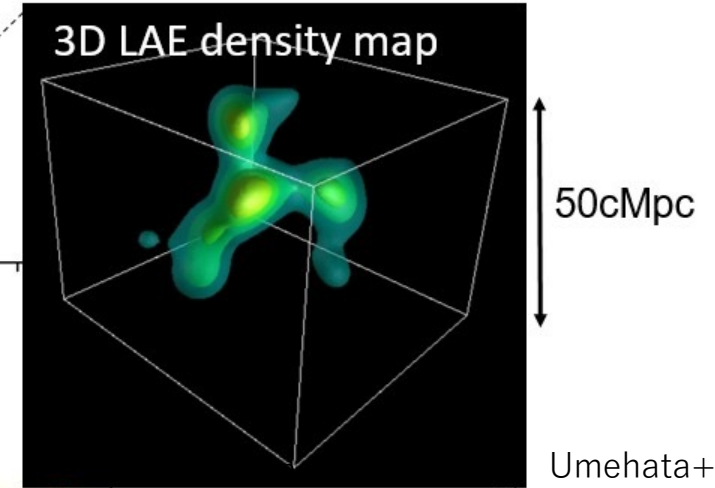
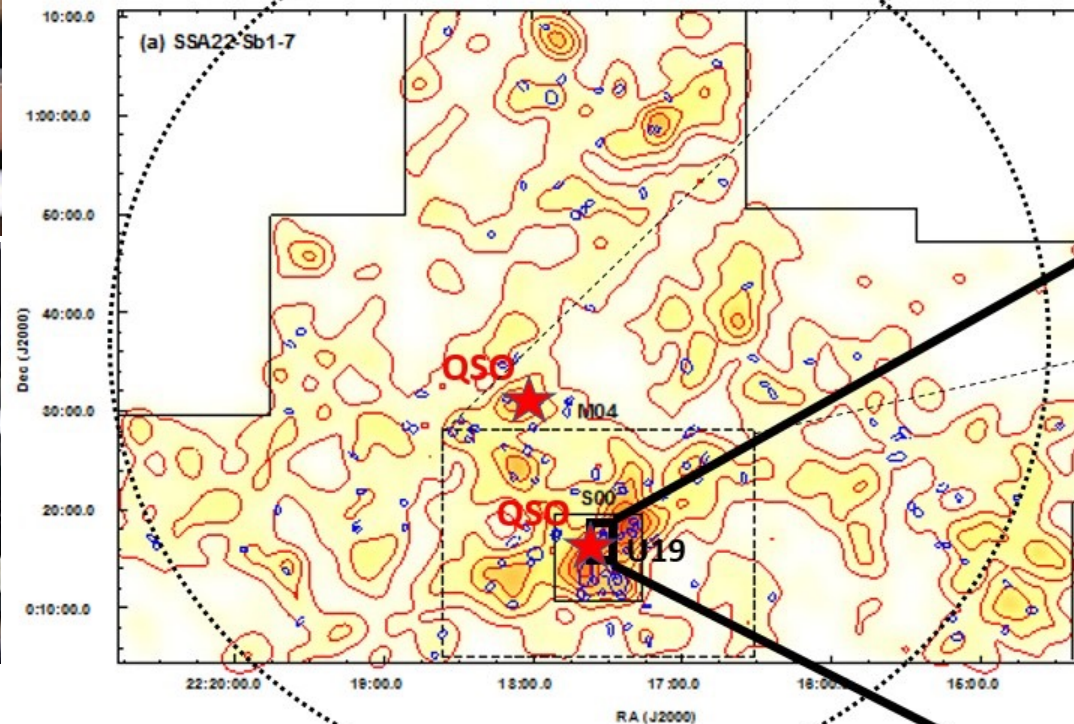
Yuichi Matsuda (NAOJ/Caltech) & MIRACLES Team

Matsuda+05

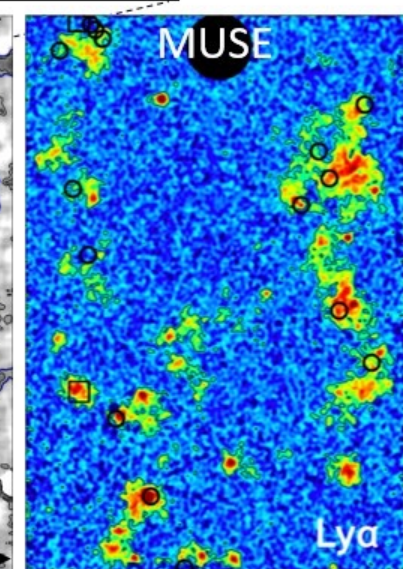
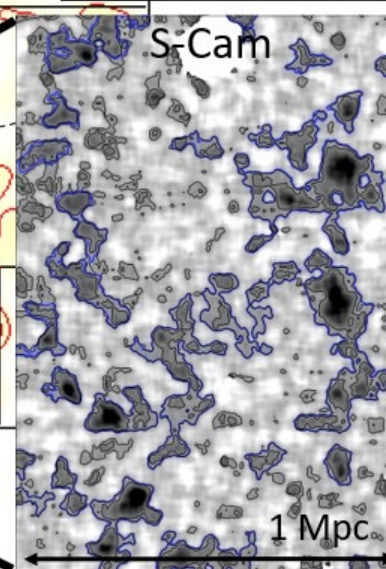


Steidel+00/Matsuda+04/Matsuda+11/Yamada+12

HSC FoV



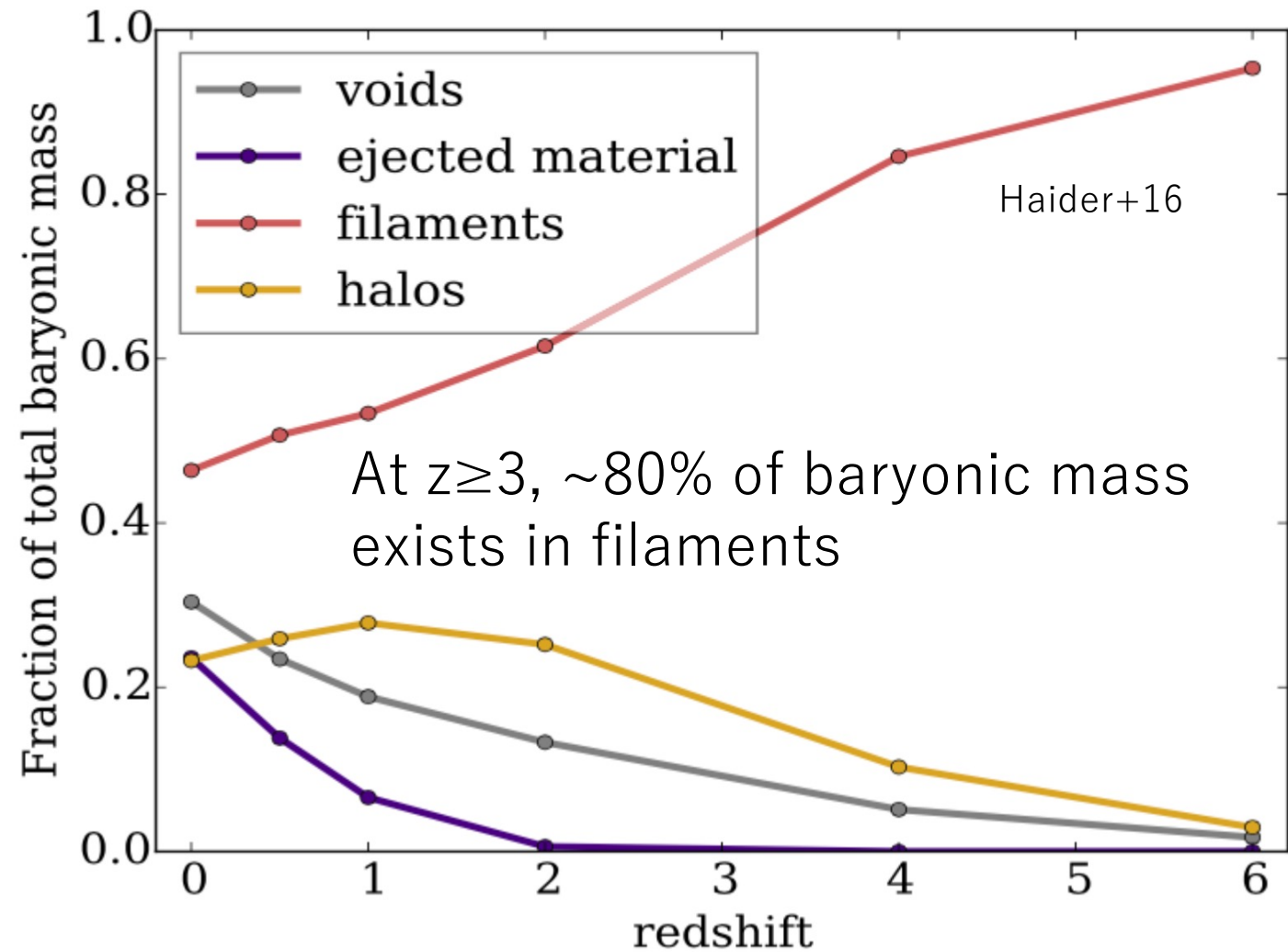
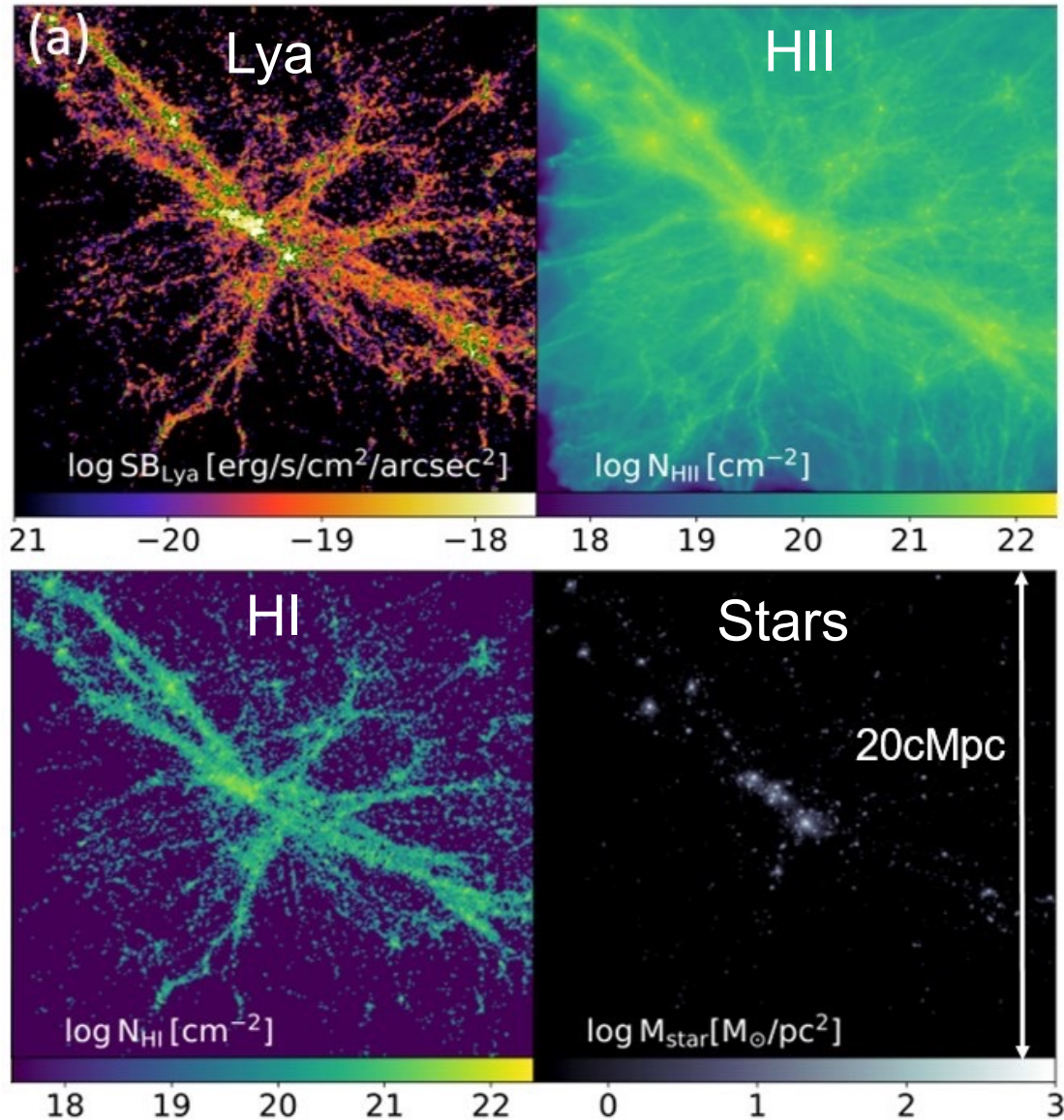
Umeshata+19



Survey Volume $\sim 180 \times 180 \times 50 \text{ cMpc}^3$

Cosmic Web: Main Gas Supplier for Galaxy Formation

Cosmic Web and Galaxies at $z=3$ (Yajima+21)

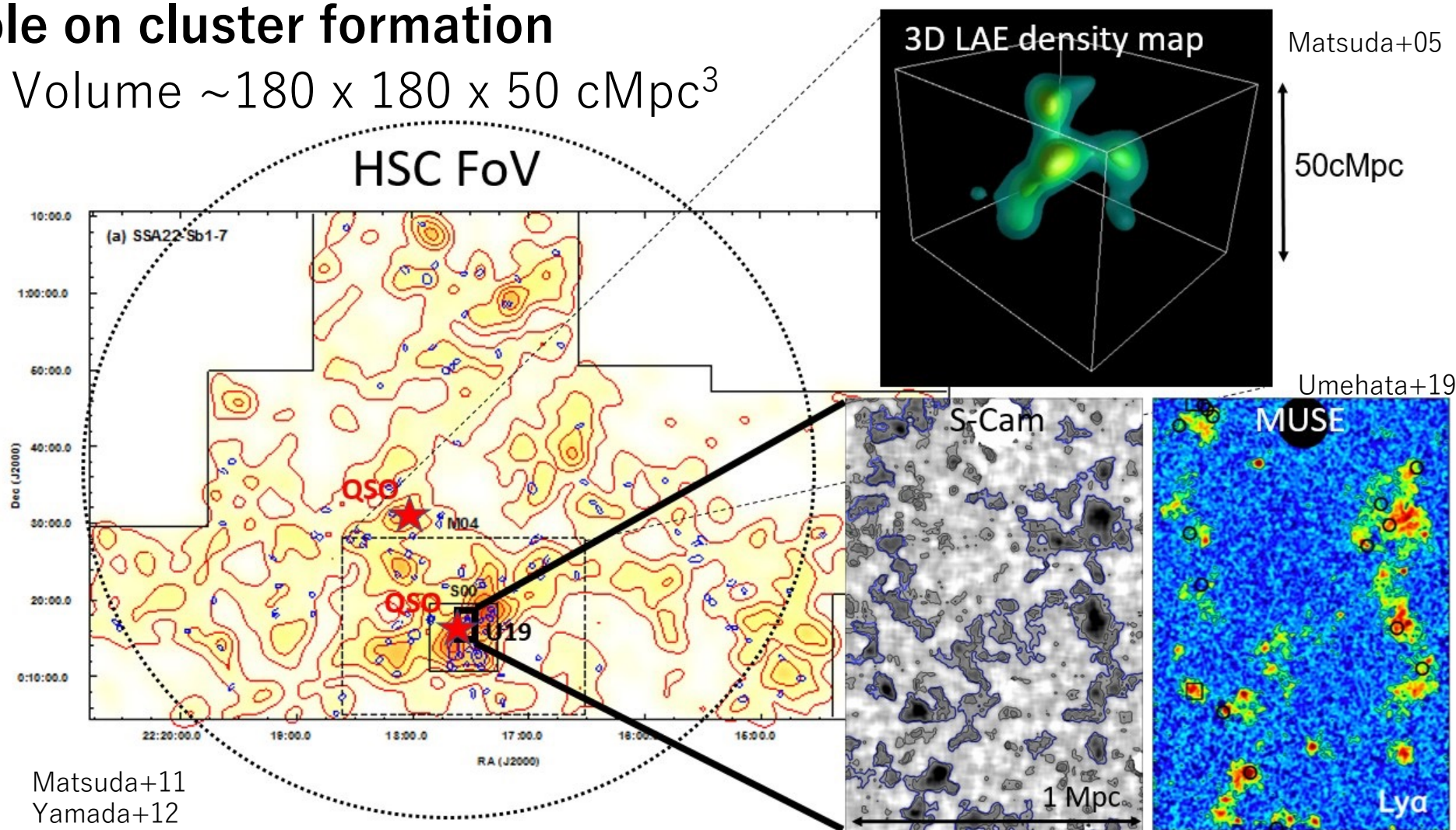


Observational studies are still difficult...

Science Goals

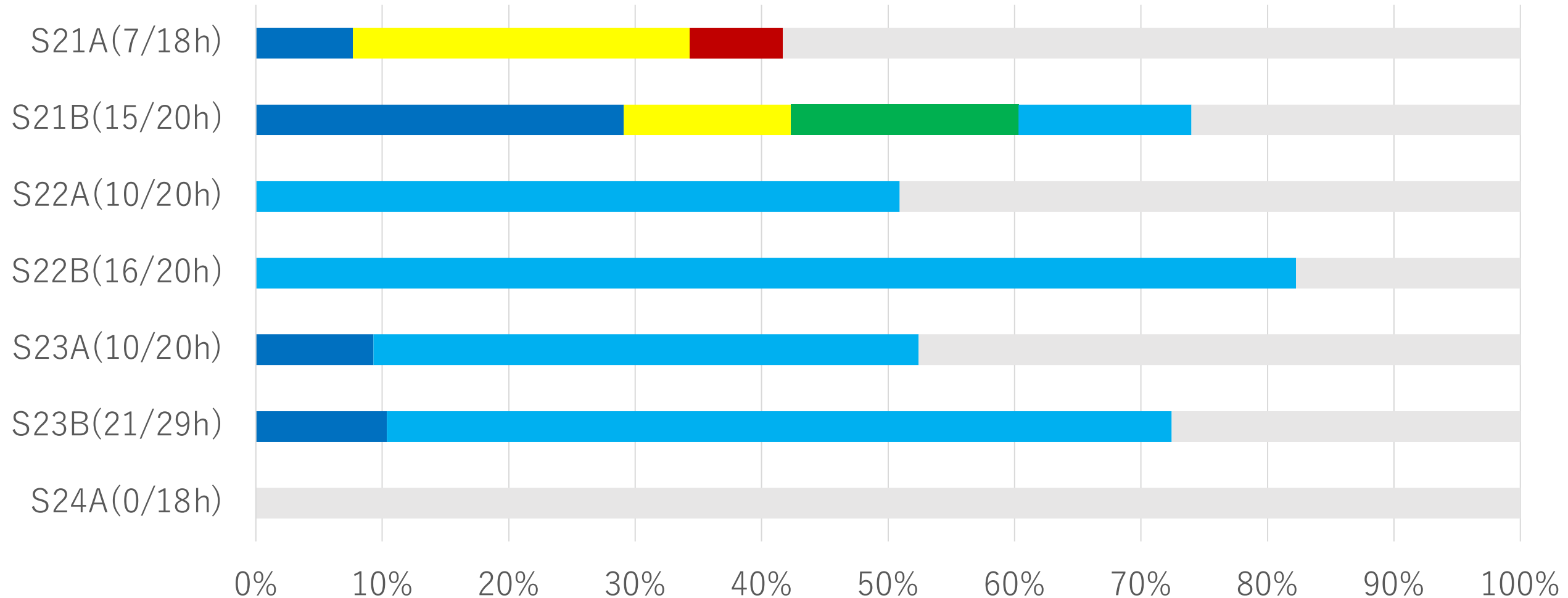
- (1) The physical properties (width, length, mass, & ionizing radiation field)
- (2) The connection with galaxy / black hole growths
- (3) The role on cluster formation

Survey Volume $\sim 180 \times 180 \times 50 \text{ cMpc}^3$

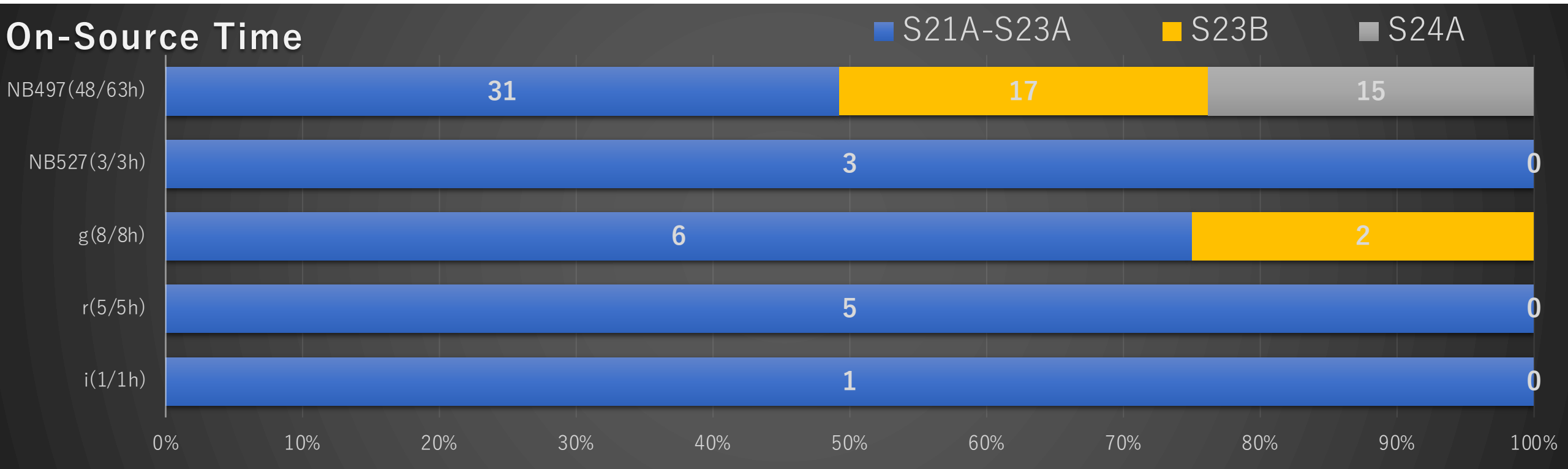


Completion Rate (81%)

■ g ■ r ■ i ■ NB527 ■ NB497 ■ No/Bad Data



Data Quality (S21A-S23B)



Data Reduction and Quality Assurance by Ken Mawatari

S21A-S23B data	NB497	NB527	g	r	i
5 σ depth (2" ap) [target depth]	27.4ABmag [28.0ABmag]	26.2ABmag [26.7ABmag]	28.2ABmag [28.6ABmag]	27.6ABmag [28.2ABmag]	26.3ABmag [26.8ABmag]
Seeing	0.8"	0.8"	0.9"	0.7"	1.6"