

# Current Status of HSC-SSP

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## Survey Progress Rate

Old Slide shown on Jan 28, 2019

- Progress rate is ~ 75 % of what we originally anticipated when we prepared the proposal (~ 1.5 years before the commissioning).
- What was wrong ?
  - Weather: Ratio of Survey quality night ( $T > 0.3$ , seeing  $< 1''.3$ ): 60 % not 70 %: **0.85 (unlucky)**
    - Weather has long time scale noise (1/f noise) that might causes large deviation from the average
  - Time between exposures: 35 sec not 20 sec: **0.93 (hardware team was optimistic)**
  - Addition of short (30 sec) exposure: **0.94 (team's decision)**

$$0.85 * 0.93 * 0.94 \sim 0.75$$

## Summary

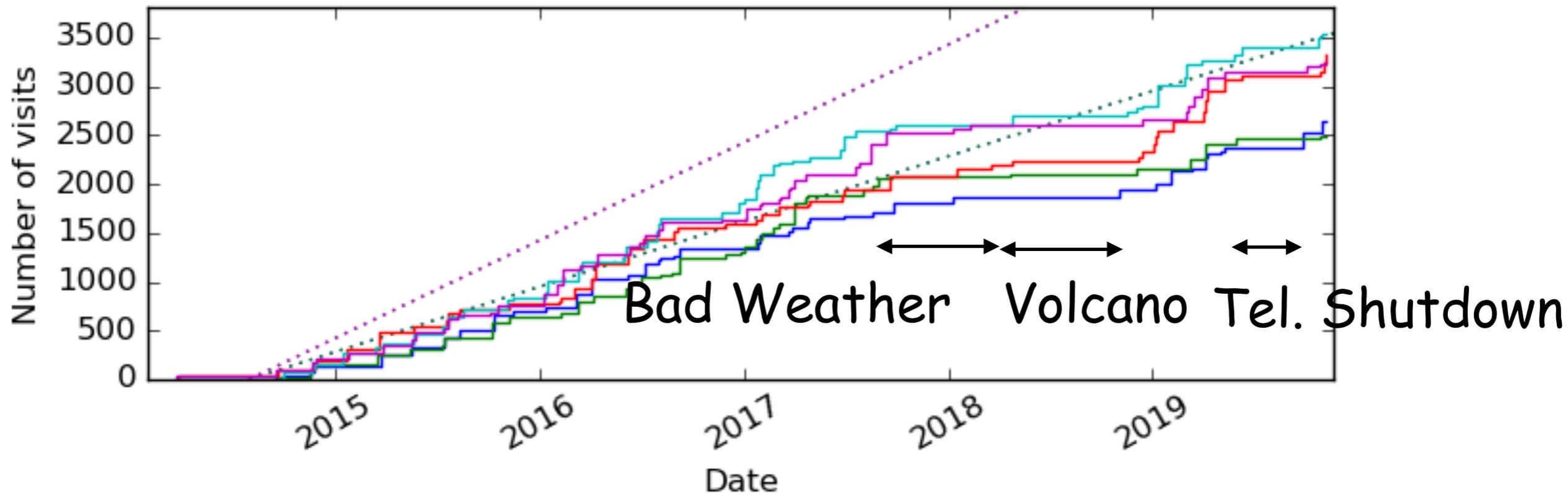
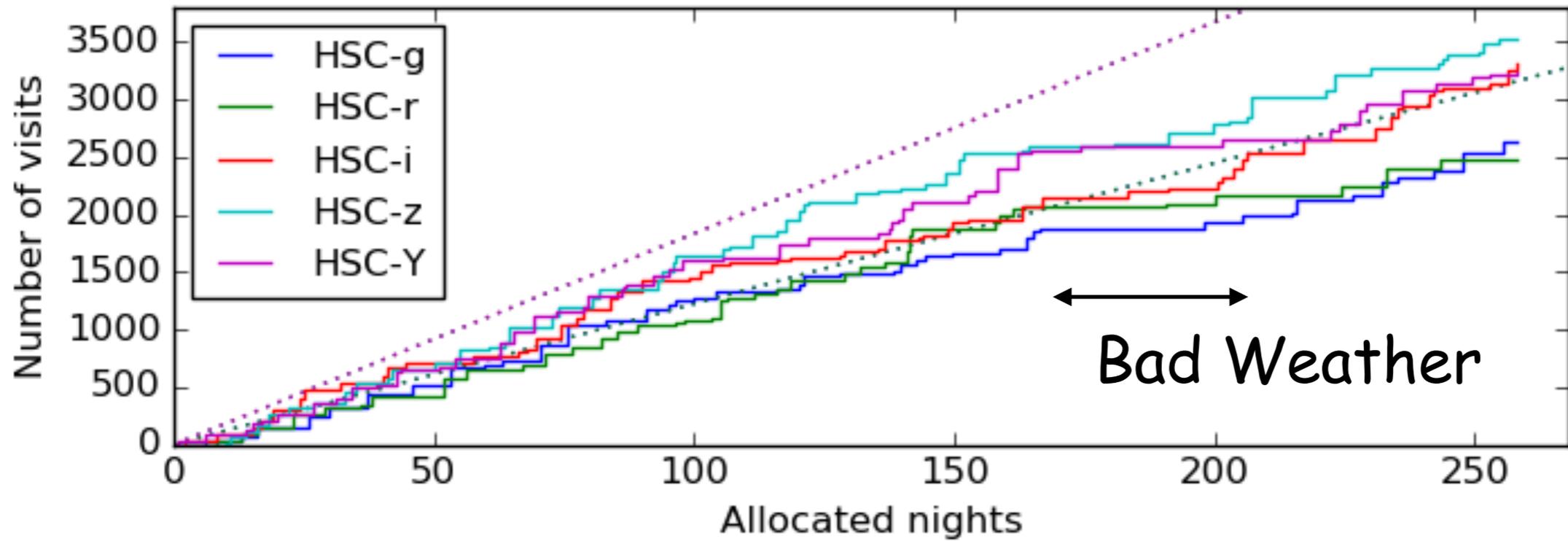
Old Slide shown on Jan 28, 2019

- HSC-SSPは300 nights allocated, ~ 200 nights used
- Expected Completion Ratio (after 300 nights) D/UD:80 %, W:72 %
- Primary reason of the delay: Significantly bad weather (15 % lost)
  - Plus additional dead time that we did not anticipate when we had been preparing the proposal
- If we have additional 30 nights, the completion ration of all the layer (UD/D/W) exceed 80 % and more rectangular W footprint will be realized which is more useful and deserves legacy survey.
- We hope to finish the survey with the reasonable level of completion ratio (80 %) before the survey team breaks apart and before the other major survey starts.

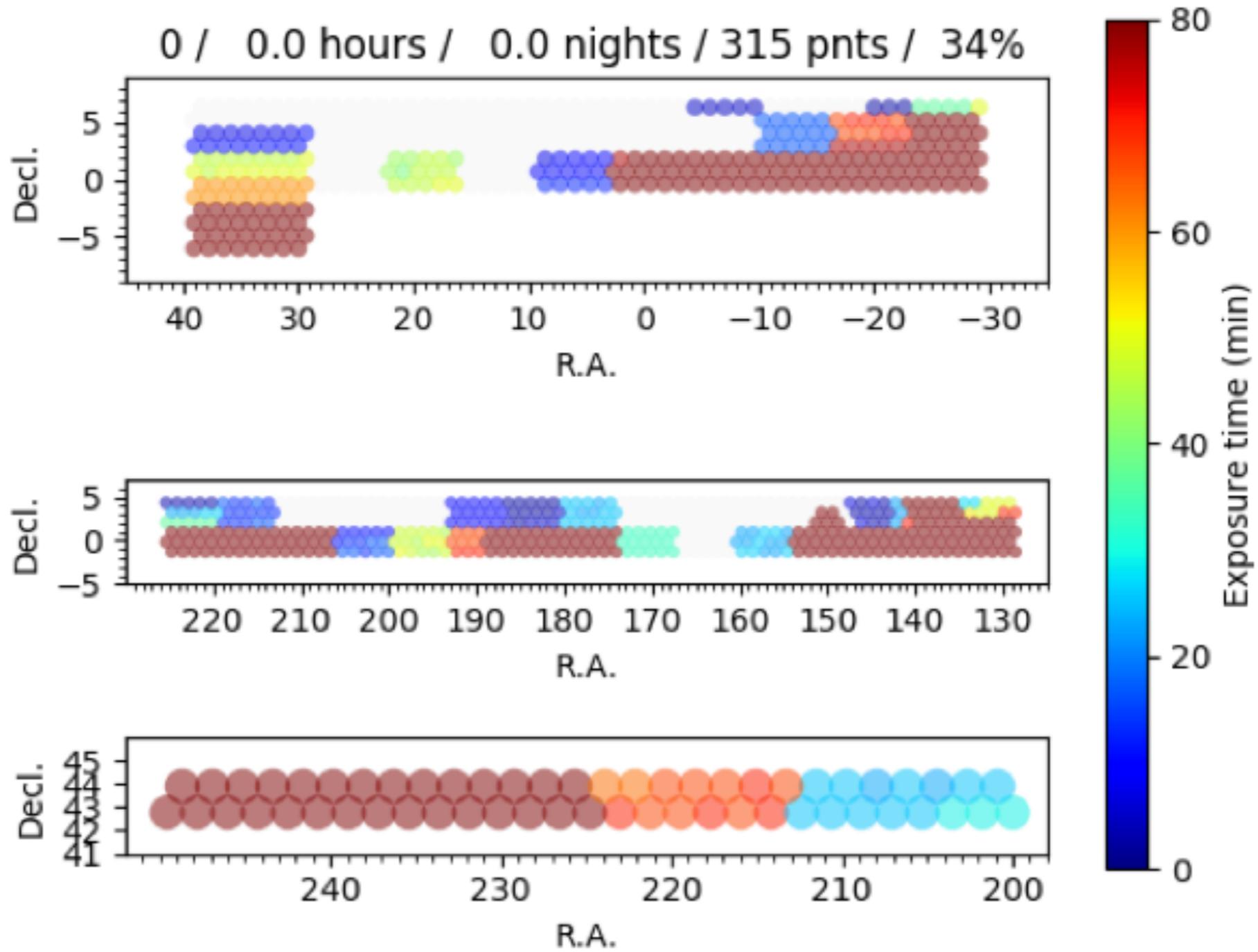
30 more nights approved by SAC

# Recent Progress

Created at 2019-11-06 01:06:28

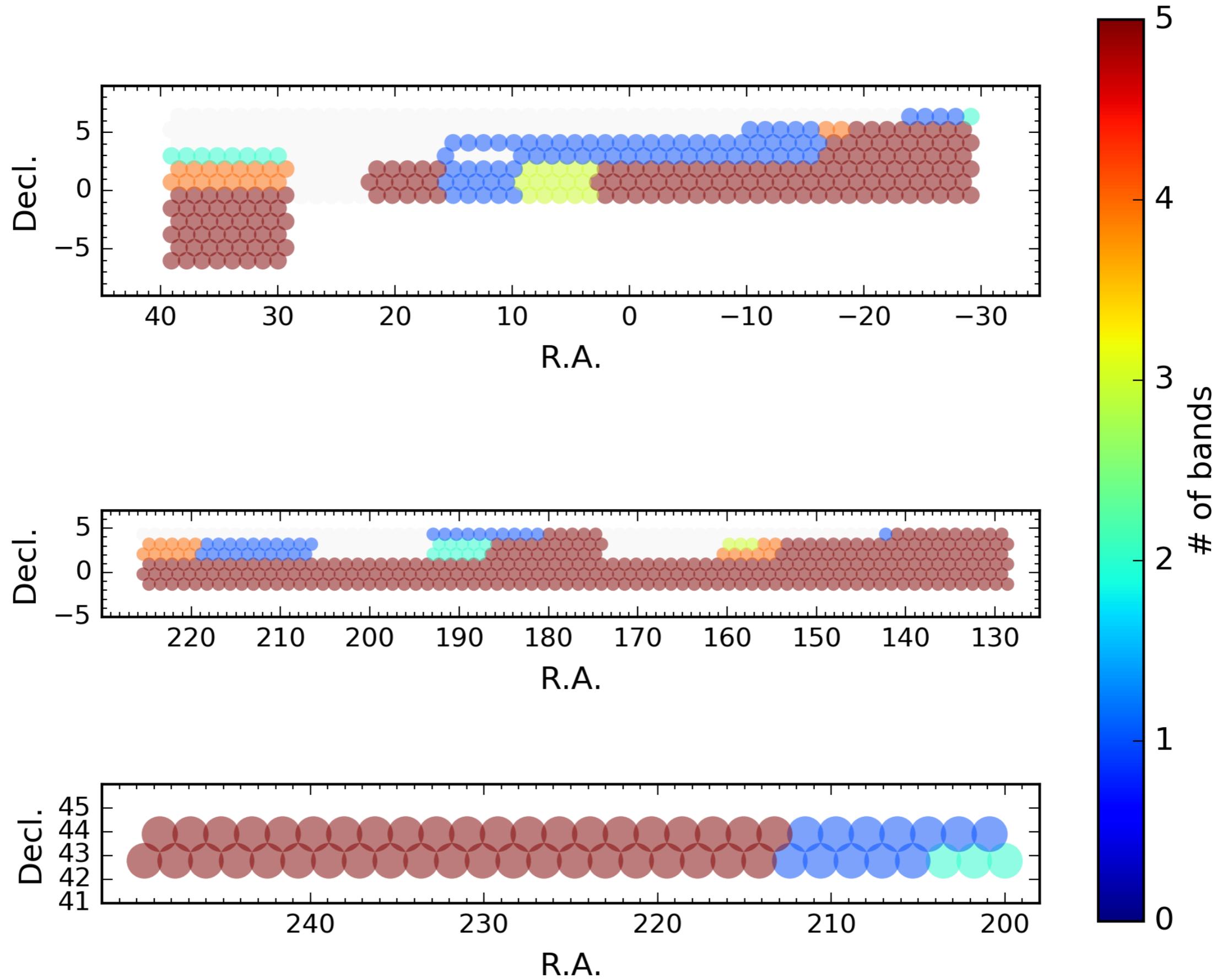


2019/01



2019/11

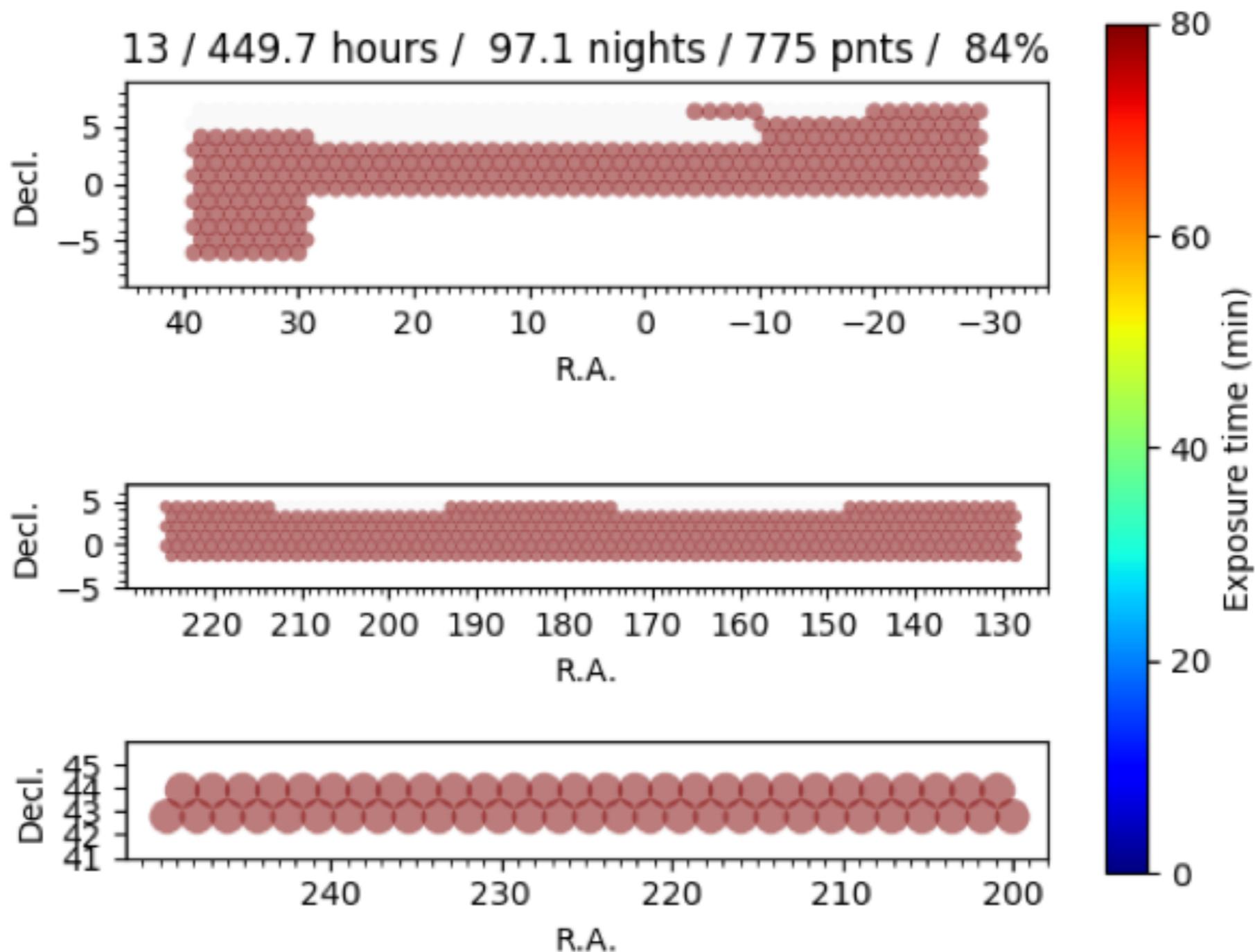
Full depth area (5) Created at 2019-11-03 00:53:50



# Survey prospect

Old Slide shown on Jan 28, 2019

If we have 30 more nights



Wide: 84 % and more rectangular survey field

We still keep the same prospect.



# Data Release

Plan in 2018

Internal release	Release date	Data included
S15B	2016/01	-2015/11
S16A	2016/08	-2016/04
S17A	2017/07	-2017/05
S17B	–	–
S18A	2018/06	
S19A	2019/09	
S20A	2020/09?	

→ PDR1 on 2017/02    160 deg<sup>2</sup>

→ PDR2 on ~2019/05  
305 deg<sup>2</sup>

→ PDR3 on ~2021/05 ?

Weak Lensing Catalog of PDR1 was released in mid 2019.

# Seeing in i-band

