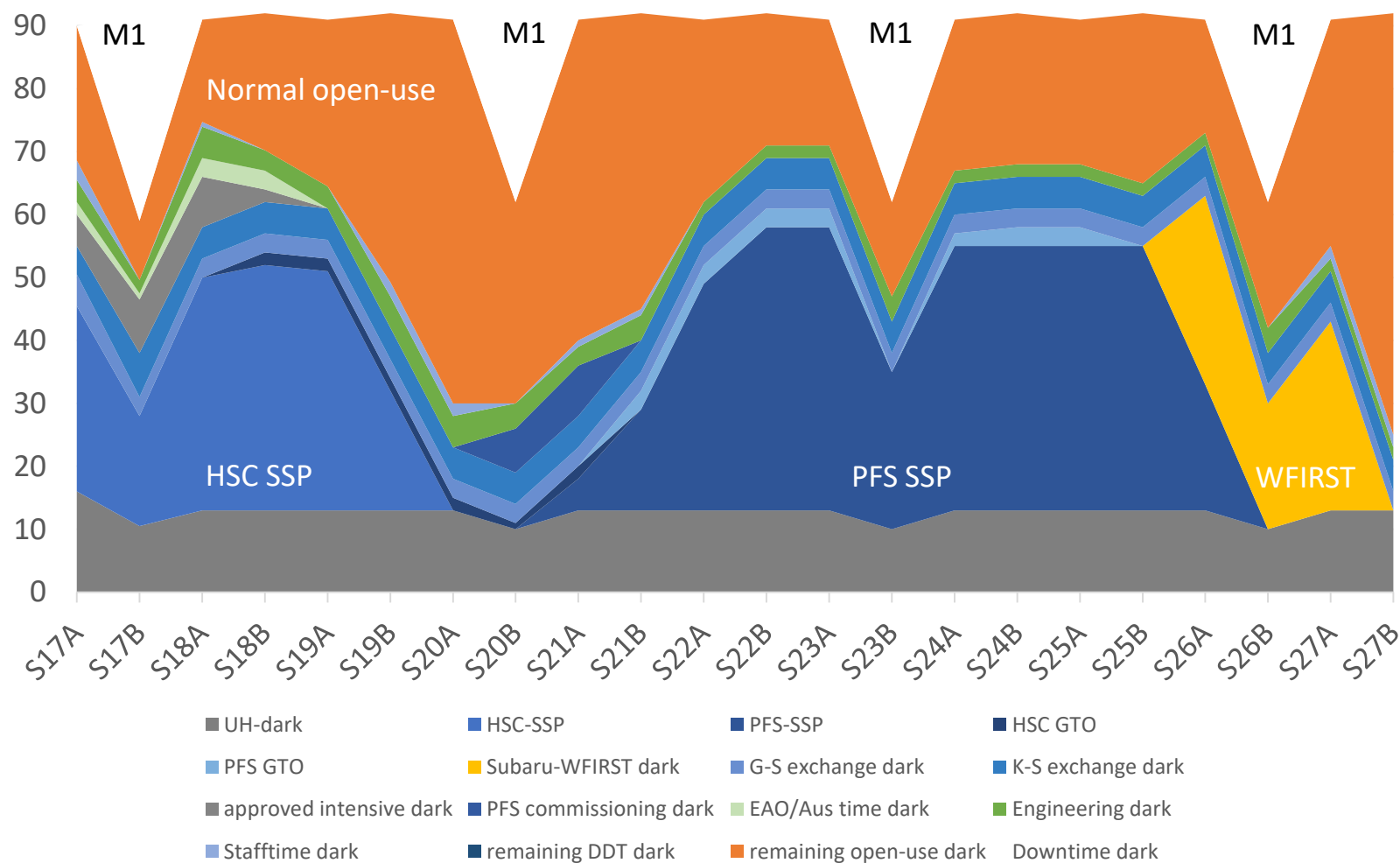
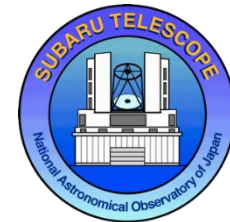
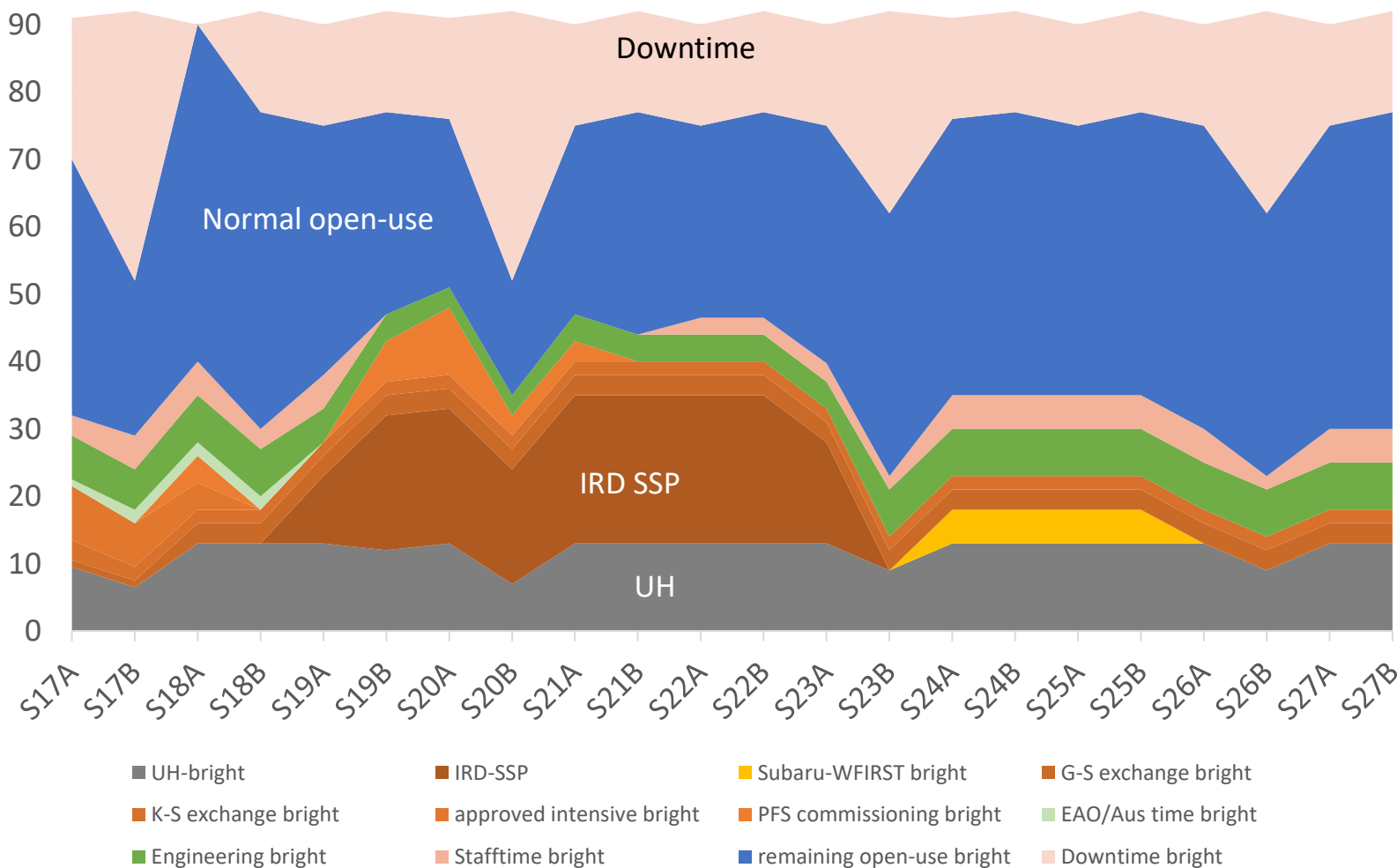


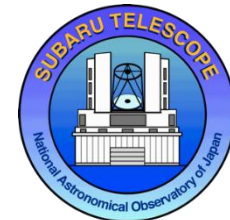
Telescope time - Dark



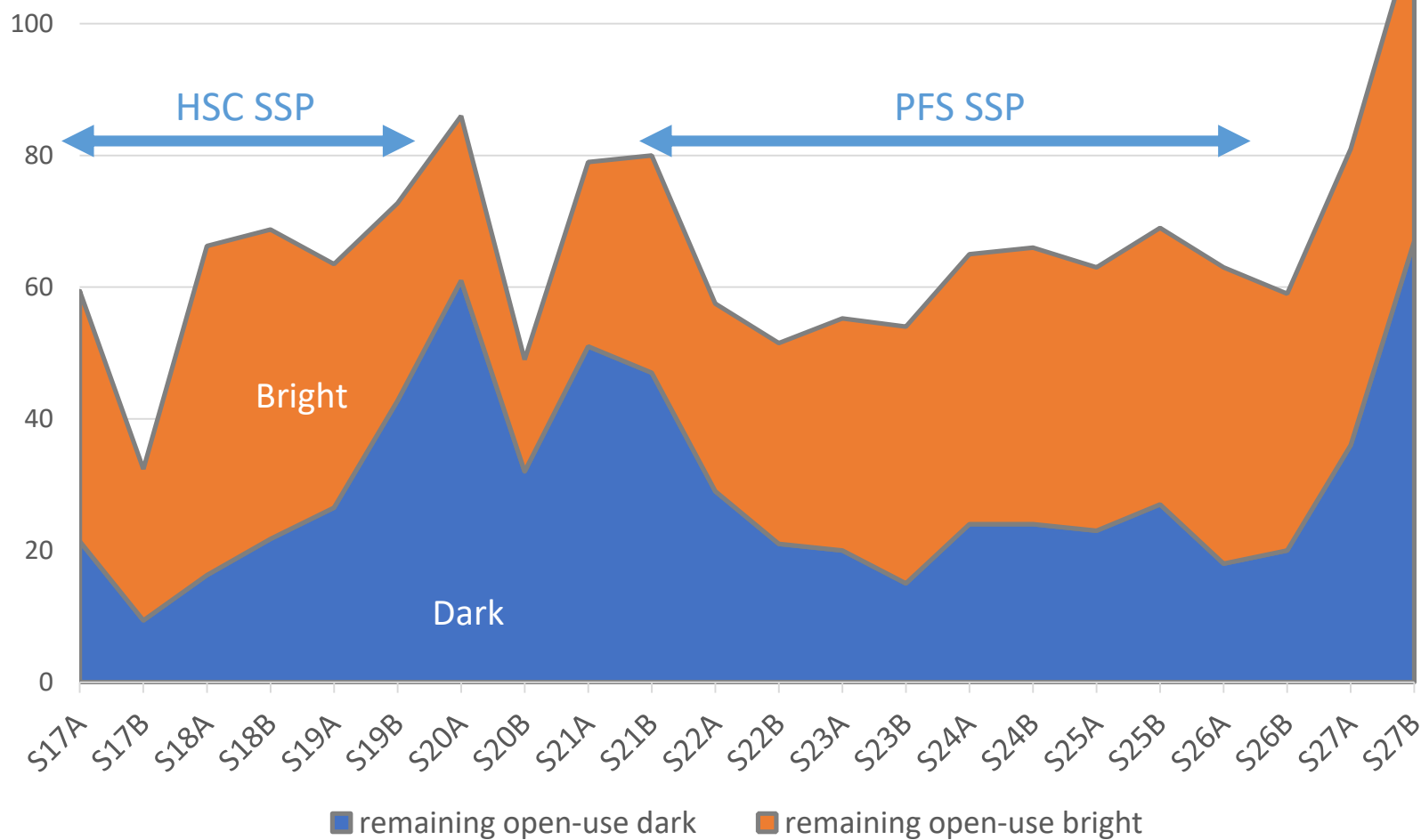


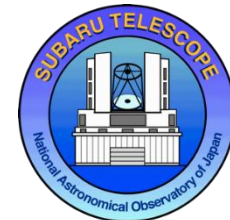
Telescope time - Bright



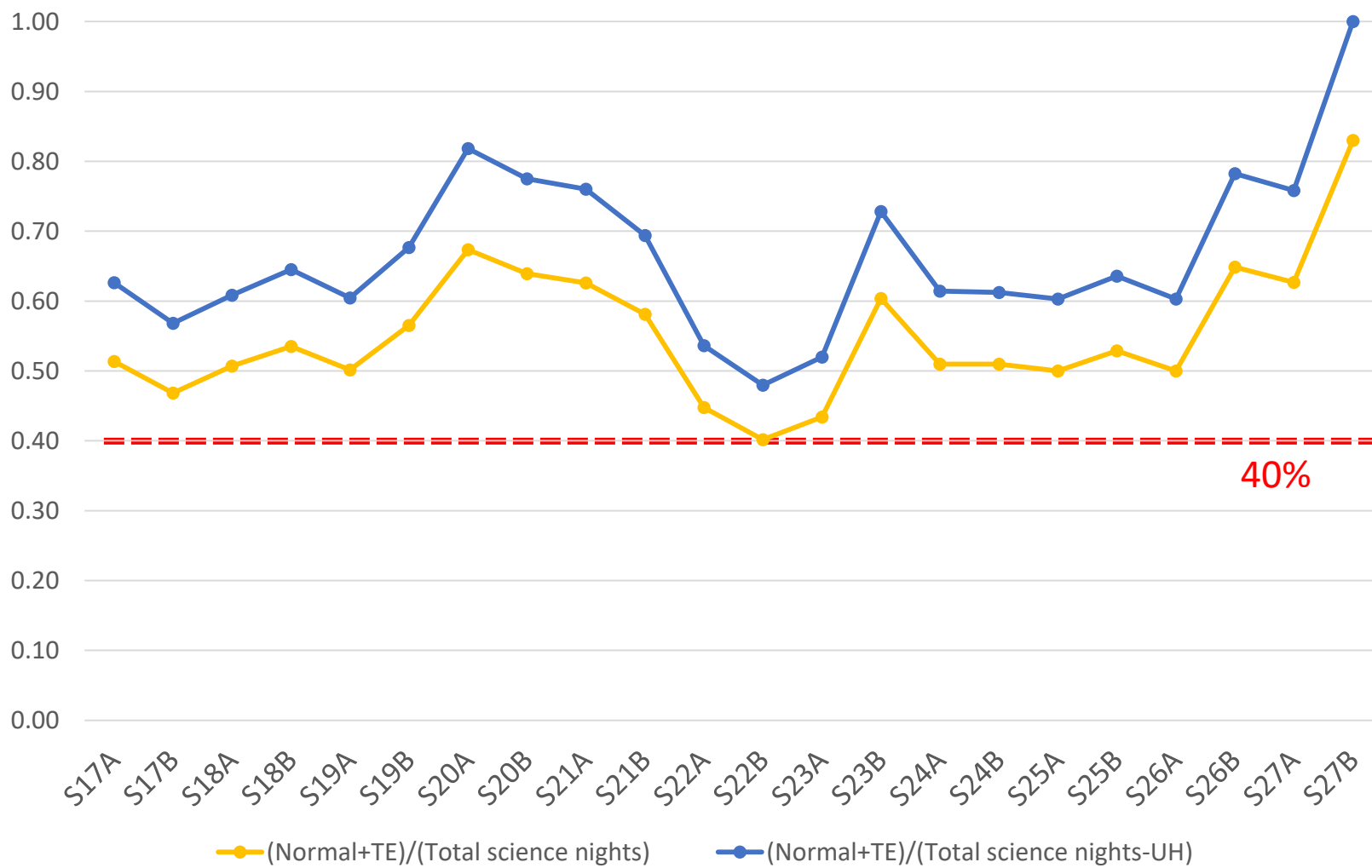


Number of Normal Open-Use Nights





Fraction of Normal+TE programs





International partnership negotiations with Australia and Canada



Australia

- Short-term agreement with Astronomy Australia Limited (AAL)
 - Subaru: 10 nights from DDT in S18A and S18B
 - AAL:
 - Cash contribution 450K USD
 - Technical development programs 600K AUD in 2017-2018
 - GLAO design study with ANU
 - NsIR beam switcher design study with AAO
 - 4 AAT nights
- Strategic partnership with ESO: 2017-2027
 - Telescope access to Paranal and La Silla
 - No E-ELT, no ALMA, (no technical collaboration)
- National-level partnership with Subaru will not happen for 10 years.



Australia – Technical Contributions

- AAO team is working on beam-switcher design work
- ANU RSAA AITC AO team is working on conceptual design study of ULTIMATE-Subaru and ULTIMATE-START (Akiyama et al.)
 - Current agreement lasts until summer 2018
 - Both ANU and Japan wish to continue this collaboration. ANU plans to submit Linkage Program of Australian Research Council in 2018. This will enable ~\$1M cash contribution from Australia to ULTIMATE-Subaru/START.



Australia – Telescope Access in S18A and S18B

- Subaru Telescope provides 5 nights/semester to researchers in Australian institutes in S18A and S18B.
- Selection is made by Subaru TAC, with Australian representatives as observers
- In S18A:
 - 2 SCExAO+CHARIS proposals, 3 nights
 - 1 HSC proposal, 2 nights
 - Additional successful proposals
 - 1 HDS night, 1 IRCS+AO188 night
- There will be 2 AAT nights for Japanese/Taiwanese researchers in S18B as well.



Canada

- Iwata made tours in universities in Canada to promote awareness of Subaru Telescope's capabilities in Canada in 2015 and 2016
- Arimoto and Yoshida made presentations in CACSA in 2016 and 2017
- Kodama, Koyama, Iwata visited Waterloo and Toronto in Nov. 2017 to promote scientific collaboration



Canada

- Discussions with National Research Council (NRC)
 - Small-scale collaboration in ULTIMATE-Subaru
- The next Long Range Plan will be published in 2020
- Gemini's 20% partner until 2021
 - Decision on Gemini partnership from 2022 will be made by November 2018.
- Many possibilities and opinions on future optical/infrared facilities
 - Gemini, MSE (Maunakea Spectroscopic Explorer), LSST, WFIRST
- Discussion in CASCA in May 2018

Why Australia and Canada?

- Our goal is to create broader 'Subaru community' to enable:
 - Future collaborative science programs
 - Coherent future strategy
 - To promote strong science cases
 - Joint technical development programs
- Both communities have:
 - Excellent science outputs based on large surveys
 - Synergies and complementarities with Japanese community
 - Strong expertise in instrumentation
 - Canada shares the same future path toward TMT with Japan
 - Good sizes for collaboration, and friendly people!