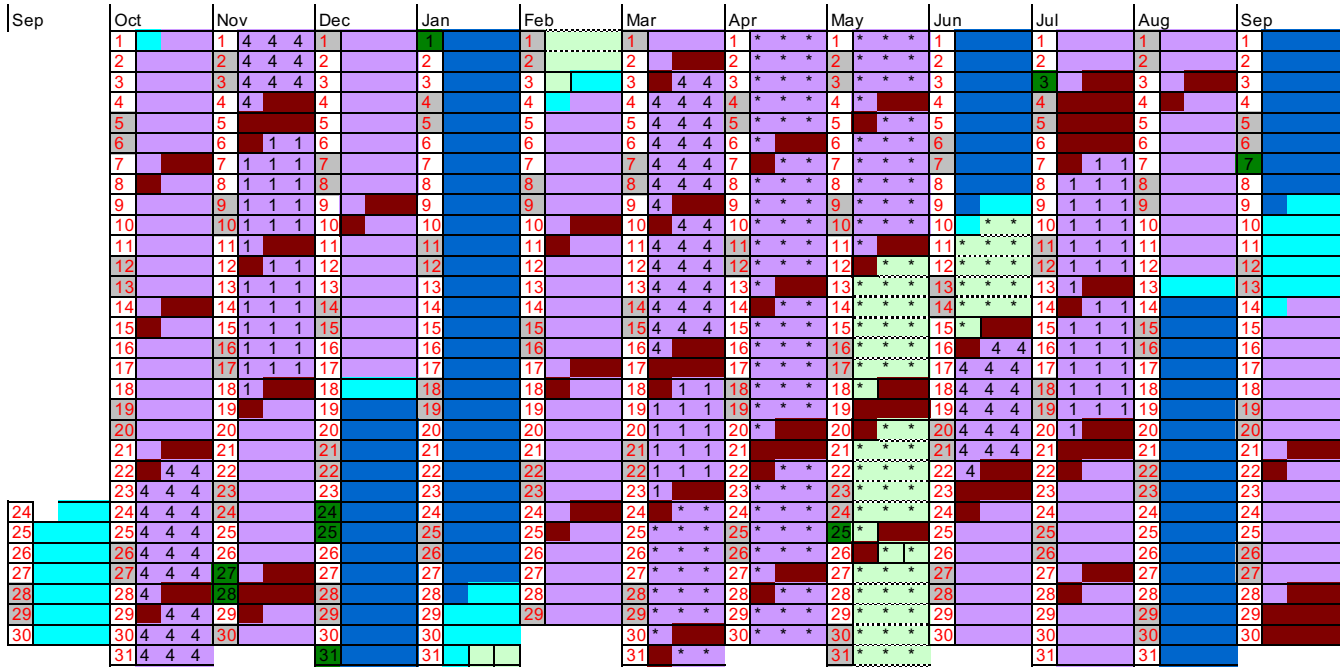


APS Long-Range Operations Schedule

Run 2019-3

Run 2020-1

Run 2020-2



- User Operation in standard lattice
 - User Operation in Reduced Horizontal Lattice(RHB)
 - Machine Studies
 - Maintenance
 - Shifts set aside for Studies/ Machines Intervention as Needed
 - Weekends
 - Lab Holidays
 - Supplemental time returned to Users
- Top-Up Operations is standard unless indicated in fill pattern
- SOM Periods
- 1 Hybrid Fill - (singlet)
 - 4 324 Singlets - Non Top-Up
 - 4 324 Singlets RHB - Non Top-Up
 - * 324 Singlets RHB - Top-Up
- Fill pattern is 24 singlets unless otherwise indicated by number

Breakdown of User Shifts by Fill Pattern

Number of 8-hour User Shifts

	24 Singlets - Top-Up	Hybrid Fill - Top-Up	324 Singlets - Non Top-Up	324 Singlets Top Up	Total Shifts	Total Shifts
2019-3	95	51	54		200	1600
2020-1	72	15	36	123	246	1968
2020-2	125	36	18		179	1432
SUM	292	102	108	123	625	5000

* Supplemental time contains 520 hours of Covid and 72 hours of other.