

Relative yearly & total integrated luminosity

Run	Year	Reference (fb ⁻¹)	Reference (fb ⁻¹)	Flat optics	Reference, 170 PU in Run 5	Flat optics, 170 PU in Run 5	Reference, 170 PU in Run 4 & 5	Flat optics, 170 PU in Run 4 & 5	Reference, 200 PU	Flat optics, 200 PU
4	2030	31.99 (PU=101)	37.86 (PU=101, φ/2=175)	35.33 (PU=101)	31.99 (PU=101)	35.33 (PU=101)	31.99 (PU=101)	35.33 (PU=101)	31.99 (PU=101)	35.33 (PU=101)
	2031	205.54 (PU=132)	211.97 (PU=132, φ/2=195)	210.85 (PU=132)	205.54 (PU=132)	210.85 (PU=132)	227.42 (PU=170)	235.57 (PU=170)	237.35 (PU=200)	247.72 (PU=200)
	2032	236.85	241.35 (φ/2=215)	252.76	236.85	252.76	267.15	293.91	283	318.88
	2033	233.82	238.27 (φ/2=215)	249.54	233.82	249.54	263.73	290.16	279.4	314.8
5	2036	208.12	208.12	214.33	238.95 (PU=170)	249.04 (PU=170)	238.95	249.04	256.37	269.8
	2037	271	271	278.55	311.36	323.95	311.36	323.95	334.56	351.53
	2038	275.72	275.72	283.38	316.78	329.59	316.78	329.59	340.39	357.65
	2039	275.72	275.72	283.38	316.78	329.59	316.78	329.59	340.39	357.65
	2040	228.54	228.54	235.28	262.45	273.45	262.45	273.45	281.67	296.38
	2041	283.57	283.57	291.44	325.82	338.98	325.82	338.98	350.13	367.86
		2250.89	2272.14	2334.86	2480.34	2593.08	2562.43	2699.57	2735.3	2917.64
	+ 520	2770.9	2792.1	2854.9	3000.34	3113.08	3082.43	3219.57	3255.3	3437.6
			+0.8	3.7%	10.2%	15.2%	13.8%	19.9%	21.5%	29.6%

1. Flat means 18/60 cm for 2030, 14/40 cm for 2031 and 8/18 for the rest
2. 2030 leveling time is 0 with round, but there is some leveling time (0.8 h) with flat
3. 200 PU means 101 max PU for 2030 and 200 for the rest

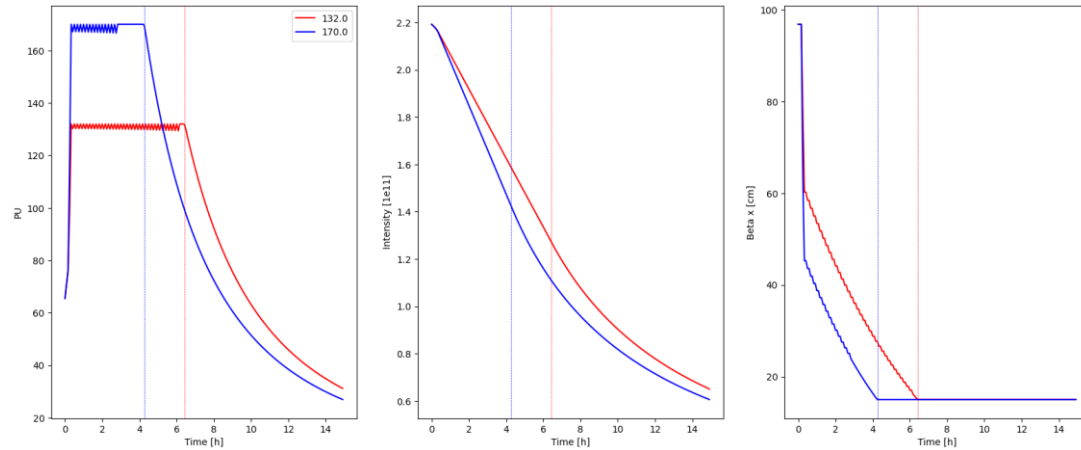
DA to do

Previous baseline

IP1/5 (10^{34} Hz/cm ²)	luminosity	Chromaticity	Optics	Octupoles (A)	Crossing angle (μ rad)	DA
End of collapse	15		Round	+300/-300	250	marginally ok/ok
			Flat	+150/-150	250	marginally ok/ok
Start of leveling	15		Round	-60	250	ok
End of leveling	15		Round	+60/-60	250	marginally ok (not ok if $> 2.5 \mu\text{m}$)/ok
			5	Round	+60/-60	250/220
End of leveling	15		Flat	+60/-60	250	marginally ok (not ok if $> 2.5 \mu\text{m}$)/ok
			5	Flat	+60/-60	250/210

- Scan in bunch intensity at EOL
- New optics for SOL both round & flat

Round



Flat

