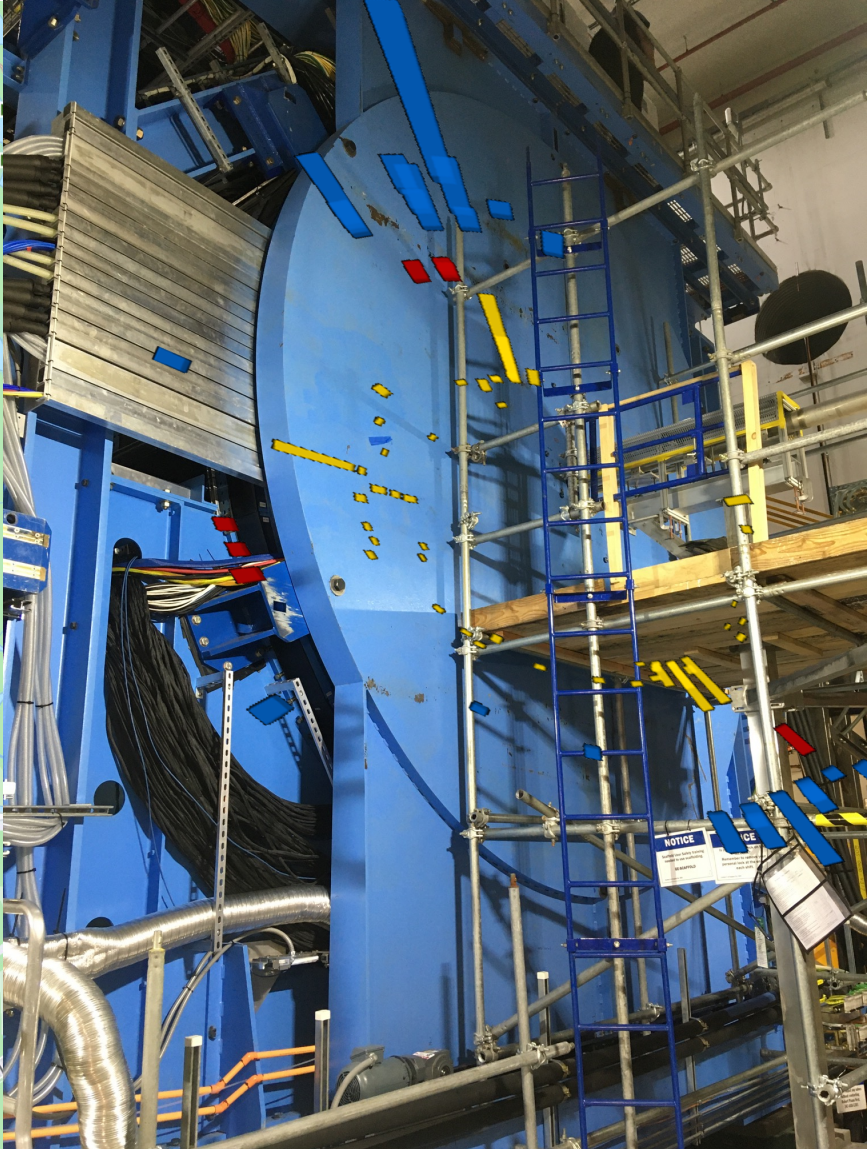
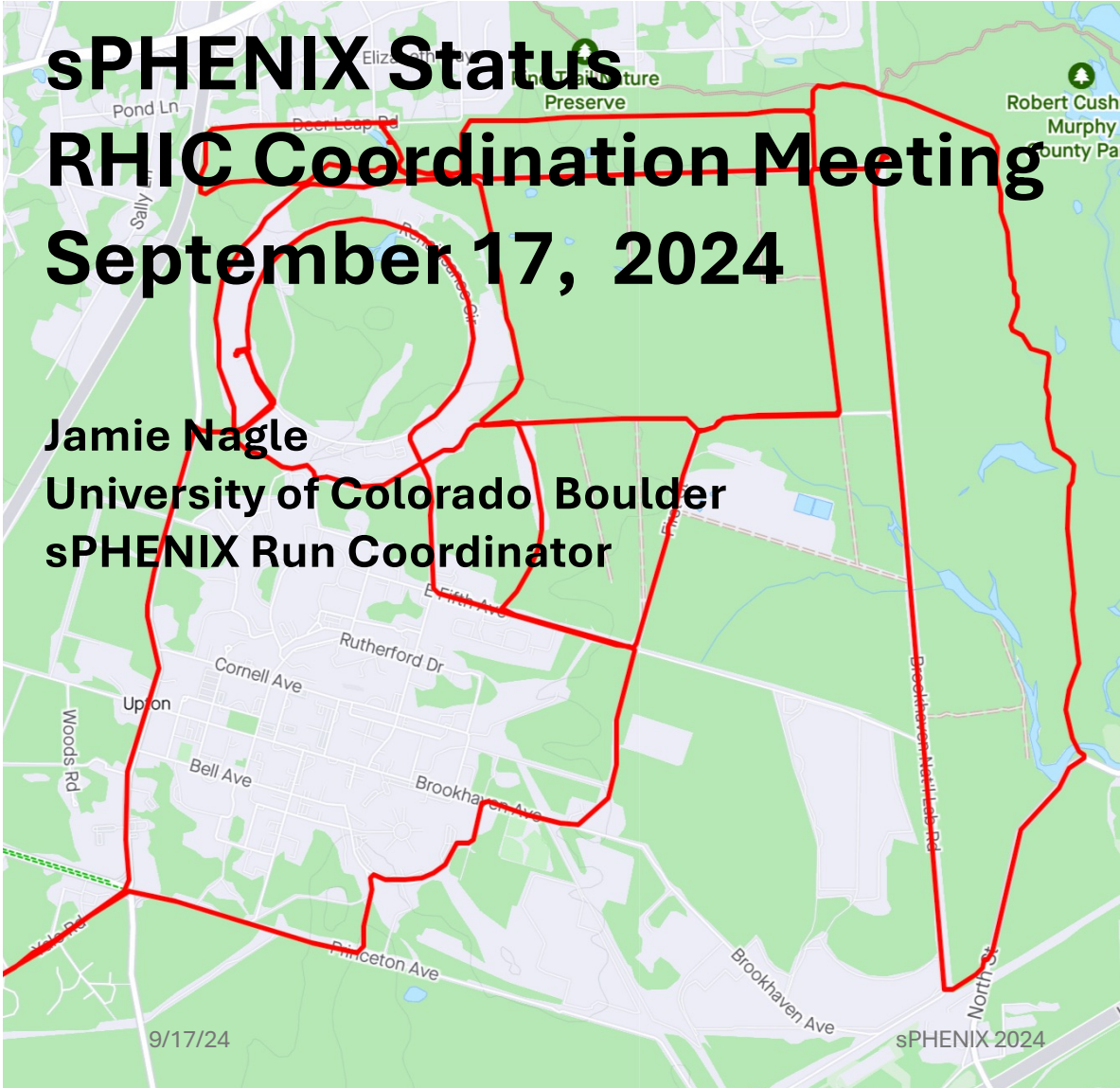


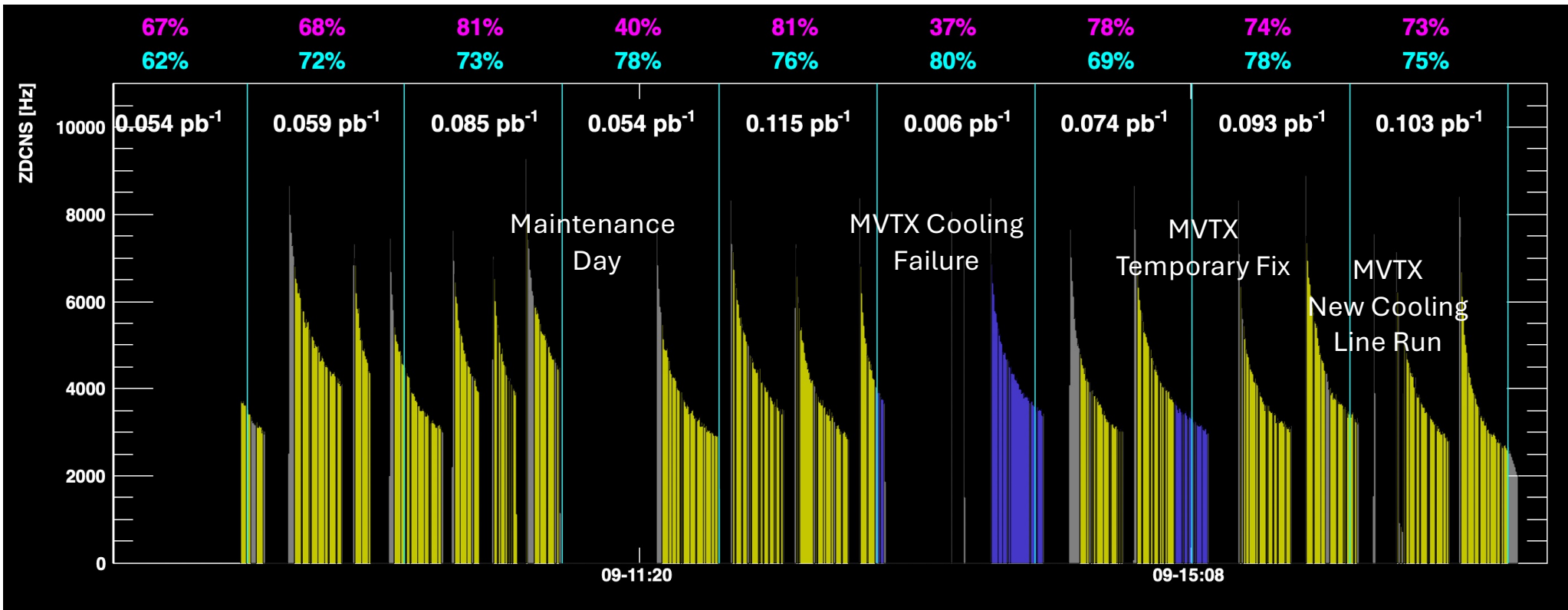
sPHENIX Status

RHIC Coordination Meeting

September 17, 2024

Jamie Nagle
University of Colorado Boulder
sPHENIX Run Coordinator





Yellow = data taking with all subsystems
Blue = data taking without MVTX (no open heavy flavor data)

MVTX Temporary T Solution
sharing cooling between staves
and electronics.

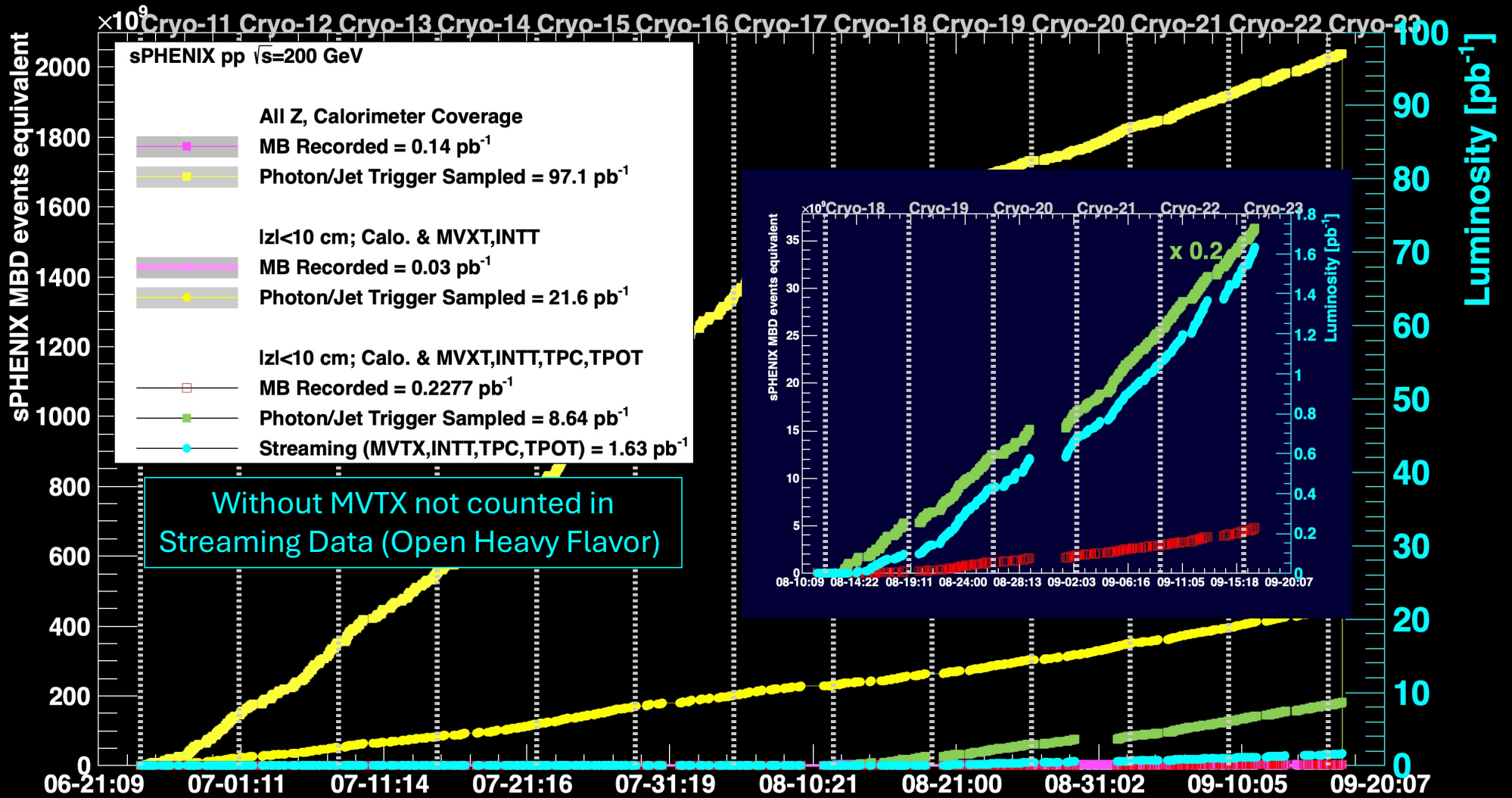


MVTX Longer Term Solution
running additional lines
through labyrinth
(from chiller platform into IR)

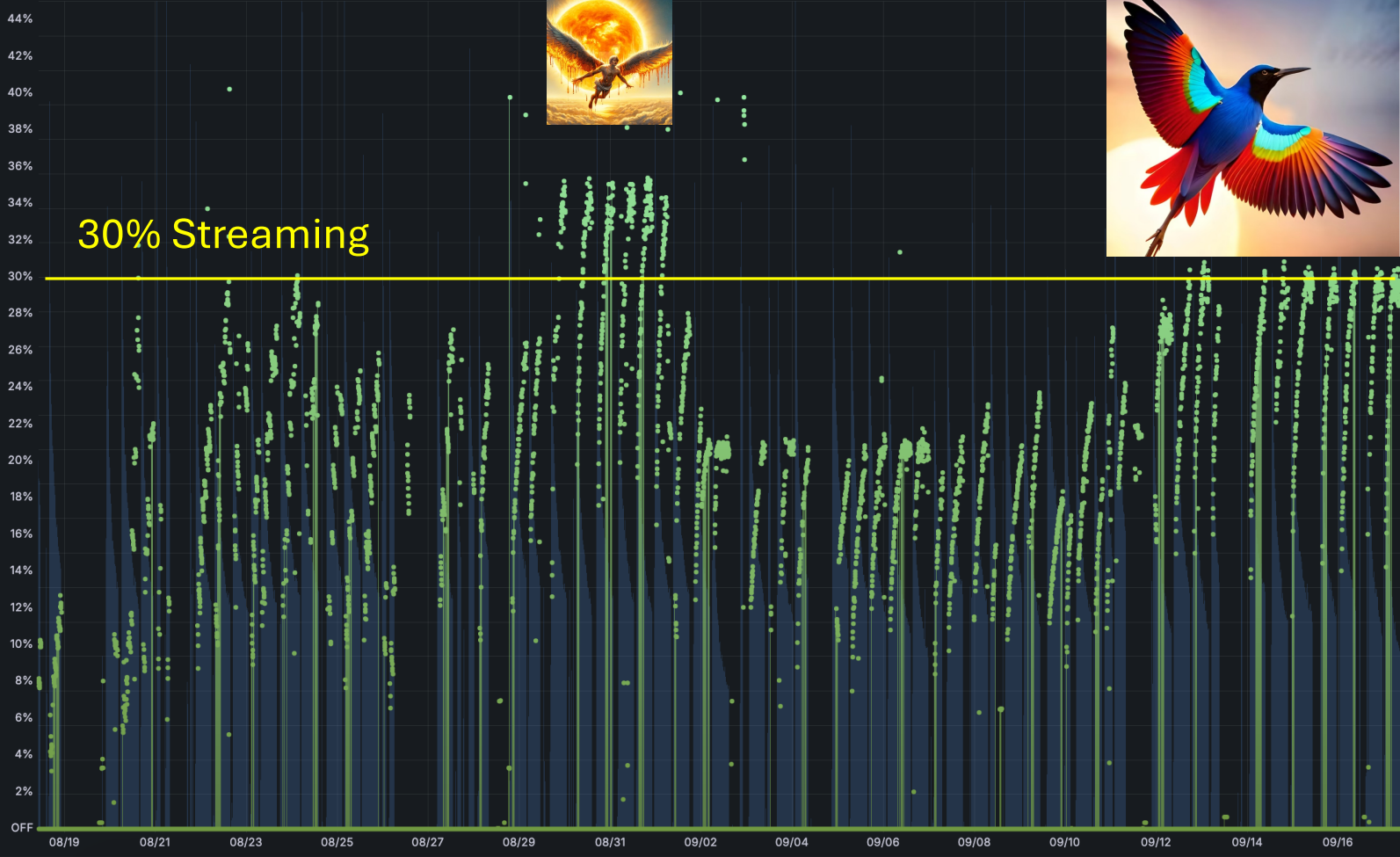


What movie is this from?

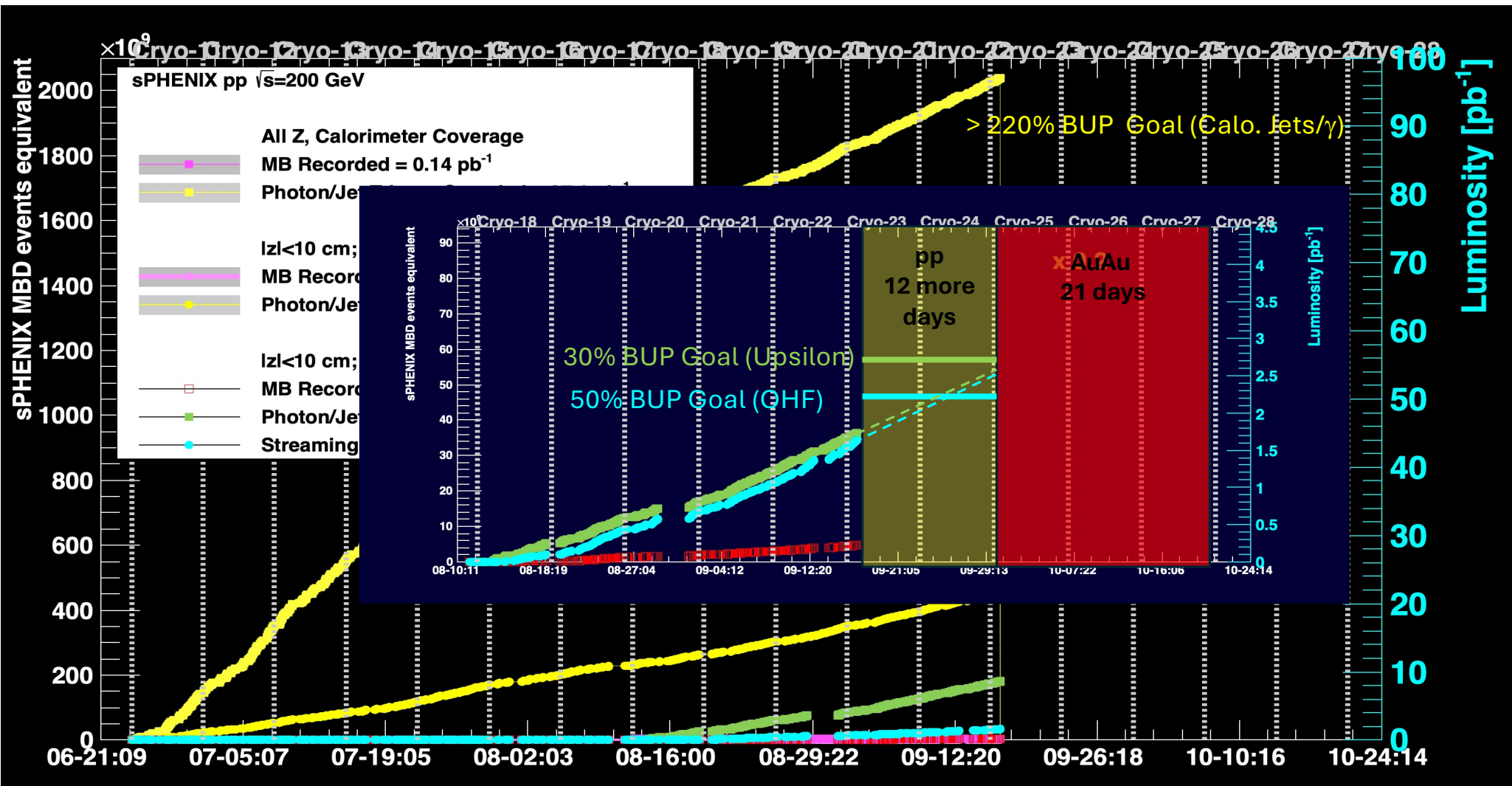




TPC Streaming Fraction [🔗](#)



	Name	Last *	Max
12 kHz	ZDC N*S (right y-axis)	2.38 kHz	2.46 MHz
11.5 kHz	SRO of Complete pp Events	OFF	40.2%
11 kHz			
10.5 kHz			
10 kHz			
9.5 kHz			
9 kHz			
8.5 kHz			
8 kHz			
7.5 kHz			
7 kHz			
6.5 kHz			
6 kHz			
5.5 kHz			
5 kHz			
4.5 kHz			
4 kHz			
3.5 kHz			
3 kHz			
2.5 kHz			
2 kHz			
1.5 kHz			
1 kHz			
500 Hz			
OFF			

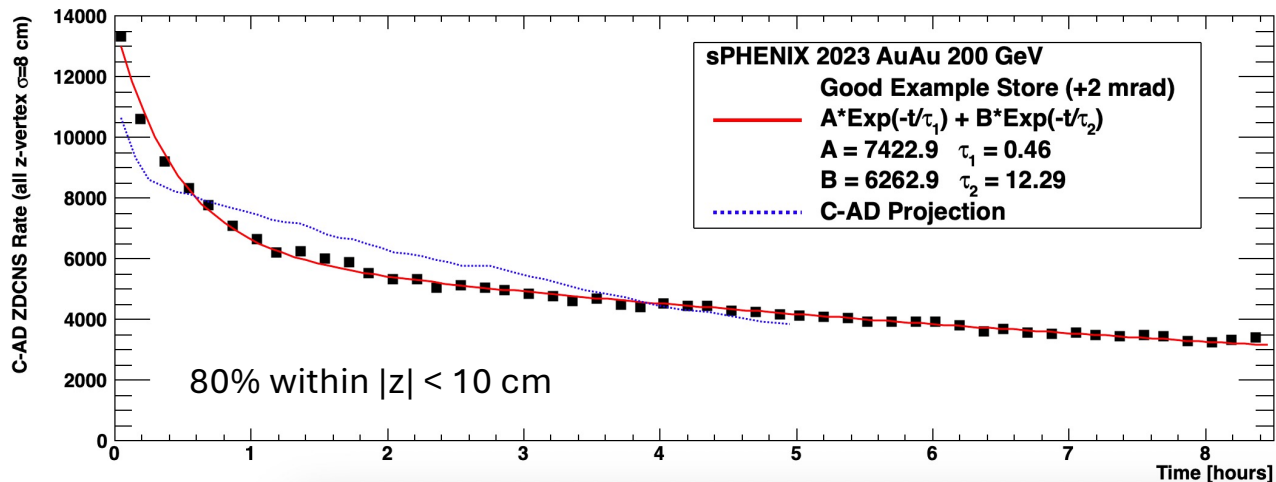
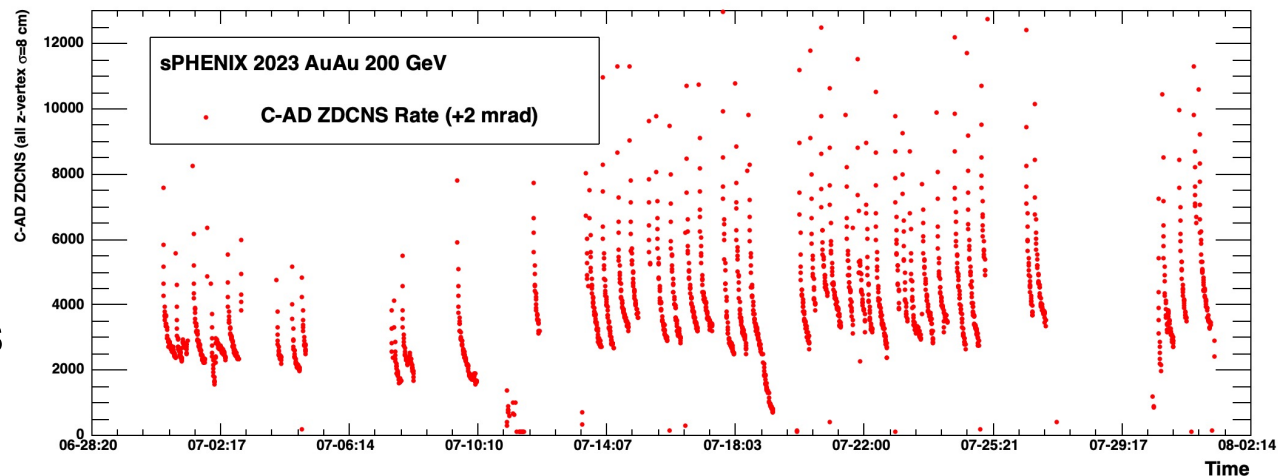


ZDC Coincidence
→ 9.8 barns

MBD Coincidence
→ 0.9×6.8 barns = 6.1 barns

Thus, Run 2023 best store
MBDNS ≥ 2 rates → 7 kHz

Interested in higher
luminosity through the
store for
Run 2025.



sPHENIX Au+Au 200 GeV Plan starting Monday, Sept. 30

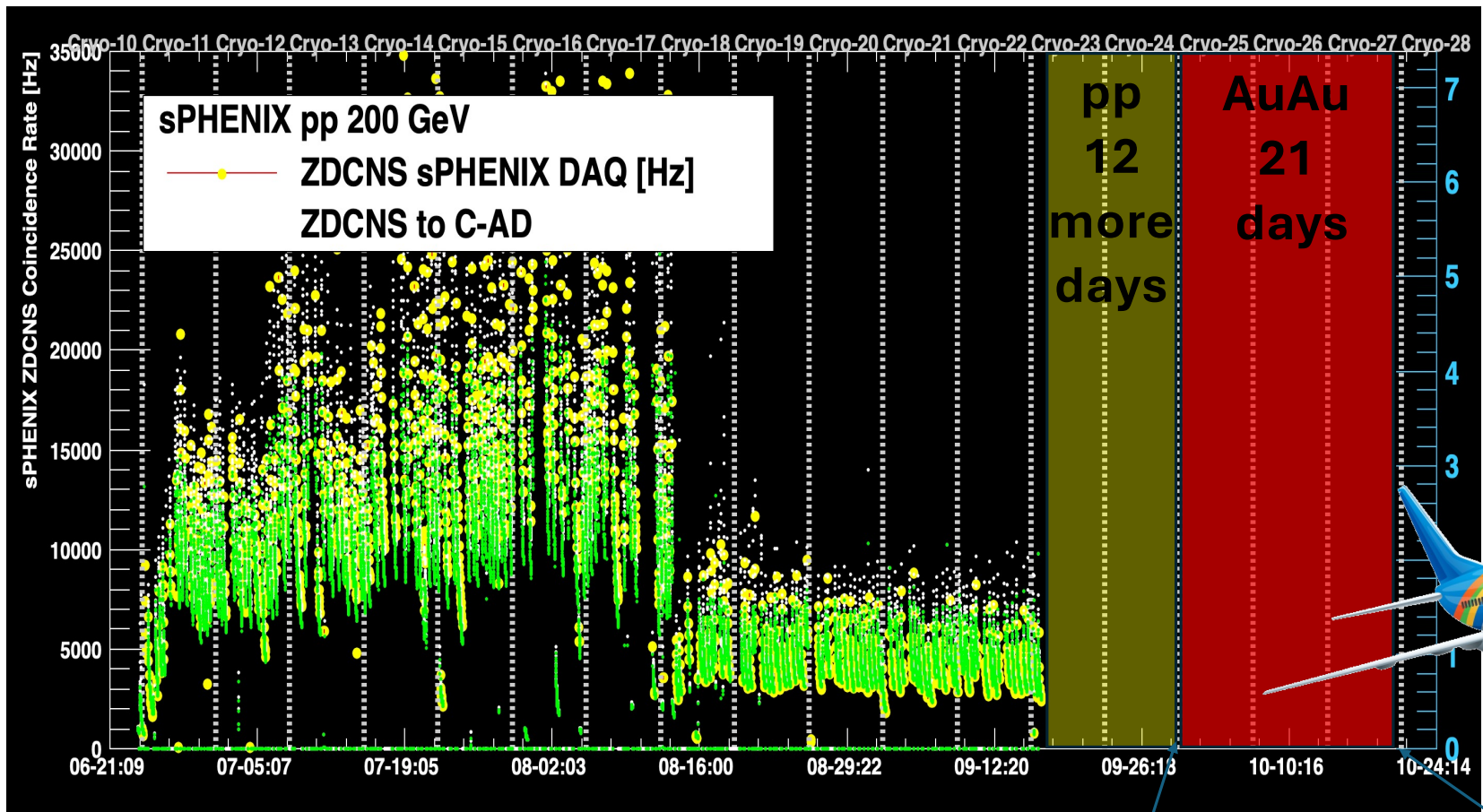
Day	RHIC day	Major activity	Beam conditions	Detector status
Monday Sep 30	1	Maintenance		Off
Tuesday Oct 1	2			Off Tune ZDC voltages
Wednesday Oct 2	3	Possible overnight store	CAD	Off Turn on MBD
Thursday Oct 3	4	Possible overnight store	CAD	Tune MBD and trigger
Friday Oct 4	5	Overnight store	28/56/111 bunches	Calorimeter timing
Saturday Oct 5	6	"Physics" stores		Calorimeter data taking
Sunday Oct 6	7	"Physics stores"	56 MHz setup begins	
Monday Oct 7	8	Silicon trackers		Si detector setup
Tuesday Oct 8	9	Silicon trackers		Si detector operation
Wednesday Oct 9	10	TPC	6x6	Turn on TPC
Thursday Oct 10	11	TPC	28x28	
Friday Oct 11	12	TPC	111x111	
Saturday Oct 12	13			
Sunday Oct 13	14			
Monday Oct 14	15			
Tuesday Oct 15	16	Possible absorber installation		
Wednesday Oct 16	17	Possible absorber installation		
Thursday Oct 17	18	Possible absorber installation		
Friday Oct 18	19			
Saturday Oct 19	20			
Sunday Oct 20	21			
Monday Oct 21	22	End of run; leave magnet on for TPC laser tests		
Tuesday Oct 22	23	Turn off magnet, go to watch shifts		

Should the first Machine Development stores have fewer bunches?

sPHENIX will want lower bunch number stores when first turning on trackers

Might want one-beam studies, dropping one beam towards end of store

A great deal will depend on what is seen in terms of MVTX backgrounds



Monday, 8 am, Sept. 30
 End of pp data taking
Planning end of pp Party!

Monday, 8 am, Oct. 21
 End of AuAu beam