Run10 Availability

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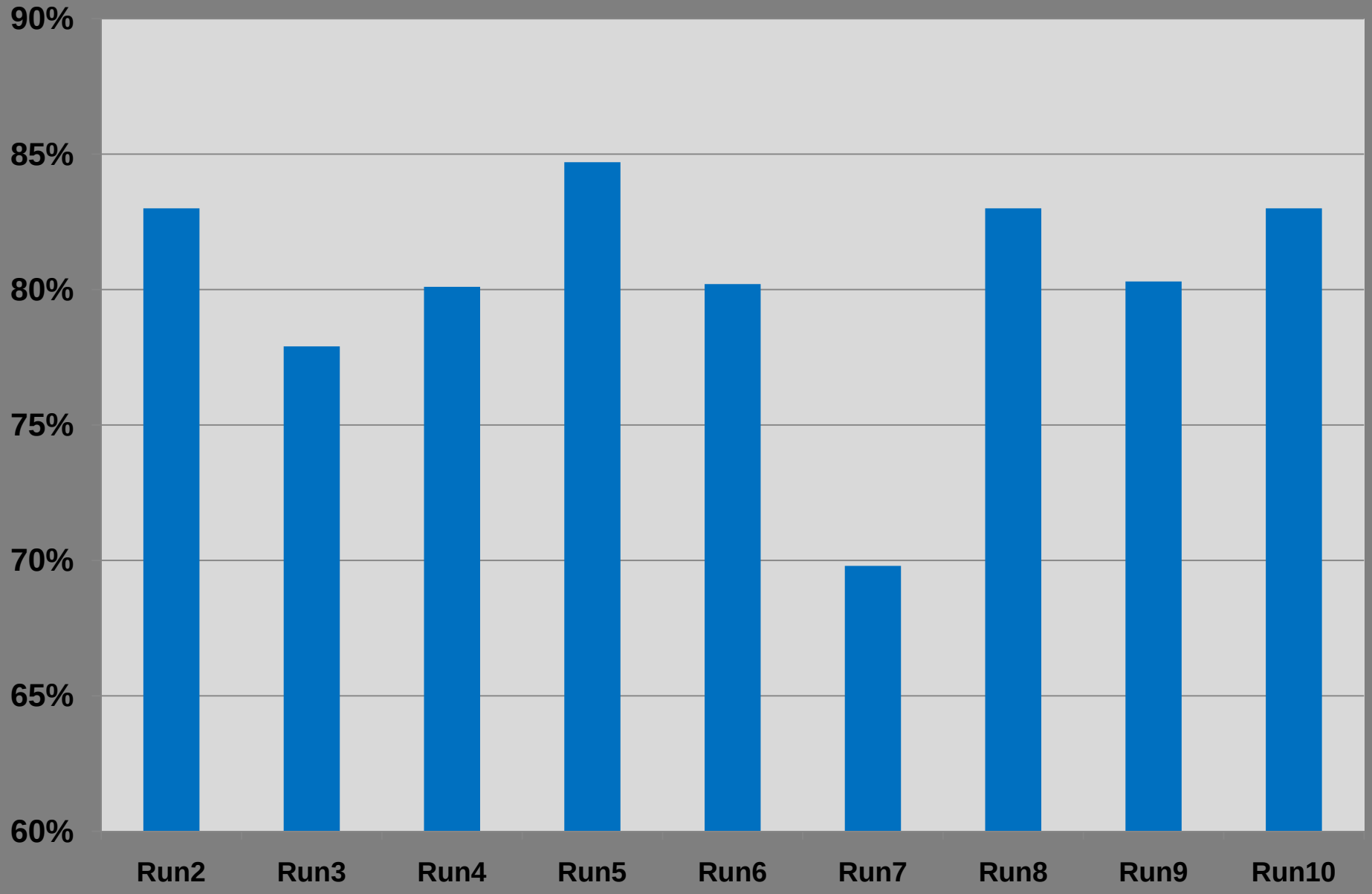
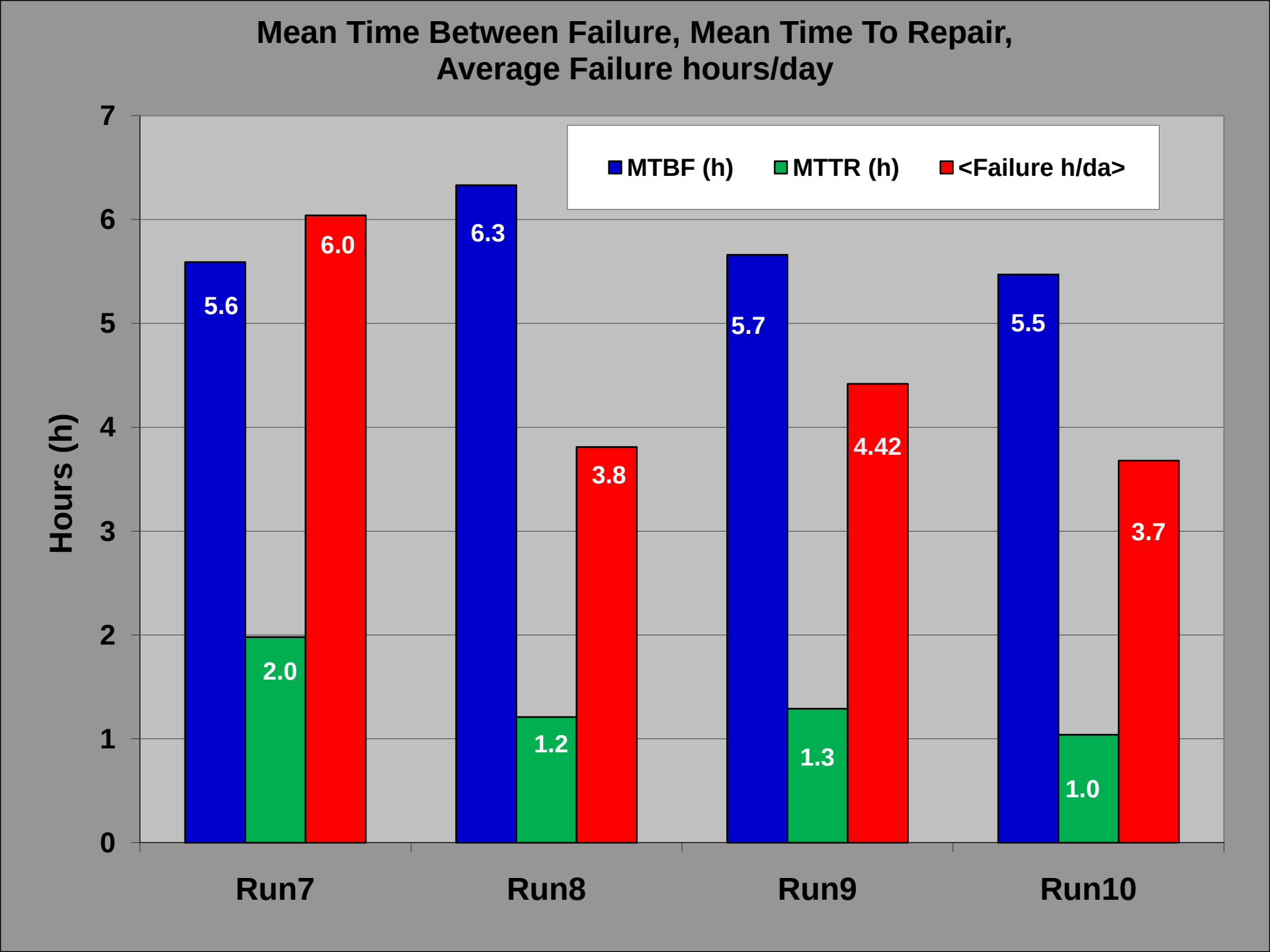
RHIC Retreat 2010

This Presentation

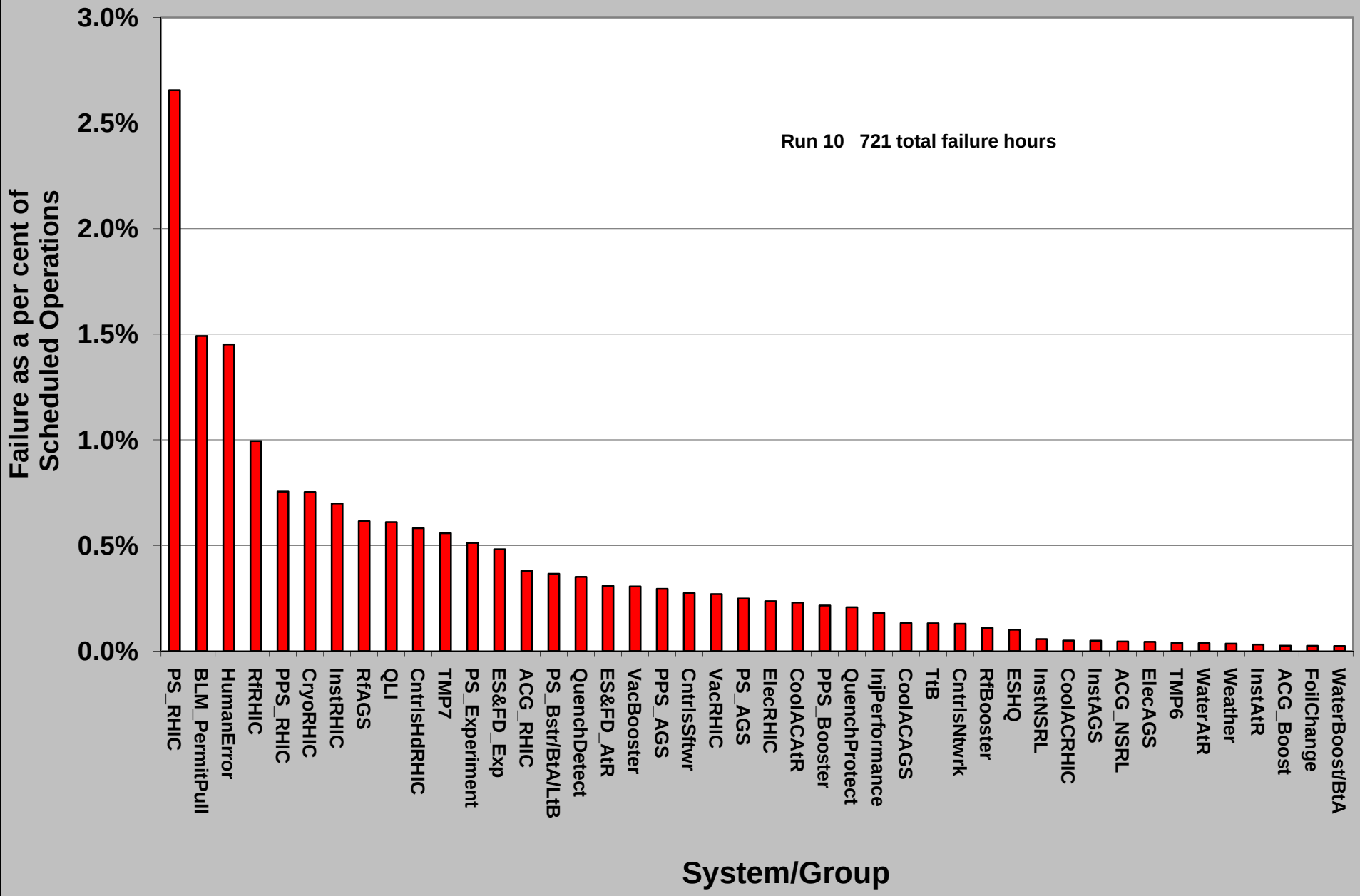
- Availability
  - Run10
  - Previous Runs
- Failure
  - Run10 Failures,
- MTBF
- “Resets”
- “Top 10” Failures by Group/System

Availability by Run

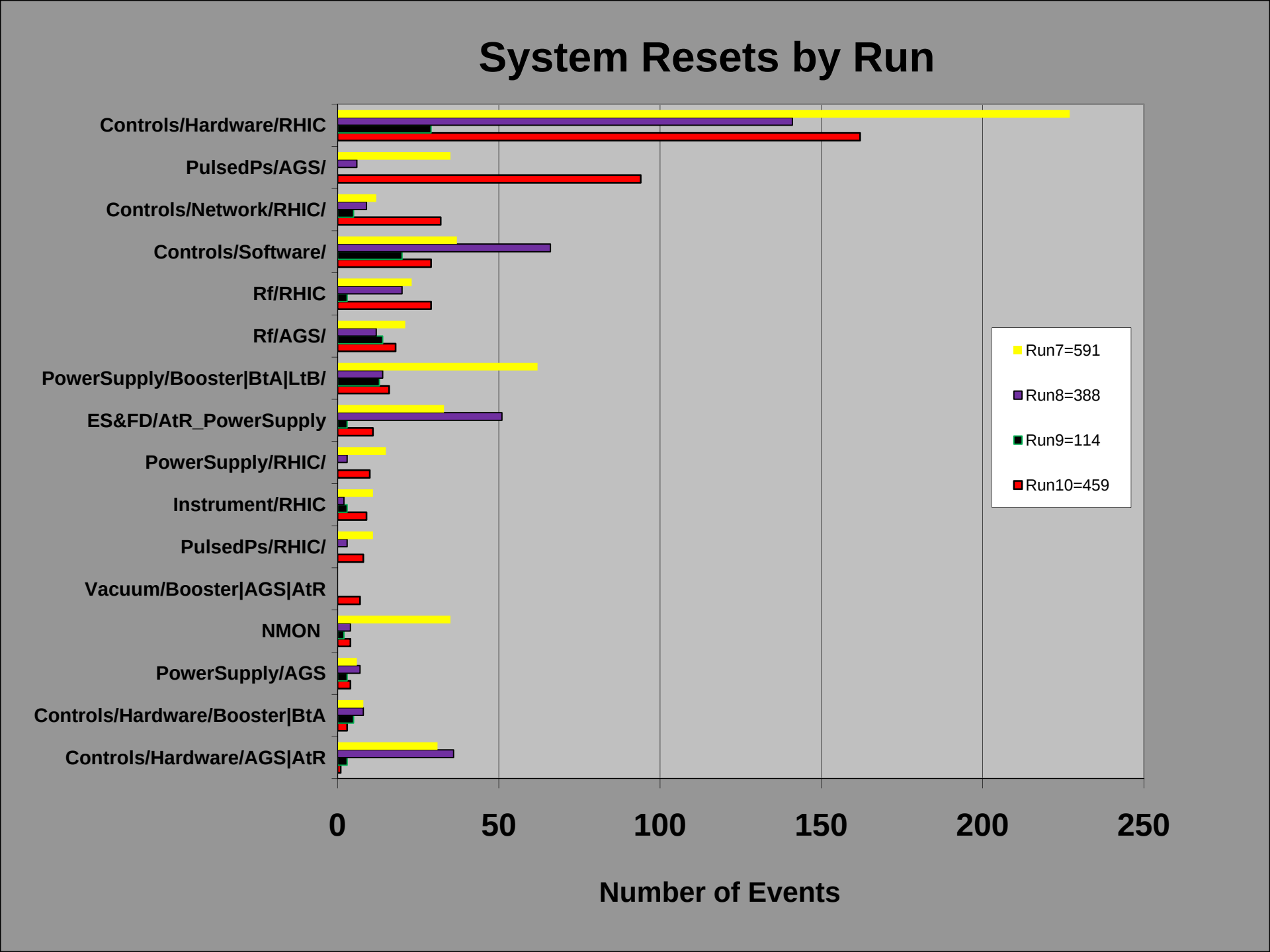



Mean Time Between Failure, Mean Time To Repair,
Average Failure hours/day
MTBF (h)
MTTR (h)
<Failure h/da>
Hours (h)
0
1
2
3
4
5
6
7
5.6
2.0
6.0
6.3
1.2
3.8
5.7
1.3
4.42
5.5
1.0
3.7
Run7
Run8
Run9
Run10

RHIC Run10 AuAu Failure Hours (> 1 hr.) by System/Group



	FY10	FY10	FY09	FY09	FY08	FY08	FY07	FY07	FY06	FY06	FY05	FY05	FY04	FY04
	RANK	HOURS	RANK	HOURS	RANK	HOURS	RANK	HOURS	RANK	HOURS	RANK	HOURS	RANK	HOURS
PS_RHIC	1	112.9	1	163.3	1	75.6	1	186.8	1	95.9	2	79	2	85.5
Rf	2	73.1	3	48.8	2	51.5	9	36.1	5	43.9	10	31.7	11	21.7
HumanError	3	61.7	4	40	4	50.6	11	23	9	29.9	9	32.5	13	19.8
PulsedPower	4	53.8	6	31.8	7	28.7	8	38.1	4	48.9	5	46.5	10	30
Controls	5	41.9	10	22.5	5	17.7	13	17.7	3	63.8	8	41	10	30
Instrumentation	6	35.5	14	15	9	9.8	16	~ 0	6	42.7	12	22	14	11.7
ES&FD_AtR & Experiment	7	33.6	12	20.3	6	13.2	6	43.3	13	15.5	6	42.6	8	34
CryogenicSystems	8	32.0	11	21.2	15	15.9	12	23	12	17.1	11	25.2	12	20.4
Tandem	9	30.9	16	0	16	6.2	15	13.7	16	~ 0	15	5.6	5	40.1
PS_AGS|Booster	10	26.1	5	34.6	10	37.6	7	39.1	2	67.2	1	79.6	1	134.9
Vacuum	11	25.1	15	3.6	8	7.3	3	92.6	11	25.9	7	42	4	66
QuenchProtect | Detect	12	23.8	2	84.3	12	54.1	2	106.9	7	41.1	3	60	3	78.1
AccessControls	13	19.2	9	23.3	3	20.8	10	35.4	15	2.2	16	0	15	3
ElectricalService	14	11.9	8	27.5	13	21.7	14	14.1	14	8.4	13	19.3	9	31.7
Services Water	15	3.4	13	19.8	11	11	5	58.7	10	26.2	14	14.8	7	34.8
Linac	16	0	7	31.1	14	28.1	4	58.8	8	33	4	53.3	6	39.8


System Resets by Run
Controls/Hardware/RHIC
PulsedPs/AGS/
Controls/Network/RHIC/
Controls/Software/
Rf/RHIC
Rf/AGS/
PowerSupply/Booster|BtA|LtB/
ES&FD/AtR_PowerSupply
PowerSupply/RHIC/
Instrument/RHIC
PulsedPs/RHIC/
Vacuum/Booster|AGS|AtR
NMON
PowerSupply/AGS
Controls/Hardware/Booster|BtA
Controls/Hardware/AGS|AtR
0
50
100
150
200
250
Number of Events
Run7=591
Run8=388
Run9=114
Run10=459