

# Australian Synchrotron Reliability Update

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## RELIABILITY TRENDS AT THE AUSTRALIAN SYNCHROTRON LIGHT SOURCE

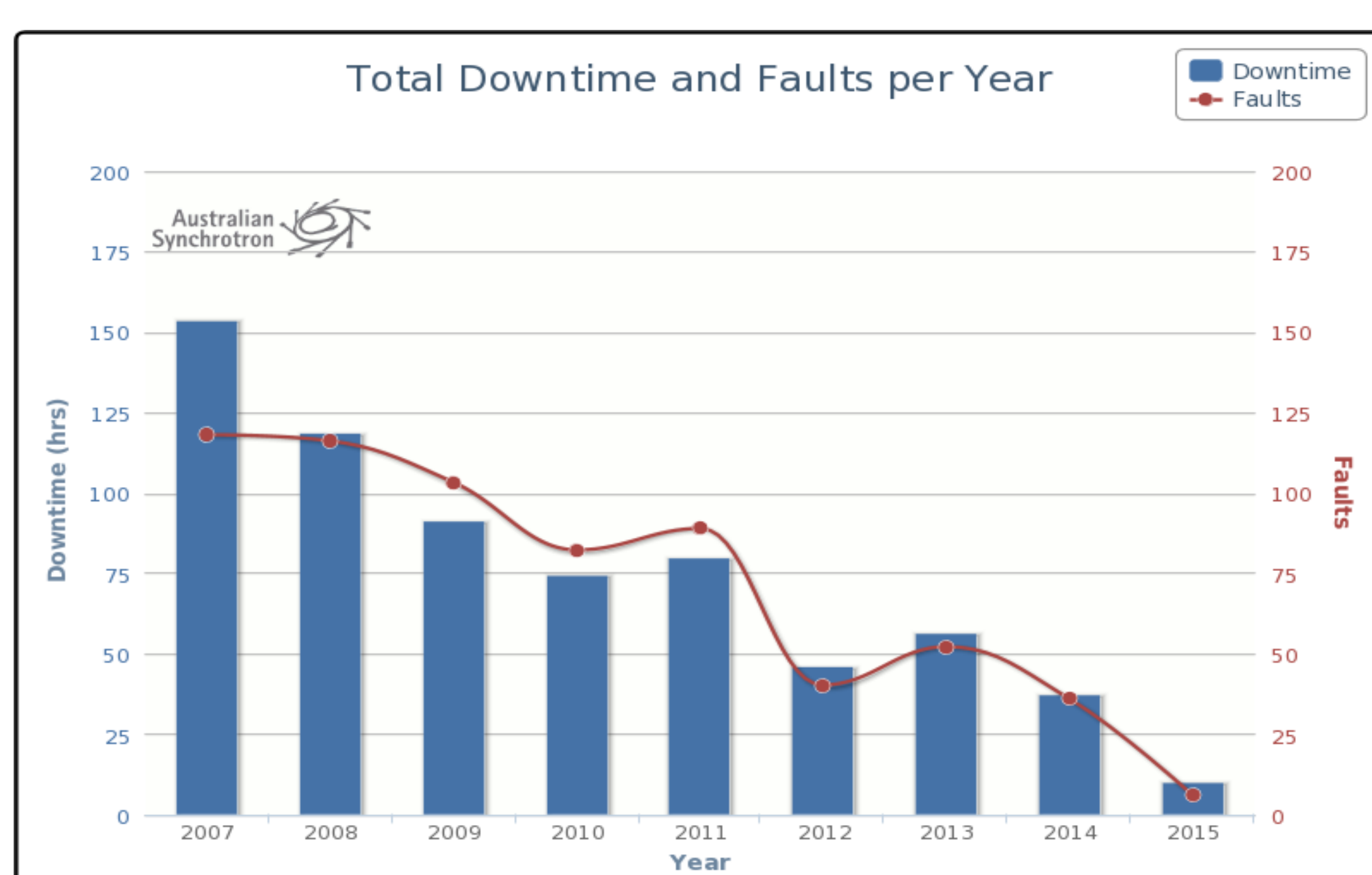
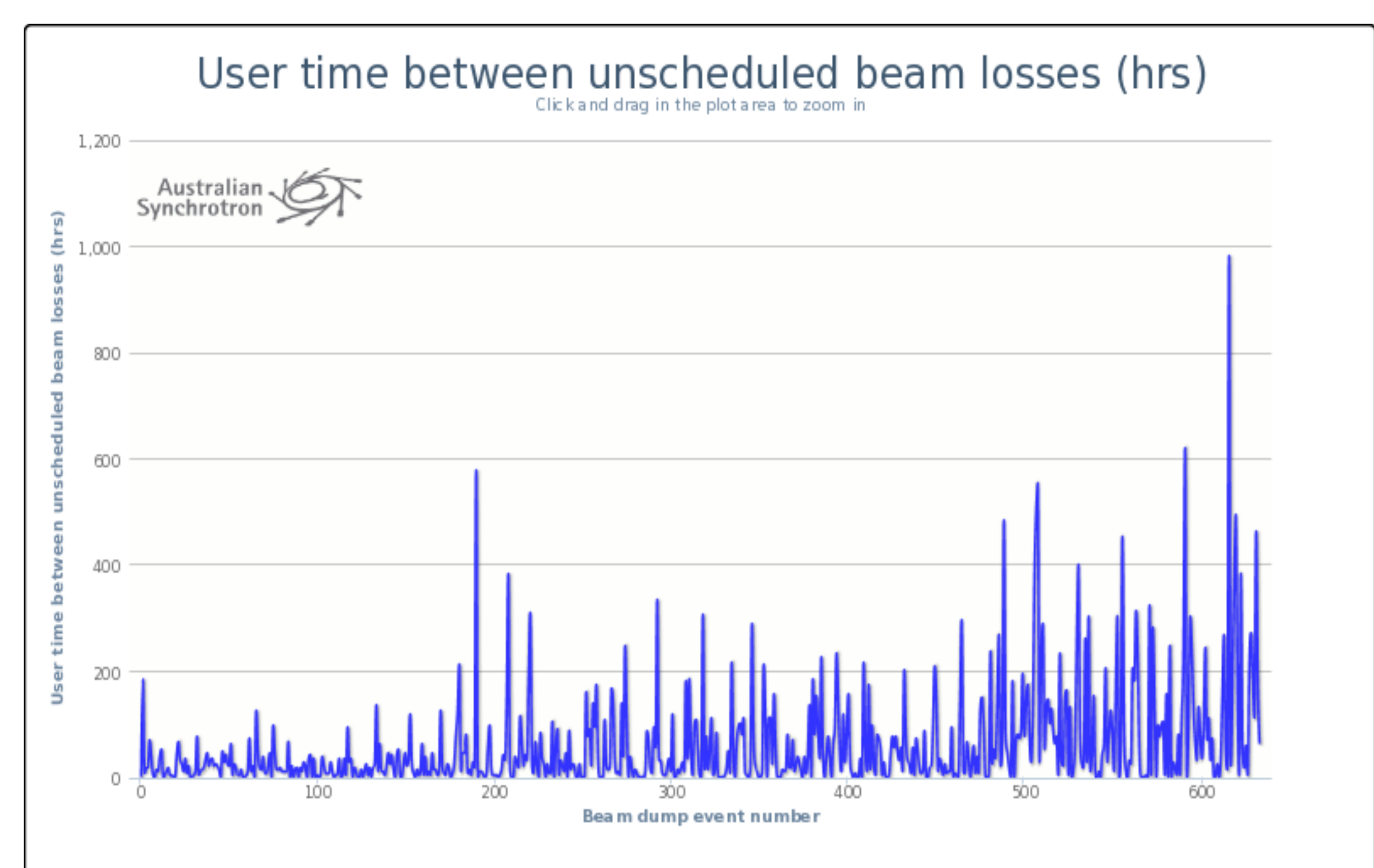
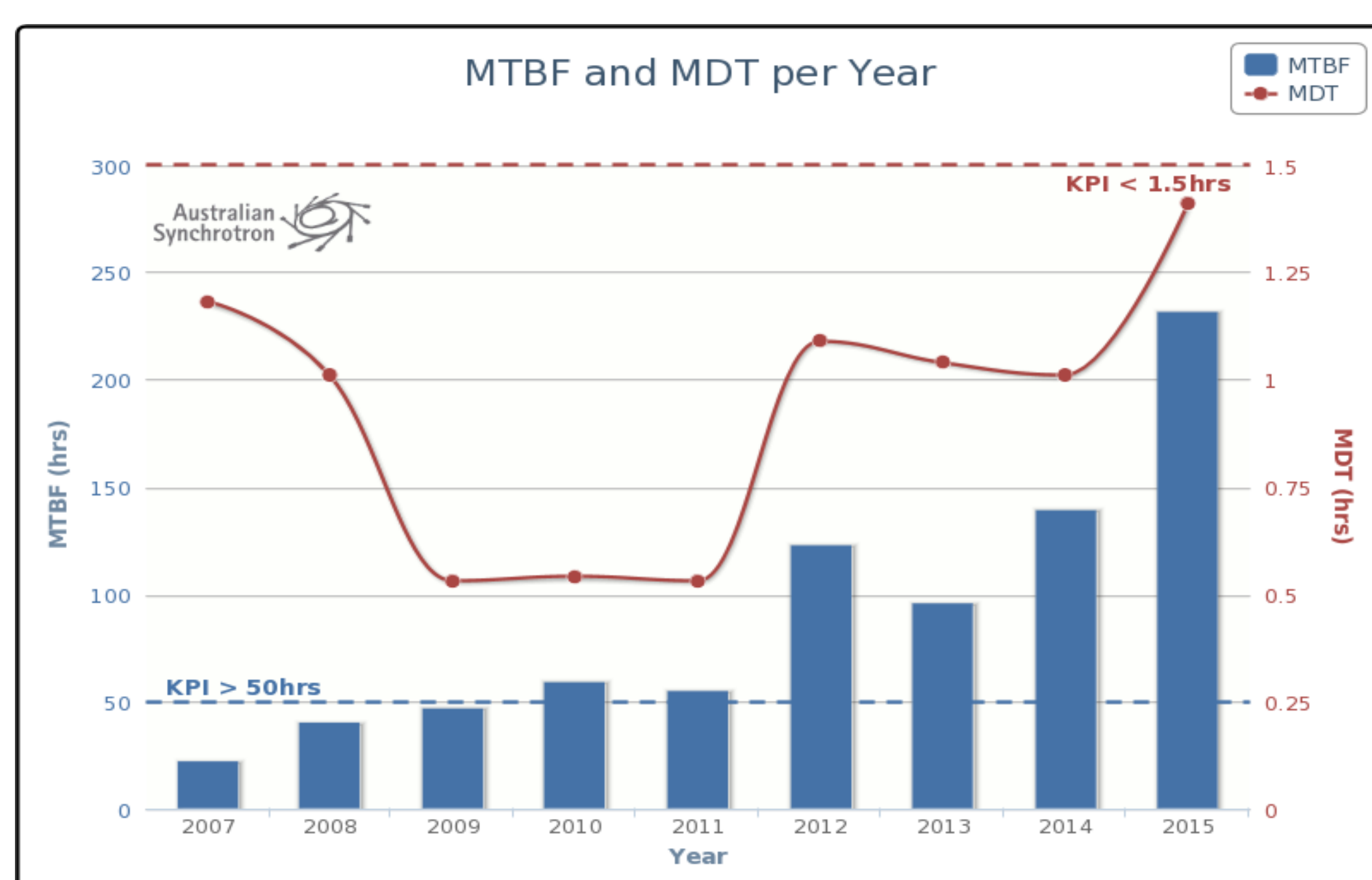
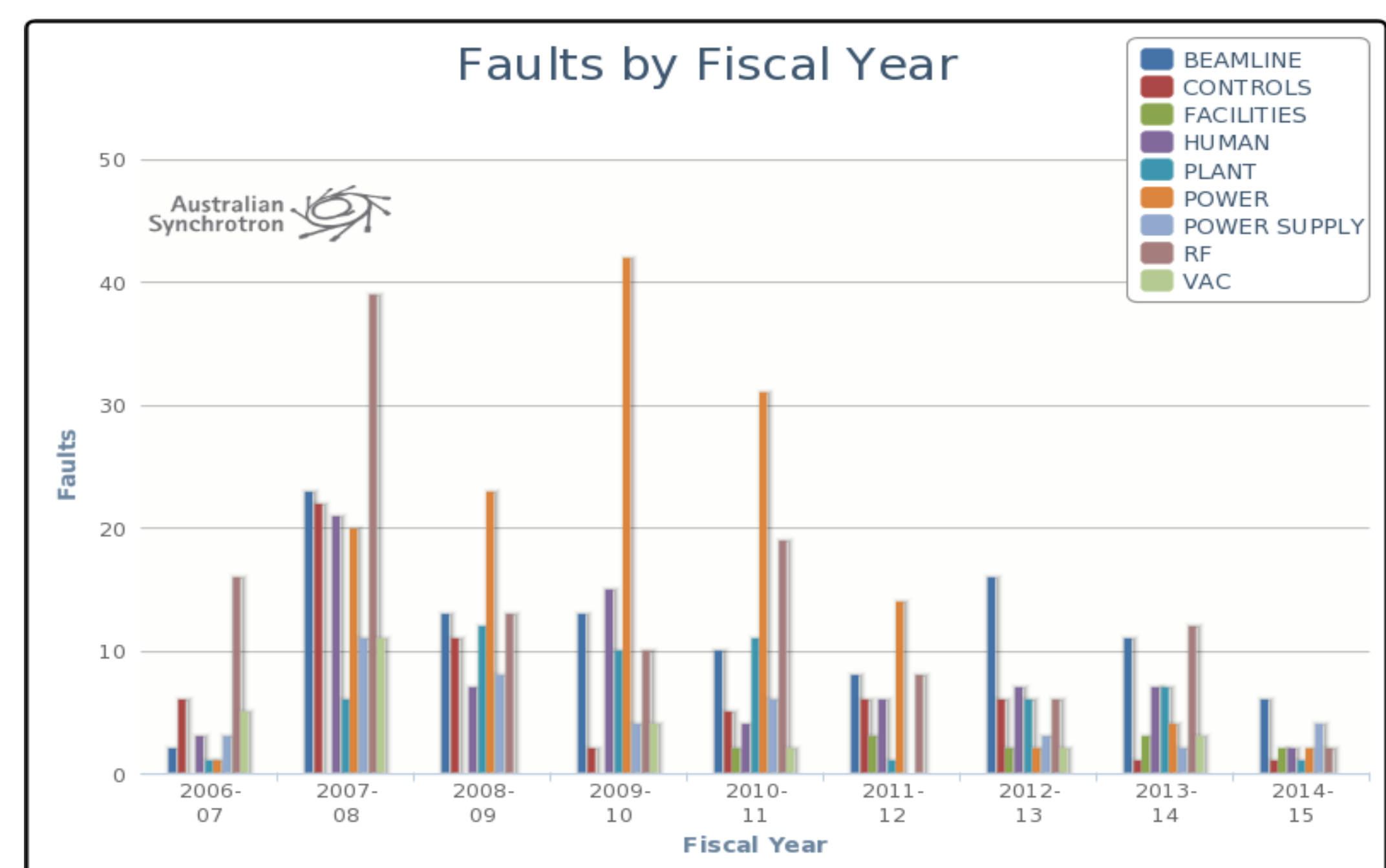
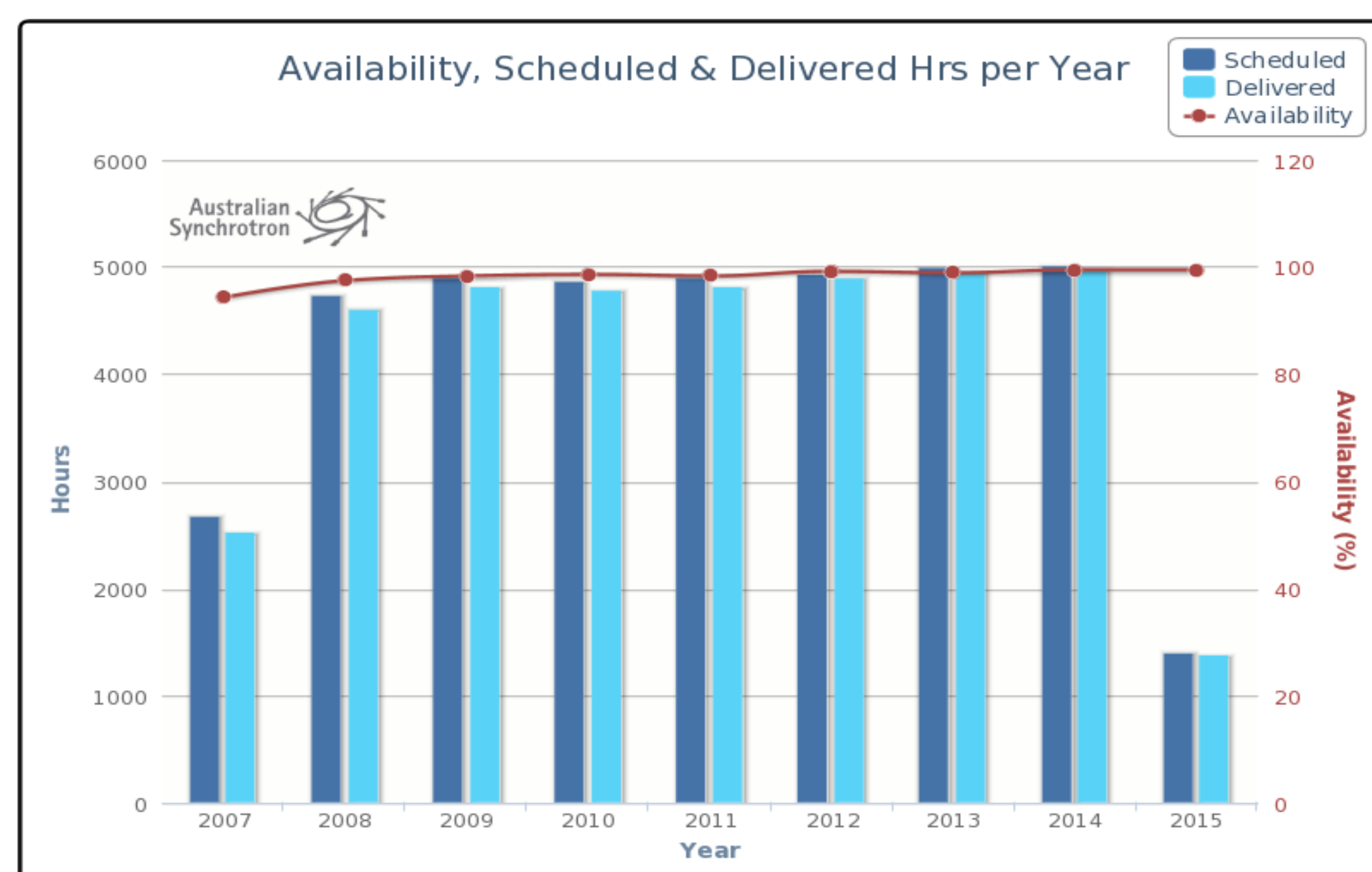
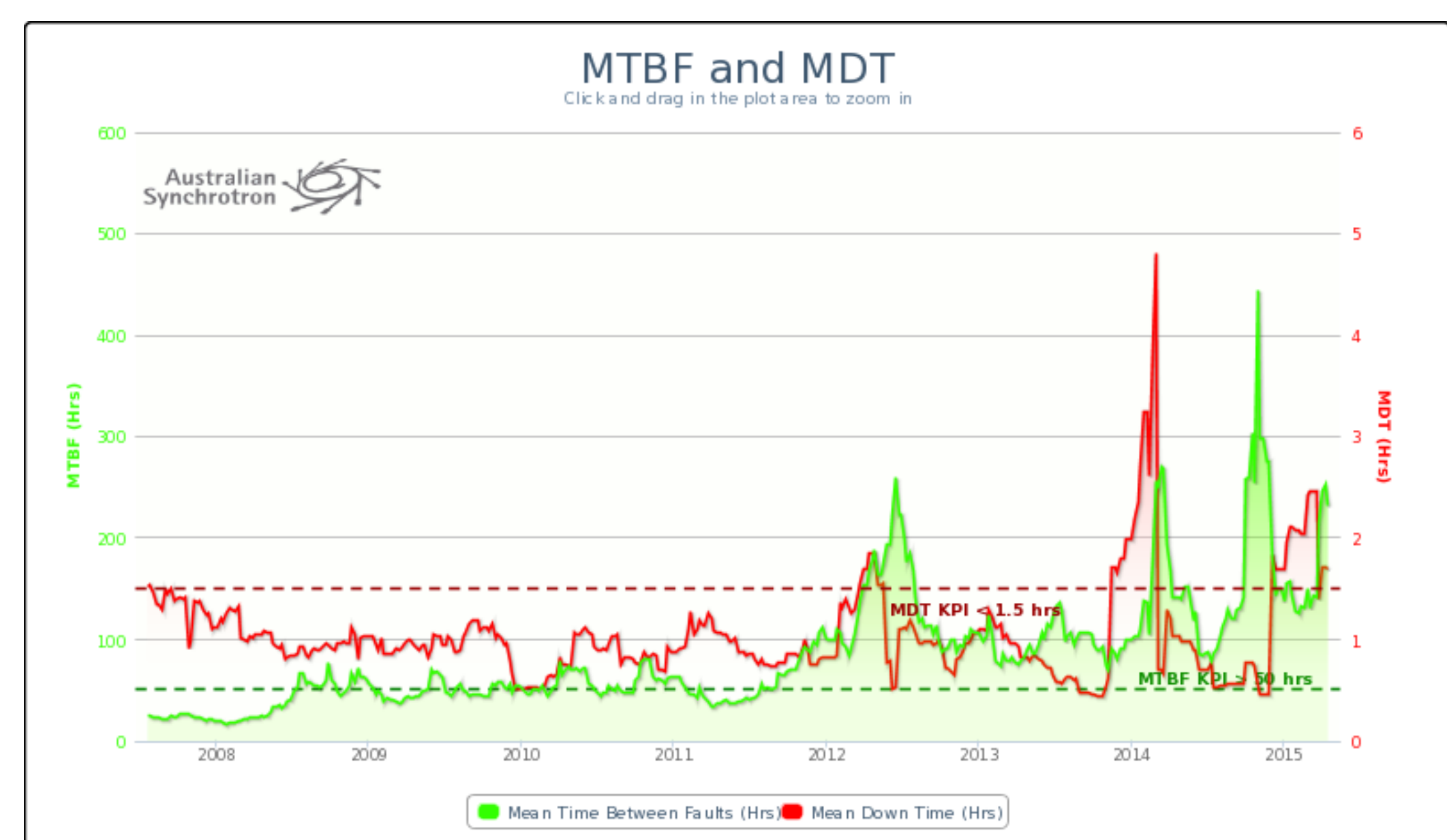
The Australian Synchrotron is a 3<sup>rd</sup> Generation Light Source located in Melbourne, Australia. It has been in User Operation since April 2007.

It consists of a 318m circumference 3GeV Electron Storage ring with a full energy injector and currently has 9 beamlines servicing more than 2000 users per year.

While we achieve high beam availability (99.88% on 31 Oct/2014) we are beginning to see End of Life issues with some components.

Several of the recent downtimes have been greater than 12 hours, skewing the Mean Down Time figures.

One highlight in 2014 was achieving 982 hours of scheduled User beam Time without a Beam Downtime Event.



### Australian Synchrotron KPI Dashboard

\* For KPI Plan document 1287

Primary KPIs							
	P KPI 1	P KPI 2	P KPI 3	P KPI 4	P KPI 5	P KPI 6	P KPI 7
	Total no. of Publications	Average Impact Factor	User Satisfaction	Machine Availability	Machine MTBF (hrs)	Machine MDT (hrs)	Beamline Availability
	Calendar year to date	Average calendar year to date	Rolling average: last 60 survey responses	16 week rolling average	16 week rolling average	16 week rolling average	Rolling average: Last 3 User Cycles
	Target per annum	Target per annum	Target	Target	Target	Target	Target
Mar-2015	156	4.7	86 %	99.4 %	215	1.38	99 %
Feb-2015	113	4.5	87 %	98.4 %	150	2.43	98 %
Jan-2015	46	4.5	87 %	98.4 %	128	2.06	98 %
Dec-2014	454	4.8	87 %	98.9 %	151	1.68	98 %
Nov-2014	402	4.8	87 %	99.8 %	276	0.45	99 %

Of particular note is the amount of Quality Scientific output the Australian Synchrotron is generating. (>50 papers/beamline/yr)