

INTEGRAL SOC & MOC News

Peter Kretschmar

09/03/2016

Issue/Revision: 1.0

Reference: Presentation Reference

Status: Issued

ESA UNCLASSIFIED - Releasable to the Public

- ISOC now at reduced staff, as agreed in saving plans:

Peter Kretschmar	80% (20% Hitomi)
Erik Kuulkers	50% Project / 50% Operations Scientist
Guillaume Bélanger	100% Operations Scientist & Archive
Celia Sanchez	50% Operations Scientist (50% Hitomi)
Emilio Salazar	100% Software Support
+ Computer Support, Webmaster, Administration, Project Control, ...	

- Routine planning smooth, thanks to streamlining of processes and changes to complicated observing programmes. But every extra effort (e.g., Earth/CXB Observations) becomes critical.
- No direct impact taken yet on TOO's – also due to luck and team spirit.
- Plan to keep staff ~stable for coming years. Slight reductions in direct costs, like computers, external support, etc.

MOC Evolution



- Slight reduction in MOC engineering & management manpower due to sharing with other missions beyond XMM-Newton (e.g. CHEOPS, Sentinel support, ...).
- Plan to reduce SpaCon support in 2016 and 2017, covered by automation and further sharing with Gaia. Implies acceptance of reduced target for technical performance, i.e., risk of slower recovery in case of problems.
- Further reduction in 2017 due to CHEOPS support (R. Southworth).
- On-going automation of routine tasks.
- Still able to react well on TOOs and do limited special observations (Earth/CXB) as well as operational improvements.



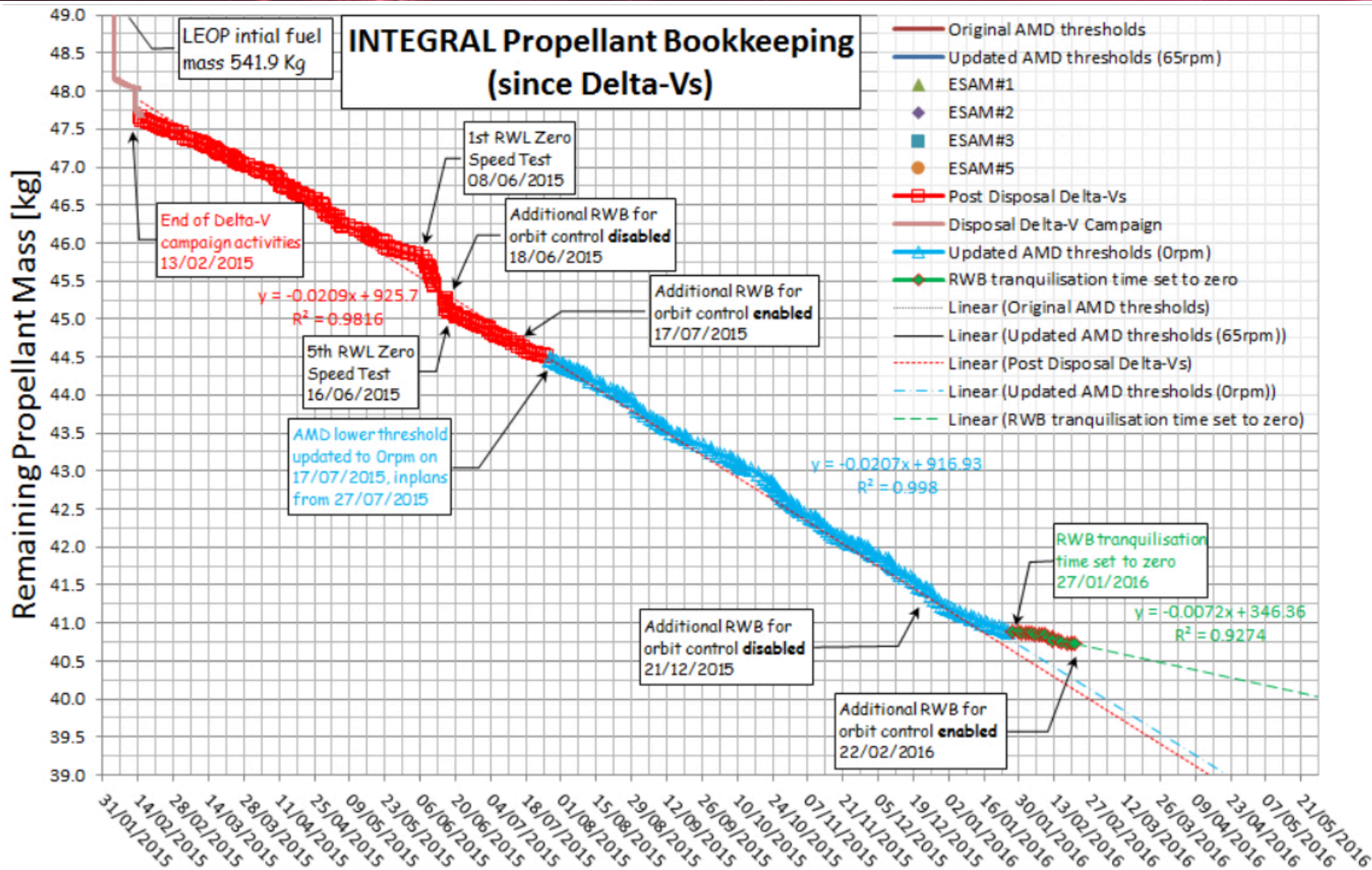
INTEGRAL Technical Lifetime



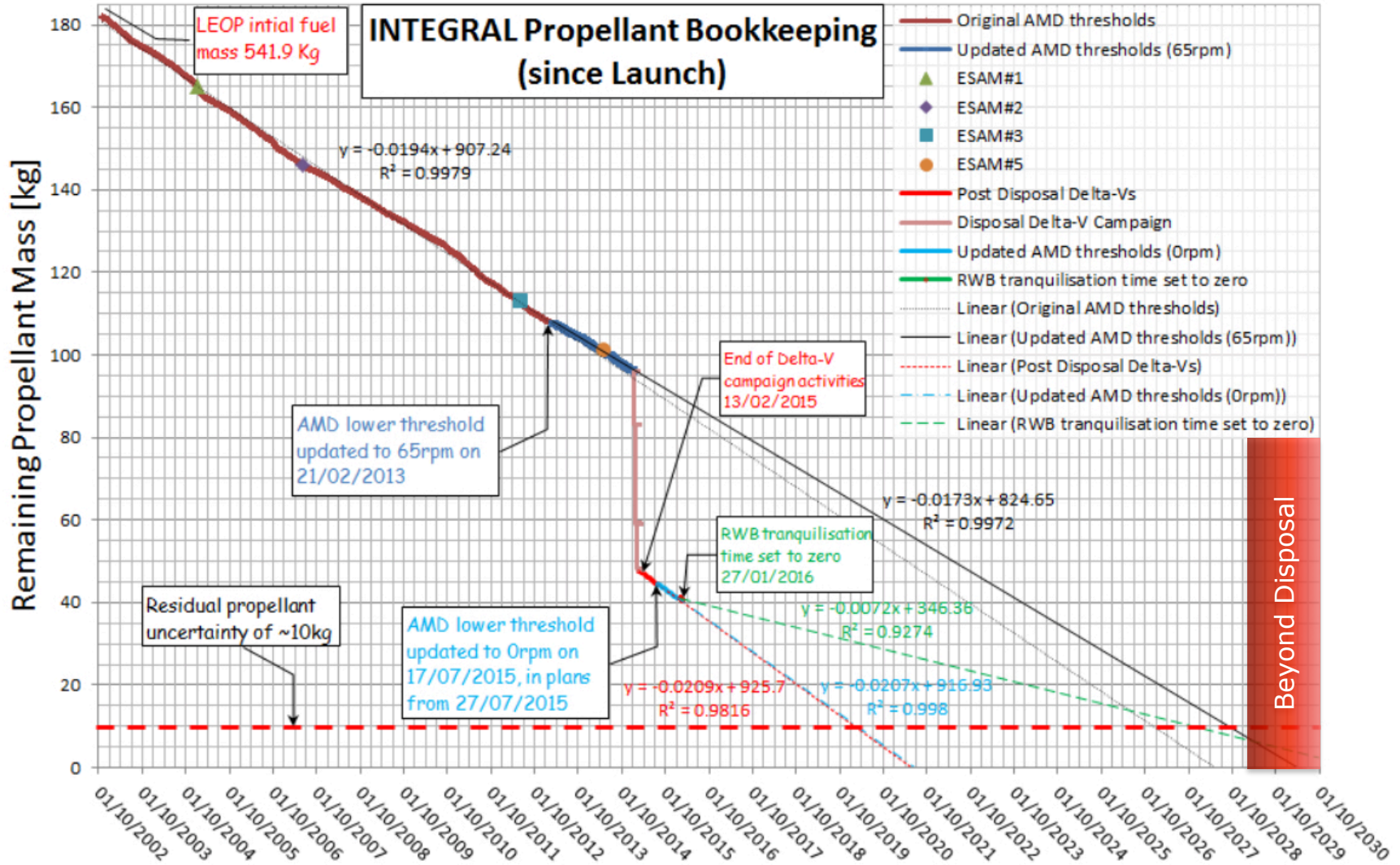
- New scheme implemented for Reaction Wheel Biases: no tranquilisation period. **Significant propellant savings, negligible effect on pointing stability.**
- Projected fuel usage now leaves margin for 10+ years again, although more time required for a stable prediction.
- Note that electrical power from solar arrays will probably limit operations earlier!



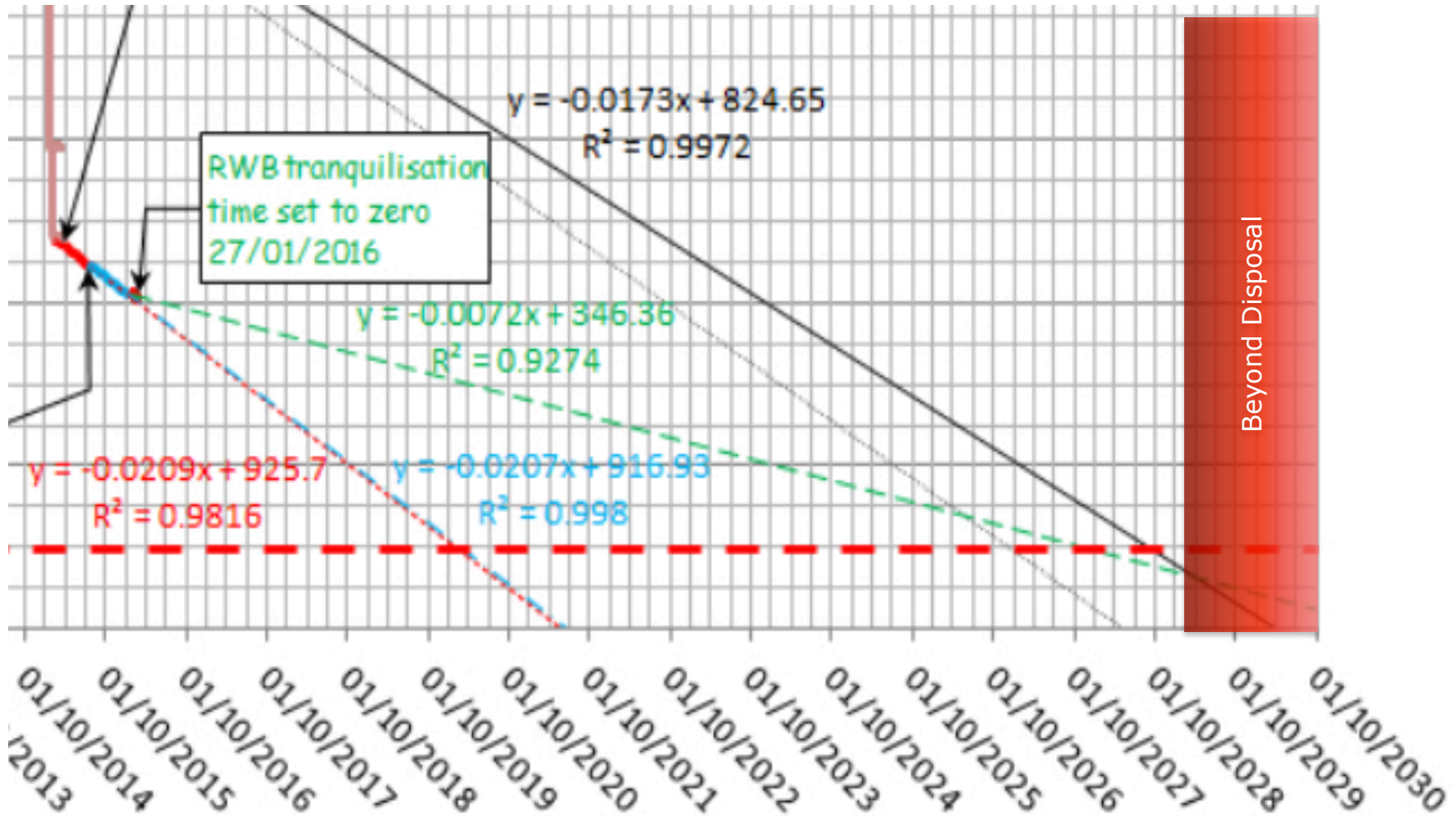
Saving Propellant by RWB Bias Changes



Propellant Long-Term Perspective



Propellant Long-Term Perspective



Solar Panel Currents

