



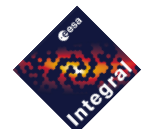
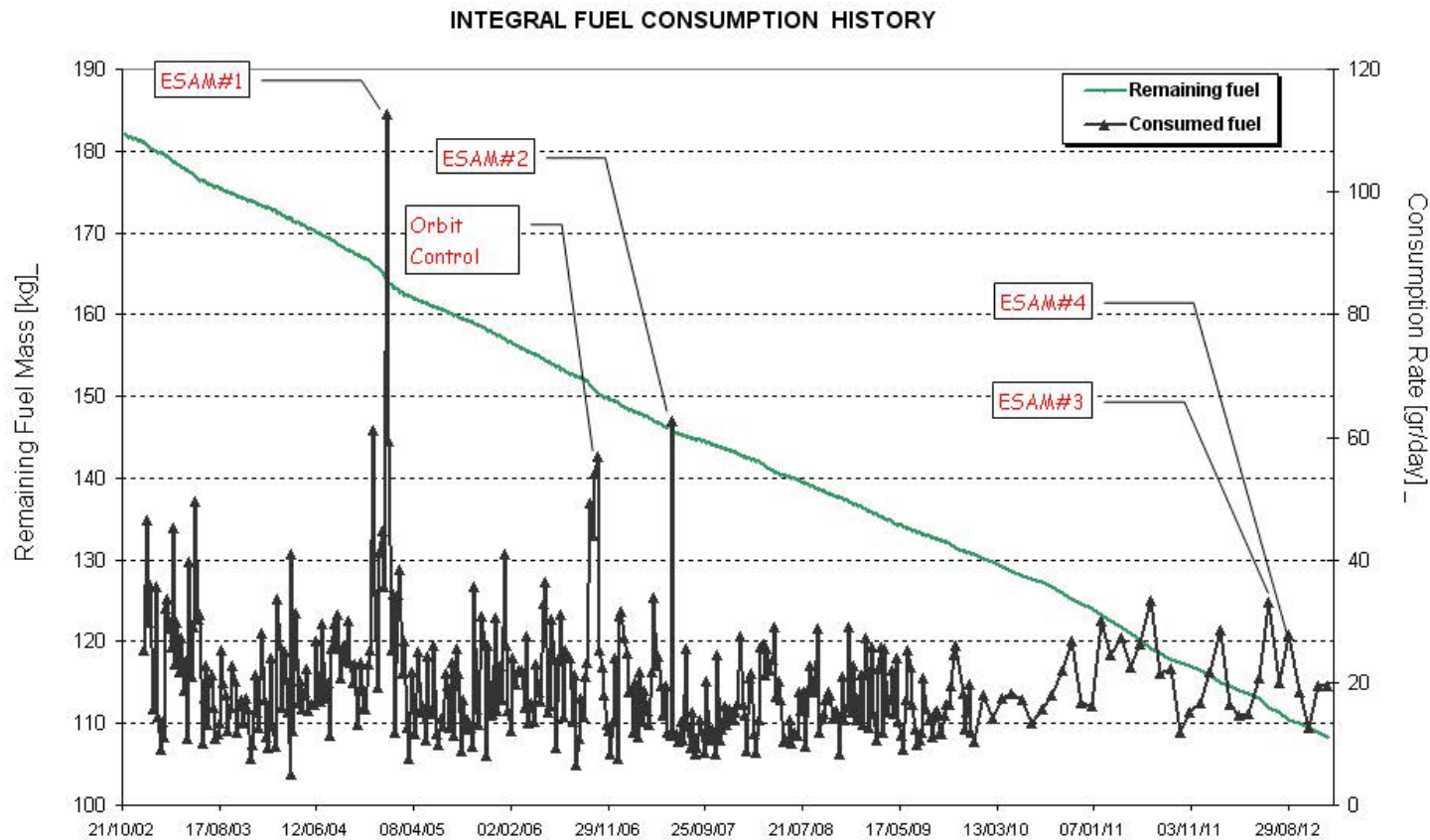
# **Integral SVM and MOC Status**

**R. Southworth ESA/ESOC**

# Integral Operations Status - Fuel

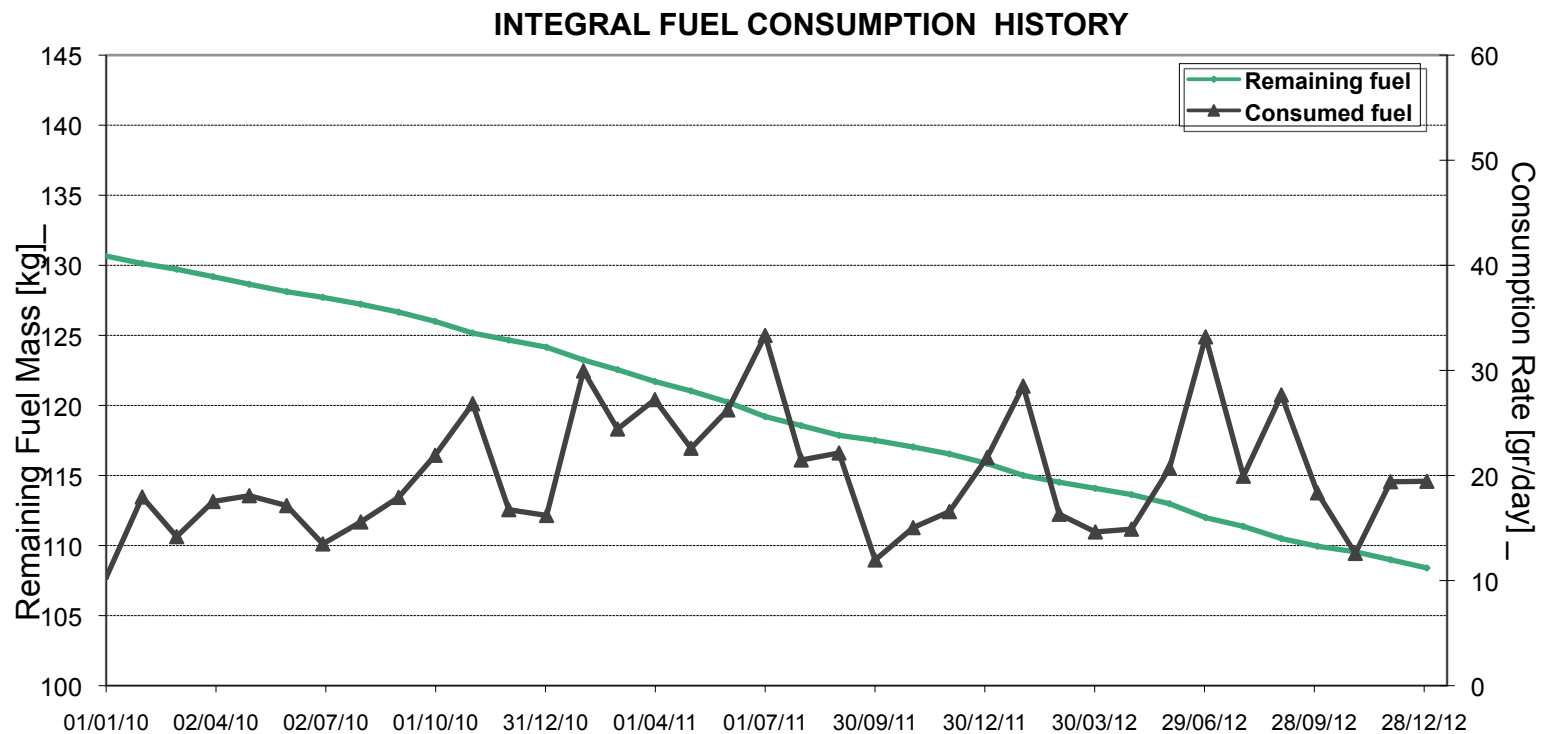


## Fuel Consumption – Long term



## Fuel Consumption – last 3 years

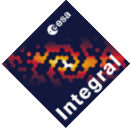
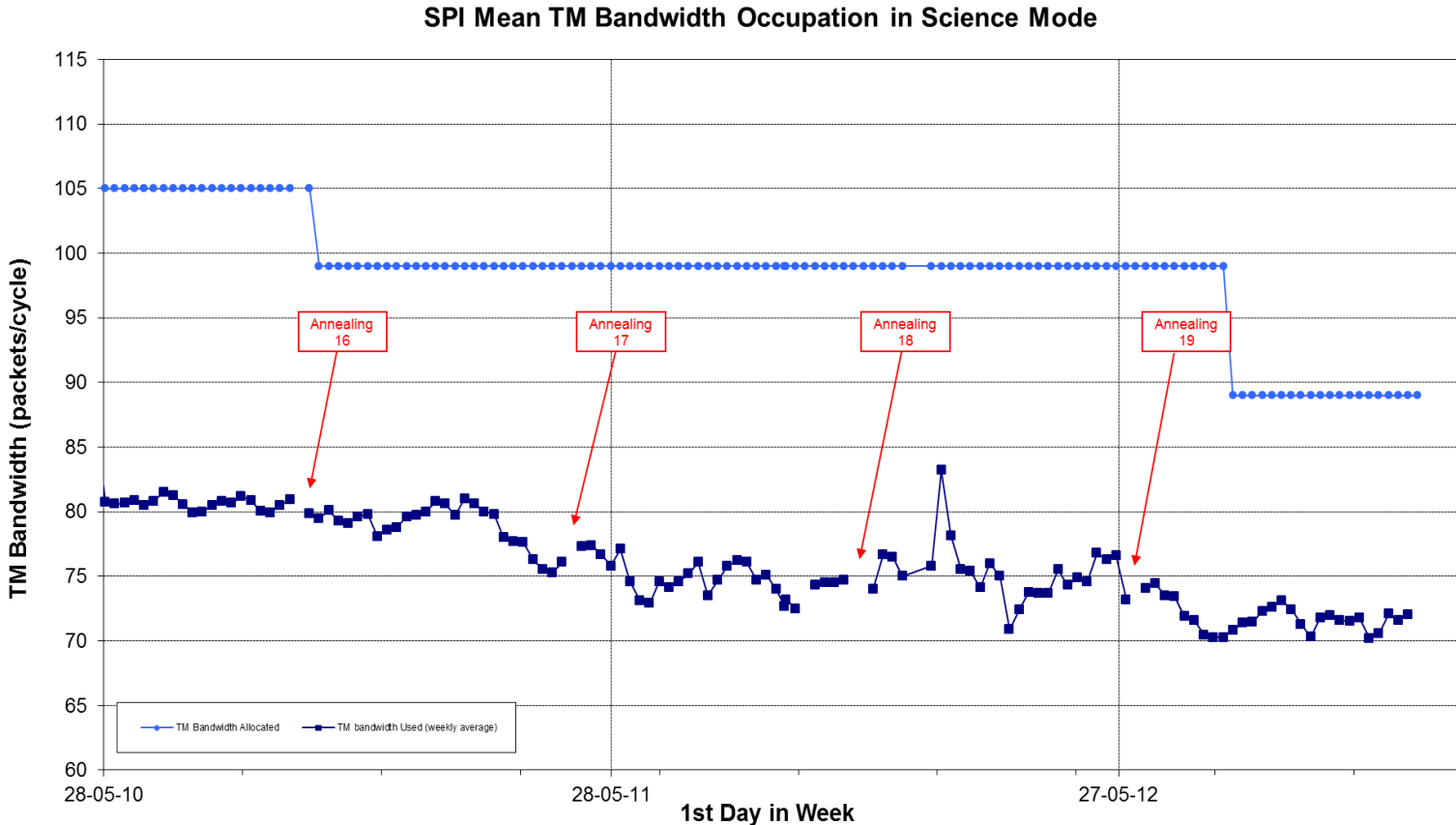
- Reductions possible by reducing zero speed region and constraints re. Wheel momentum constraints



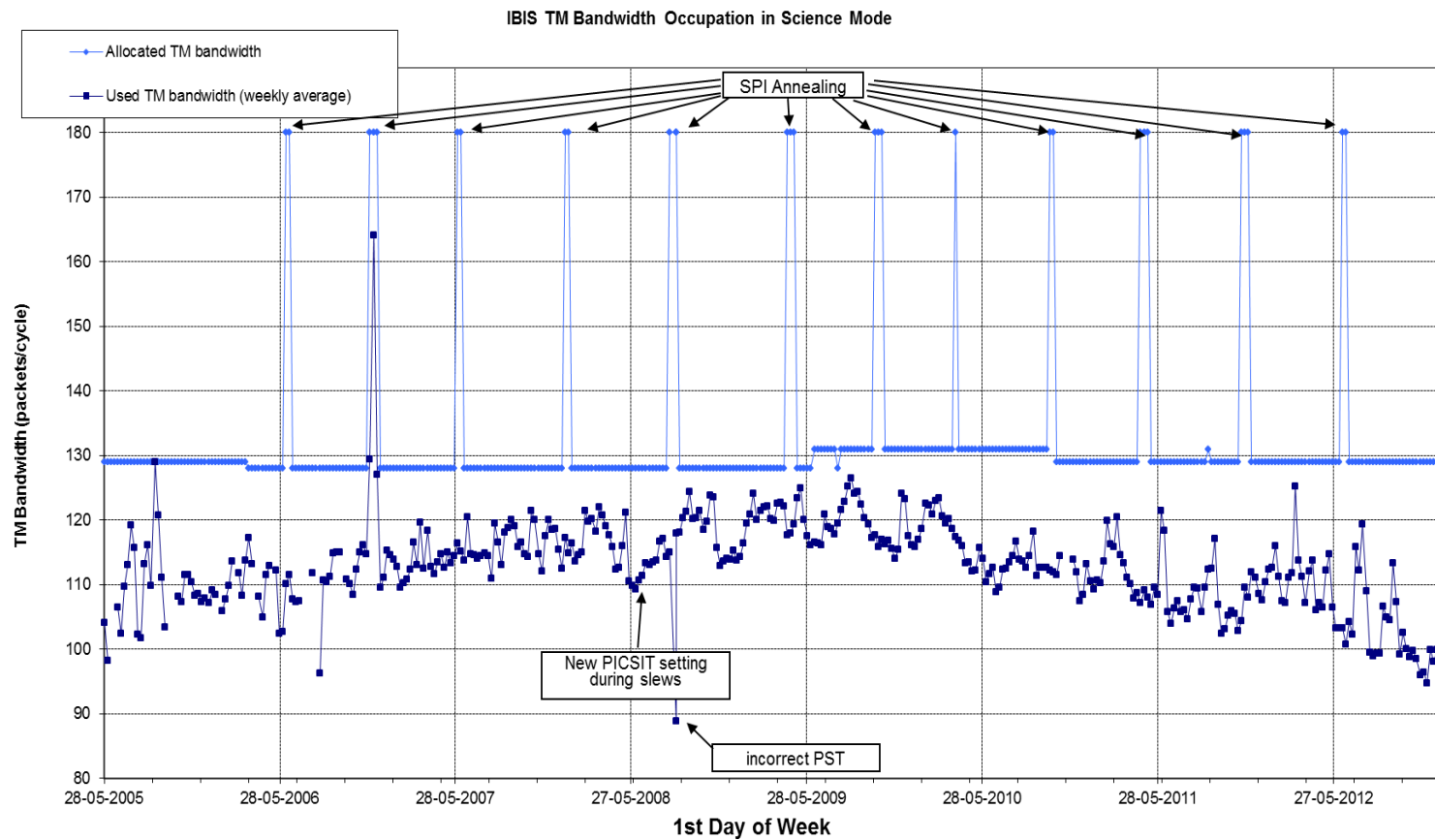
# Integral Operations Status - PST



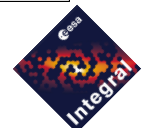
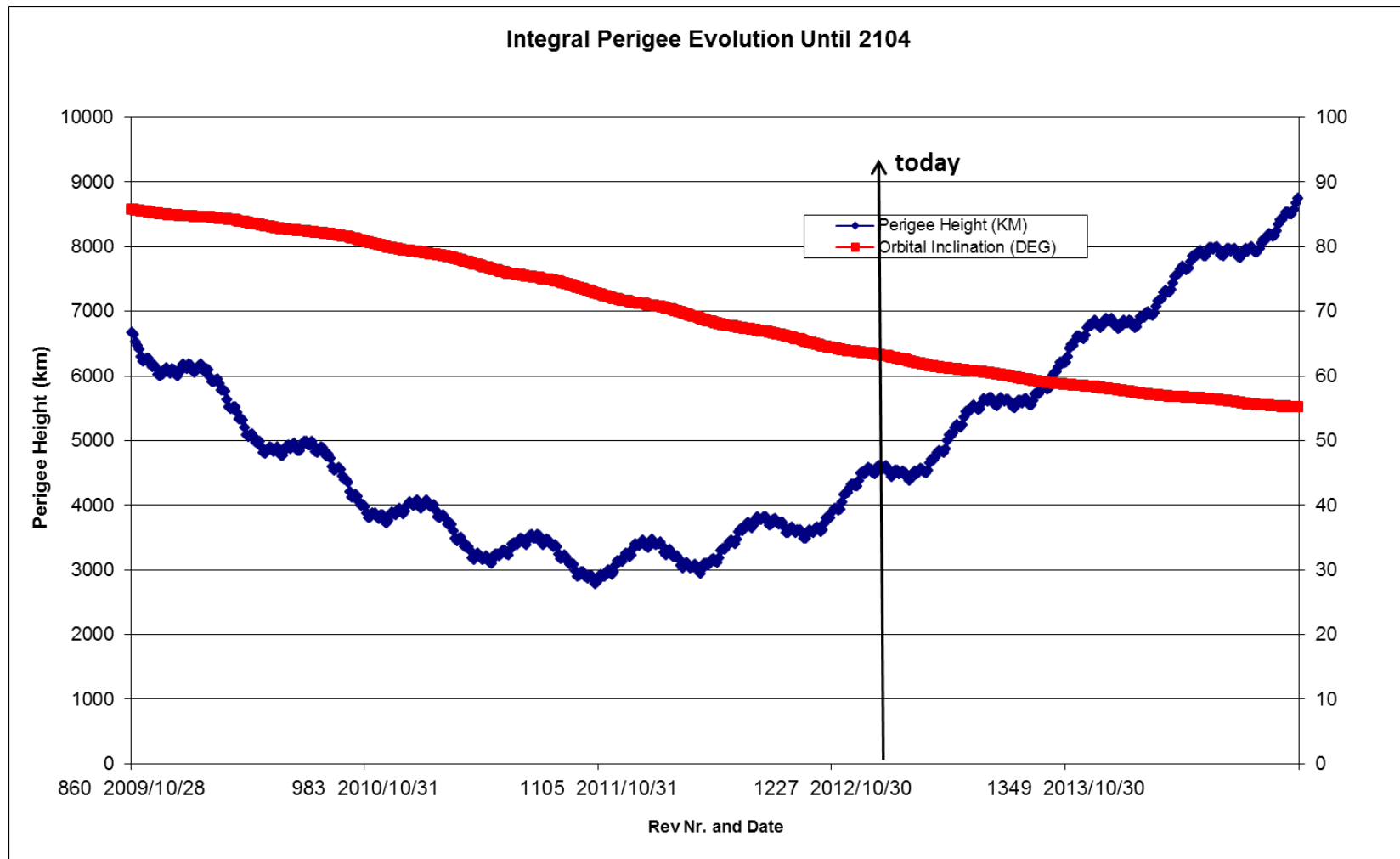
## TM Bandwidth usage - SPI



## ■ TM Bandwidth - IBIS



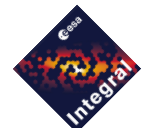
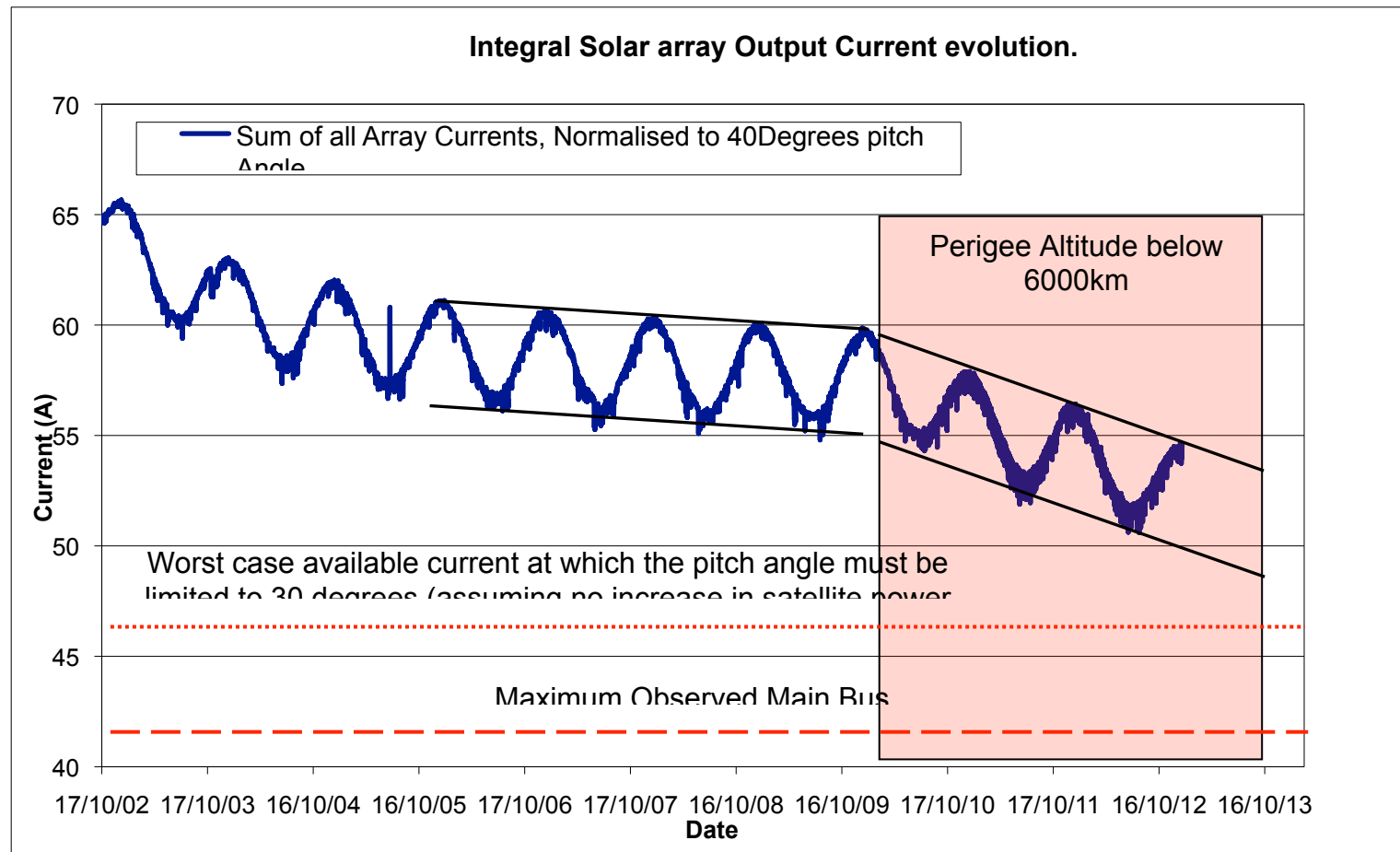
# Integral Operations Status - Orbit and Arrays



# Integral Operations Status – Orbit and Arrays



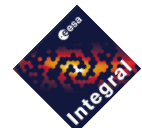
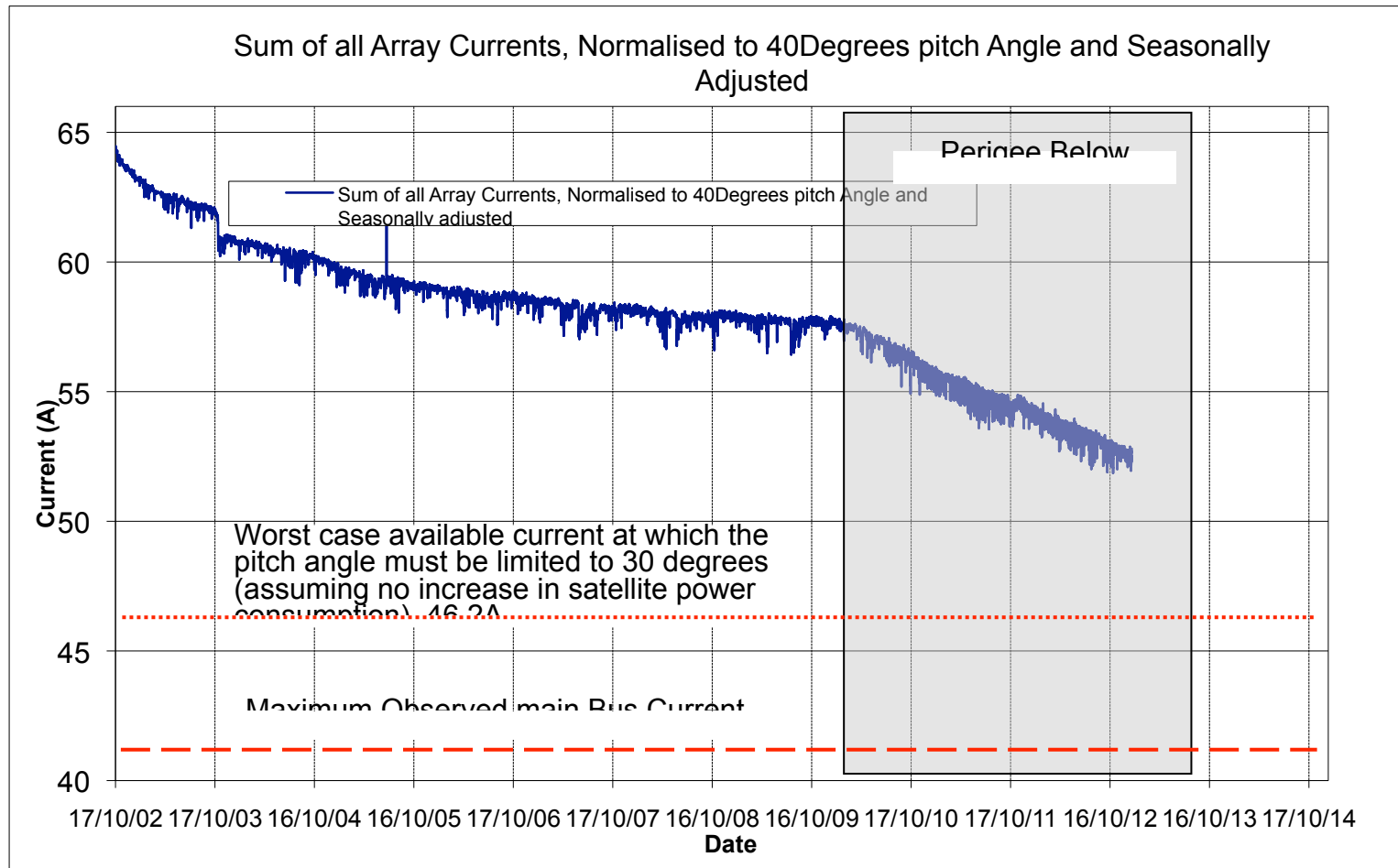
## ■ Array Output Current



# Integral Operations Status – Orbit and Arrays



## ■ Array Output Current – Seasonal removed

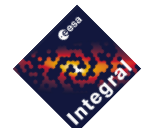




# Integral Operations Status – PLM Anomalies

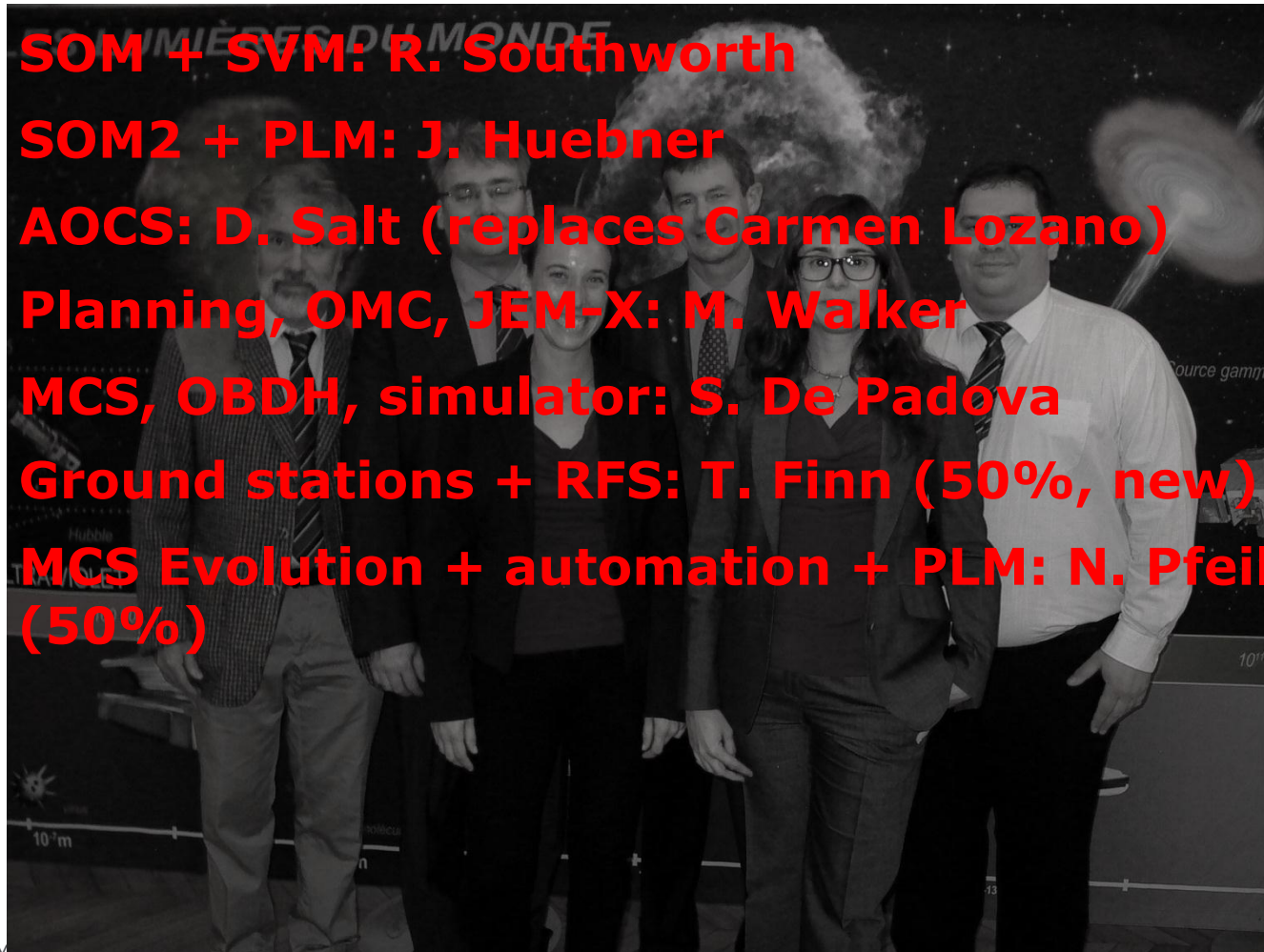


- Major Anomalies:
  - 2 x IBIS DPE crashes in early 2012
  - 1 X SPI DPE crash in early 2012
  - Recoverable using existing procedures
- Recurring Anomalies
  - IREM crashes
  - JEM-X DFEE CRC Anomalies
  - IBIS VDM Voltage Breakdowns
  - Occasional SPI PSD Resets
- Other Anomalies, issues
  - OMC Shutter B LCL Close, then open???
  - IBIS VETO Off due to LCL trip
  - Change of SPI GeD AFEE DC OP Voltage for GeD 8 + 11
  - Change of SPI PSD Threshold
  - Reduction of SPI AFEE HV to 2.5KV (precaution)



## ■ Flight Control Team

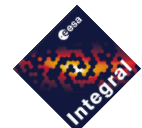
- **SOM + SVM: R. Southworth**
- **SOM2 + PLM: J. Huebner**
- **AOCS: D. Salt (replaces Carmen Lozano)**
- **Planning, OMC, JEM-X: M. Walker**
- **MCS, OBDH, simulator: S. De Padova**
- **Ground stations + RFS: T. Finn (50%, new)**
- **MCS Evolution + automation + PLM: N. Pfeil (50%)**



# MOC Status – Ground Stations



- REDU (prime since 2002) will be handed over completely to Galileo soon, access already limited
- New prime long term will be Kiruna1
  - Performance as REDU
  - Visibility better
  - Some conflicts with GOCE this year
  - Potential LEOP support of other missions occasionally
- VIL2 and Maspalomas remain
  - Visibility constraints
  - Conflicts with Cluster
- Perth has only minimal visibility
- Weilheim is prohibitively expensive



- Move to Solaris 10 Virtualised system
  - Low cost and maintenance system
  - Solaris 10 supported until at least 2018
  - Solaris 11 migration path
  - Commonality with XMM, Ros, MEX, VEX
  - Access level commonality with all other ESOC missions and infrastructure
  - Increased external capacity – possible capacity for data dissemination

- Extension until end 2014 confirmed
- Technically no problem to continue longer
  - All prime units available
  - No issues with consumables or limited life time components
- Financial issues to be resolved this year
- Disposal options to be assessed