

KICKER ADAPTION.

Der aktuelle Stand beim D00CS Server Version 2.0

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HELMHOLTZ



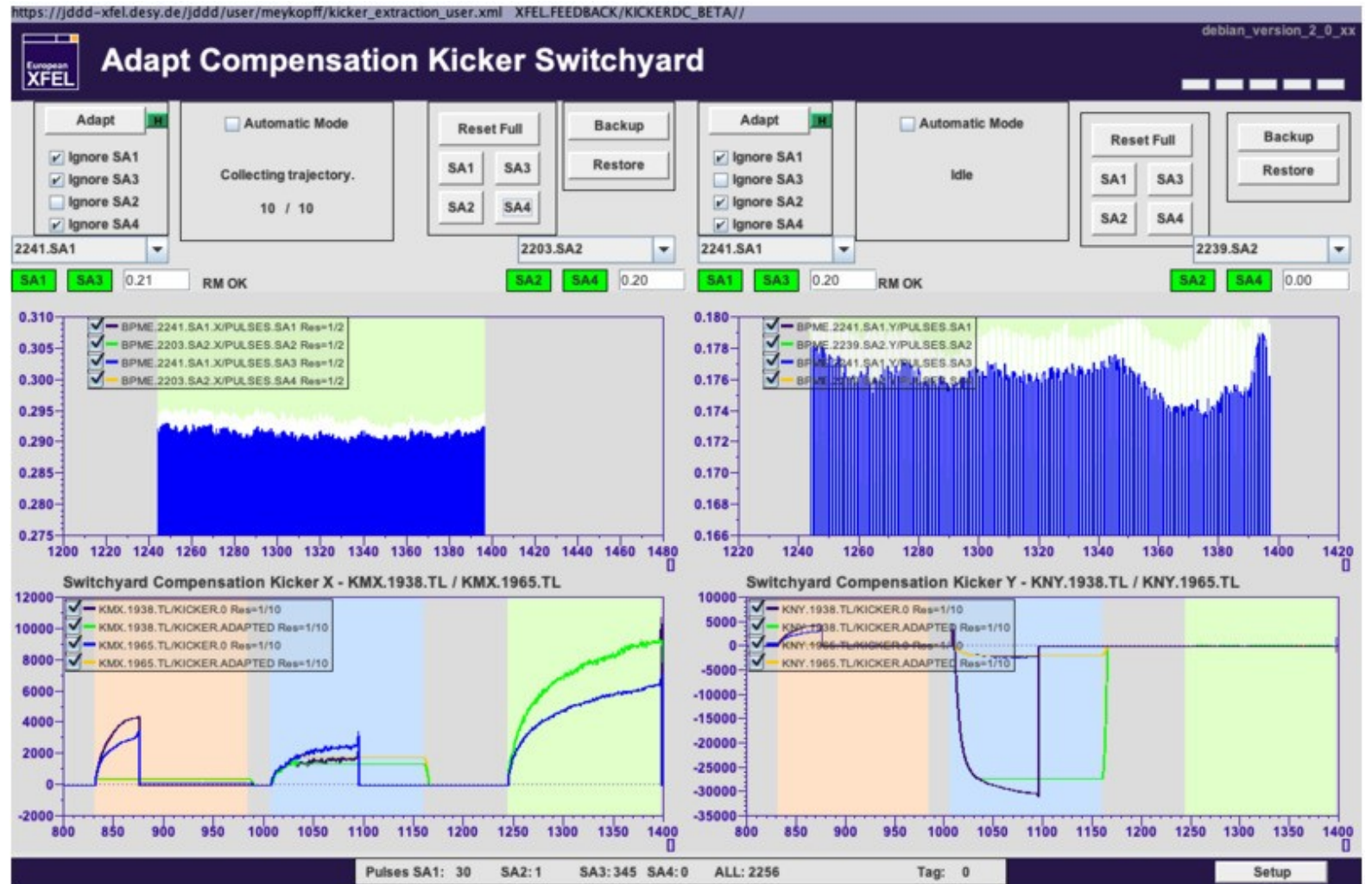
Kicker Adaptation: Übersicht

1. Worum geht es?
2. Was gibt es?
3. Kicker Adaptation Server 2.0
4. Und sonst?

Kicker Adaptation:

Worum geht es?

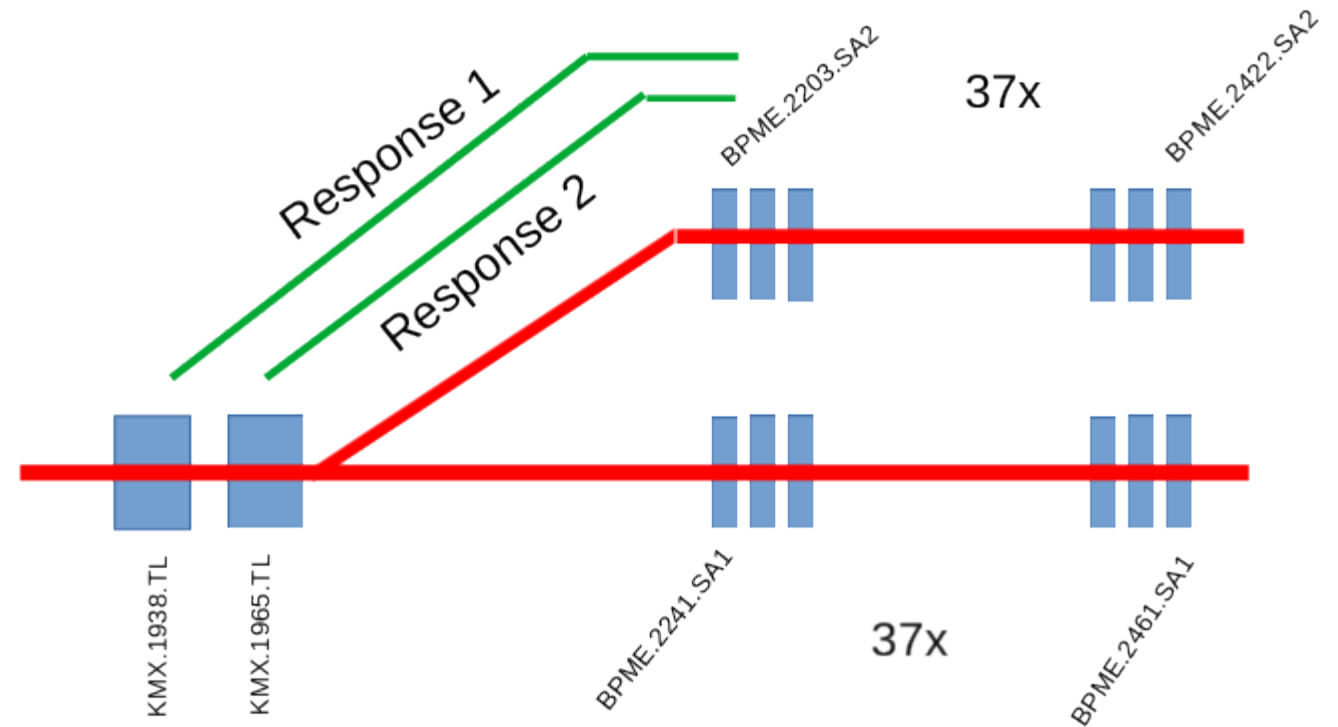
Der Orbit der einzelnen Pulse entlang des Pulszuges ist weder horizontal noch vertikal gleich. Das ist aber erwünscht.



Kicker Adaptation:

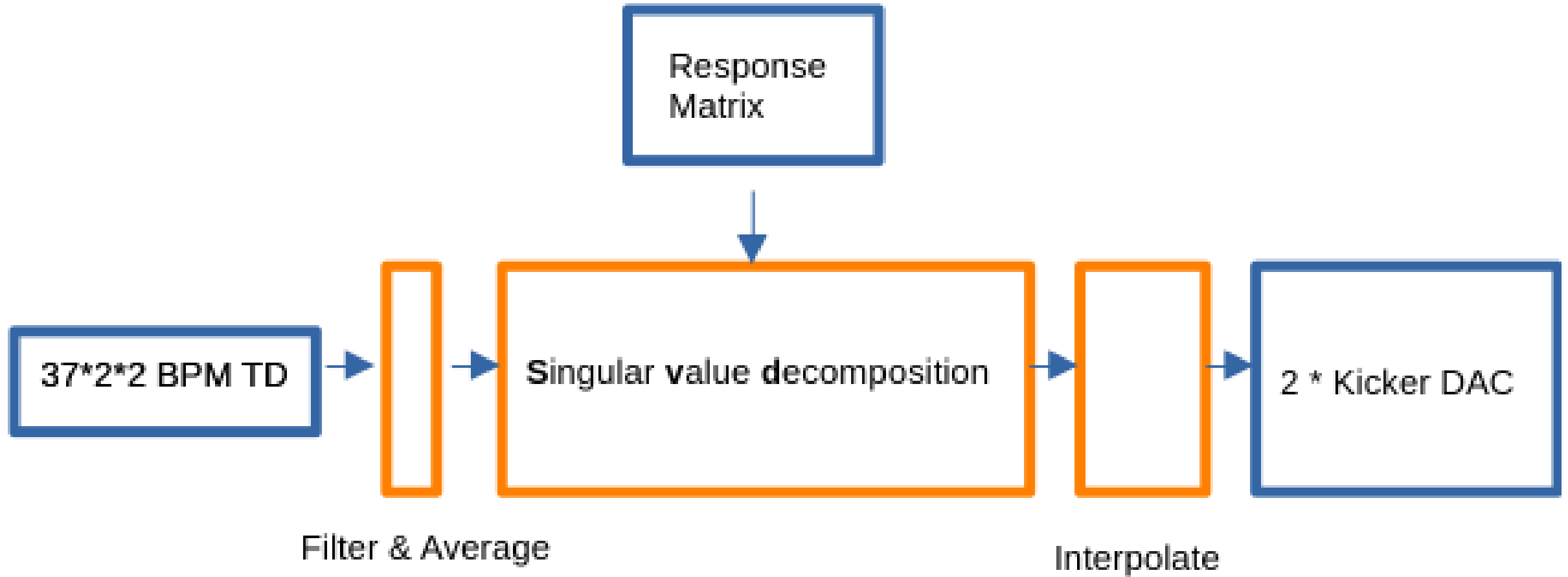
Das Problem

- * 2 Kicker
- * Je 37 BPMs pro Beamline
- * SA1 / SA3 Interleaved ?
- * SA2 / SA4



Kicker Adaptation:

Das Problem

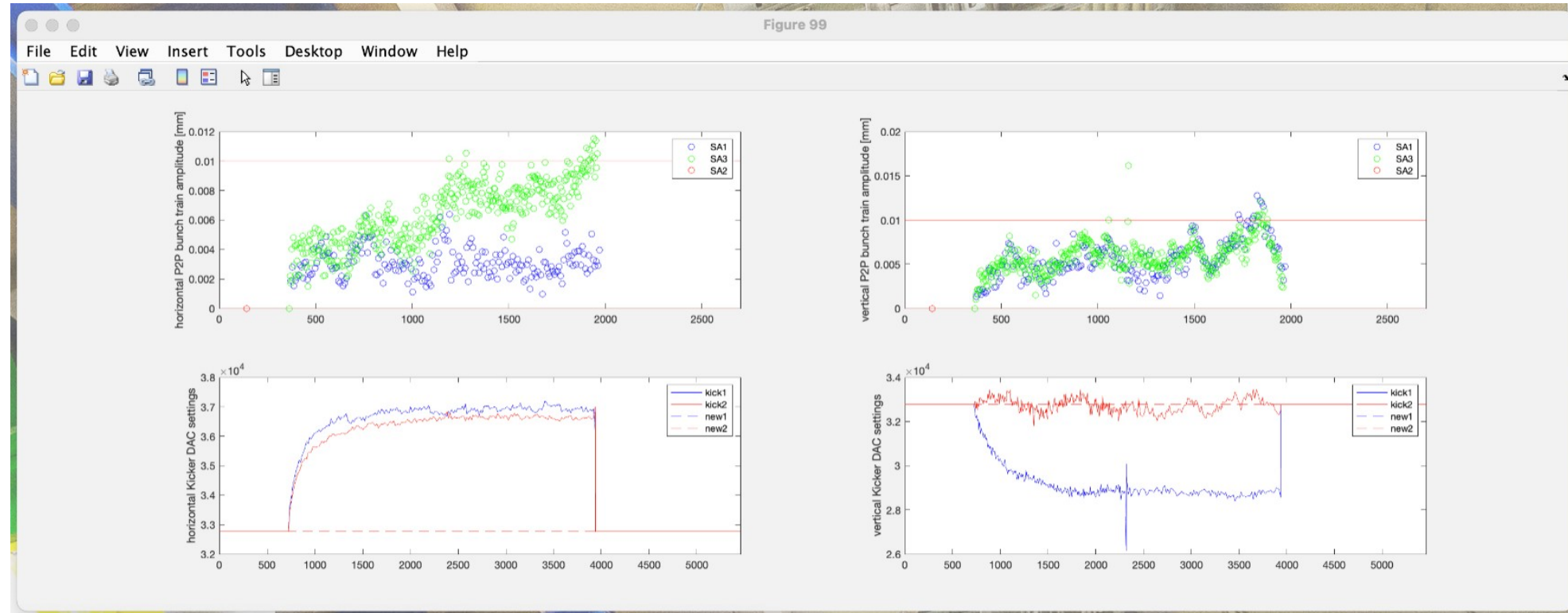


Kicker Adaptation:

Matlab Tool

Das Matlab (Winni) Tool

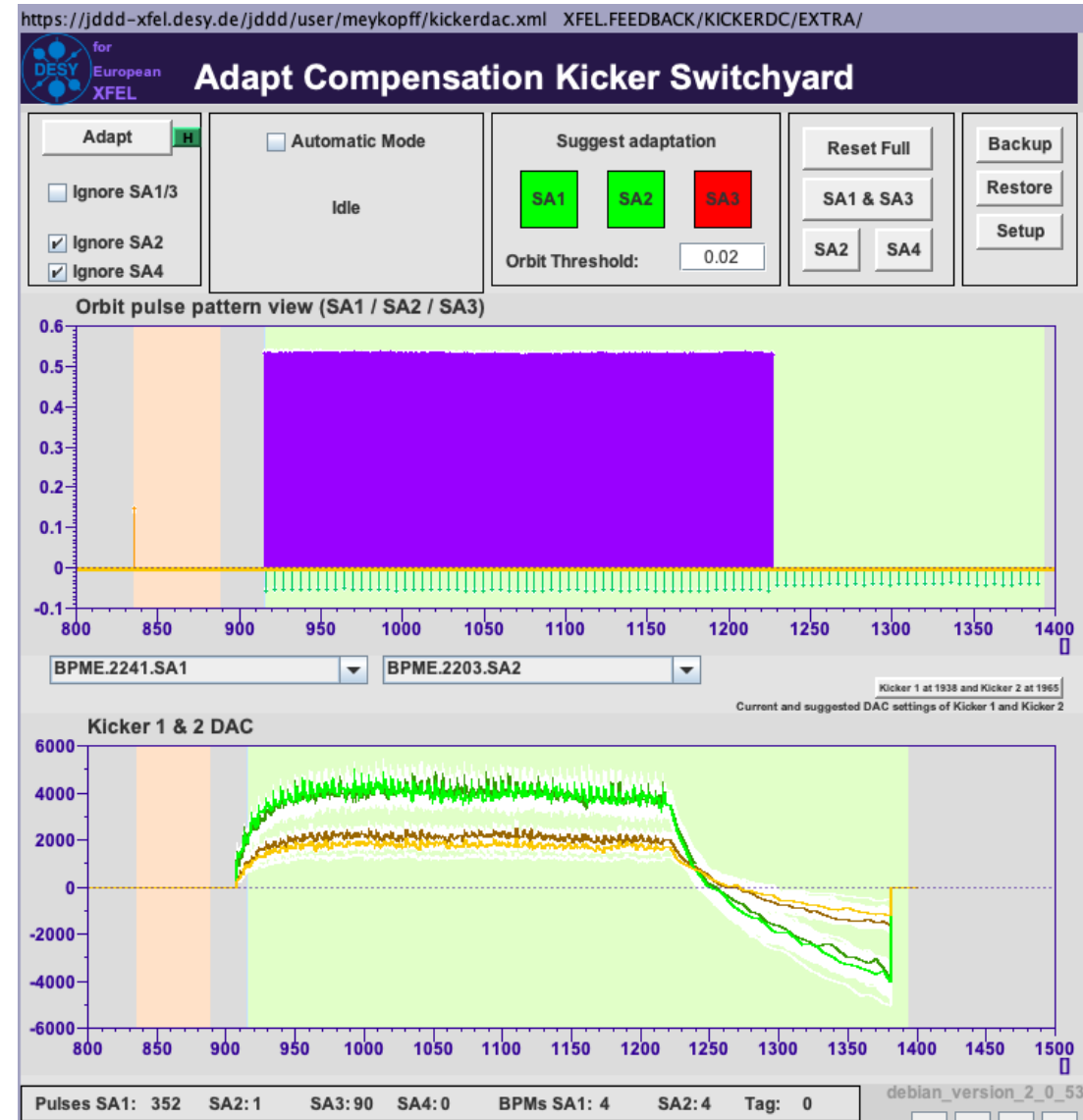
- * Oft angepasst
- * Geht !
- * Läuft lokal



Kicker Adaptation:

DOOCS Server V1

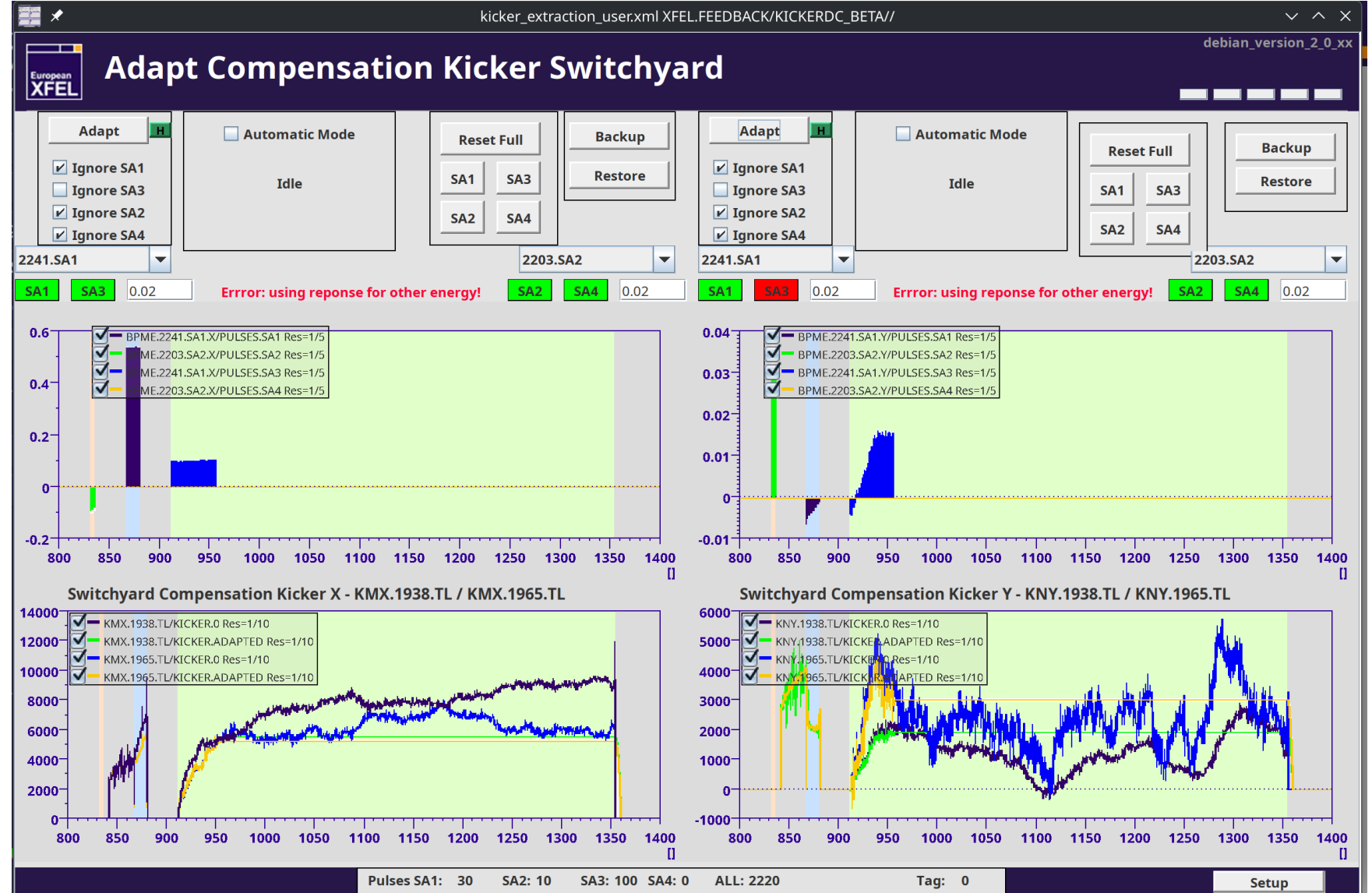
- * Historisch gewachsen
- * Erst Extraktion
- * Dann Gun Kicker (1 Kicker, 1 Ebene)
- * Dann Dogleg (2 Kicker, 2 Ebenen)
- * Dann Extraktion mit 2 Ebenen ⚡



Kicker Adaptation:

DOOCS Server 2.0

- * Ebenen getrennt
- * Resonse Messung OK
- * Resonse Manager
- * Wenig getestet



Kicker Adaptation:

DOOCS Server 2.0 Setup

- * Fill end of range
- * Nice transition
- * Adaptation scale
- * RM manager & warning
- * Automatic in development

The screenshot displays the 'Adapt Compensation Kicker Switchyard Setup' interface. The window title is 'kicker_extraction_setup.xml XFEL.FEEDBACK/KICKERDC_BETA/'. The interface is organized into two main panels: 'Switchyard Adaptation X' and 'Switchyard Adaptation Y'. Each panel contains a 'Switchyard Compensation Kicker' section and two 'BPMS for Switchyard Adaptation' sections (SA1 and SA2 for Y, SA2 for X). The kicker sections include fields for 'Kicker...' (e.g., KMX.1938.TL, KMX.1965.TL), 'Calibration delta' (5000.00), and 'Adaptation scale' (0.25). The BPMS sections show 'Nr. BPM: 37', 'Calibration ongoing' (0), 'Calibration state' (0), 'Wait ticks' (0), and 'Response valid for energy: 10.6 GeV'. Checkboxes for 'Fill end of range', 'Nice transition', and 'Automatic Adaptation' are present. The 'Automatic Adaptation' section includes 'State: IDLE 0', '# of adaptation: 0 / 10', 'Reset before adaptation' (checked), 'Wait after each adaptation: 1', and 'Collecting pulses: 0 / 10'. Buttons for 'Start calibrat...', 'RM manager', and 'Automatic Adaptation' are also visible.

Kicker Adaptation:

DOOCS Server 2.0 RM Manager

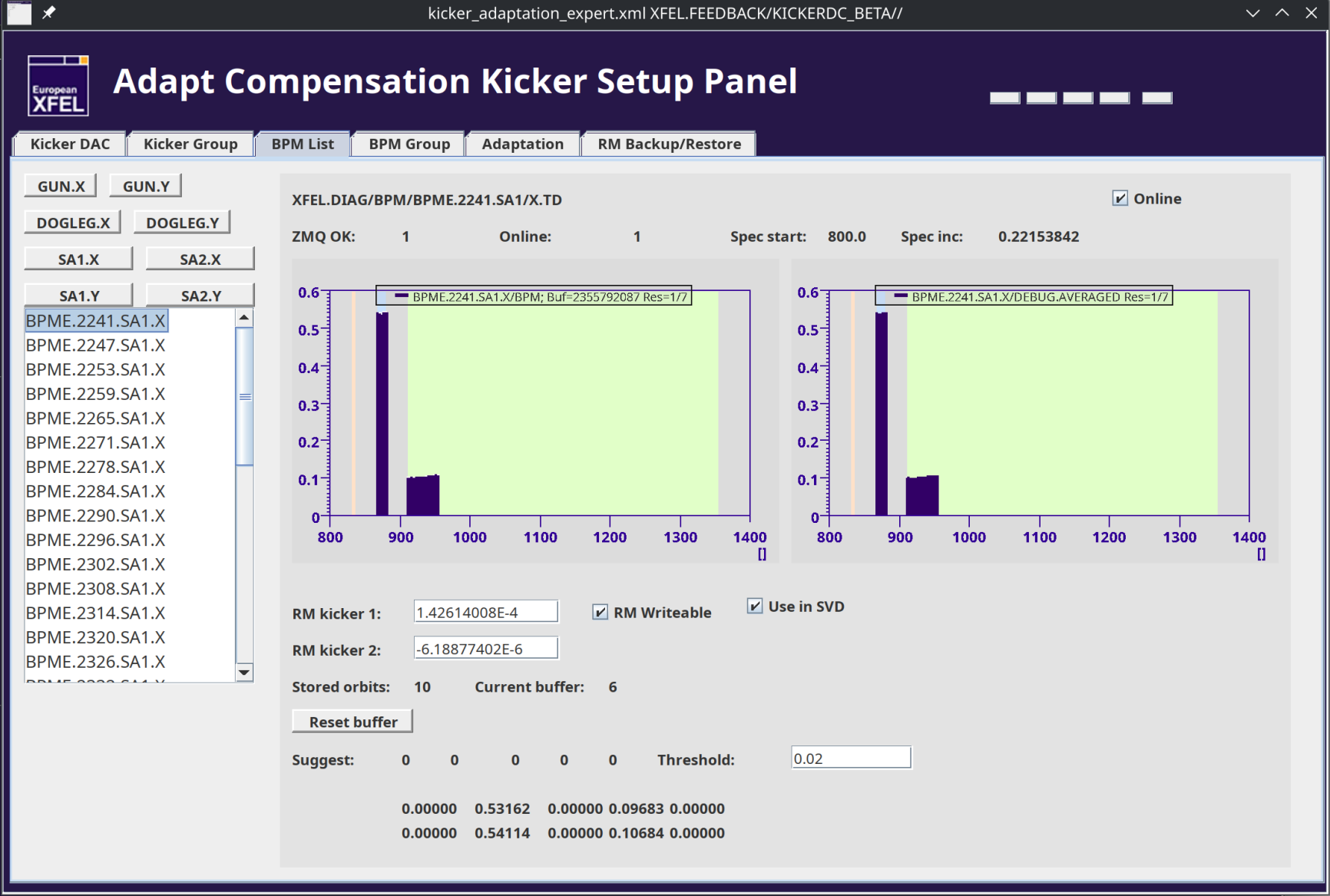
The screenshot shows a web browser window with the address bar displaying 'kicker_backup_manager.xml XFEL.FEEDBACK/KICKERDC_BETA/BPM.SA1.X/'. The page title is 'Kicker adaptation response backup/restore'. The main content area has a dark blue header with the European XFEL logo and the title. Below the header, it states 'Current response is valid for 10.6 GeV.' and 'BPMS for Switchyard Adaptation X'. The table lists backup records with dates, times, and beam energies, each with 'Overwrite with current RM' and 'Restore' buttons.

Backup Record	Action
11-04-2025 17-18 16.299999GeV	Overwrite with current RM Restore
20-05-2025 19-13 12.000000GeV	Overwrite with current RM Restore
	Overwrite with current RM Restore
	Overwrite with current RM Restore
	Overwrite with current RM Restore
11-04-2025 17-18 16.299999GeV	Overwrite with current RM Restore
10-06-2025 21-11 10.600000GeV	Overwrite with current RM Restore
	Overwrite with current RM Restore
	Overwrite with current RM Restore
	Overwrite with current RM Restore

Kicker Adaptation:

DOOCS Server 2.0 Expert Setup

Finger weg!



Kicker Adaptation:

- * 'Geheime' Features
- * Rumpel Takt
- * Rotating Pattern

Vielen Dank

Kontakt

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