



ALBA 2026 CONFERENCE, MAINZ 19-20 MAY
S021 / C. Mondoloni

RECAP OF ADDITIONAL CHARGE RECOVERY TESTS
LAUNCHED ON LEAD ACID BATTERY
FOLLOWING 2025 ALBA PRESENTATION

TARGETS

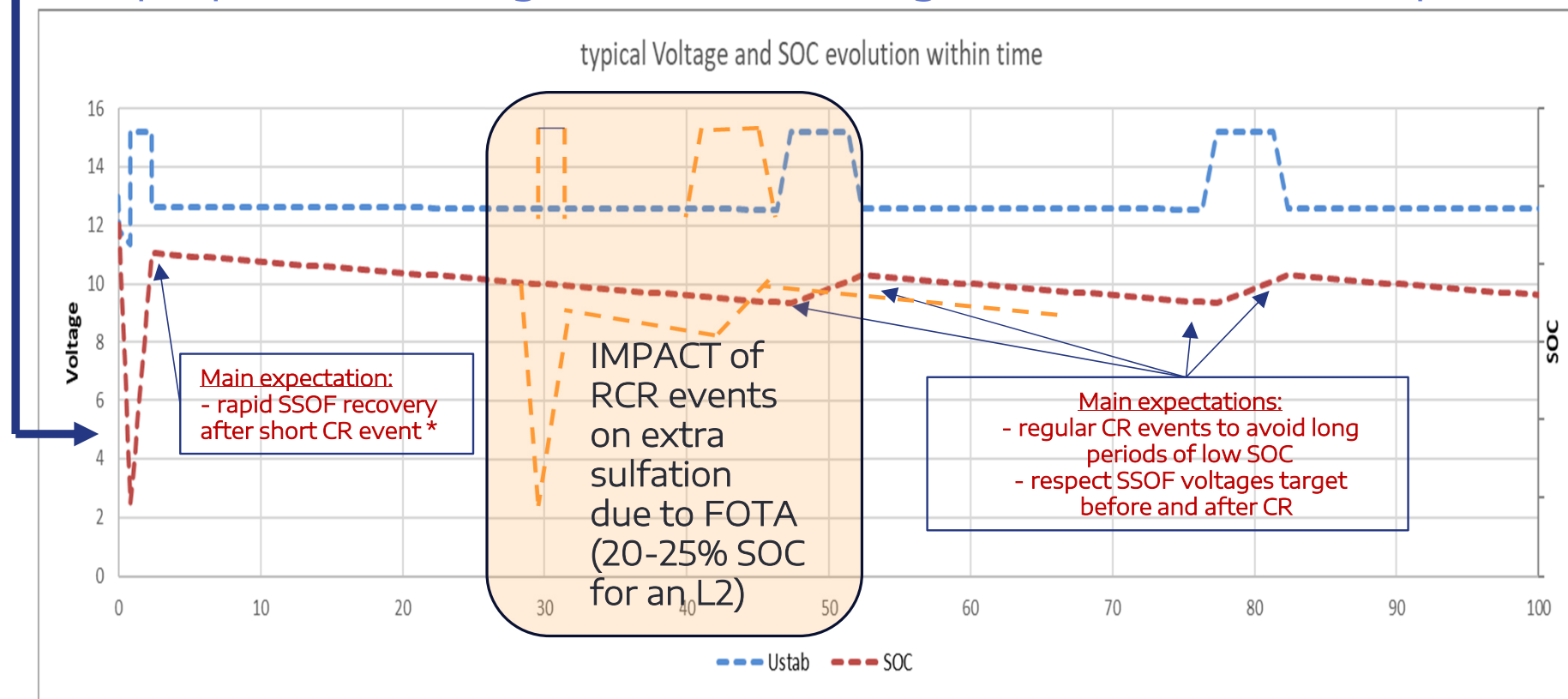


1 – Compare Repetitive CR test plan applied by INCI and MOURA* with potential CR strategy deployed on cars

- Short synthesis and remaining question on next diapositive

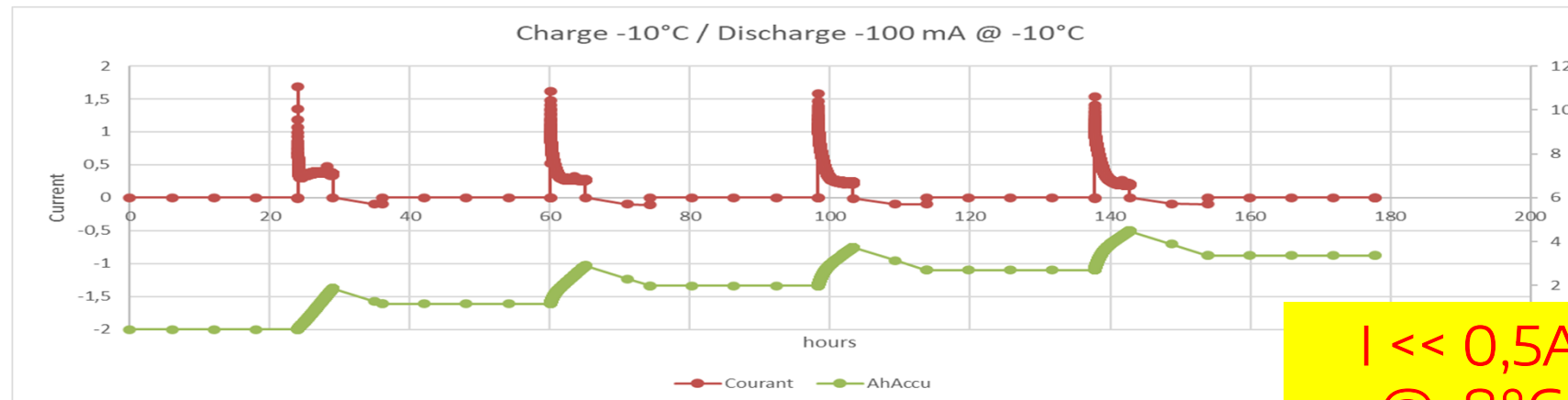
2 – Define / integrate new use case in original validation CR test profiles to simulate «over the air repetitiv SW update»

- Worse case was proposed as being introduced in original CR Stellantis test profile

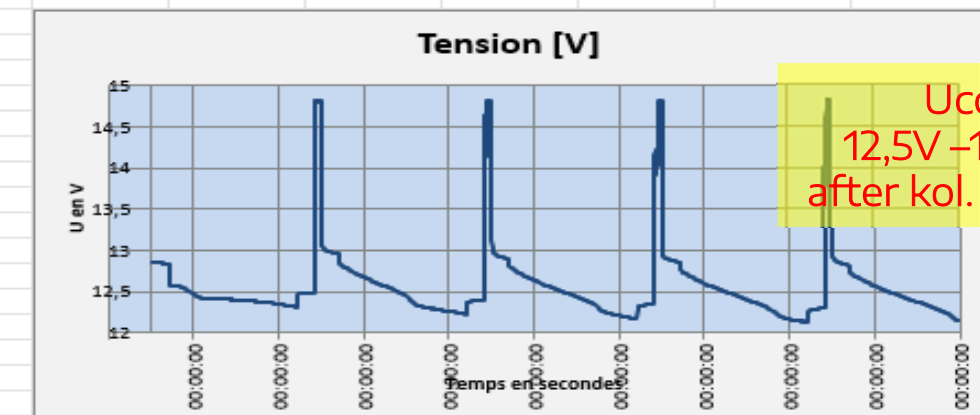
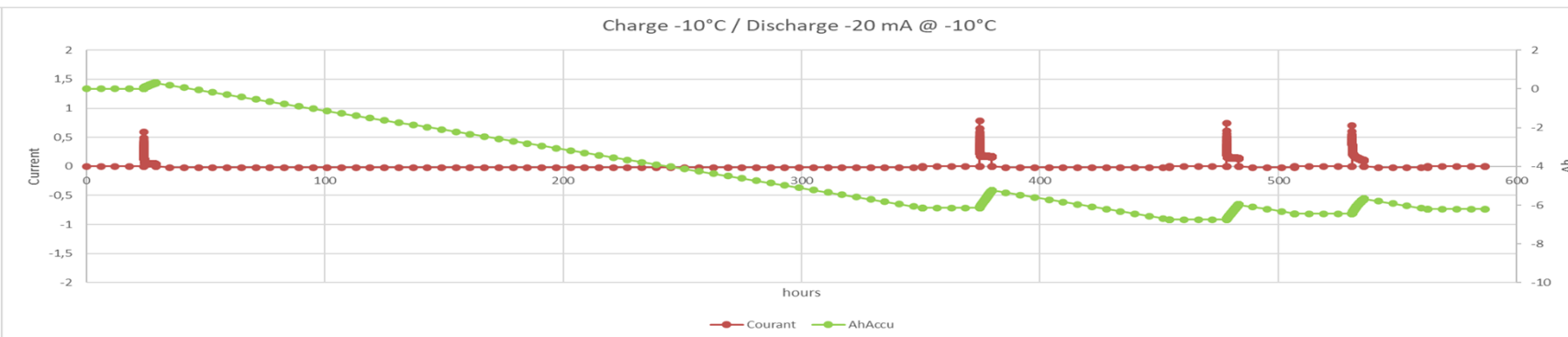
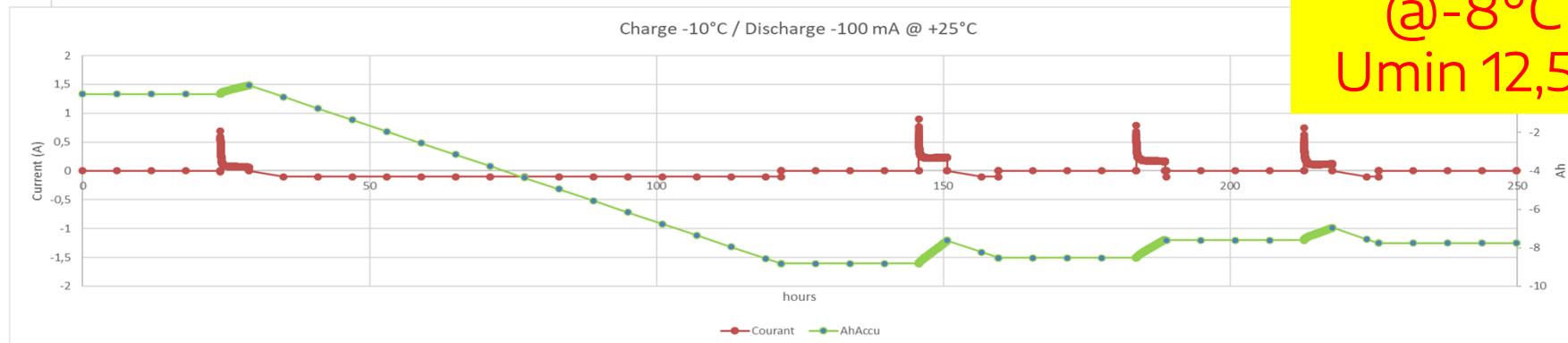


* See ALBA2026 SO22 / SO23 presentations in which SSOF recovery voltage levels after different charging time on fresh and aged batteries are also very usefull for voltage plateau level predictions of safety relevant profiles (presentation CR21)

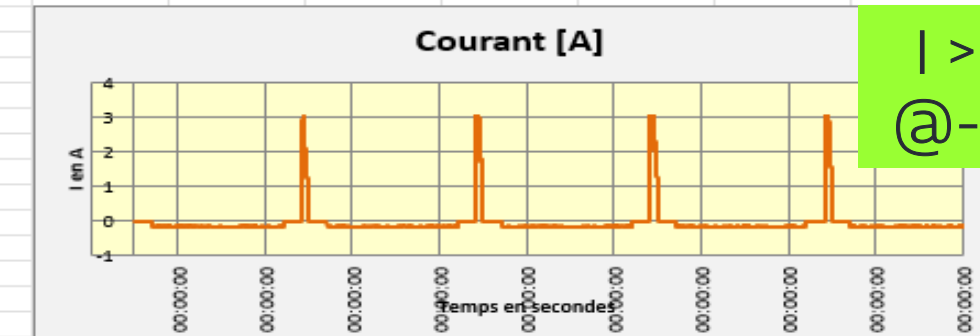
WORSE CASE: SUCCESSIVE LOW_T CR. TESTS / ON BATTERY INITIALLY SULFATED



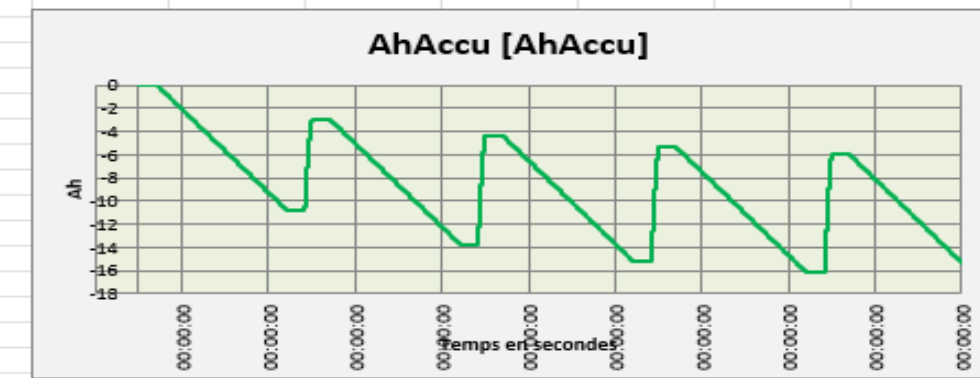
$I < 0,5A$
@-8°C
 $U_{min} 12,5V$



U_{co}
12,5V -12,25V
after kol. 150mA



$I > 1A$
@-5°C



- New STELLANTIS results are confirming periodic CR events results can be significantly higher than the one obtained by triggering CR event by a certain SOC_OCV battery threshold.
- BUT THIS NEW TEST APPROACH ALLOWS MAINLY TO DETERMINE RAPIDLY CHARGING STRATEGY TO APPLY TO KEEP SUFFICIENT AH BALANCE AT A GIVEN TEMPERATURE WITH MINIMUM SOC AFTER STORAGE PERIODS COMPATIBLE TO SSOF TARGETS