MD 14325 request: Tests with full squeeze in the ramp in the ion cycle

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Updated MD procedure

- **MD goal:** Tests with full squeeze in the ramp to understand if the losses at the start of the ramp are related to this and explore options to bring it back in the ion cycle

- **MD preparation**
  - **Prepare new MD ramp** with the **full squeeze** included for 2024 optics
  - **Regenerate** all the **TCT functions** for compatibility with the the new squeeze and the measured aperture bottlenecks at the end of the squeeze.
    - We should end up with the nsigma TCT settings that we have in the standard cycle at the end of squeeze

- **Steps to be taken during the MD**
  - **Three ramps** are foreseen with the 2024 collimator settings:
    - **1st ramp:** Ramp with **low intensity** beam (set up beam)
      - Acquire feed-forward corrections on the orbit
    - **2nd ramp:** Ramp with **low intensity** beam (set up beam)
      - Implement and test feed-forward corrections
      - Loss maps in the ramp and at flat top, end with ASD
    - **3rd ramp:** Ramp with **119b** and monitor the losses in the ramp

- **Recovery after the MD**
  - No special steps are required

Comments and answers

- **Specify validation strategy (loss maps, ..)**
  - 1st ramp: Acquire feed-forward corrections on the orbit
  - 2nd ramp: Implement and test feed-forward corrections and loss maps
    - For the loss maps we should mask the usual BLMs
    - Some loss maps can be performed continuously in the ramp, and some at Flat Top. The fill can end with ASD
    - **Loss Maps validation will be performed online**

- **Clarify TCT positions in IR2**
  - All the TCT functions (not only IR2) should be regenerated to be compatible with the new squeeze and the measured aperture bottlenecks at the end of the squeeze
    - We should end up with the nsigma TCT settings that we have in the standard cycle at the end of squeeze
  - **Added in the MD procedure as a preparation step**

- **Need for using more than 119b (first ramp up step)**
  - Not necessary needed. We can use 119b