Calibration 4

Methods

- Changes compared to calibration 3:
    - Changed the ACS nodes to floating nodes from the probed points registered to the meshes.
    - Updated the origins and rigid cylindrical joints as well.
    - Put in new flexion angles too based on the average robot flexion angle
    - Fixed the model oks006 meniscus spring
    - Made uniform cartilage contact penalty (1 for all models)
    - Set all max_ups to 0 for all models
    - Removed two pass meniscus-cartilage contact, decreasing convergence time.

The Python scripts used for calibration can be found in folder: *\Python scripts - Calibration 4

Results

The calibration results can be found in: Results calibration 4.xlsx

- Still condylar lift off for multiple models, however, we don't know if there was condylar lift off in the cadaveric experiments and next to that, there will be an axial force applied before the moment arm simulations.
- The MCL penetrated the bones for multiple models. A MCL side contact is necessary.