
Collation of FlexPLI Pendulum Certification Test Results

Revision 1

- disclosing Information on Master Legs and Pass/Fail Ratio -

7th Meeting of Informal Group GTR9 Phase 2
July 3rd, 2013

Oliver Zander

Bundesanstalt für Straßenwesen

Bundesanstalt für Straßenwesen

(Federal Highway Research Institute)

Dataset

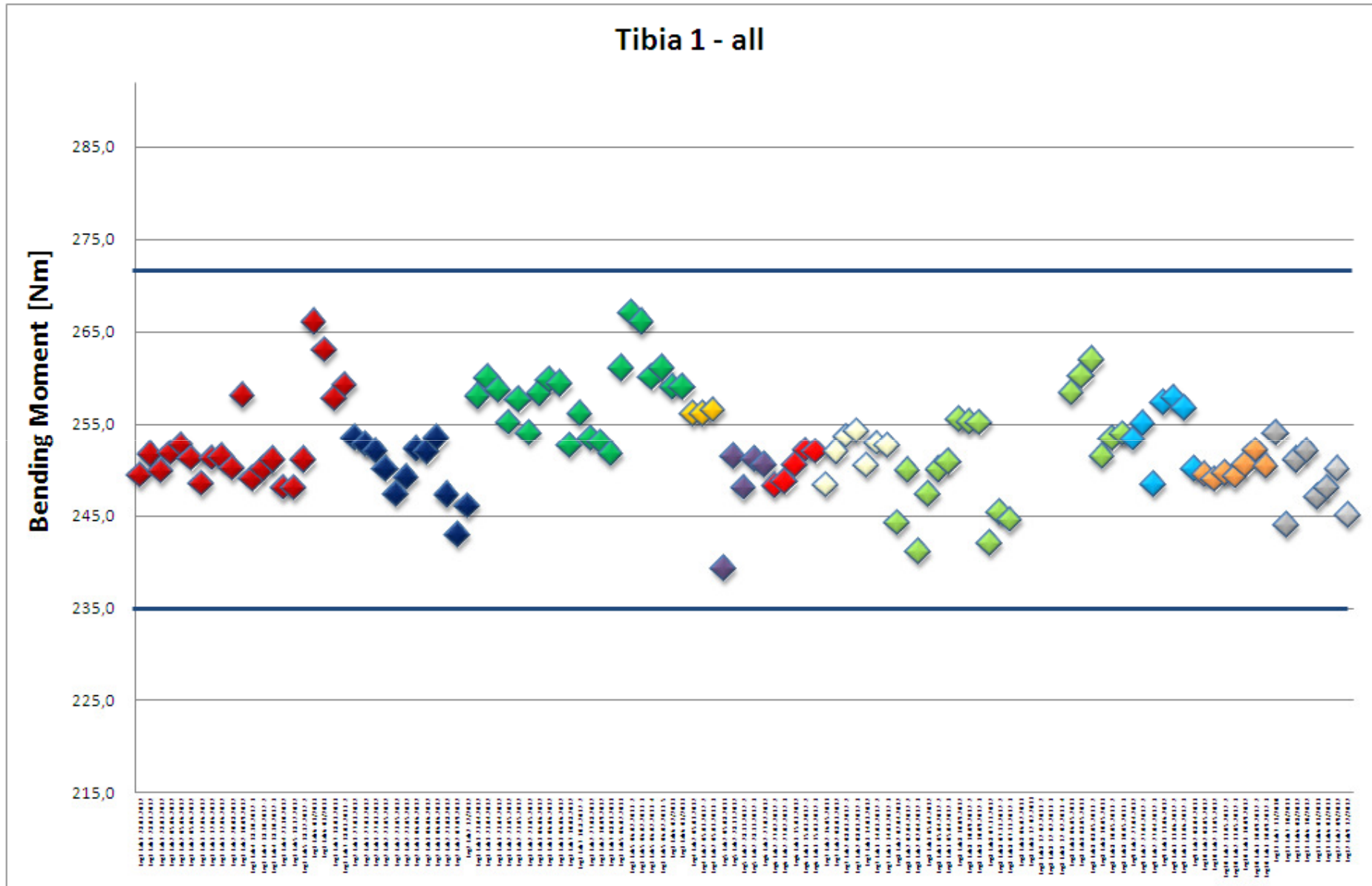


- **12 impactors**
 - **1 prototype (leg 4)**
 - **11 serial production legs**
 - leg1: Master Leg SN01
 - leg 2: Master Leg SN03
 - leg 3: Master Leg E-Leg

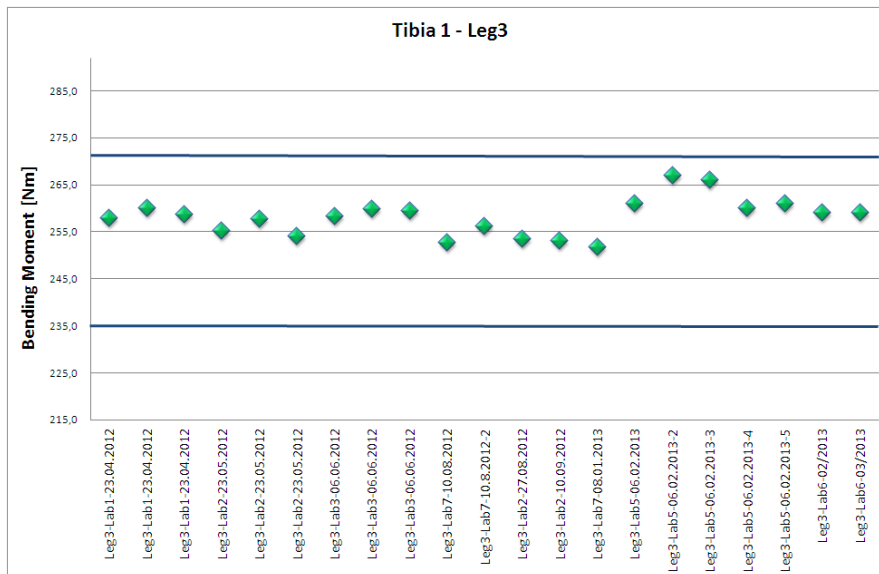
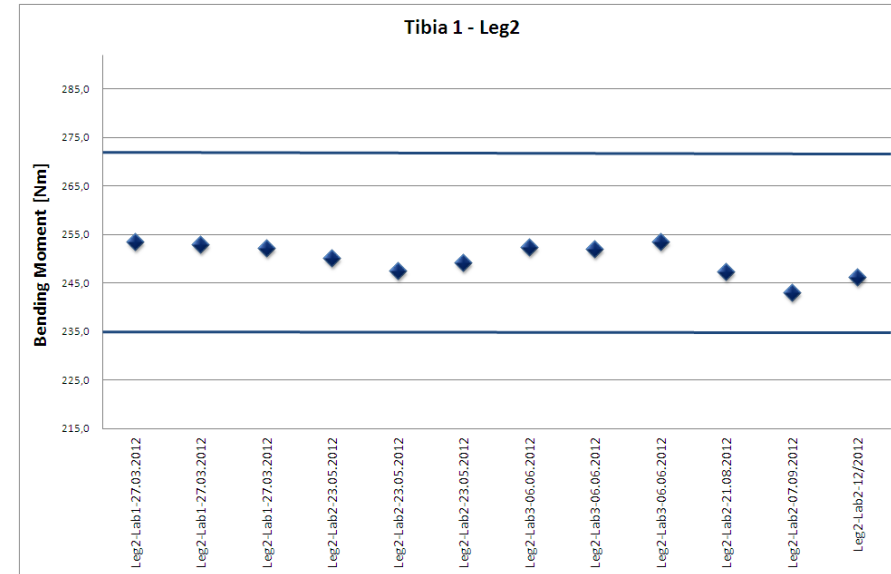
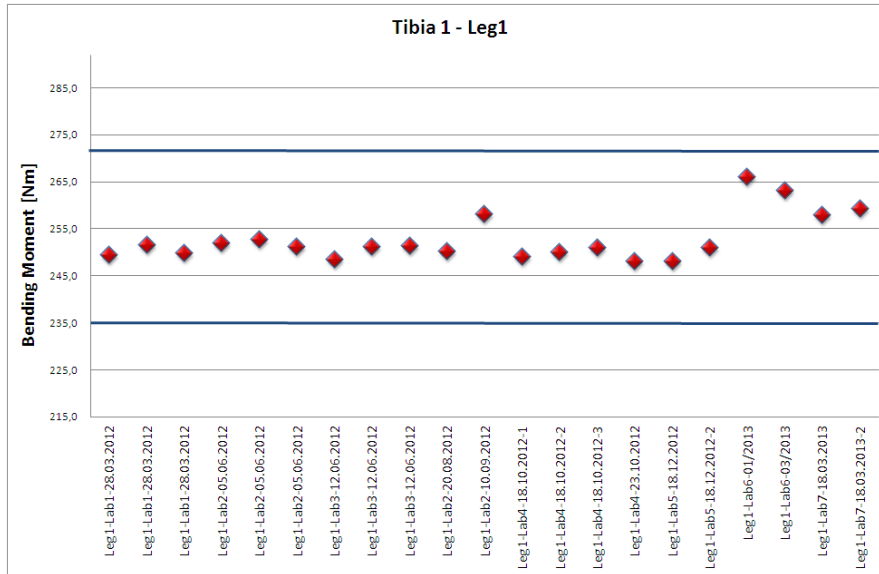
- **9 test labs**

- **119 tests**
 - **3 tests w/ prototype**
 - **116 tests w/ serial production legs**

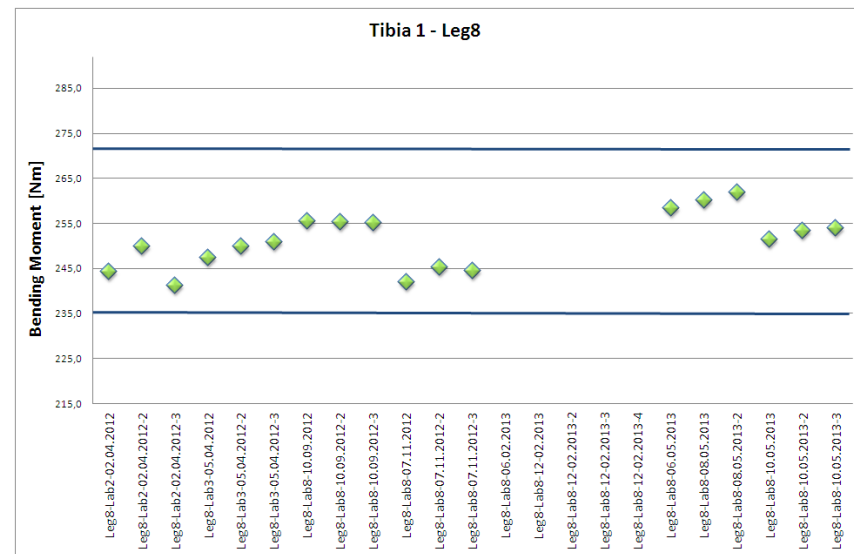
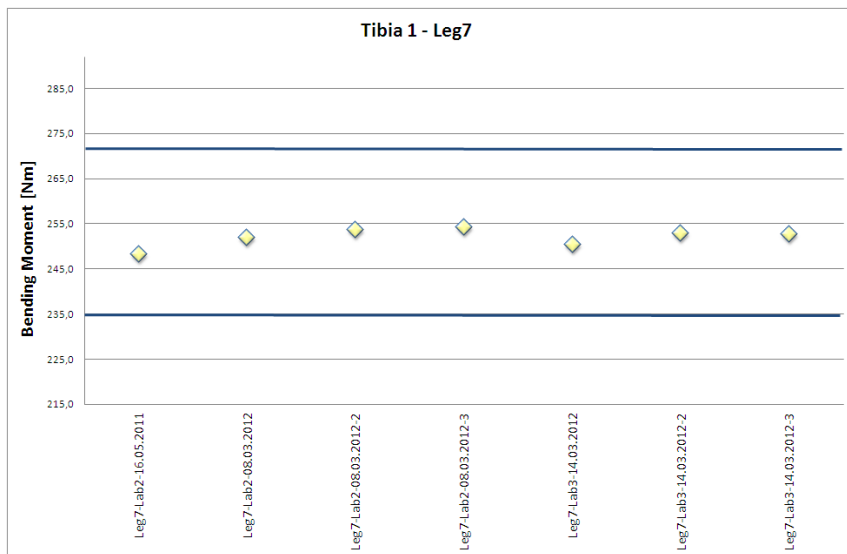
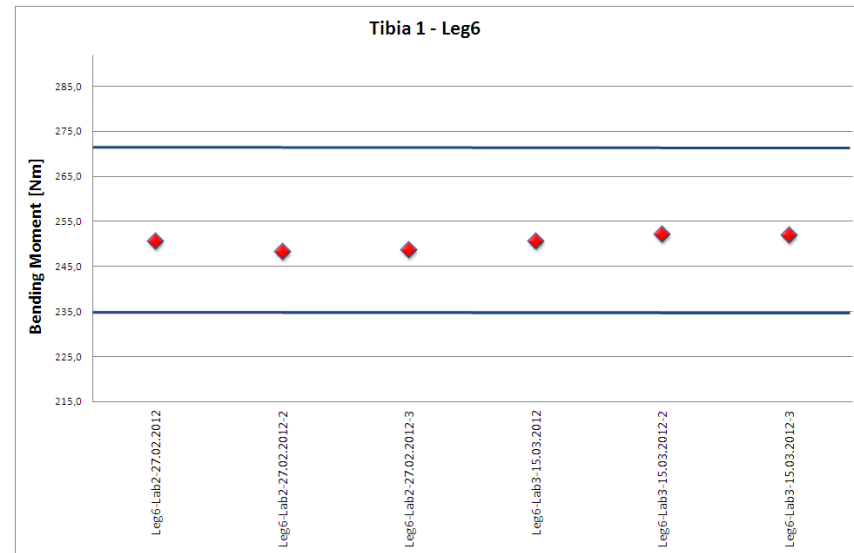
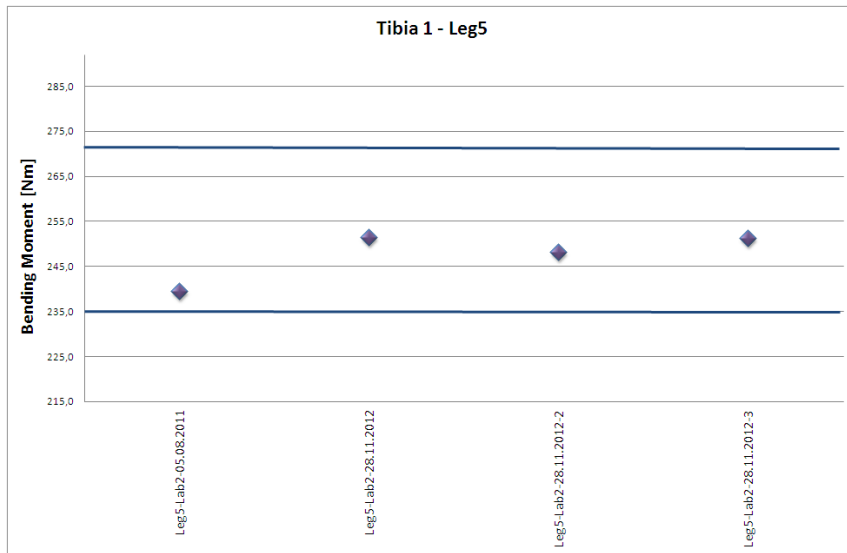
Results Overview - Pendulum Tests T1



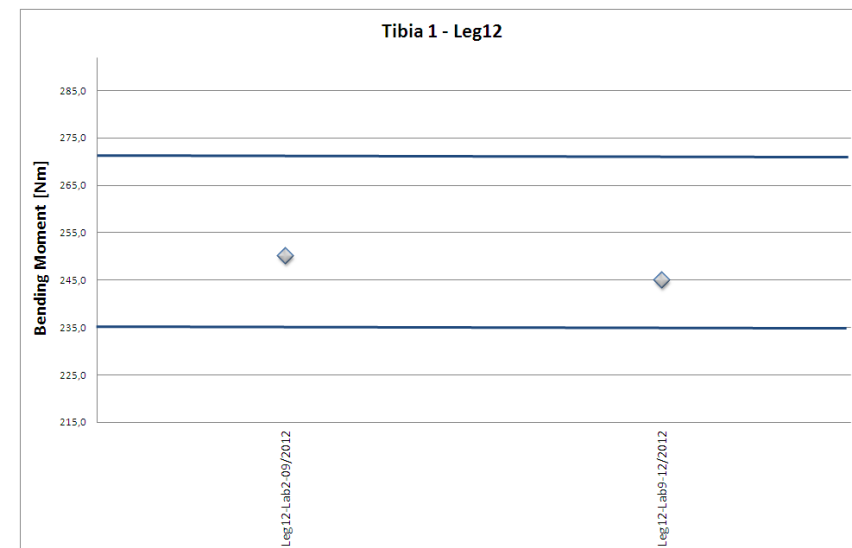
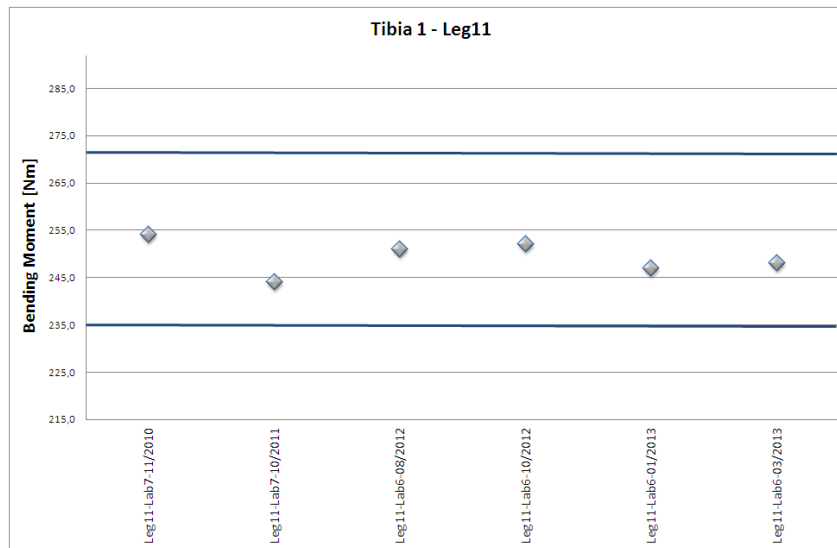
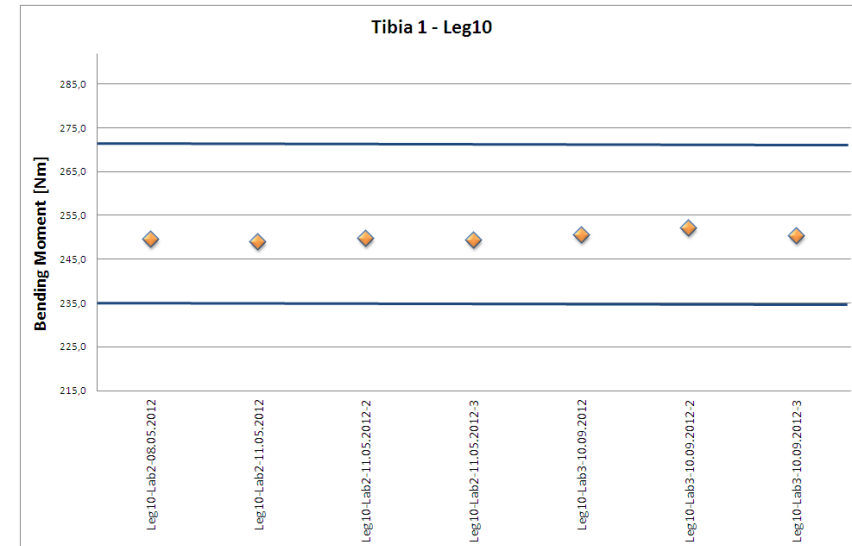
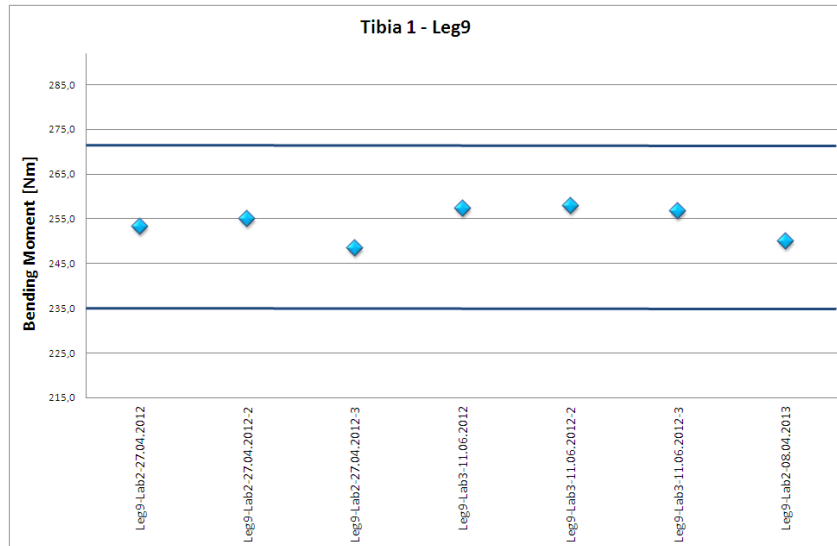
Results Tibia 1 - Pendulum Tests



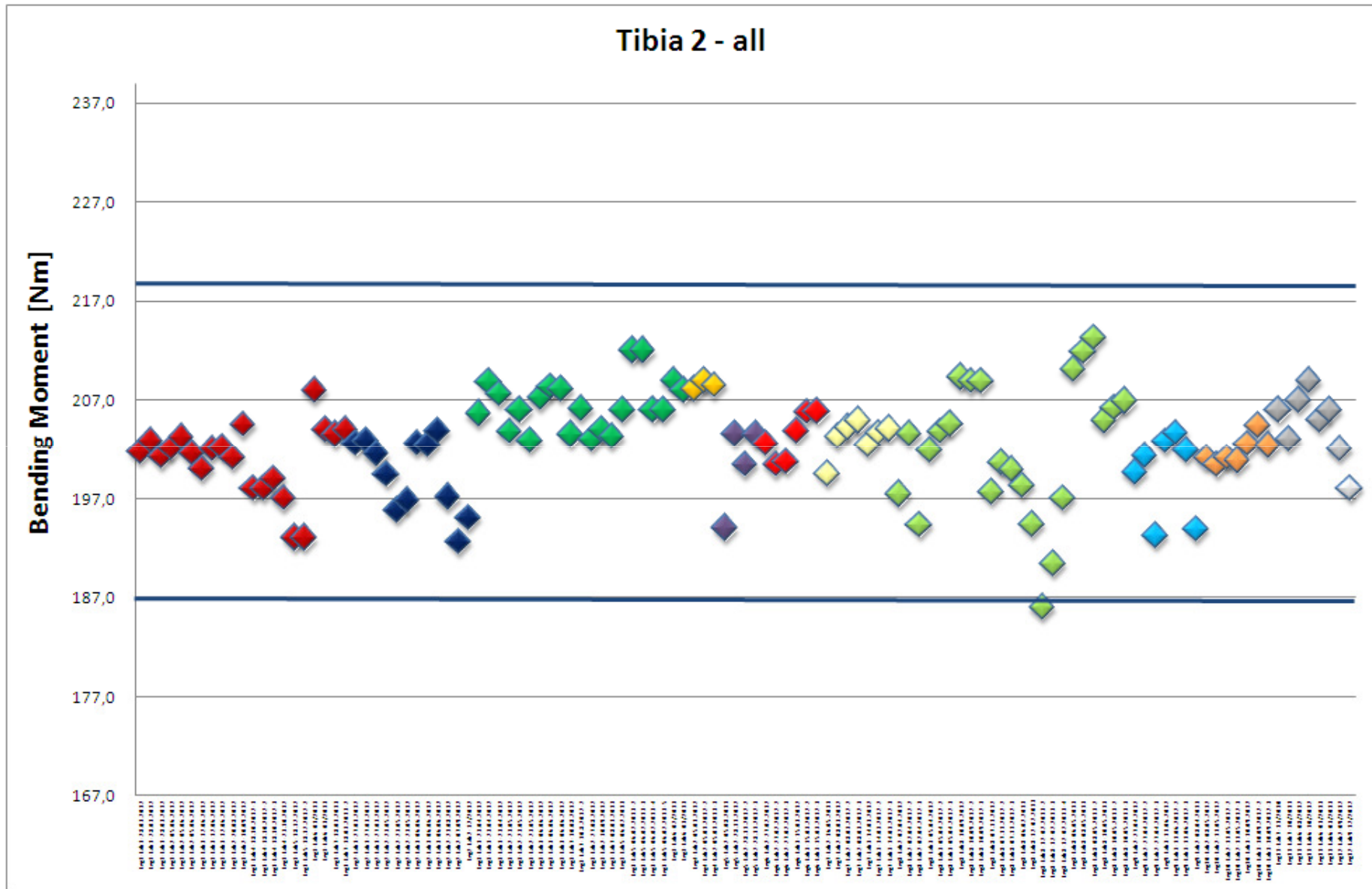
Results Tibia 1 - Pendulum Tests



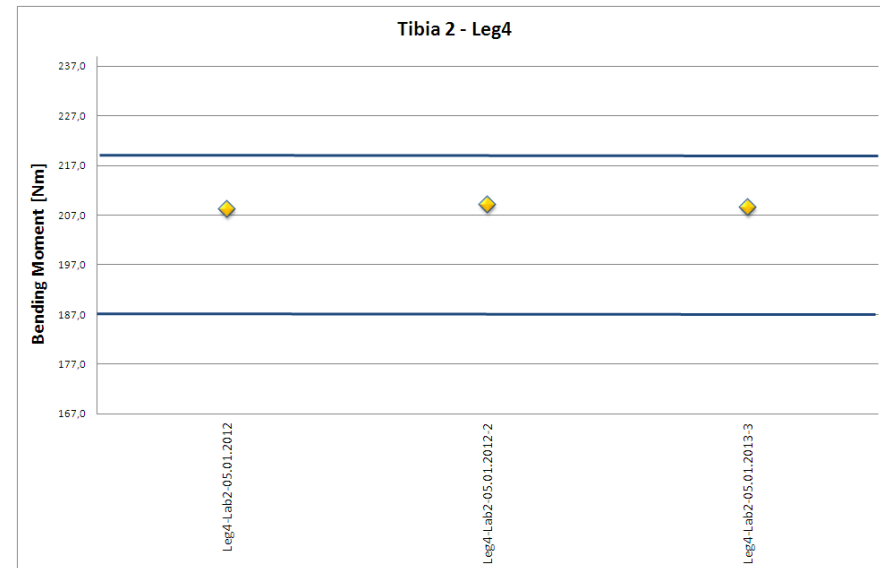
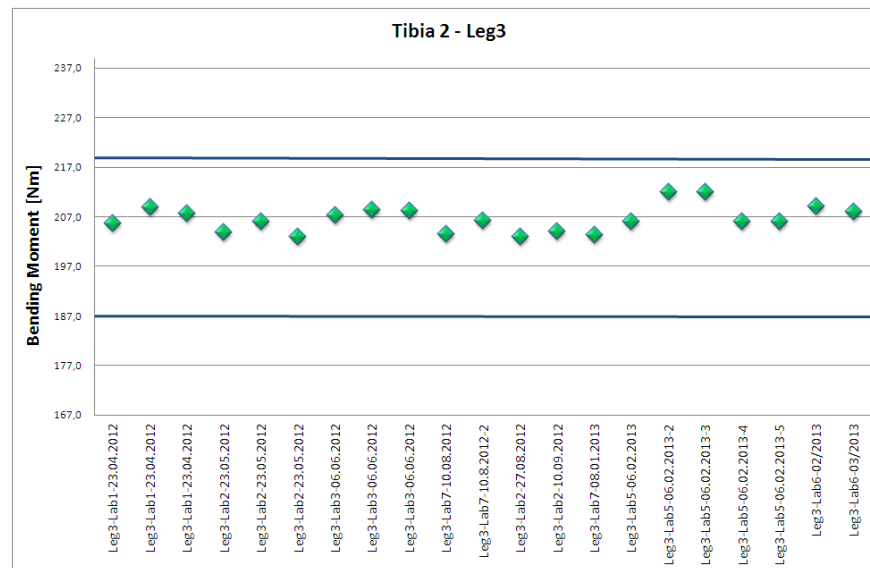
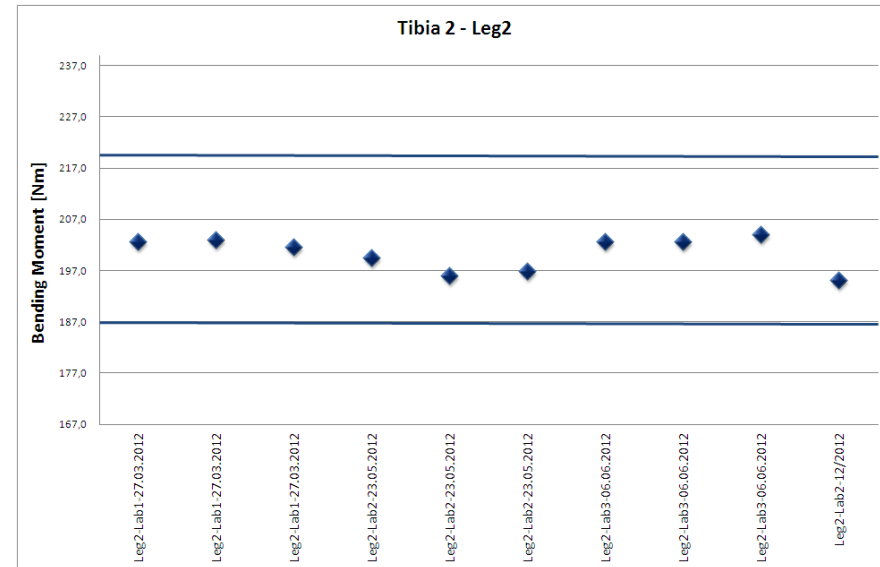
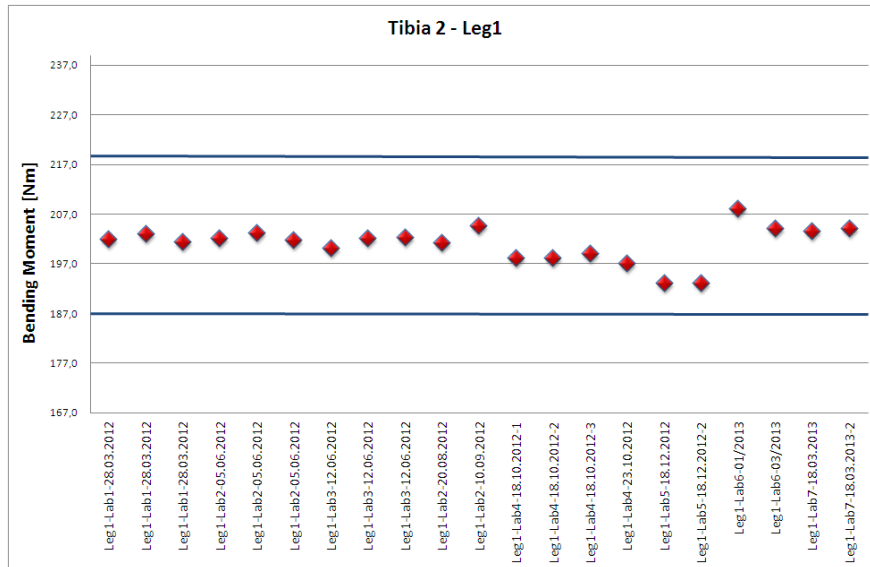
Results Tibia 1 - Pendulum Tests

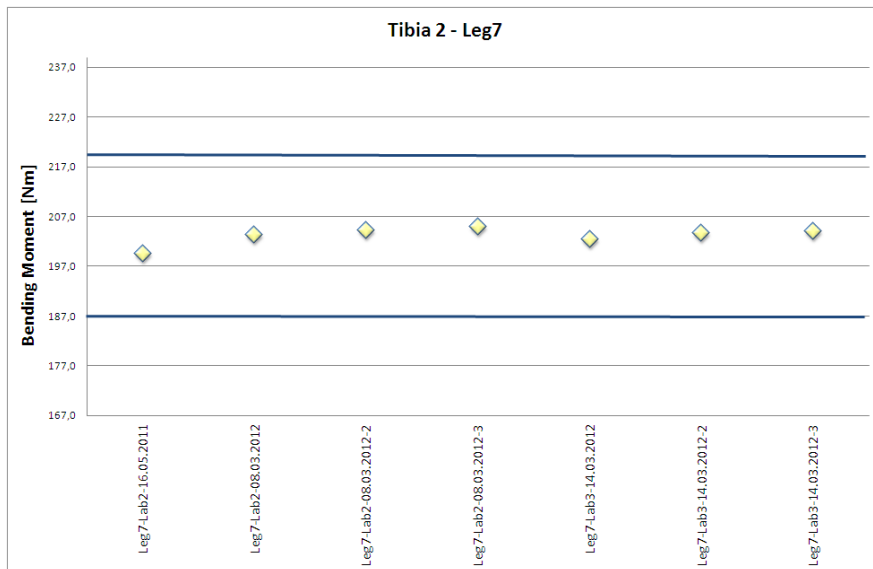
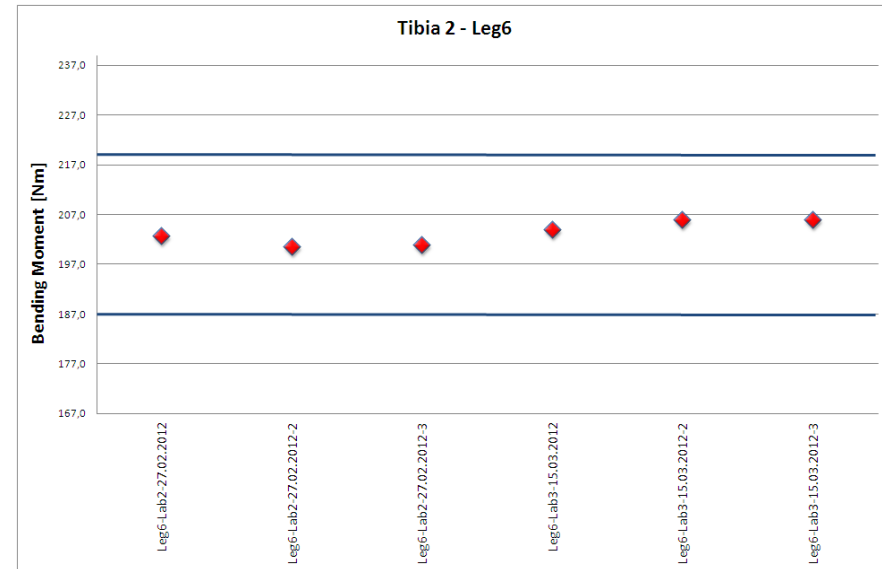
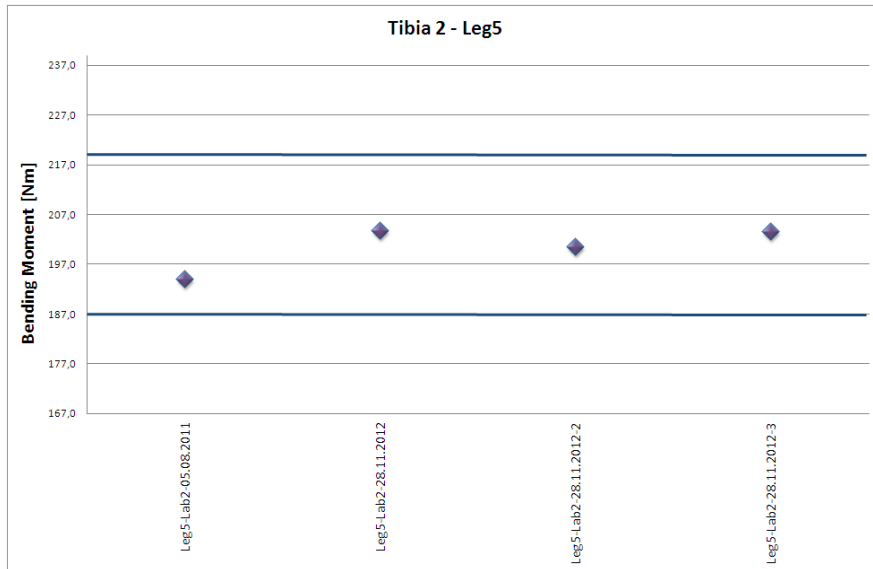
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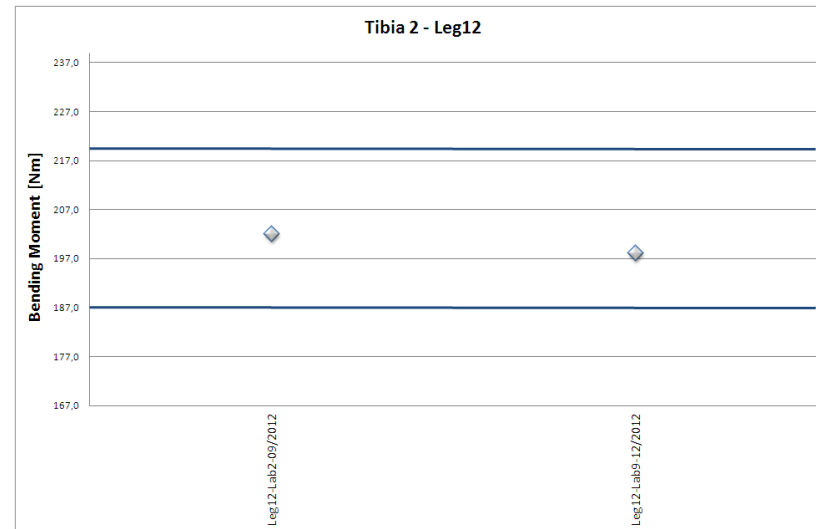
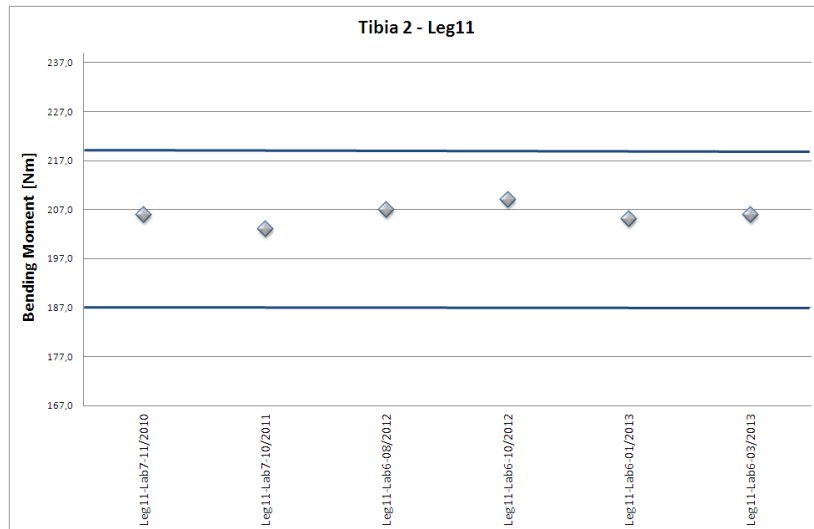
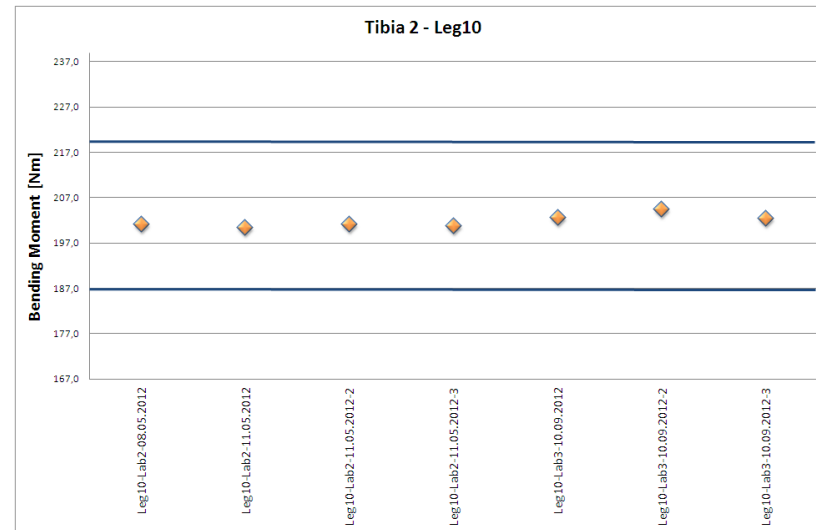
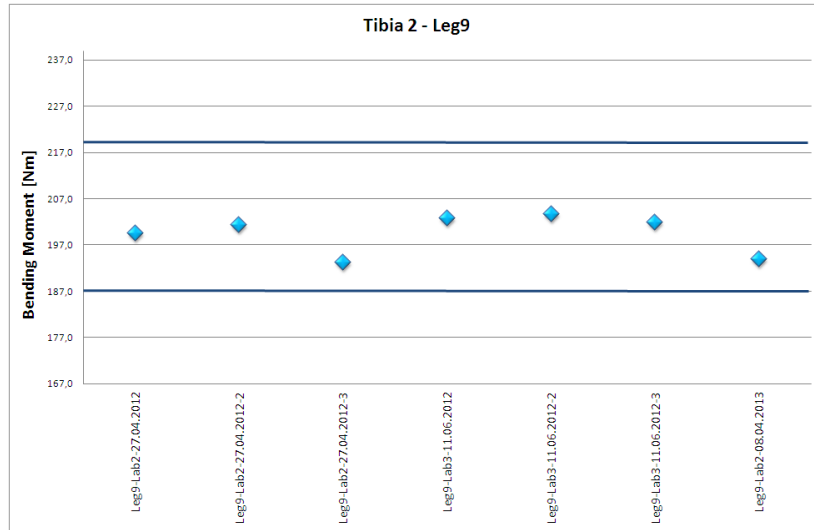
Results Tibia 2 - Pendulum Tests



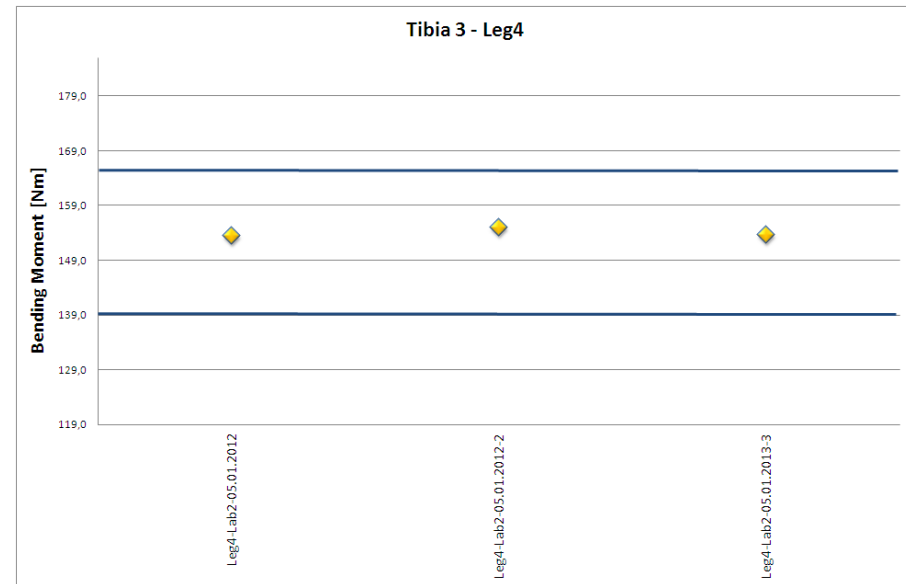
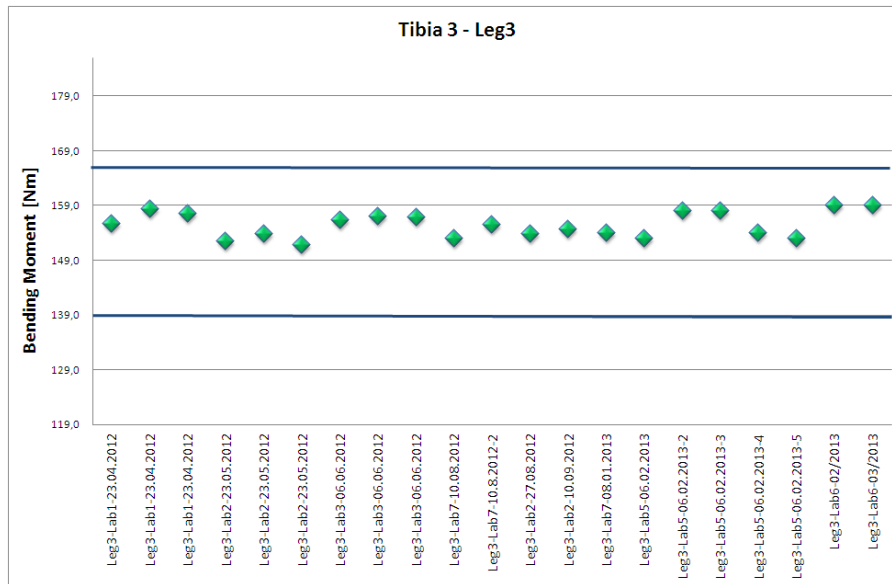
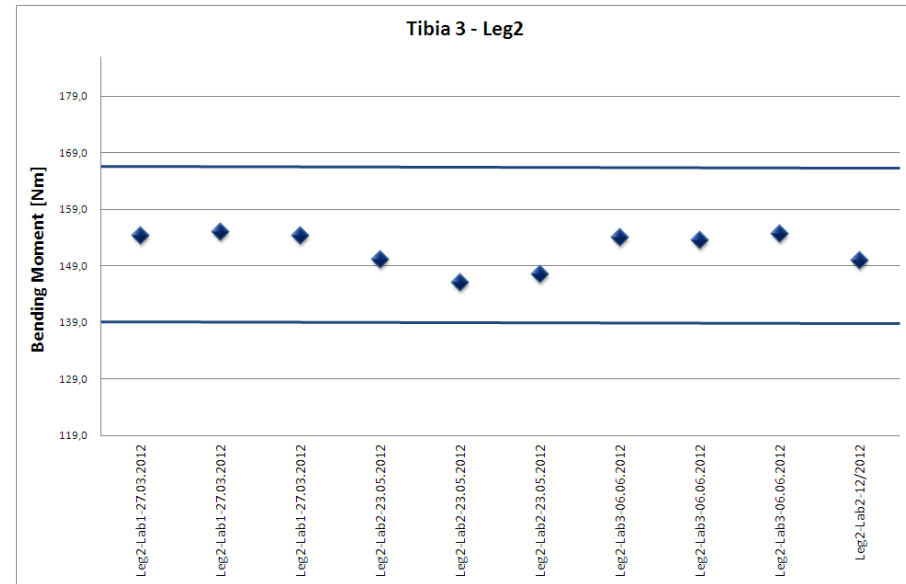
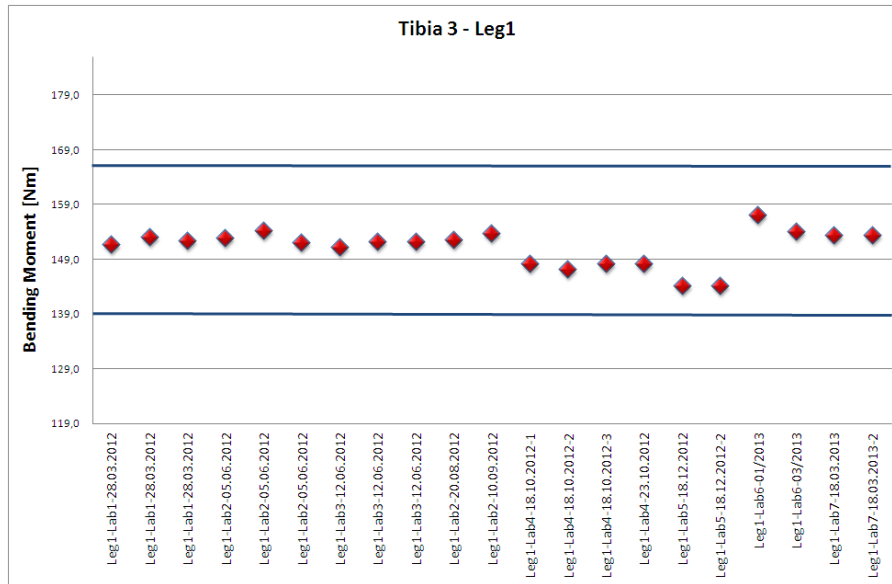
Results Tibia 2 - Pendulum Tests



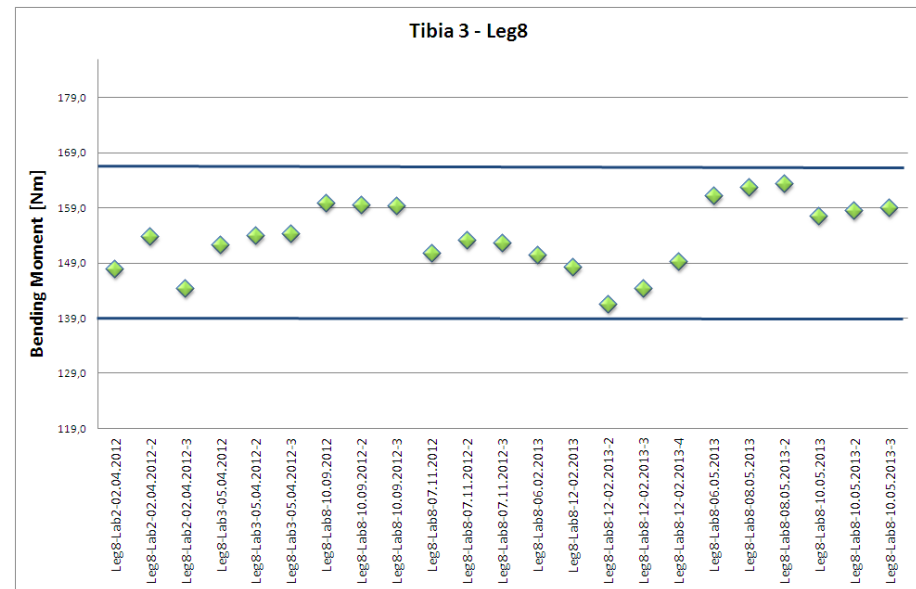
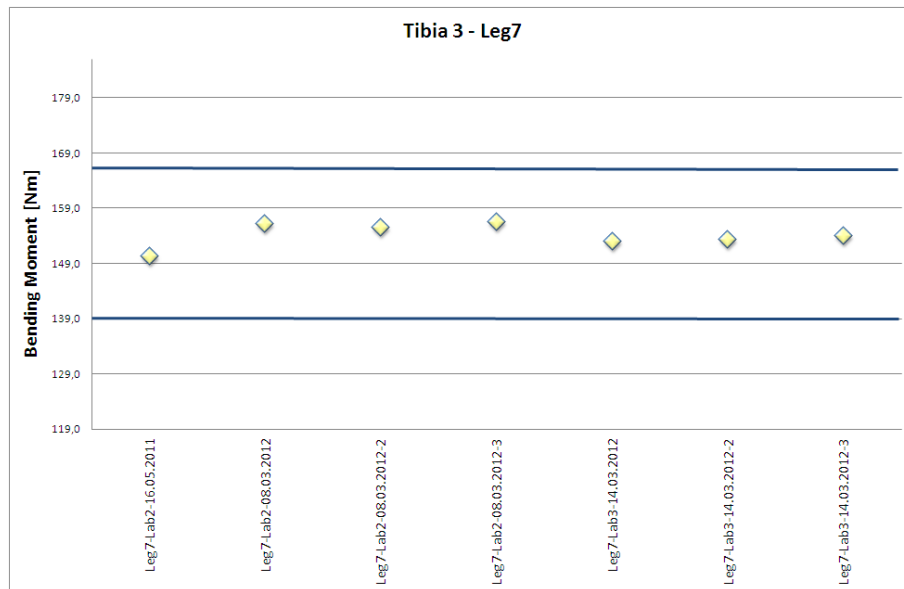
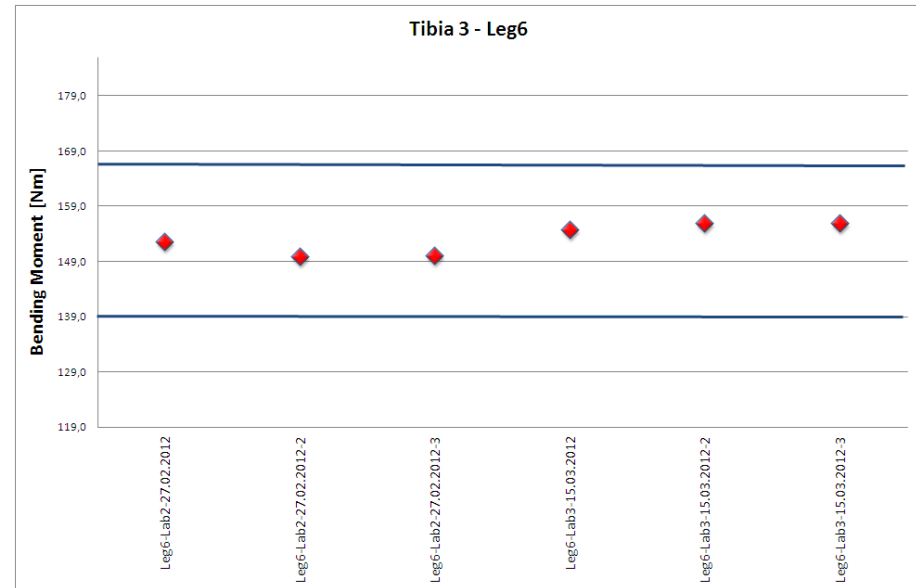
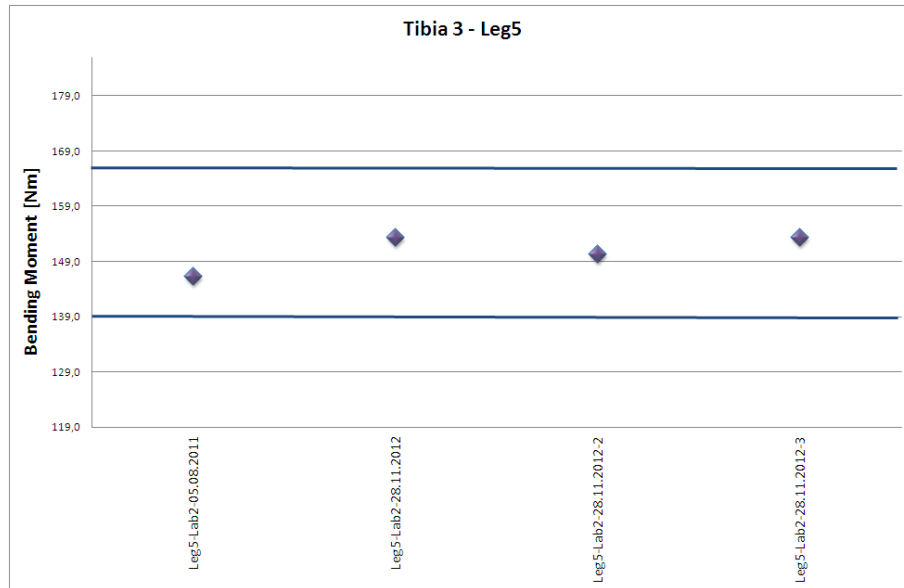
Results Tibia 2 - Pendulum Tests



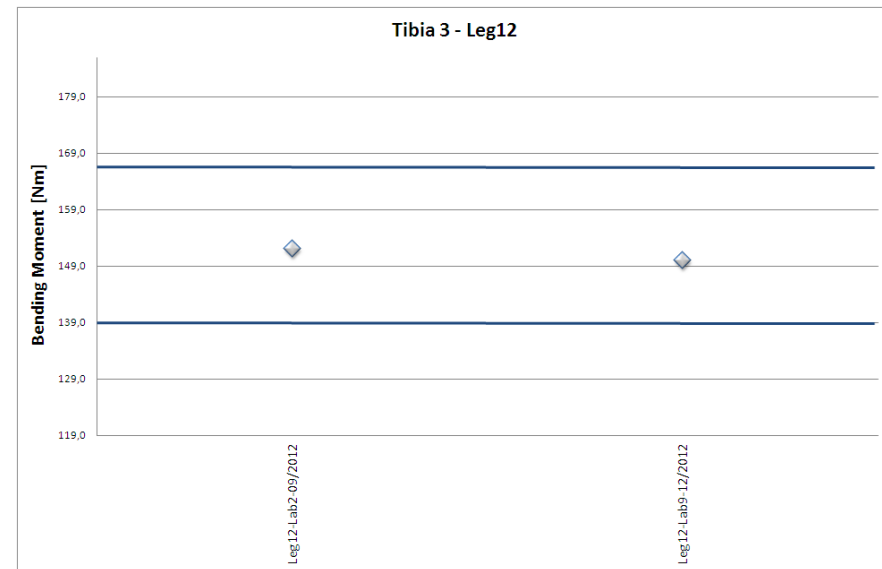
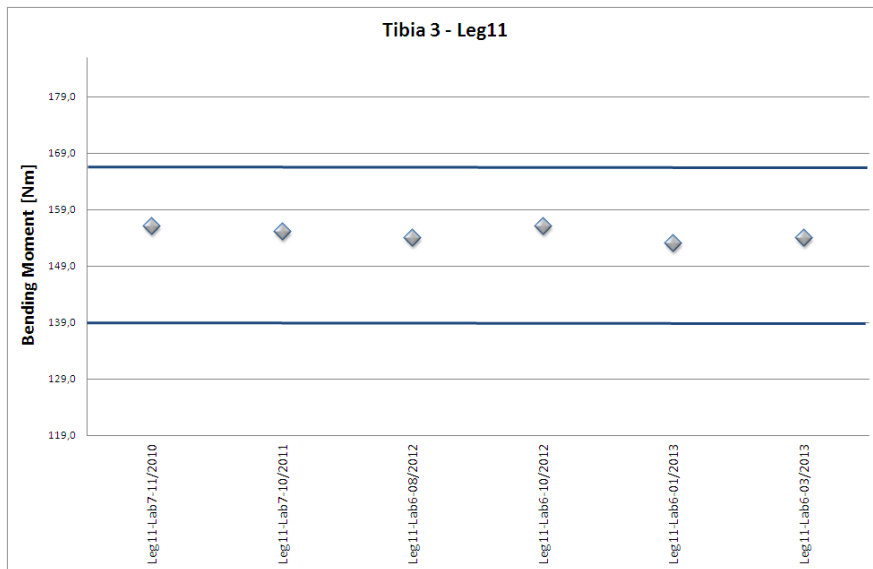
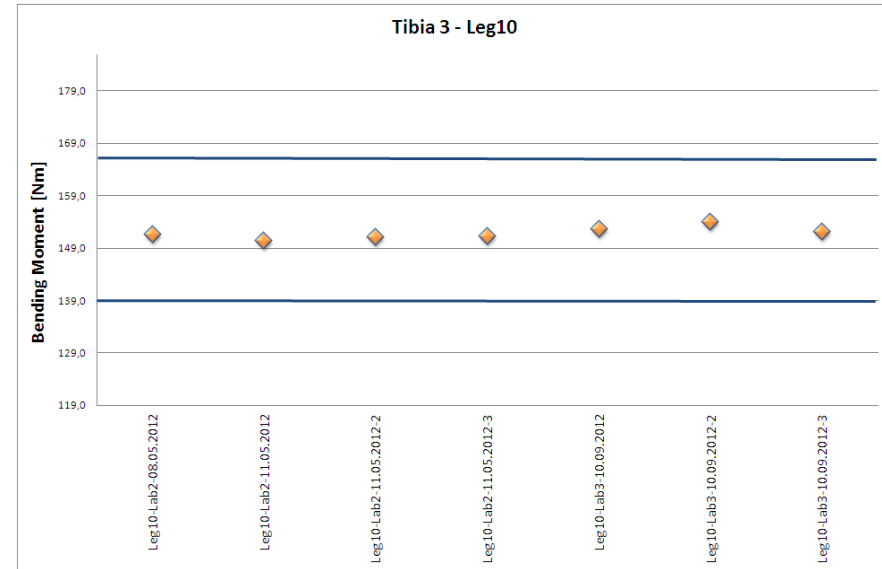
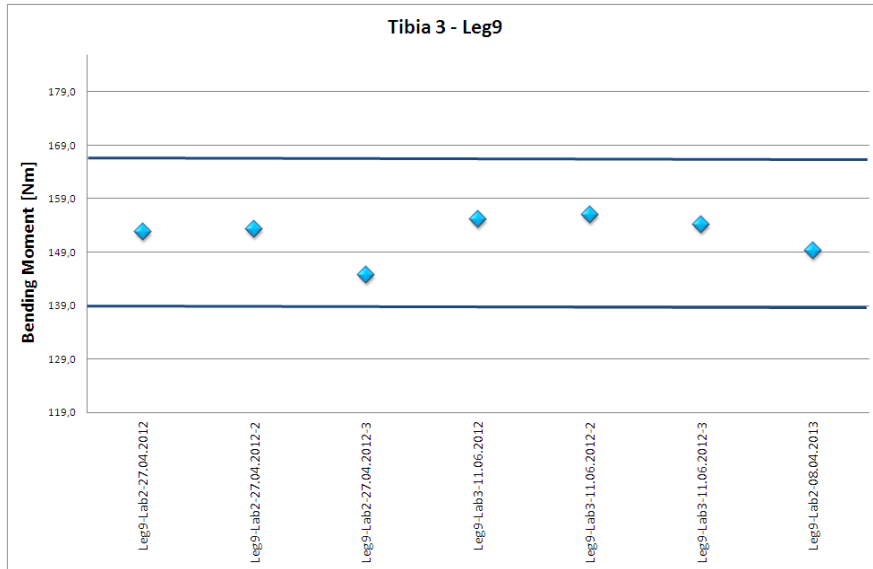
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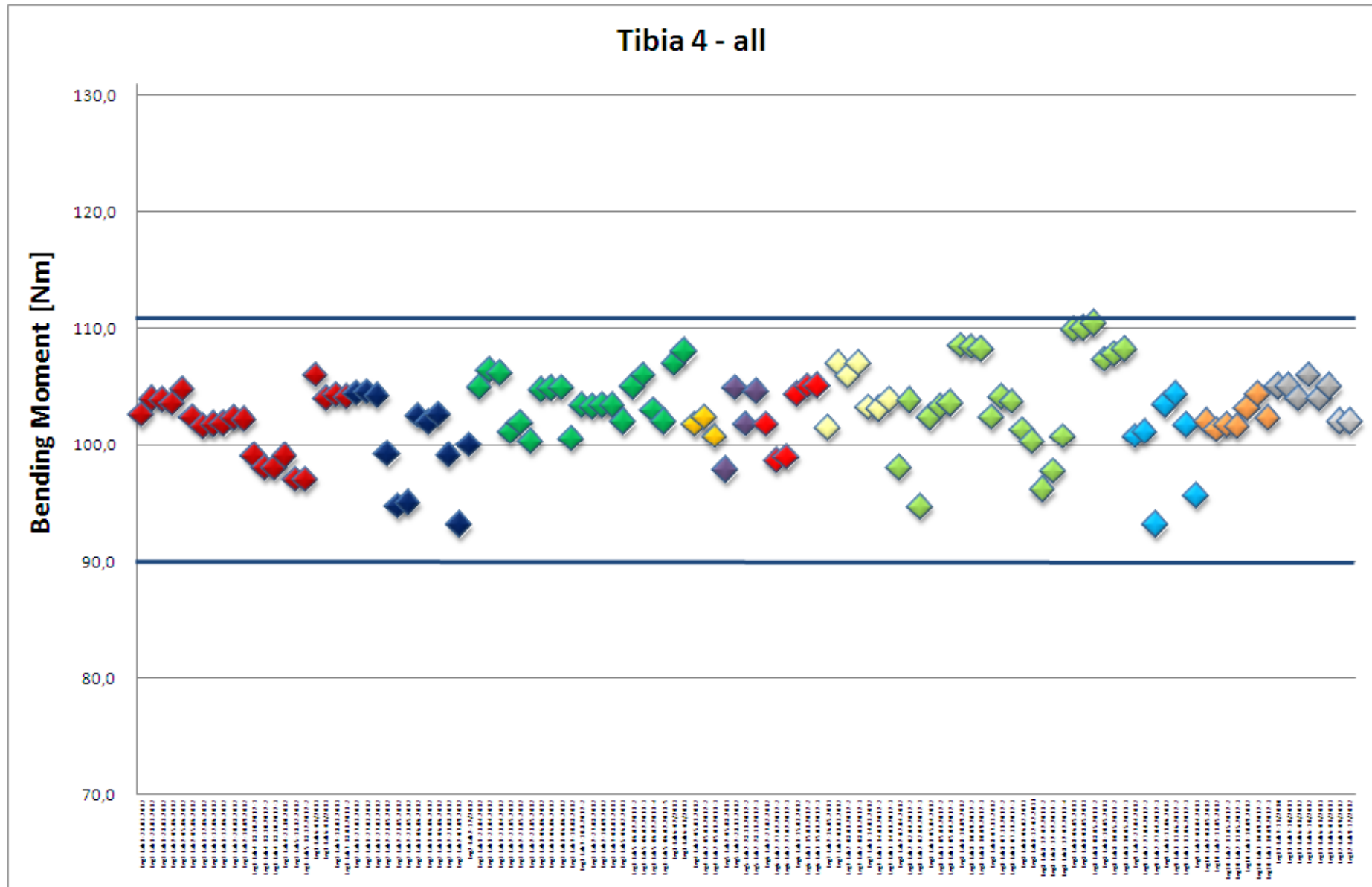
Results Tibia 3 - Pendulum Tests



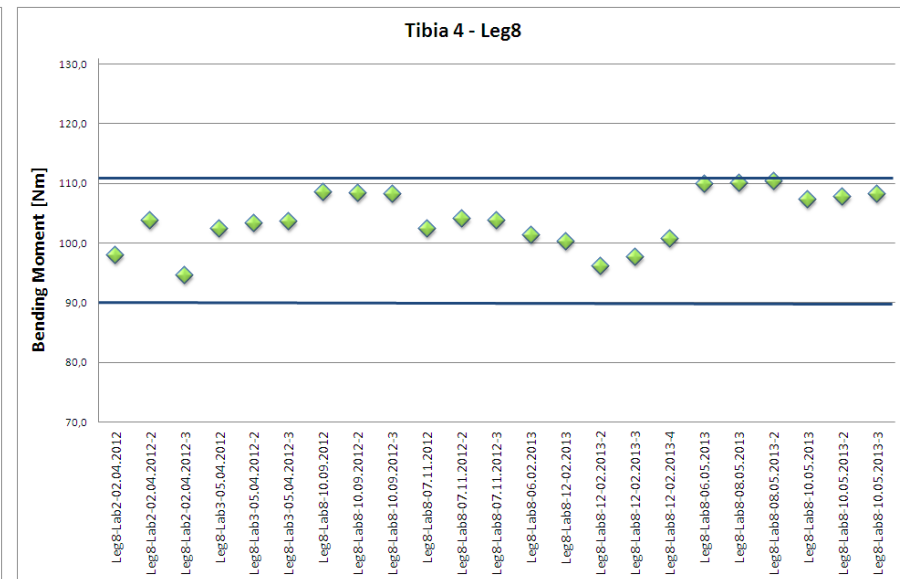
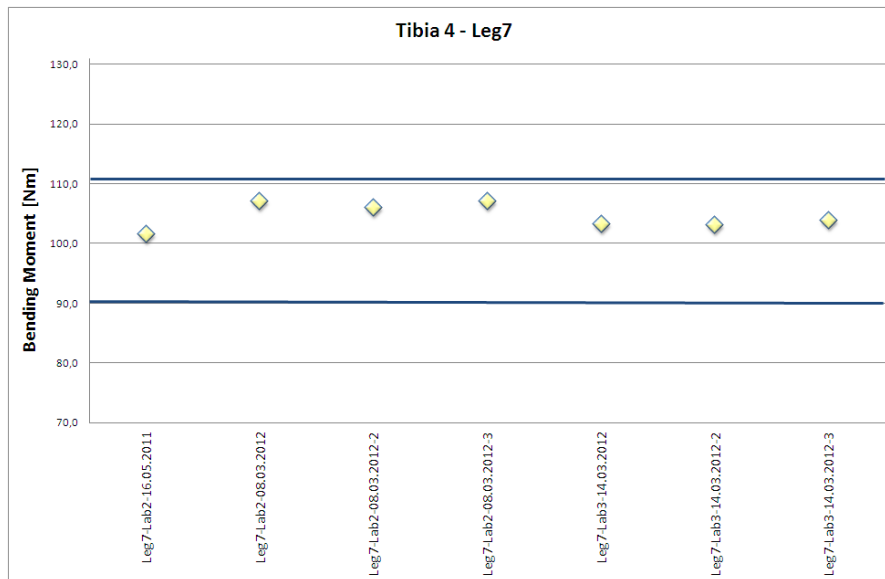
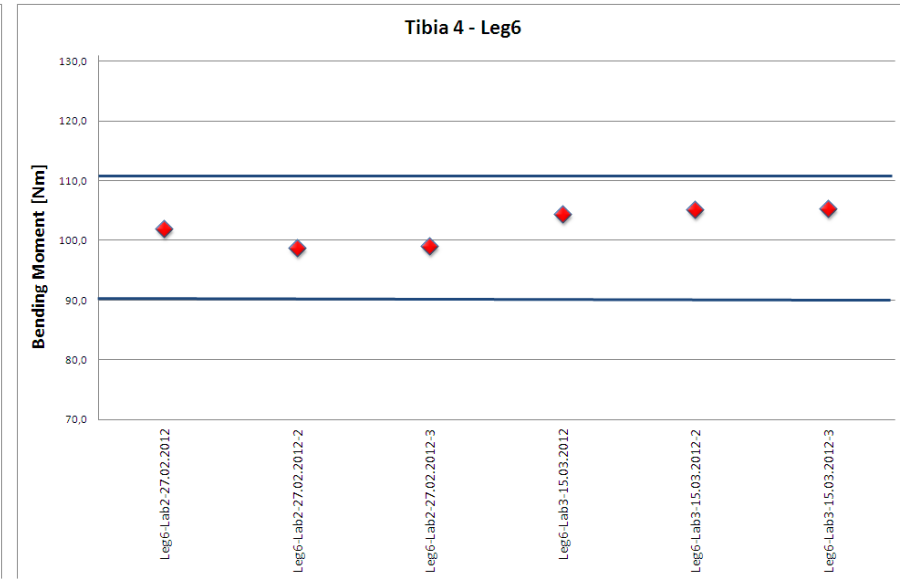
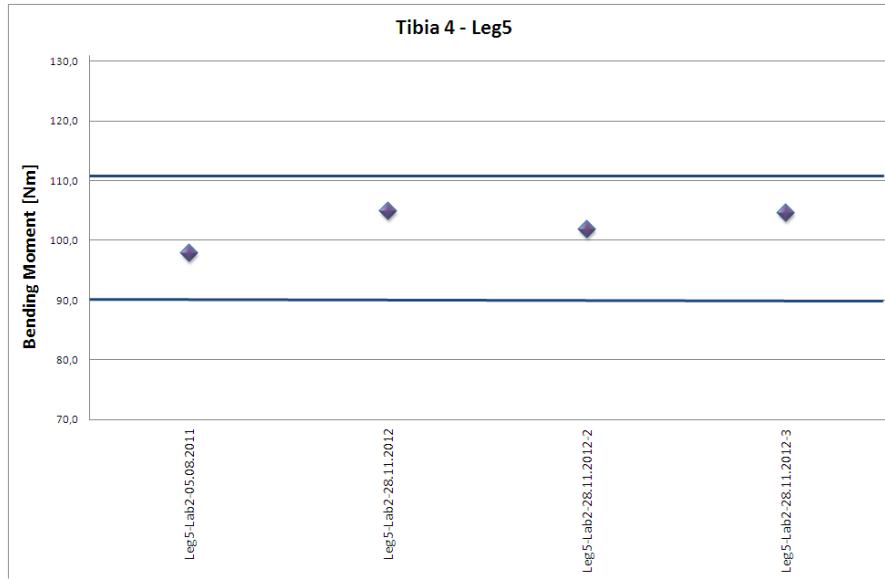
Results Tibia 3 - Pendulum Tests



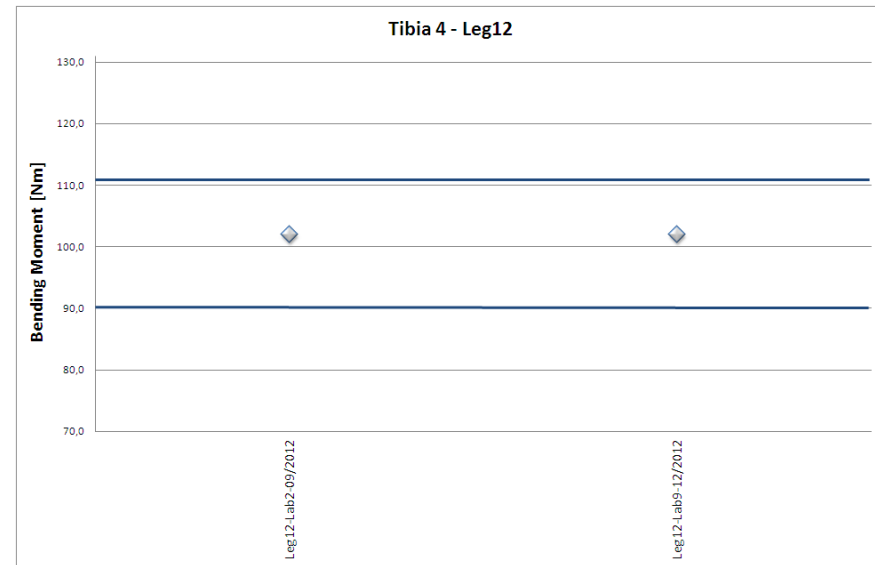
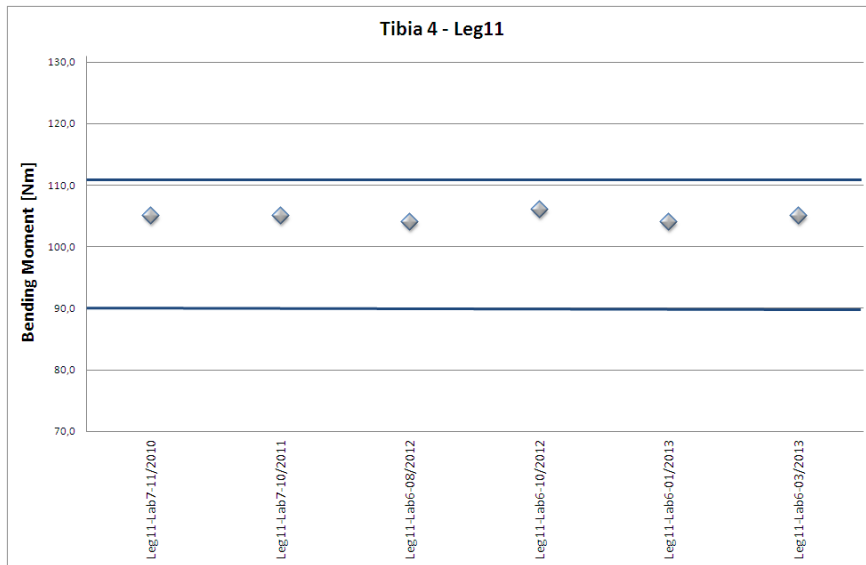
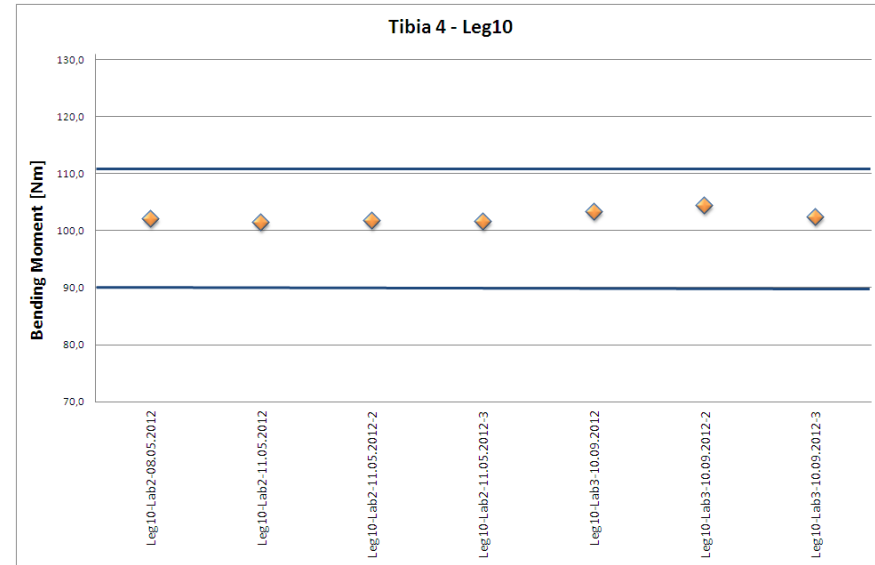
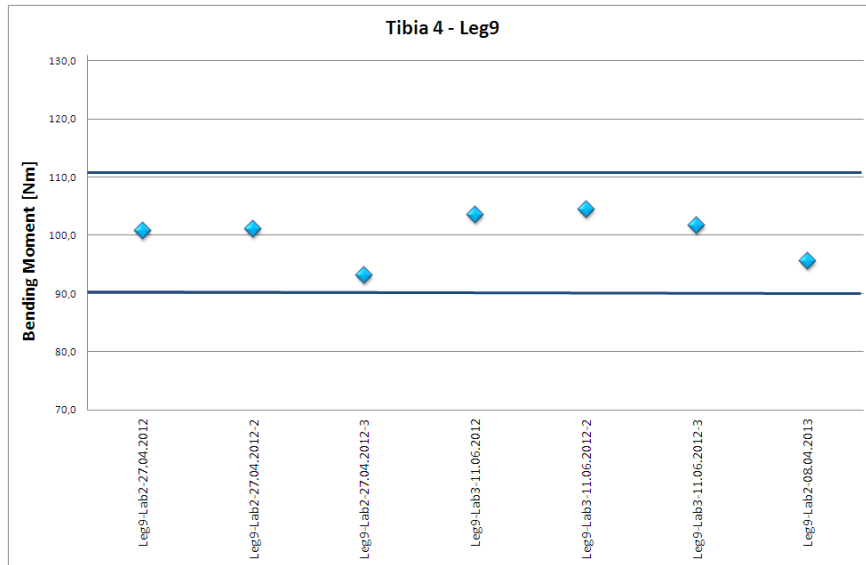
Results Overview - Pendulum Tests T4



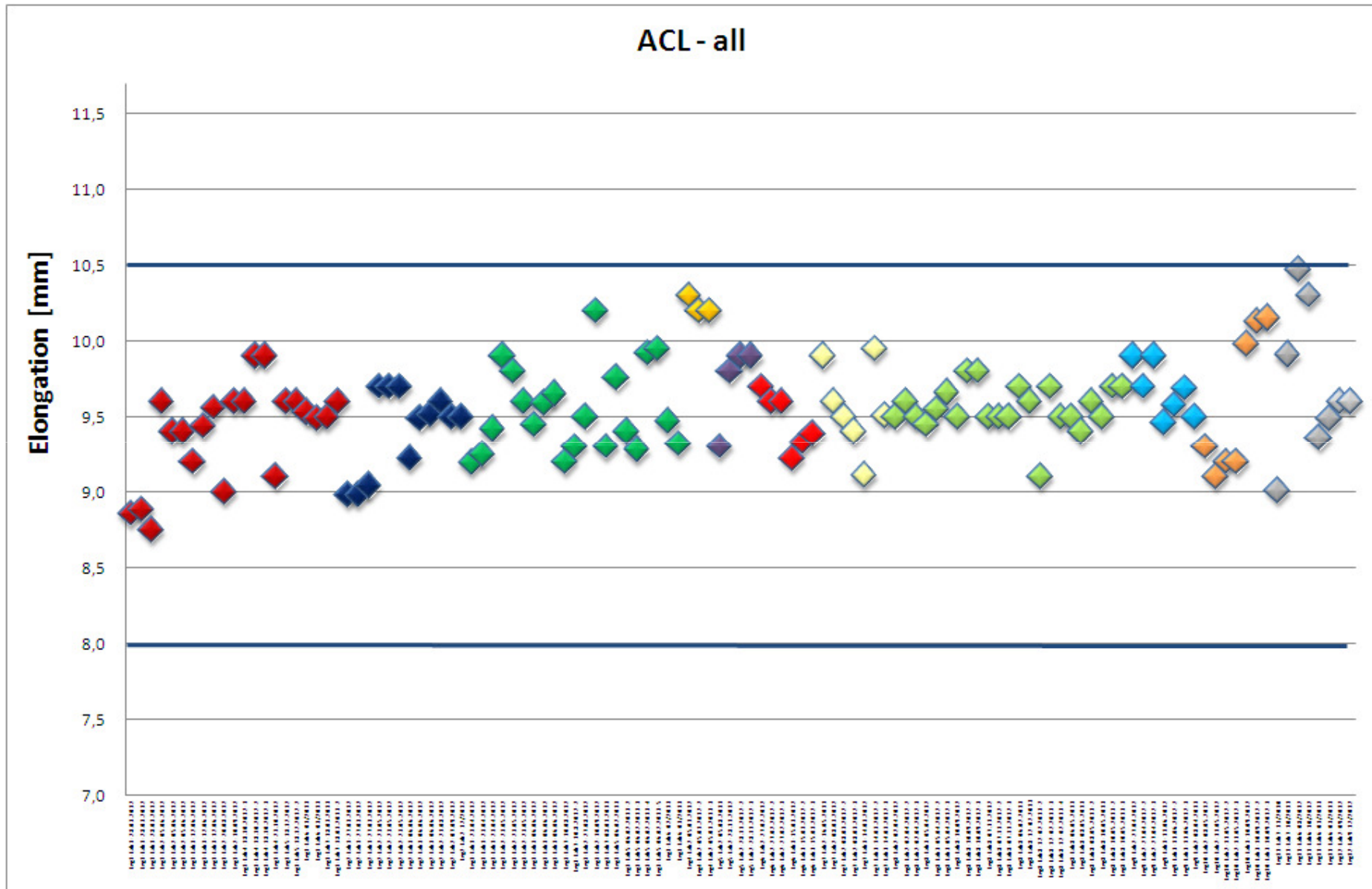
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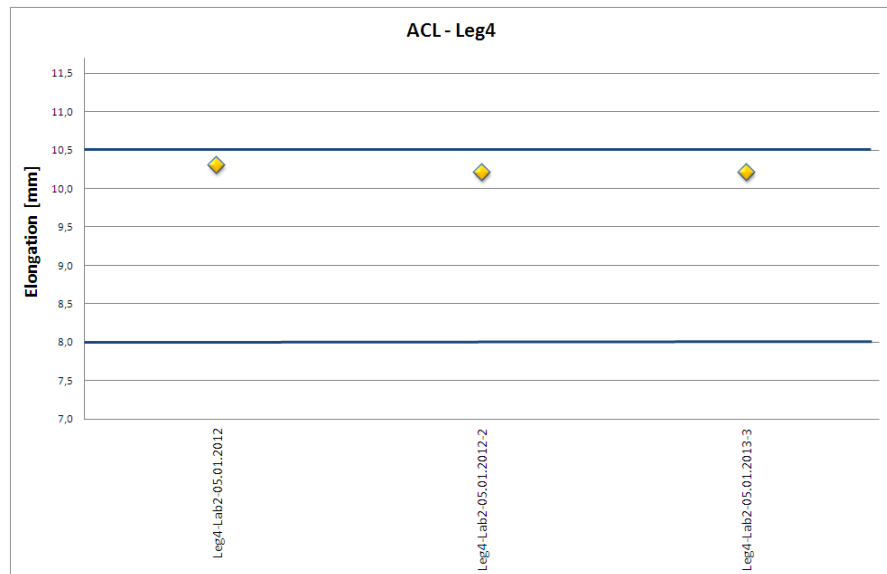
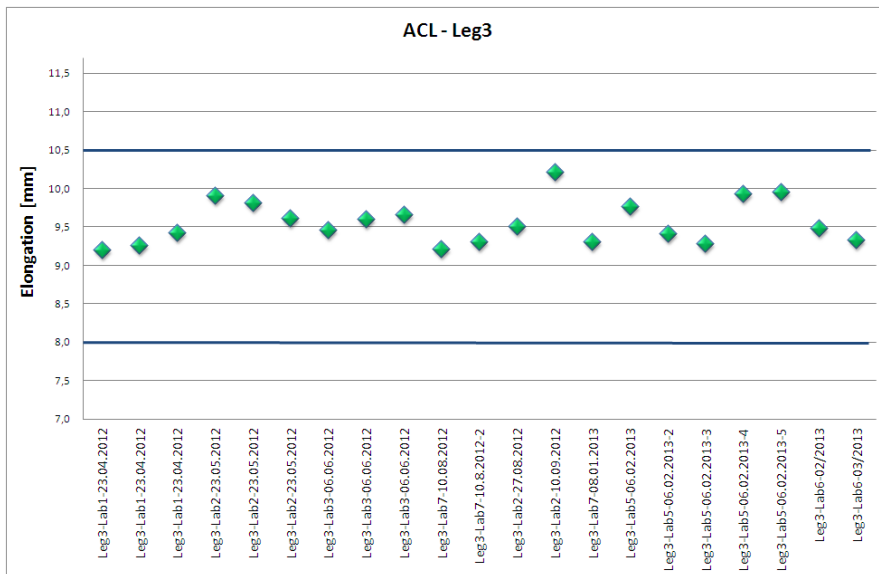
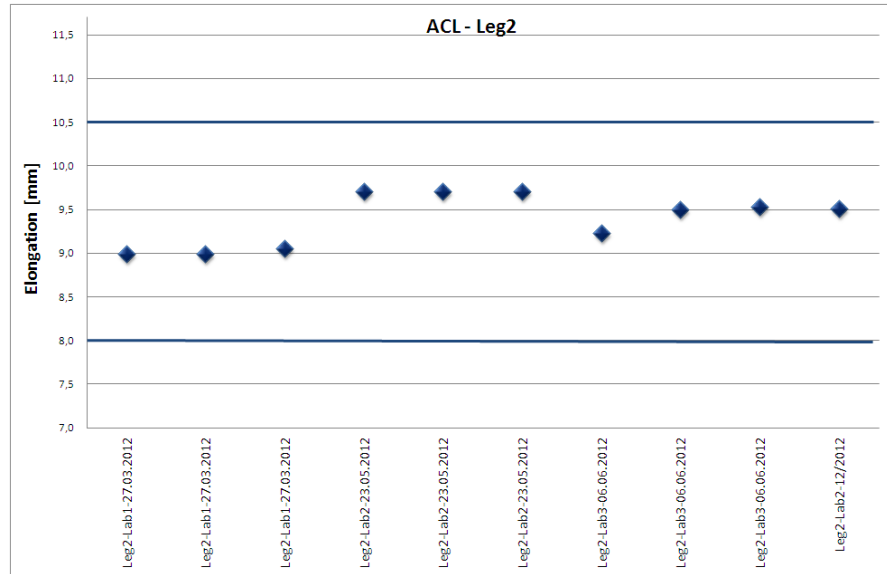
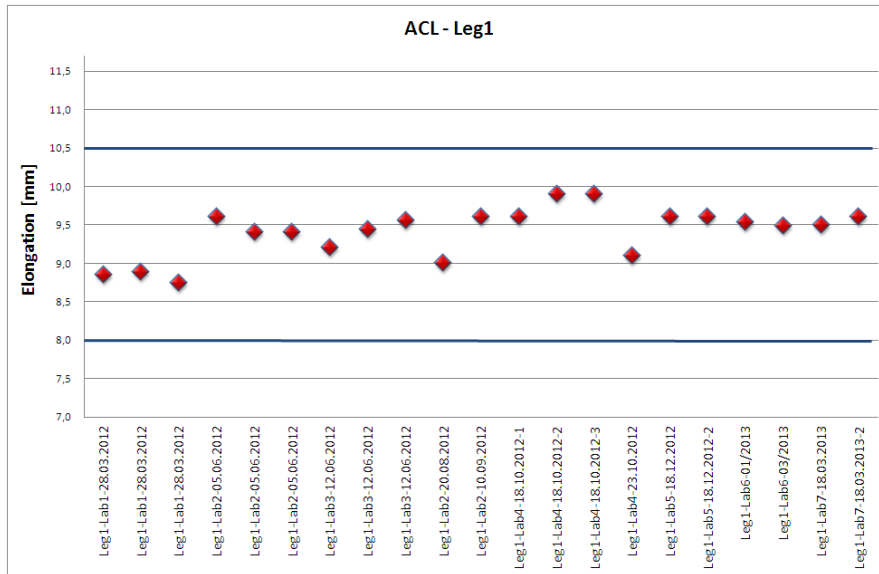
Results Tibia 4 - Pendulum Tests



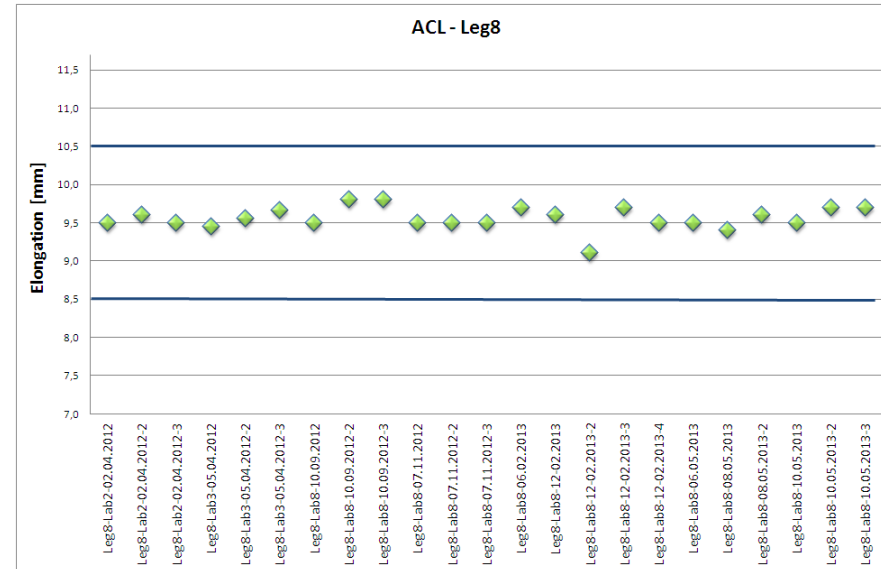
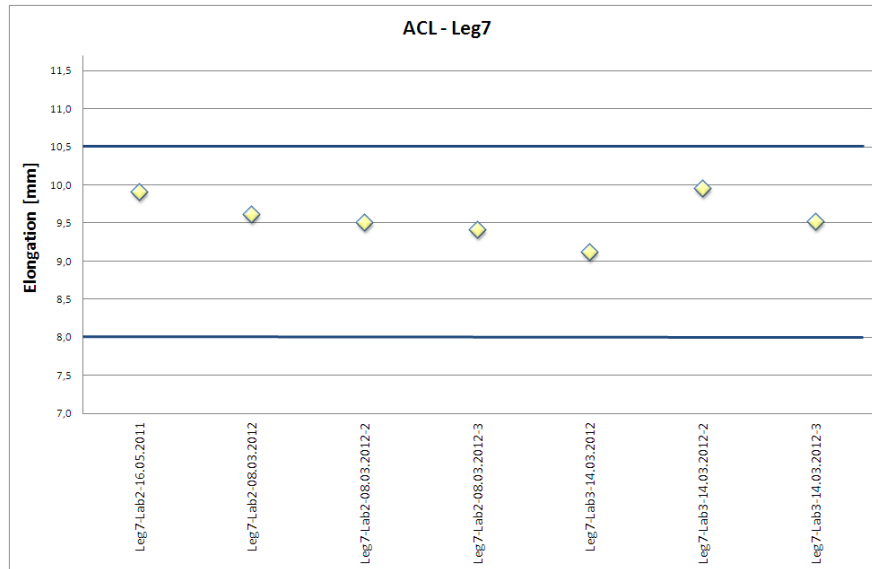
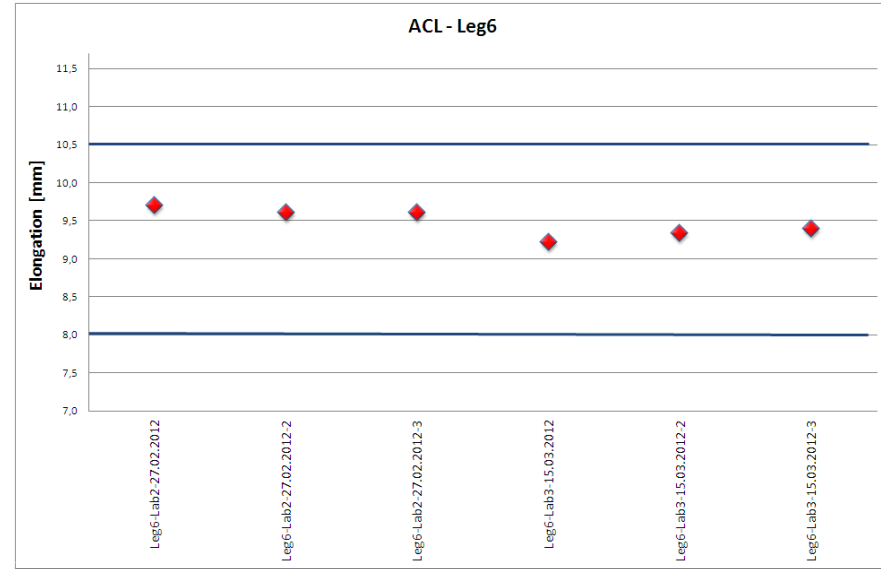
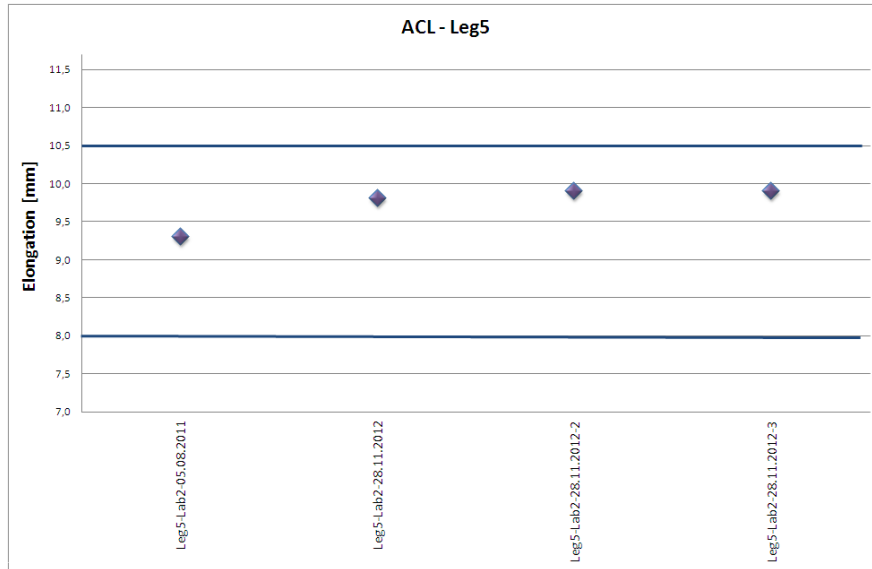
Results Overview - Pendulum Tests ACL



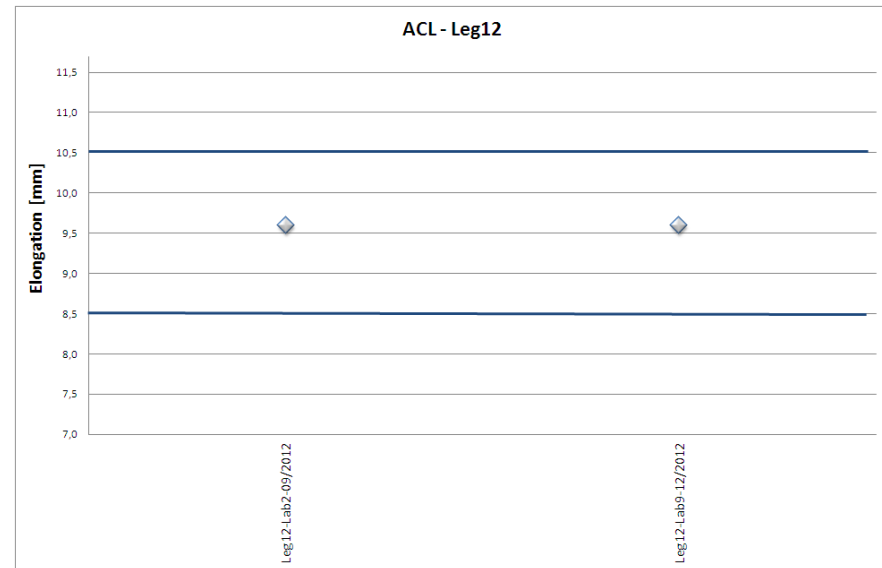
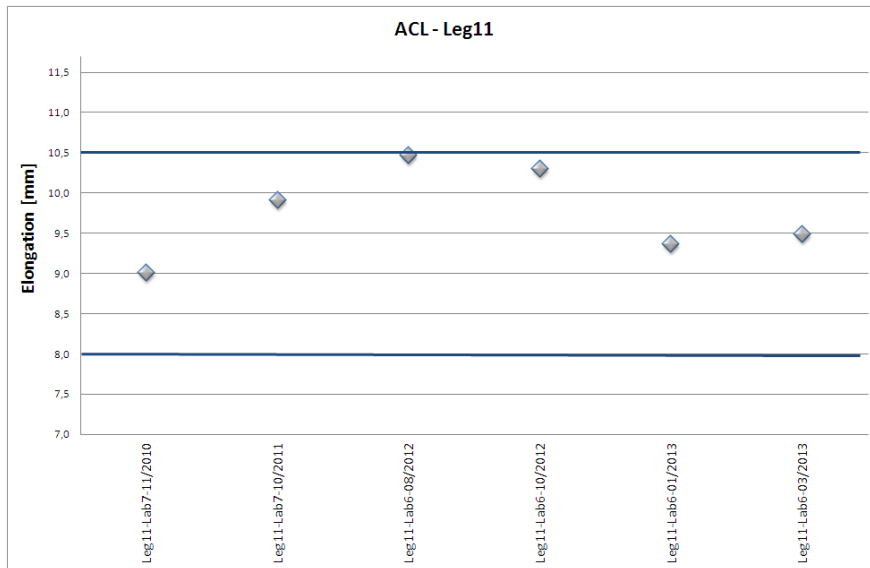
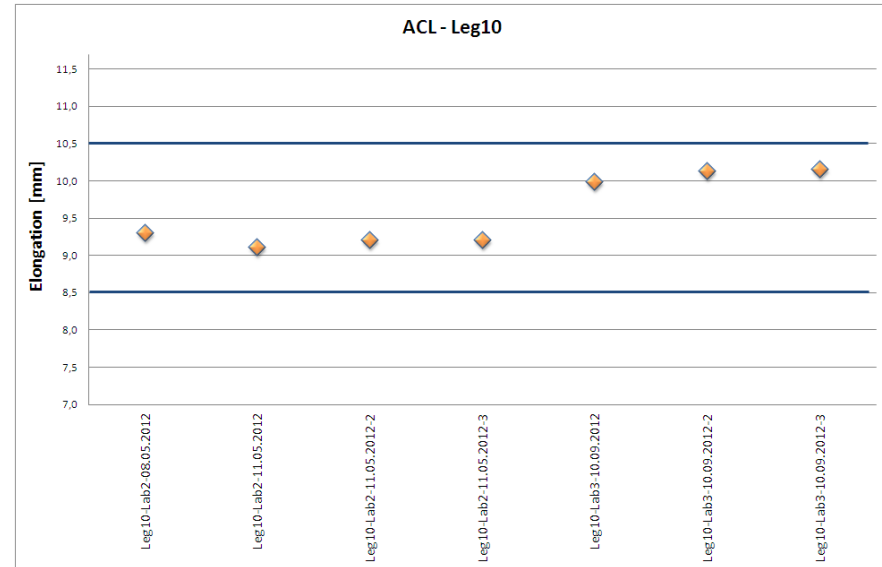
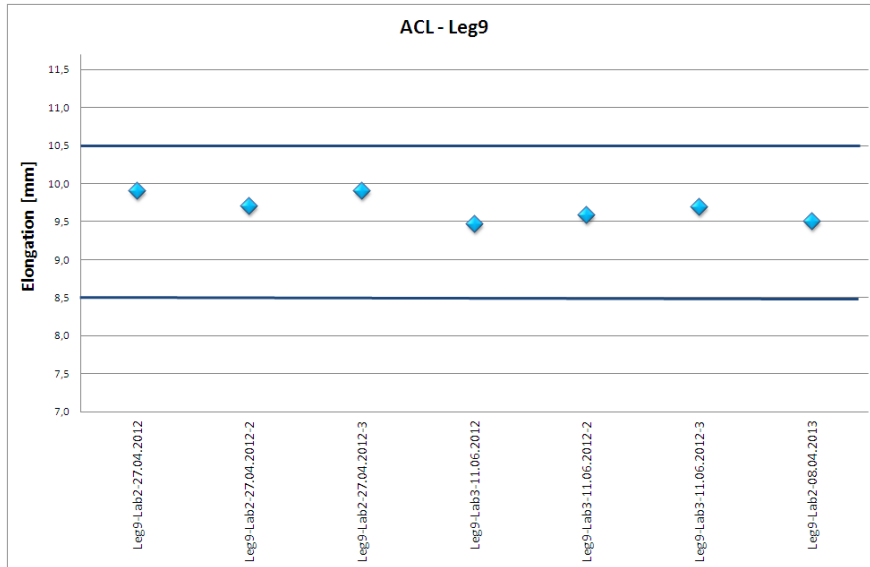
Results ACL - Pendulum Tests



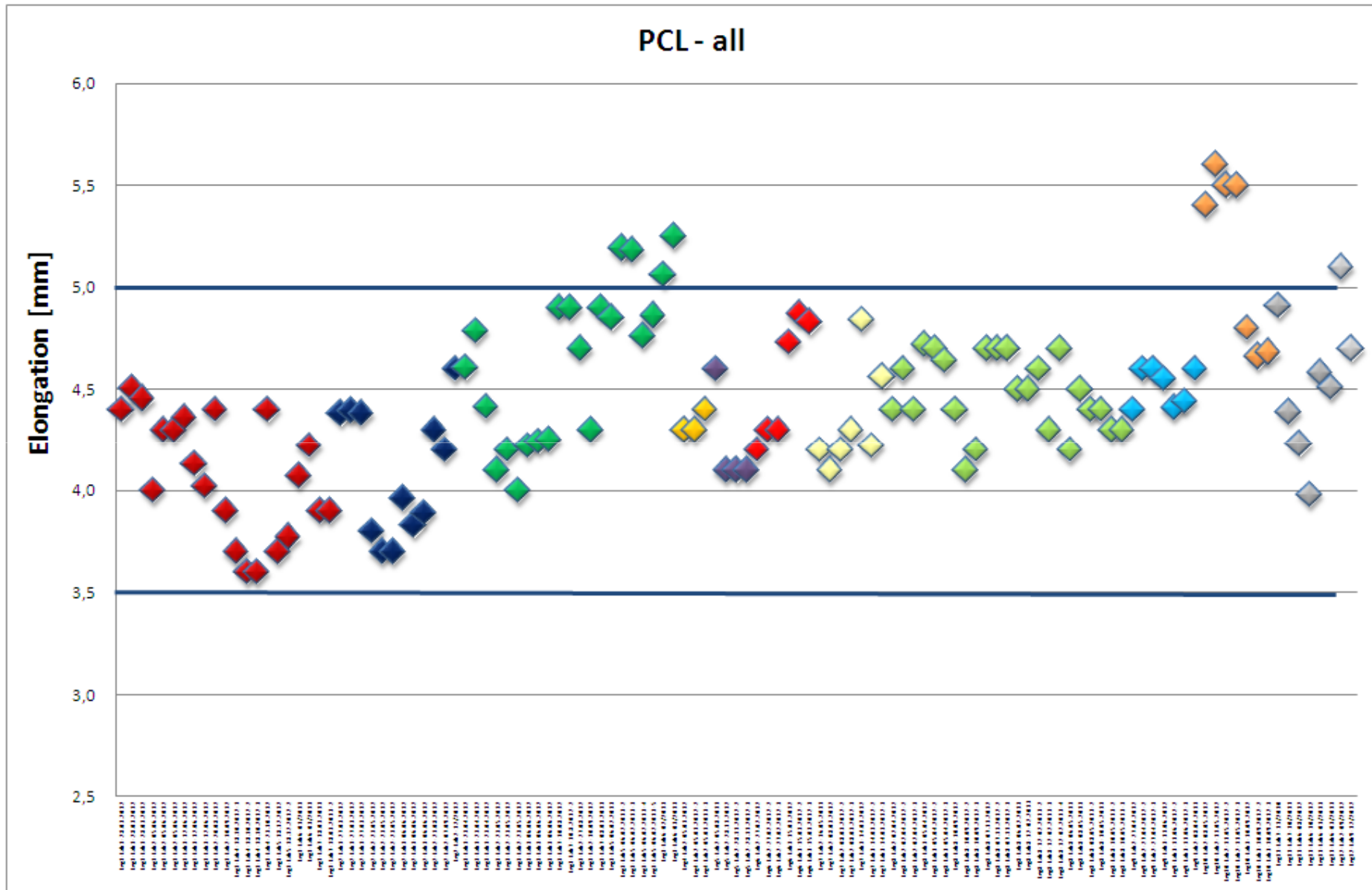
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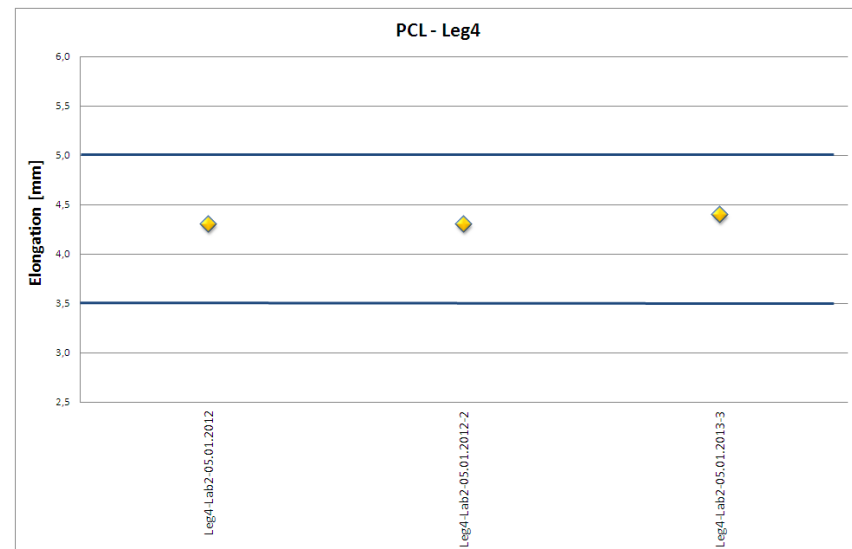
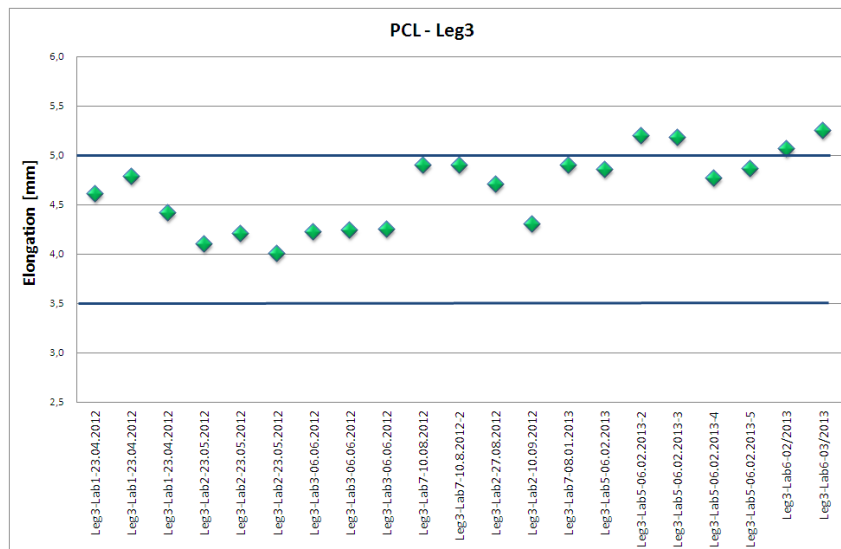
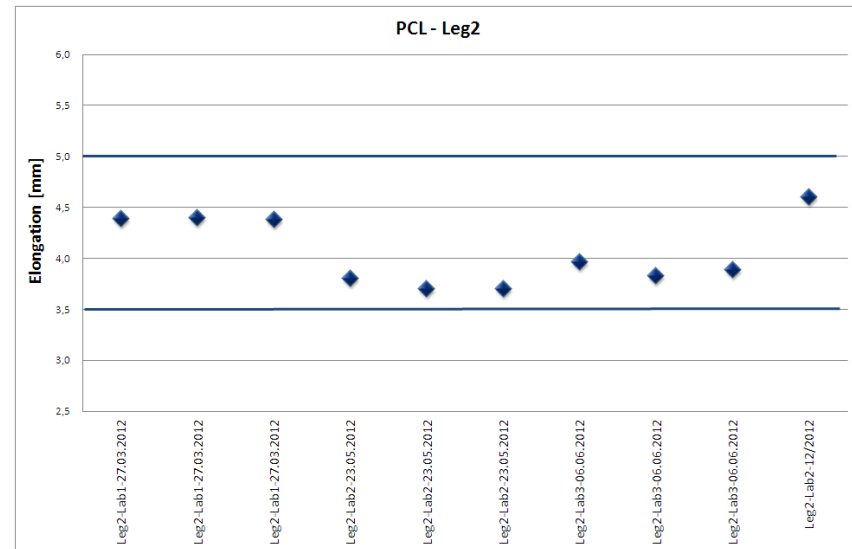
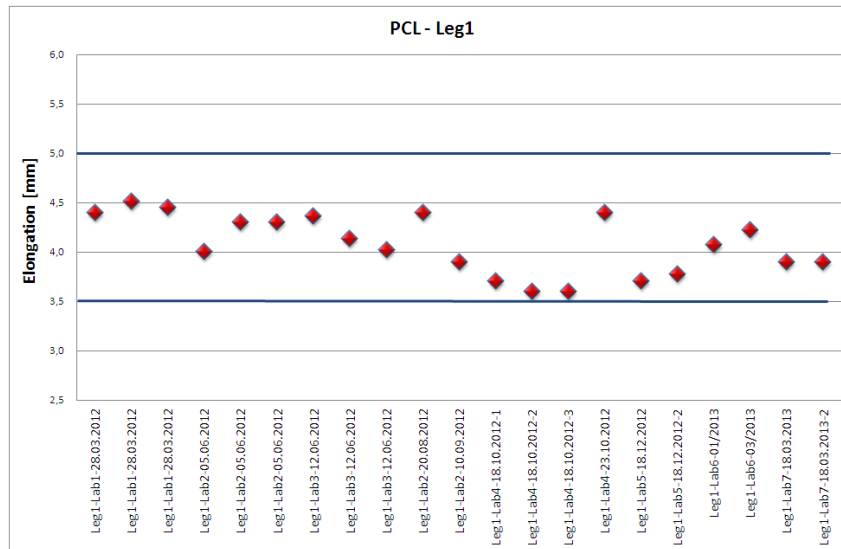
Results ACL - Pendulum Tests



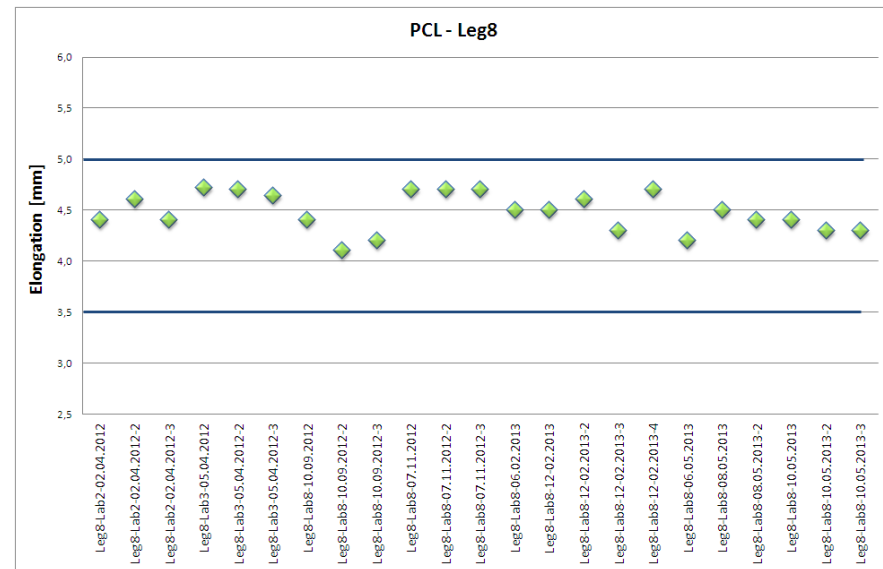
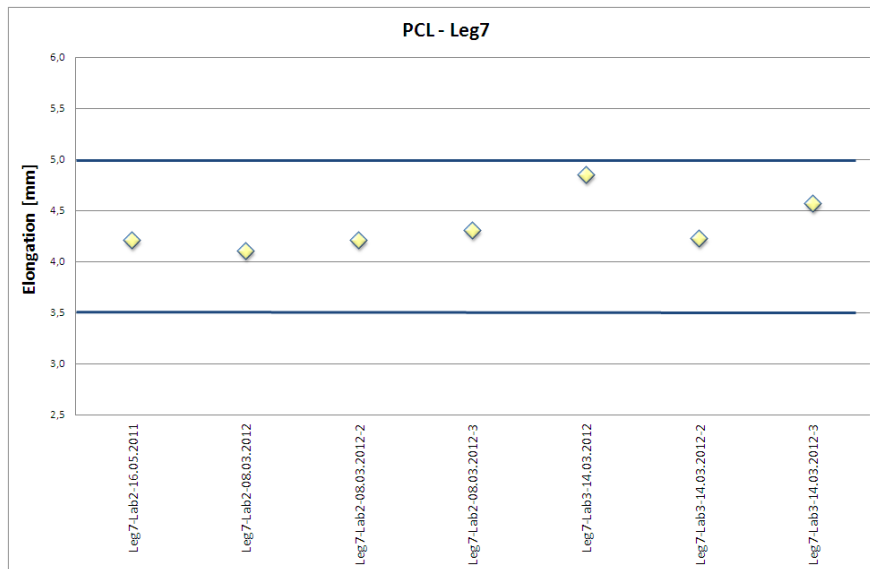
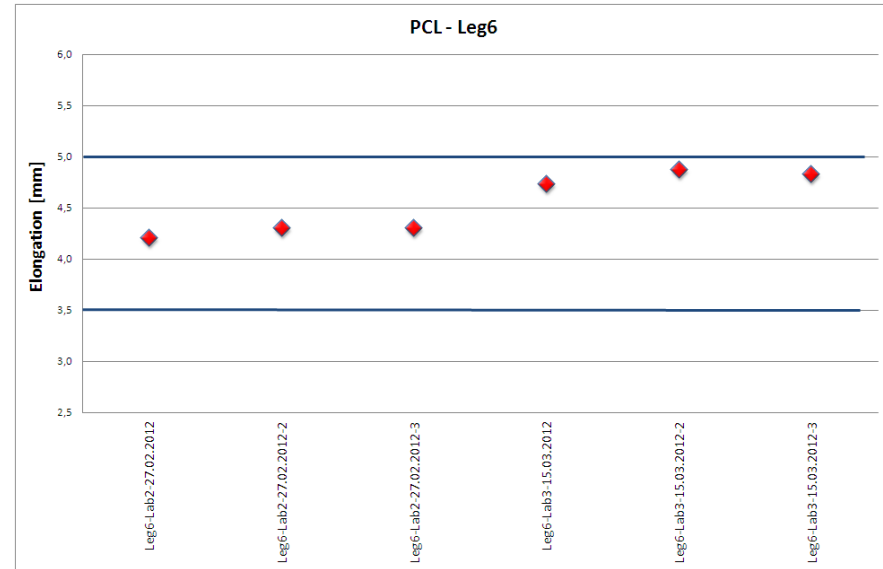
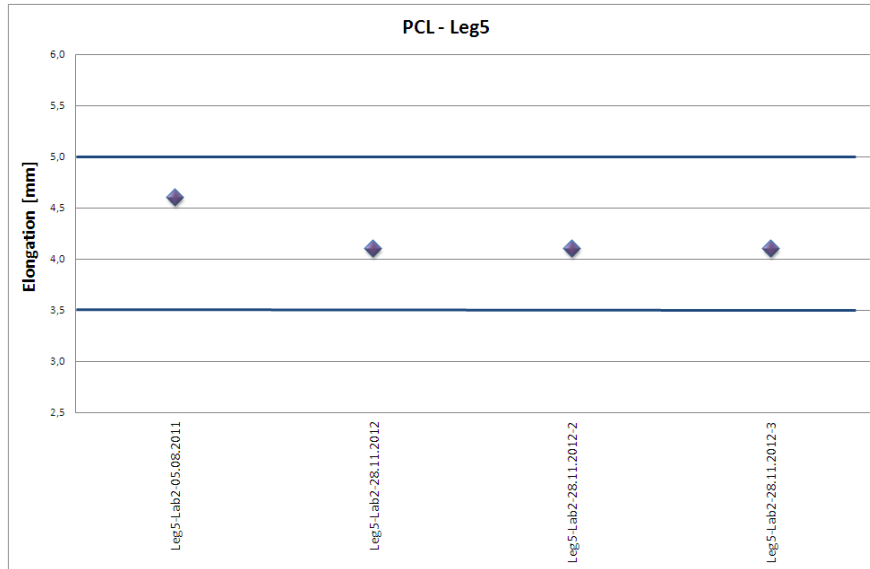
Results Overview - Pendulum Tests PCL



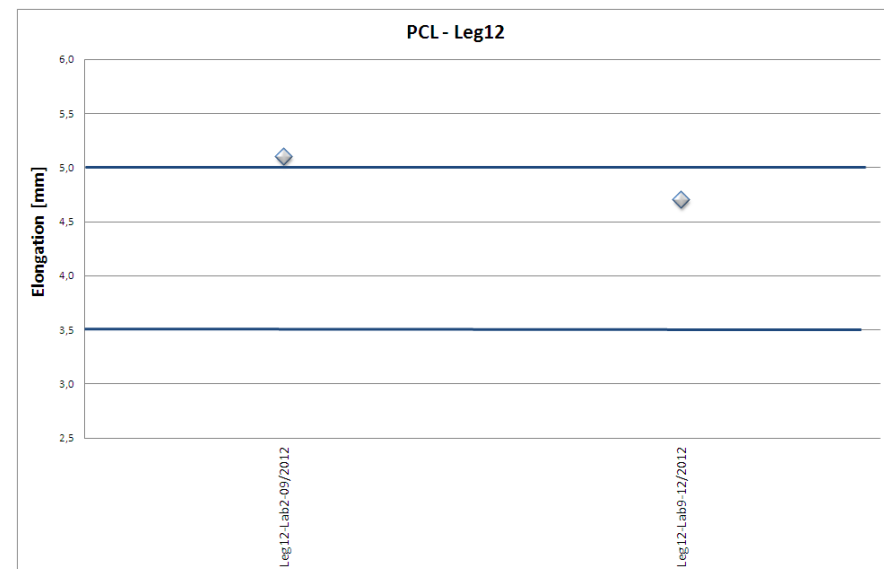
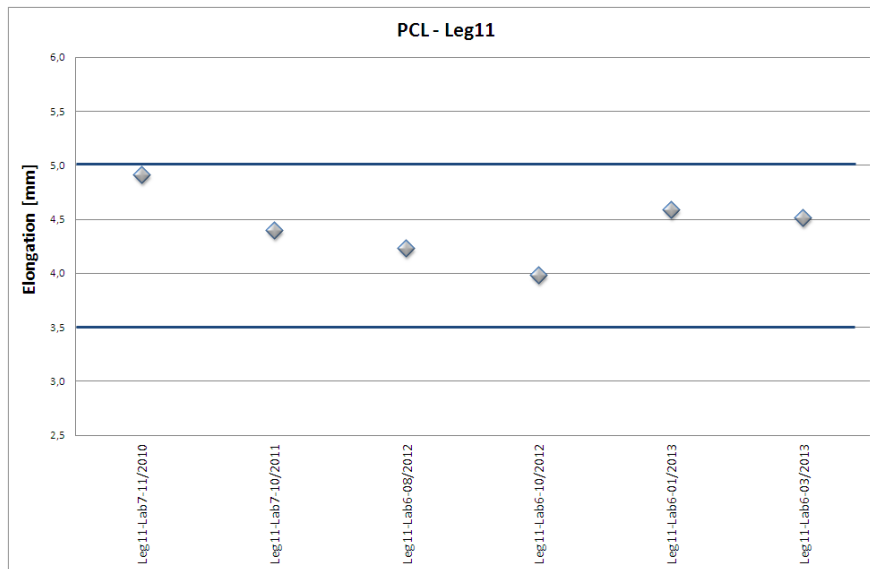
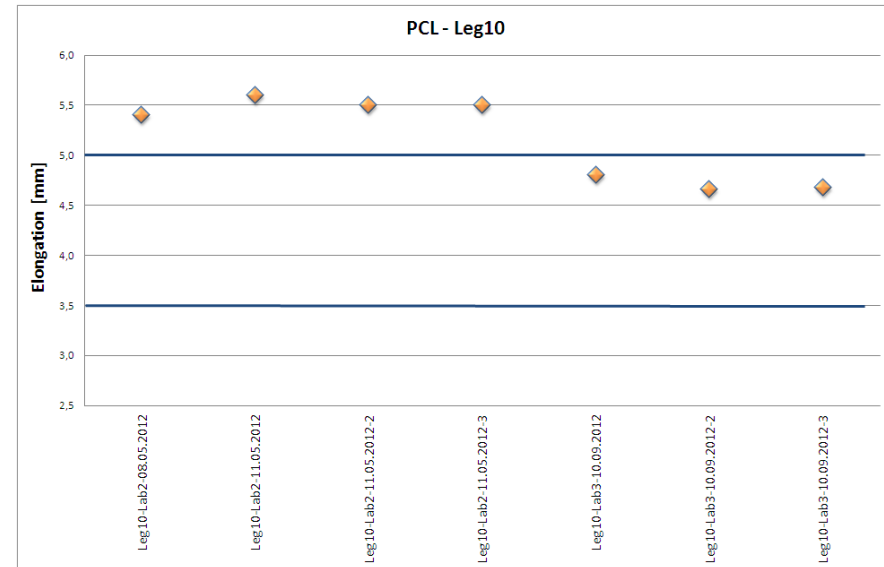
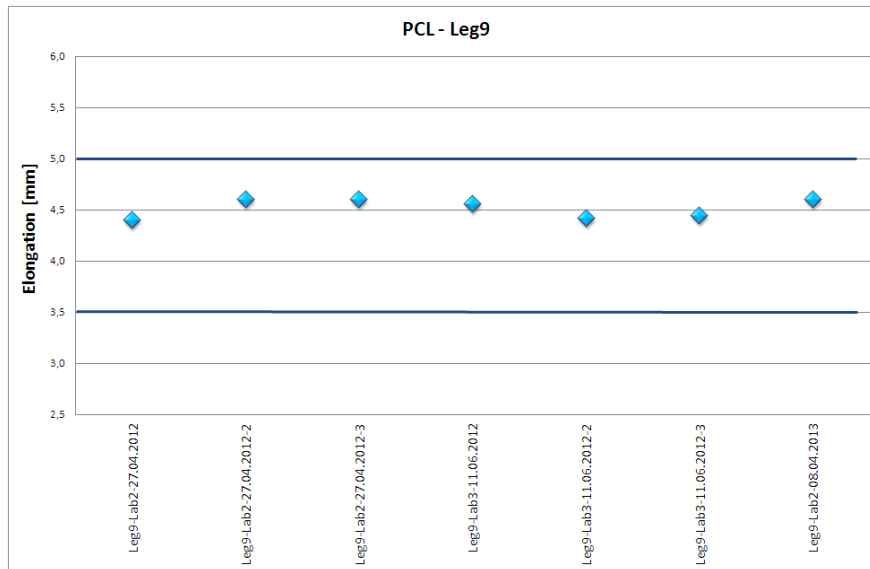
Results PCL - Pendulum Tests



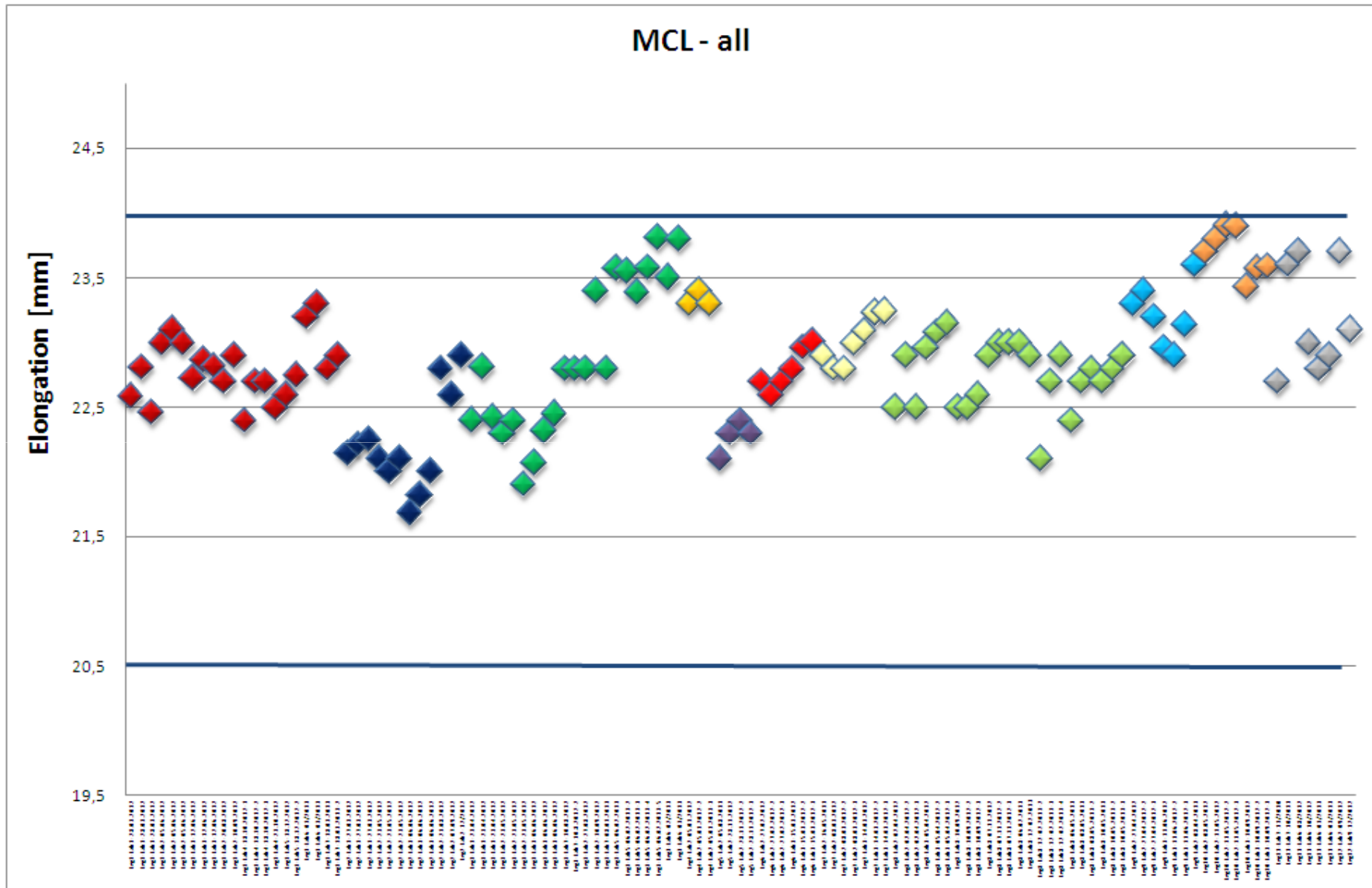
Results PCL - Pendulum Tests



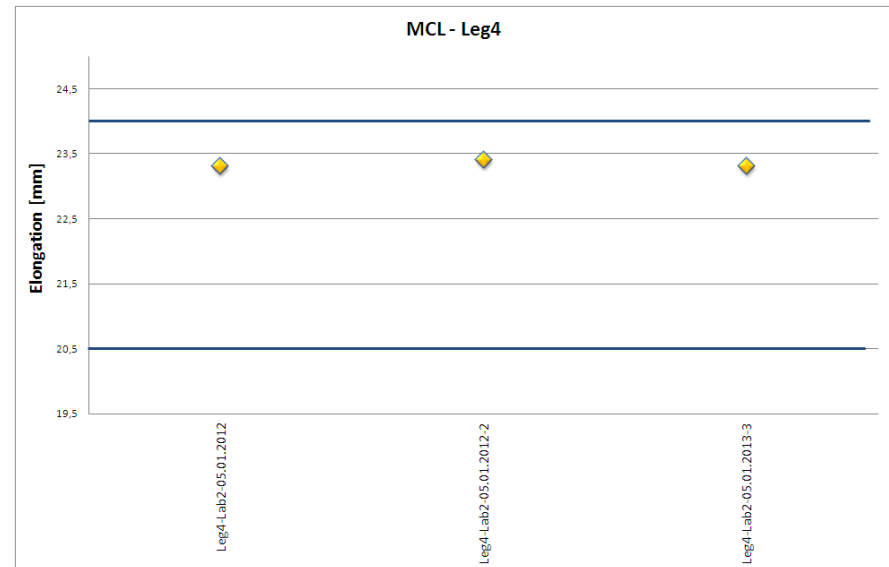
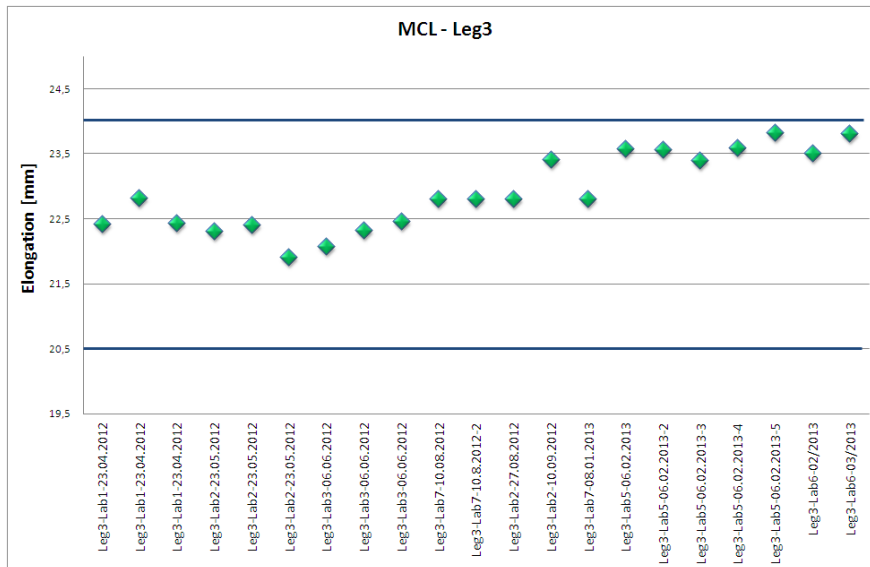
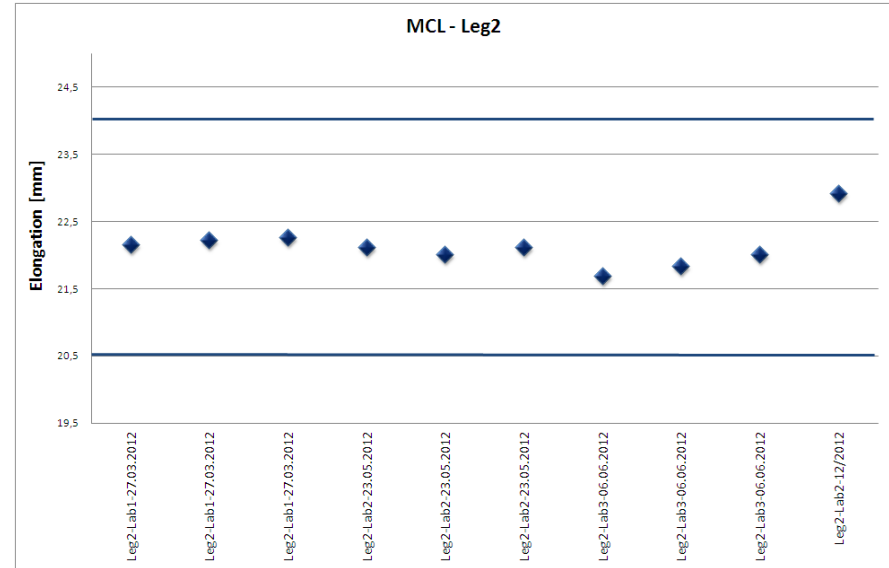
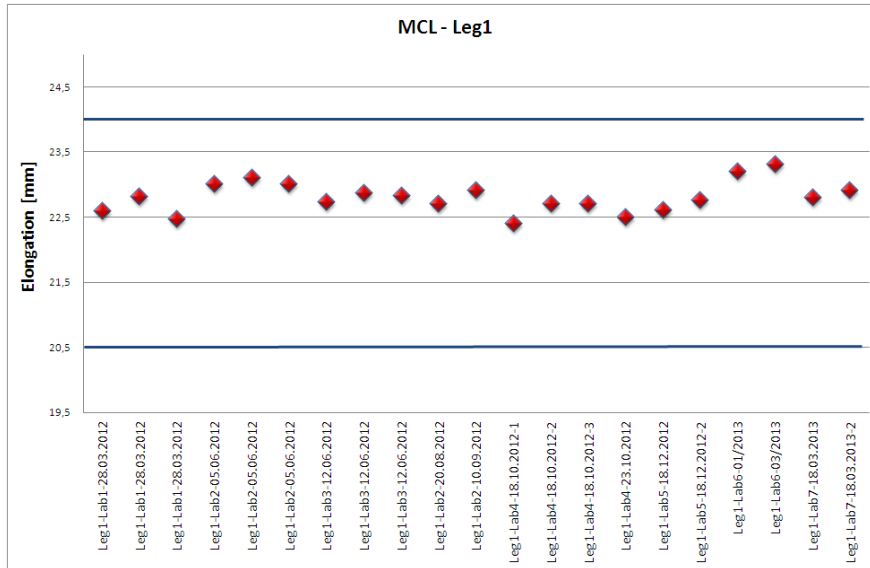
Results PCL - Pendulum Tests



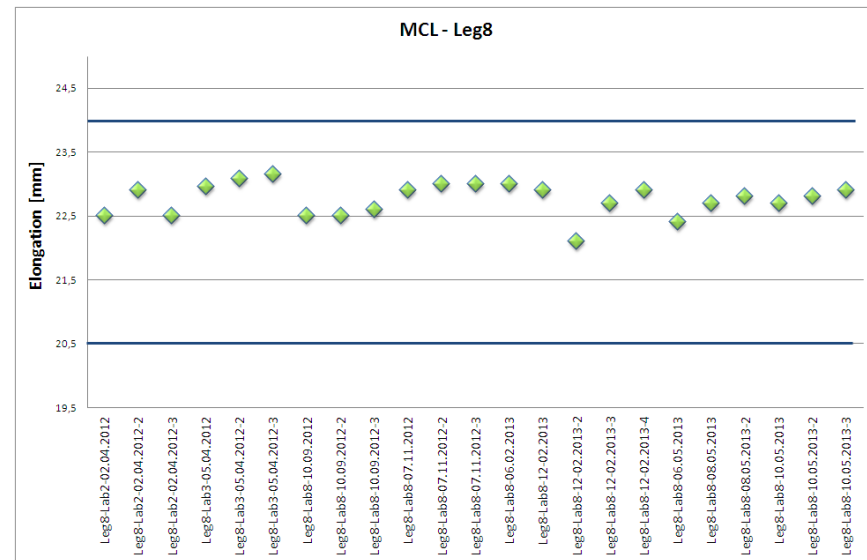
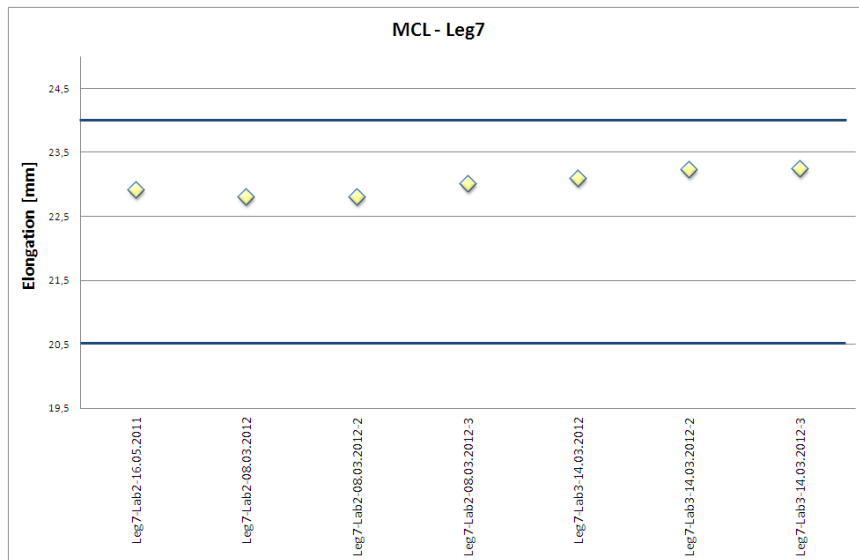
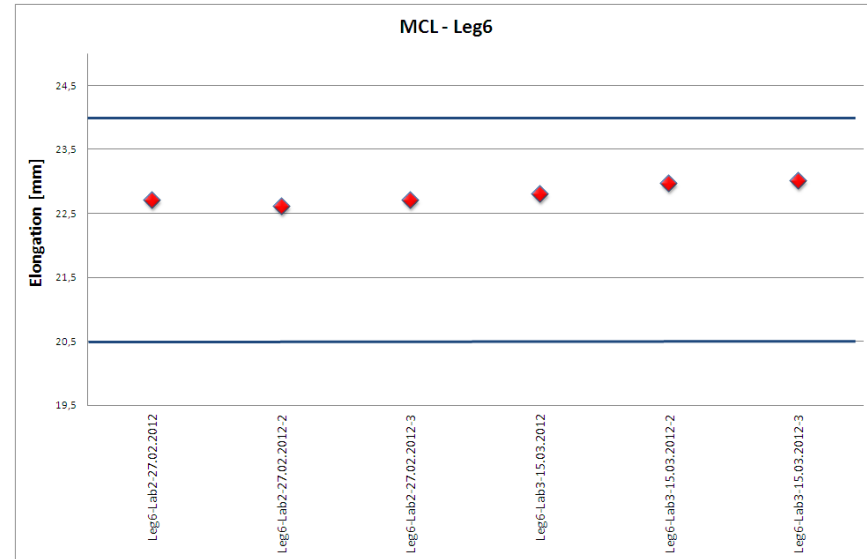
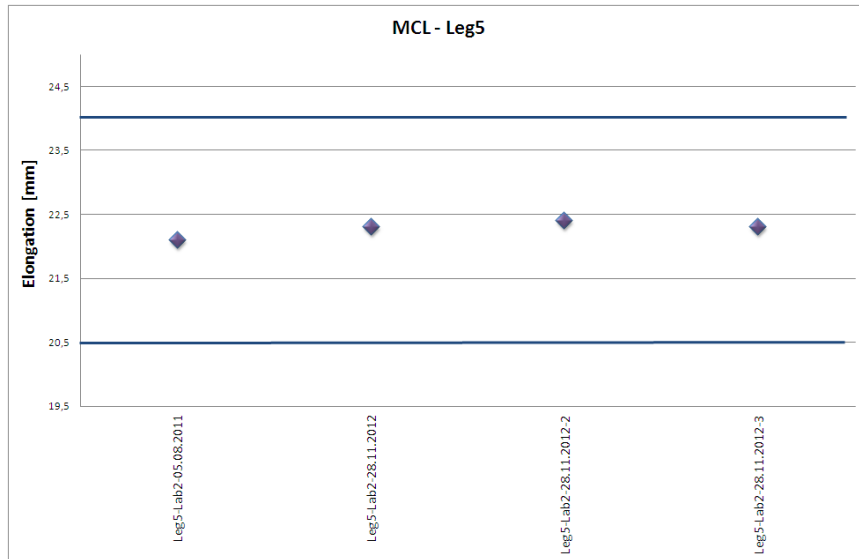
Results Overview - Pendulum Tests MCL



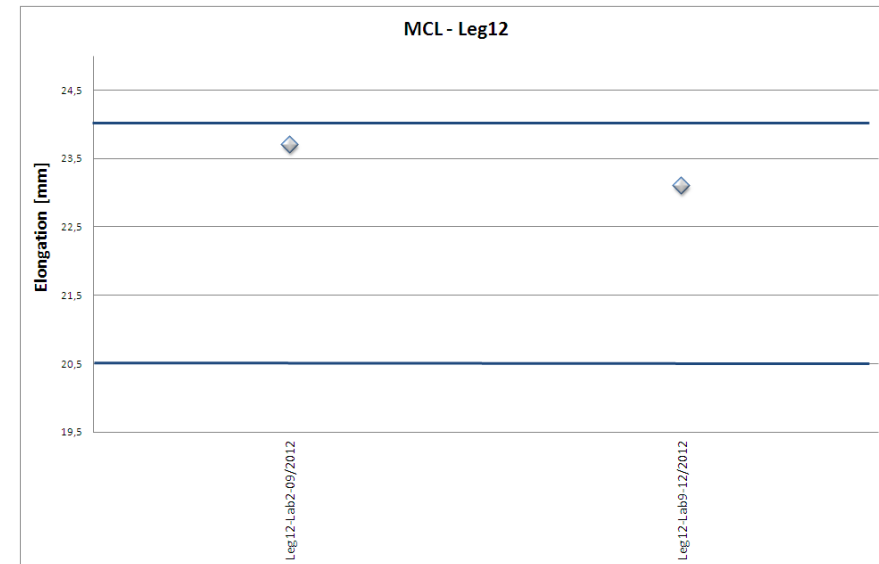
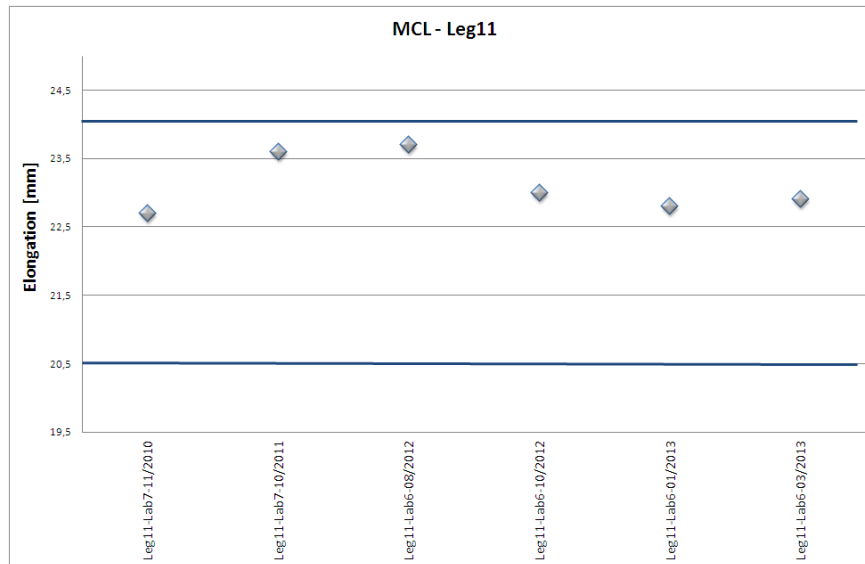
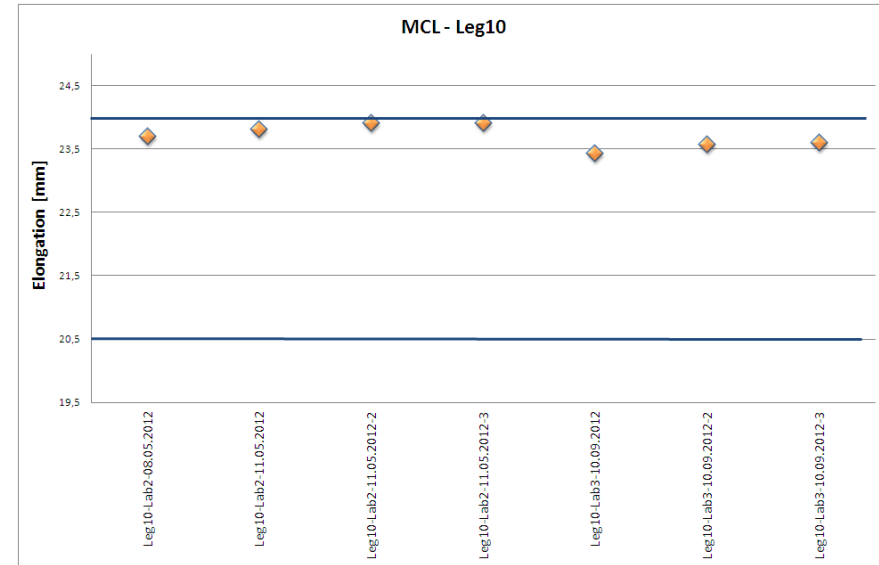
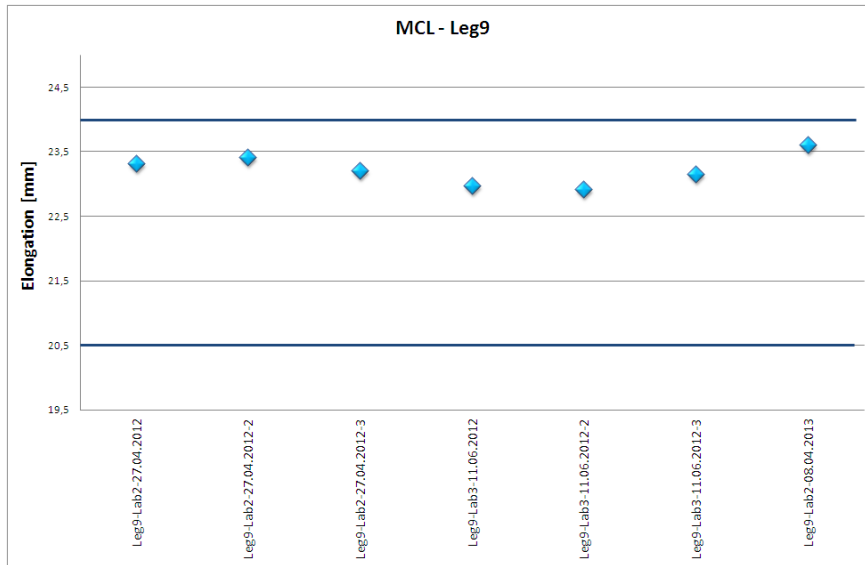
Results MCL - Pendulum Tests



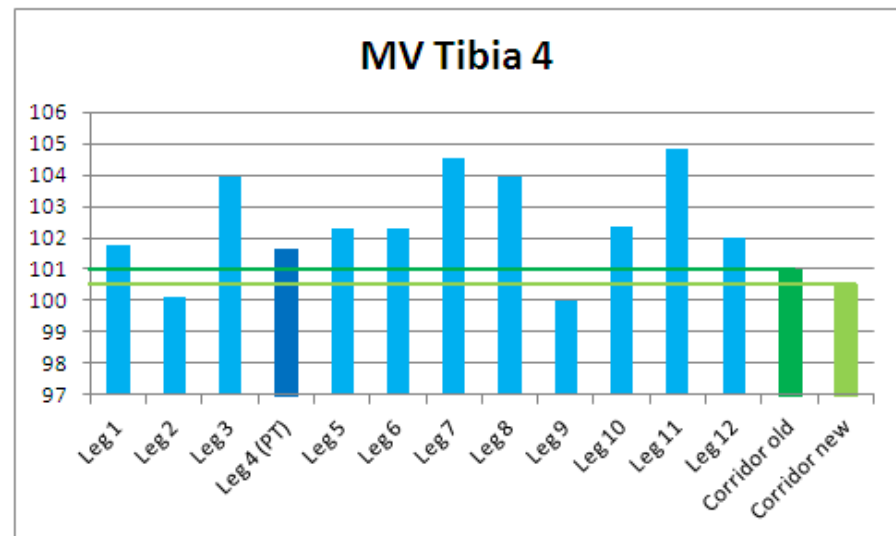
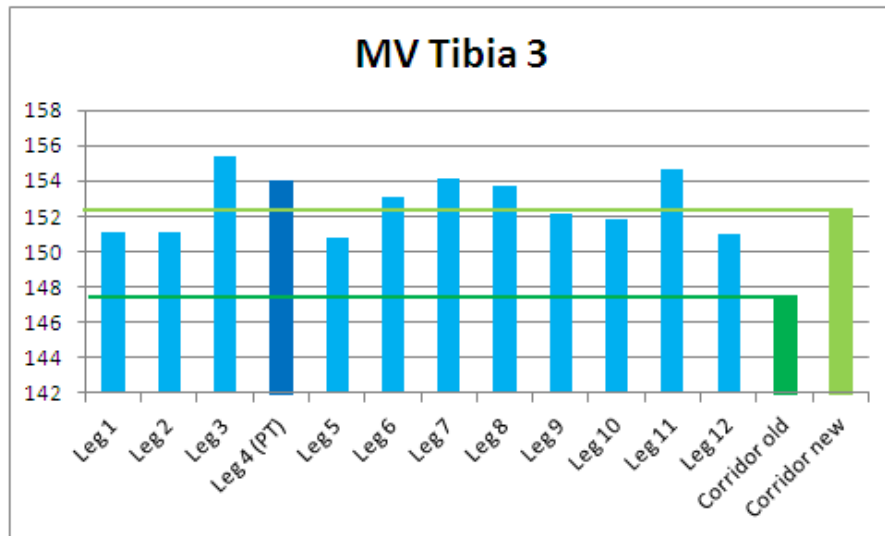
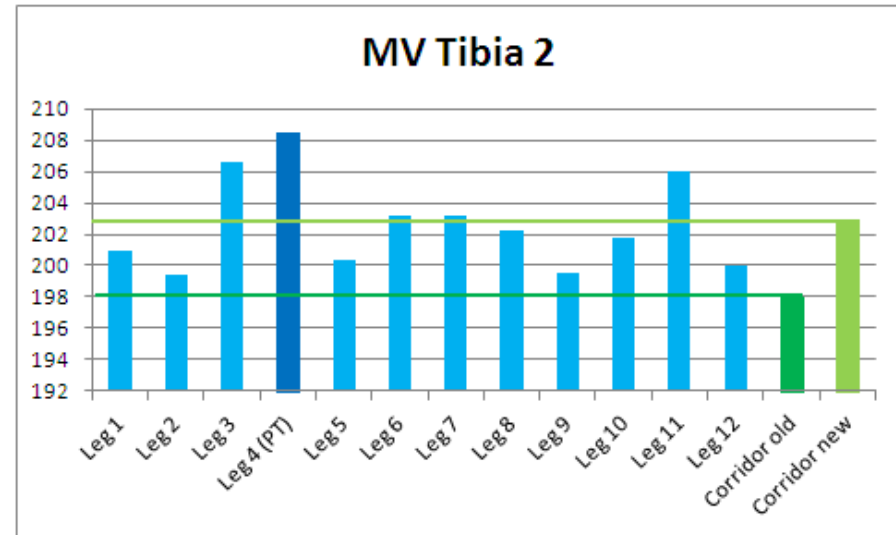
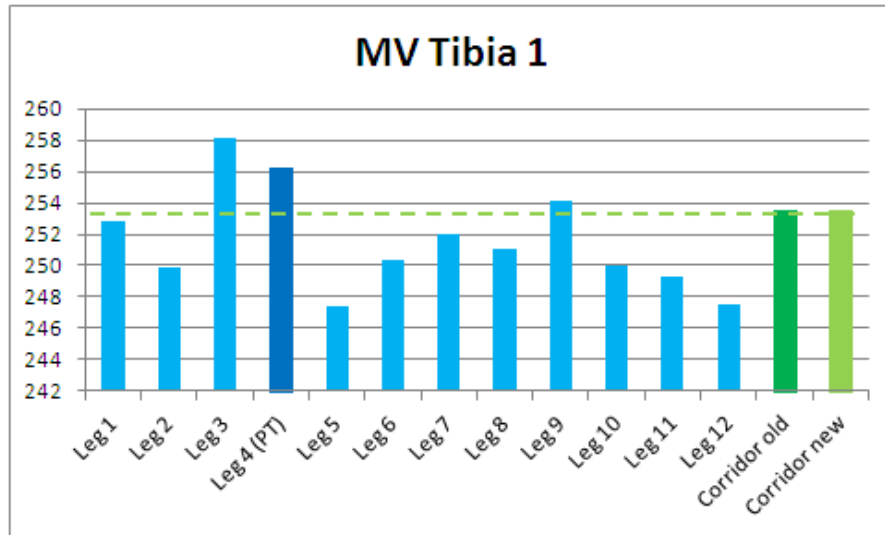
Results MCL - Pendulum Tests



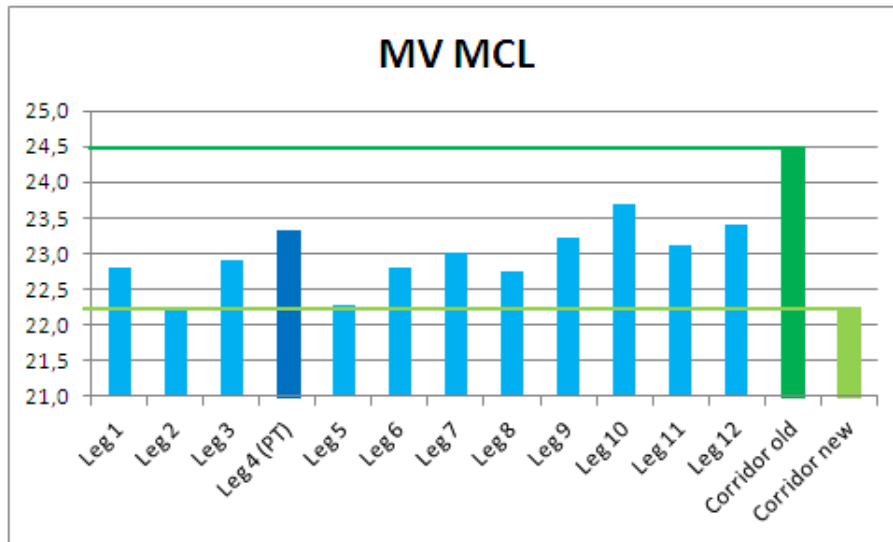
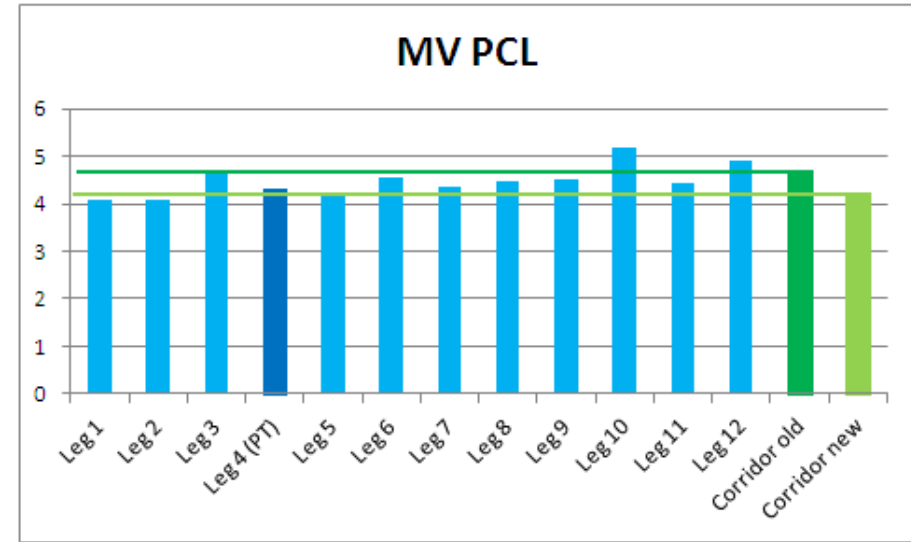
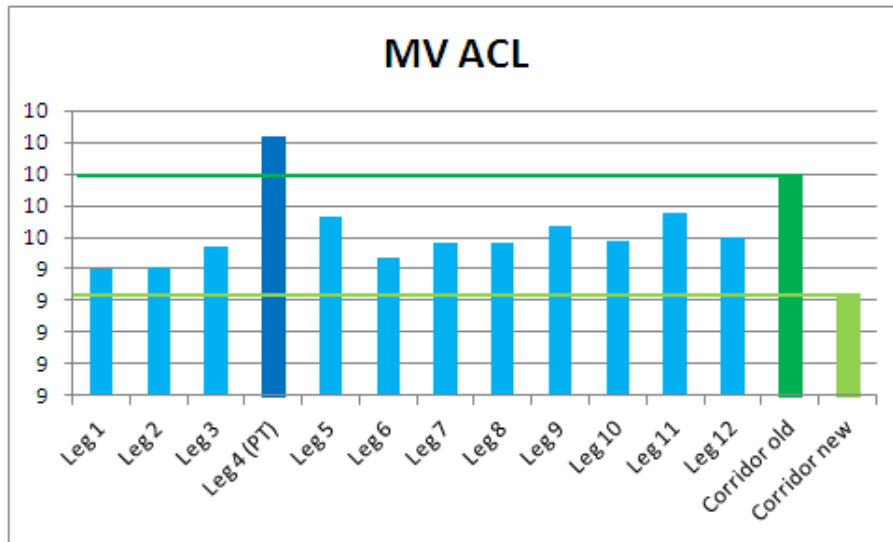
Results MCL - Pendulum Tests



Mean Values - Pendulum Tests



Mean Values - Pendulum Tests



Summary



- **Tibia 1: 5 * not met – 114 * met**
 - **Serial production legs: 5 * not met (defect in tibia 1 detected)**
- **Tibia 2: 1 * not met – 118 * met**
 - **Serial production legs: 1 * not met**
- **Tibia 3: all met**
- **Tibia 4: all met**
- **ACL: all met**
- **PCL: 9 * not met – 110 * met**
 - **Serial production legs: 9 * not met**
- **MCL: all met**

Summary:

- **105 tests passed pendulum requirements**
 - **102 w/ serial production legs**
 - **3 w / prototypes**
- **14 tests failed pendulum requirements (due to one or more segments not meeting the corresponding corridor)**
 - **14 w/ serial production legs**
 - **0 w/ prototypes**
- **Pass / fail ratio**
 - **88 % for all legforms**
 - **88 % for serial production legs**
 - **100 % for prototypes**