



International Spring School

10.-15. March 2025

Marius Schlaak, Mail: marius.schlaak@tum.de Grigorios Kalimeris, Mail: greg.kalimeris@tum.de

Lab 0: Software test

Purpose

In order to check whether your software environment is fully functional, please carry out the following task in MATLAB or GNU Octave.

Tasks

1. Use the function *readicgem.m* to import the static gravity field model *ITSG-Grace2018s* into your workspace. If the import is successful and no errors occur: Congratulations, you are ready to start working on the Labs!

Matlab functions:

function [scs, ncs, header, scst, ncst] = readicgem(filename)	
Reads potential coefficients in ICGEM-format from ASCII file	
Input	<ul style="list-style-type: none"> • filename: full path and file name [string]
Output	<ul style="list-style-type: none"> • scs: potential coefficients in cs-format; size [n,n] • ncs: formal errors of potential coefficients in cs-format (if available); size [n,n] • header: structure containing header information of the ICGEM file • scst: dot-coefficients in cs-format (if available); size [n,n] • ncst: formal errors of dot-coefficients in cs-format (if available); size [n,n]
Requires	<ul style="list-style-type: none"> • cs_format