International Spring School

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Lab 0: Software test

Purpose

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

Tasks

1. Use the function *readicgem.m* to import the static gravity field model *ITSG-Grace2018s*. The function is part of the *SpringSchoolLib12* file which can be imported if the file is in you working directory while the model can be found in the data sub-directory. Additionally, import the function-library for practicals 3 and 4 (*SpringSchoolLib34*) to test for the required libraries. If the import is successful and no errors occur: Congratulations, you are ready to start working on the Labs!

Python functions:

function [scs, ncs, header, scst, ncst] = readicgem(filename)	
Reads potential coefficients in ICGEM-format from ASCII file	
Input	• `filename`: full path and file name [string]
Output	• `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	• `cs_format`