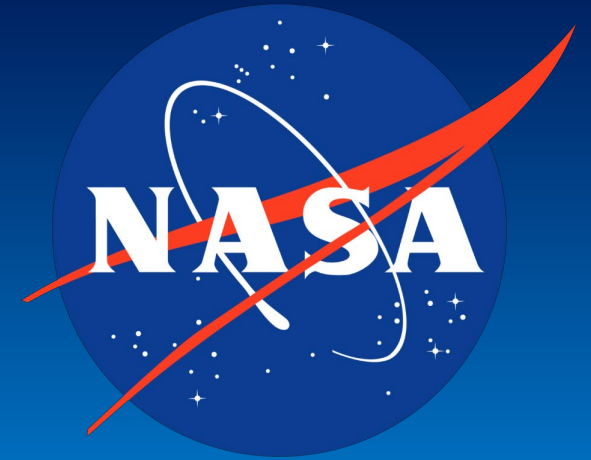# Dragonfly Entry Aerosciences Measurements (DrEAM) NASA Sensor Simulator to DLR Data Acquisition System Test

Purpose:
Confirm that the DLR Multiplexing Signal Conditioner (MSC) can properly acquire analog signals from the NASA thermocouples and pressure sensors embedded in the Dragonfly aeroshell.

Objectives:
1) Perform checkout test with the NASA sensor simulator to verify channelization and functionality for NASA sensor measurement ranges expected during flight.
2) Verify the DLR MSC engineering unit can acquire simulated output voltages for the following NASA sensors: Type K thermocouples, hypersonic range pressure transducers, RTDs within the pressure transducer assembly

Test Results:
1) Data from the test was plotted to compare measurements from the MSC engineering unit to an independent DAQ

Details of the testing and results are shown in the poster.