

PROJECT AIM	The main purpose of the program was to conduct tests on a heat exchange device under microgravity conditions. INFIBRA TECHNOLOGIES has been involved as technical partner working in the design and integration of the monitoring system. FBG interrogator and sensors were used to monitor the temperature variations at various points on both the evaporator (High Temp) and condenser (Low Temp) sections of the heat pipe.
CUSTOMER	ESA (European Space Agency) Call for Students
LOCATION	//
SENSORS	Smart FBG
INTERROGATOR	SmartScan SBI Lite
IMAGES	
RESULTS	The figure shows part of the data collected using FBG sensors and, in particular, by the high temperature FBG sensors at the evaporator. The data start from about 30 seconds before lift-off and show about 60 s of microgravity condition which starts after the despin. At the lift off signal the ceramic heaters start dissipating about 200 W starting de facto the experiment.