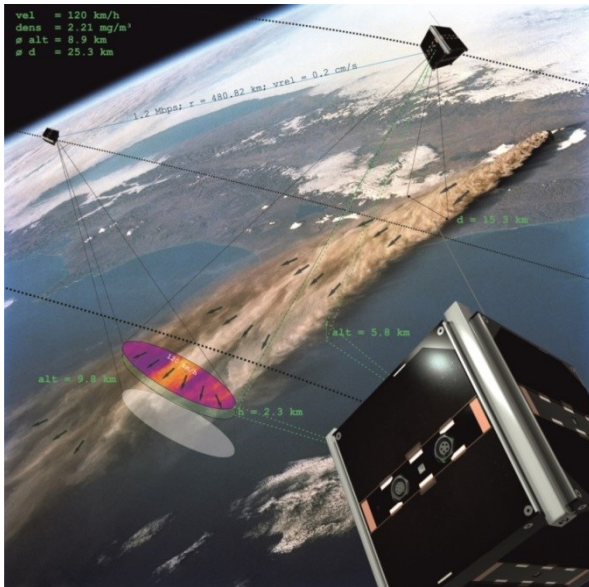


## Taylored, Very Small Satellite Systems



### Description:

Our team is specialized to realize for given payloads a complete satellite system at a minimum mass in order to provide maximum cost efficiency. Typically our satellites are at a mass range between 1 and 10 kg, depending on payload requirements, very often but not necessarily compliant with CubeSat standards.

Our team has extensive expertise from traditional missions for interplanetary exploration (Cassini/Huygens, Rosetta), Earth observation (ERS-1, Cluster) and telecommunications, but also pioneered CubeSat development in Germany by realizing with UWE-1 the first German pico-satellite. All parts had to be designed and implemented from scratch in Würzburg. This basis was continuously further developed by leading edge technology enabling today's sensor networks in orbit by cooperating pico-satellite formations.

Due to this tradition typical test equipments for small satellites and for innovative multi-satellite formations are in continuous use. The necessary infrastructure, like ground station equipment, antennas for UHF, VHF, S-Band, X-Band are in place.

### Unique Features:

- Taylored satellite system design for dedicated payloads at minimum mass
- Design of advanced single satellites and of multi-satellite formations
- Experience in pico-satellite realization since 2003
- Experience in traditional interplanetary, Earth observation and telecommunication missions since 1986
- Our team realized the first German pico-satellite completely from scratch
- Active involvement in international small satellite organizations to promote standards and technology progress

### Pico-Satellite Experience:

- 1 to 3 unit CubeSats for broad application fields
- Telecommunication experiments for "Internet in Space" since 2005
- Earth Observation by sensor networks (TOM, TIM)

