

BATAL campaign plan 2017

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- Gadanki : 6-14 July : 4 - 5 Medium flights (CFH/ozonesonde/COBALD/small OPC)
- Hyderabad : 17 July-6 August 6 Heavy flights of multiple payloads



Objectives:

Improve the physical characteristics of the ATAL

- OPC measurements with SOLAIR 1100 [0.1-1 μm]
- MCPC: Mixing Condensation Particle Counter : ultrafine aerosol (few nm)
- Light-weight OPC measurements with MetOne [0.3-10 μm]

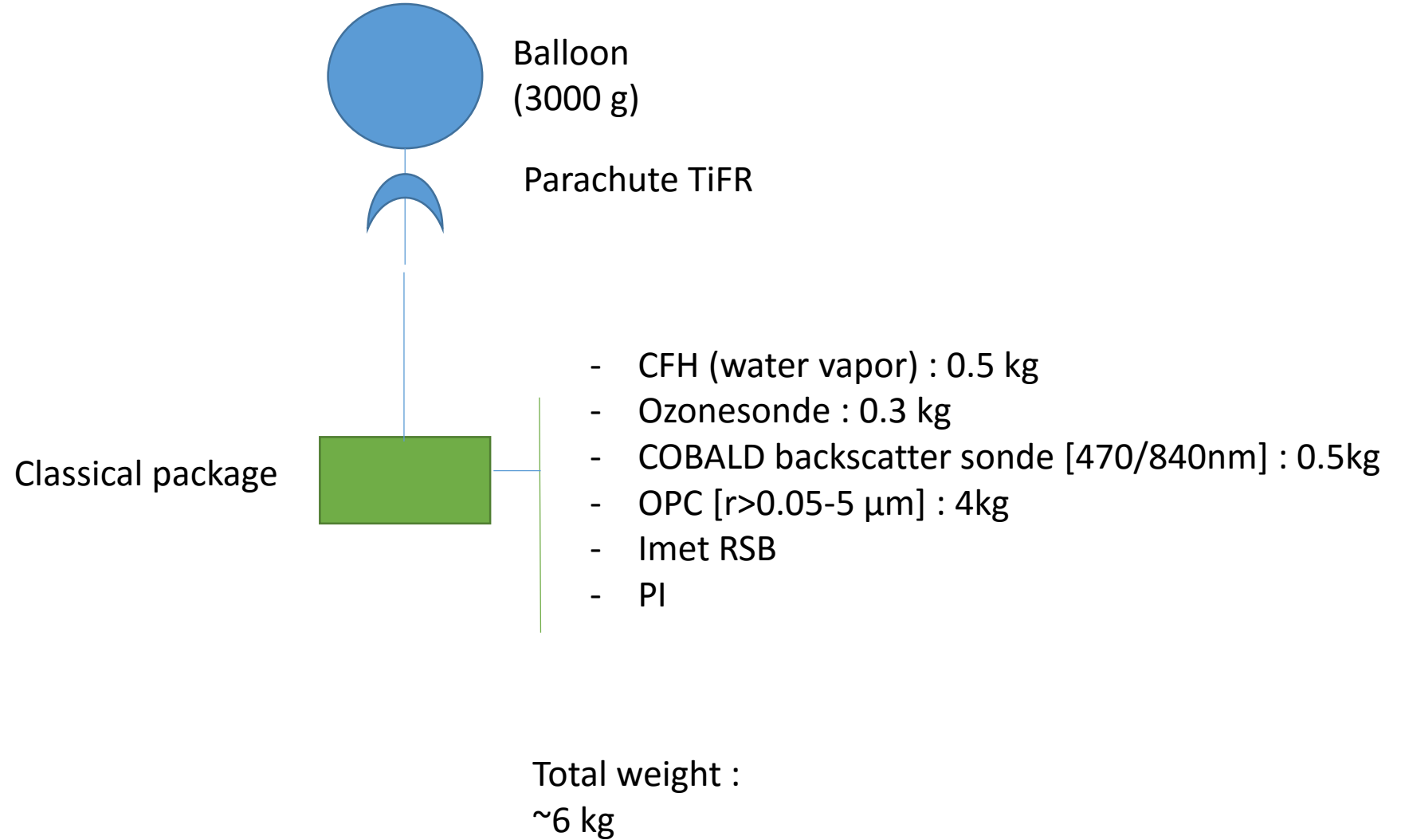
Chemical characterization of the ATAL

- Aerosol sampling through 4-stage MPS4G 7 slpm-flow inertial impactor sample collector; cut-points of $> 2 - 0.5 - 0.15 - 0.05$ micron
- **Zero pressure flights** 2 hours near the tropopause. Need to sample at least 500 l of air to reach detect limit threshold for Ion Chromatography

Study ATAL-cirrus clouds interaction

- Measure the size distribution of ice in cirrus clouds with SOLAIR Boulder 6-channel OPC [10 - 100 μm]
- Measure in cloud and background aerosol size distribution.

4- 5 Medium Flights : Gadanki



3 ZP and 3 HF flights: Hyderabad

Total weight :
~30 kg (Langley)

