

SOFOG3D Data and Science Meeting part II : Agenda

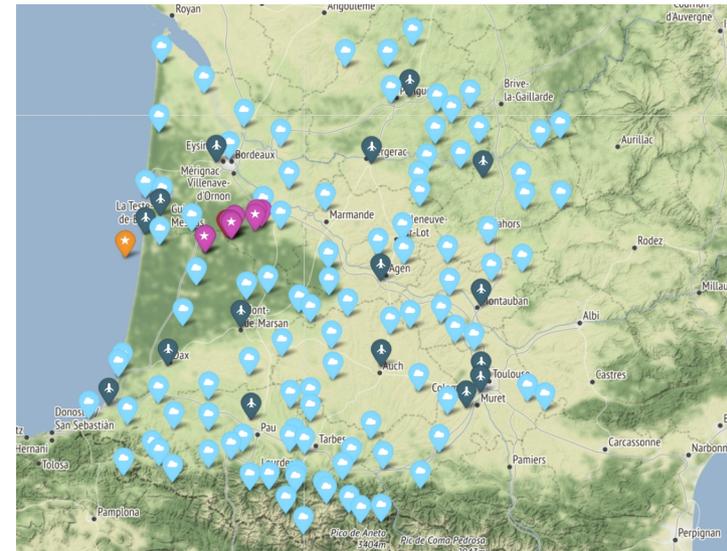
Main objectives : discuss the preliminary results and future plans

=> who is doing what and how to stimulate collaborations and avoid duplication of work

- AERIS database website – W. Maurel
- Availability of the data => round table of data providers
- Discussion on preliminary results presented at the last meeting
 - Intro and 2019-2020 campaign overview - F. Burnet
 - MWR network – assimilation Task5 - P. Martinet / A. Kremer
 - Radar measurements – Task2 – J. Delanoë / S. Jorquera / A. Bell
 - UKMO contribution – J. Price
 - Turbulence and flux measurements - G. Canut
 - Aerosol measurements and closure - S. Tinorua
 - UAV measurements - J. Viviand
 - 3D LES and heterogeneities – Task 3 – C. Lac / Q. Rodier
 - Advanced process studies – Task 4 – M. Haeffelin / C. Lac
 - St to fog transition – Task 4.2 – M. Fathalli
 - Evaluation of AROME model – S. Antoine
- Future plans for data and science analysis, collaborations and publication intentions.
=> round table of Task leaders and all interested people

Task 1.2 Field campaign

- Data processing (main contact people)
 - Met. + visibility network (W. Maurel, G. Canut, B. Gaillard)
 - ▶ list <https://nextcloud.meteo.fr/s/9qpBf6mso9dtmiN>
 - AROME met network + ceilometers (B. Gaillard)
 - microphysics network (F. Burnet, T. Bourriane)
 - aerosols : JACHERE site (T. Bourriane, C. Denjean)
 - tethered balloon :
 - ▶ thermodynamics + turbulence (W. Maurel, G. Canut)
 - ▶ Cloud droplets and aerosol CDP + OPC + CCN (F. Burnet, T. Bourriane, C. Denjean)
 - UAV (J. Viviand, G. Cayez)
 - RS (A. Roy)
- Remote sensing :
 - MWR network (P. Martinet, V. Unger)
 - Radar (J. Delanoë, S. Jorquera)
 - Lidar : LB100, wind V2 (A. Dabas), MPL aerosol (DSO (?))
- UKMO site : (J. Price)



Task 1.3 In situ analysis

PhD T. Costablos (April 2021-24) :

=> 3D characterization of fog microphysics and impacts on their life cycle

- Data analysis : in situ microphysics (+ radar, MWR, thermod,...)
=> 3D evolution of the droplet size distributions during the fog life cycle
 - ▶ CDP balloon validation & analysis to explore vertical & temporal DSD evolution
 - ▶ In situ microphysics network and UAV to explore horizontal heterogeneity

- 2 or 3 IOP LES with Meso-NH model in collab. Task 3
=> investigate heterogeneities of microphysics and process studies :
 - ▶ Transition between thin and thick fog => contrib. to Task 4.1
 - ▶ Entrainment at fog top => impact on the layer development, link with turbulence
 - ▶ Impact of surface heterogeneities on the microphysics

Temptative list of papers

- Do we need a special issue in ACP ?
- Presentation of the campaign + main highlights : F. Burnet et al
=> submission end of 2021 (?)
- MWR retrieval inter-comparison : P. Martinet + Univ. Cologne
- ???