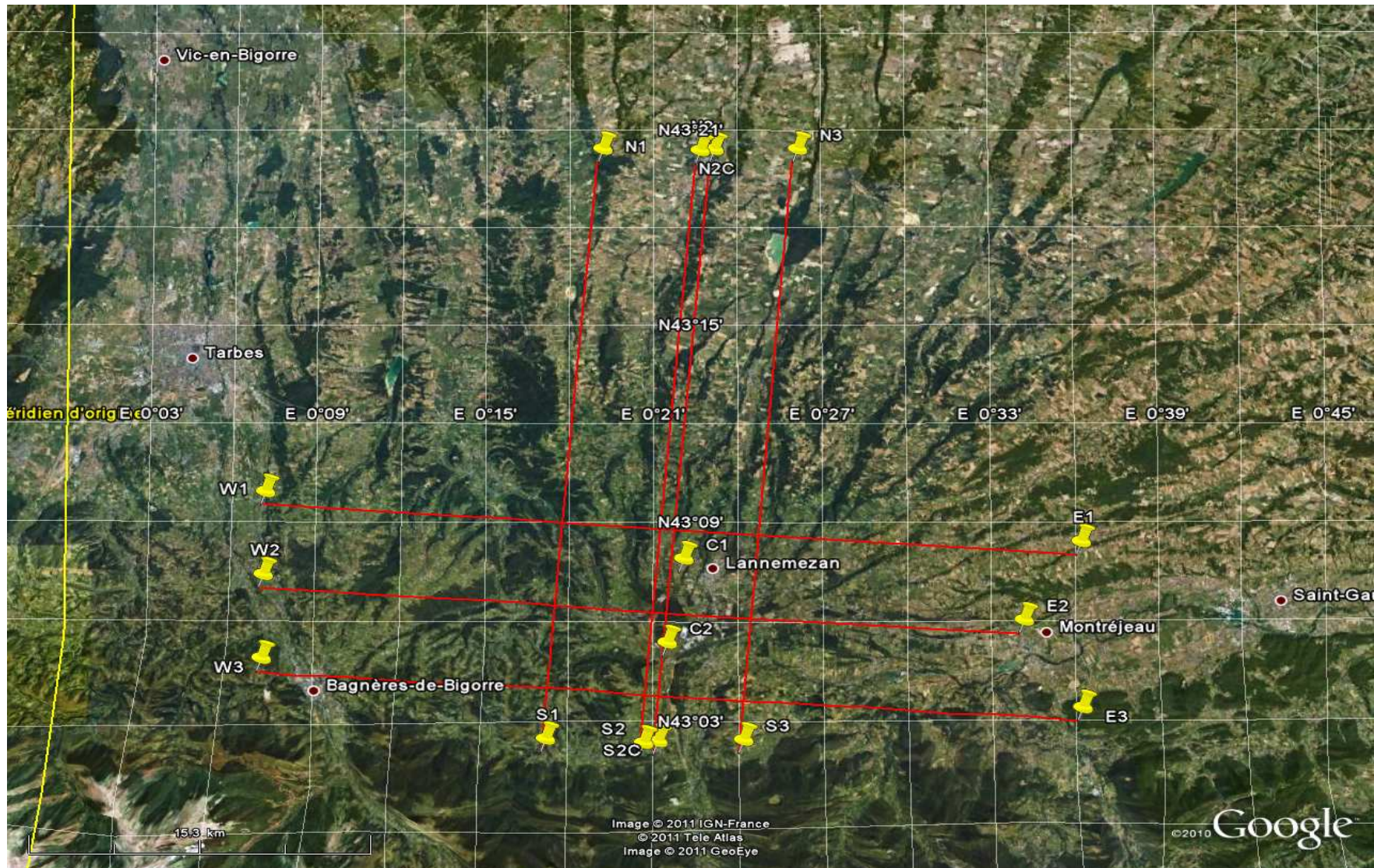


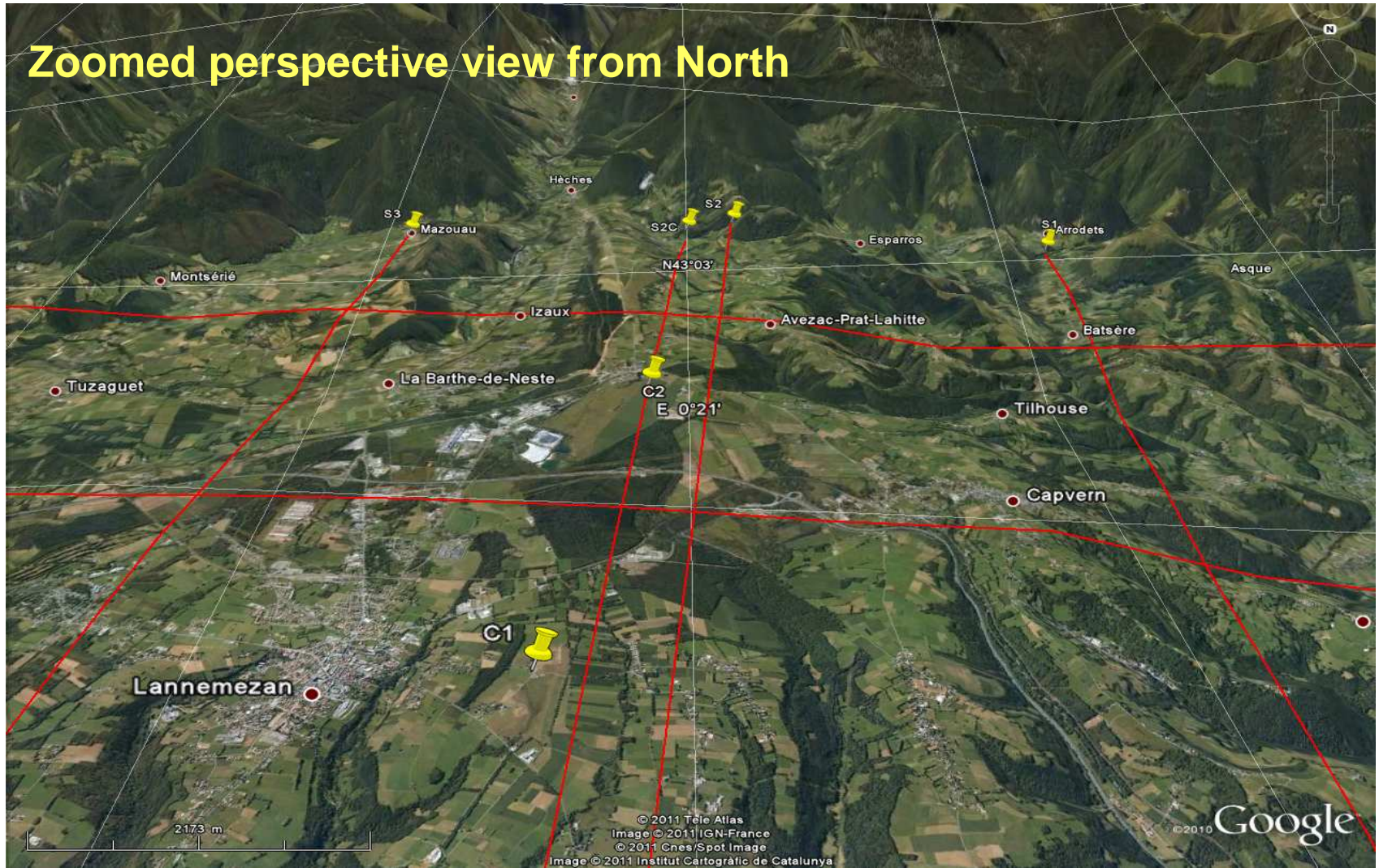
Piper Aztec in BLLAST

22 flights, from June 15 (IOP 1) to July 5 (IOP 11)



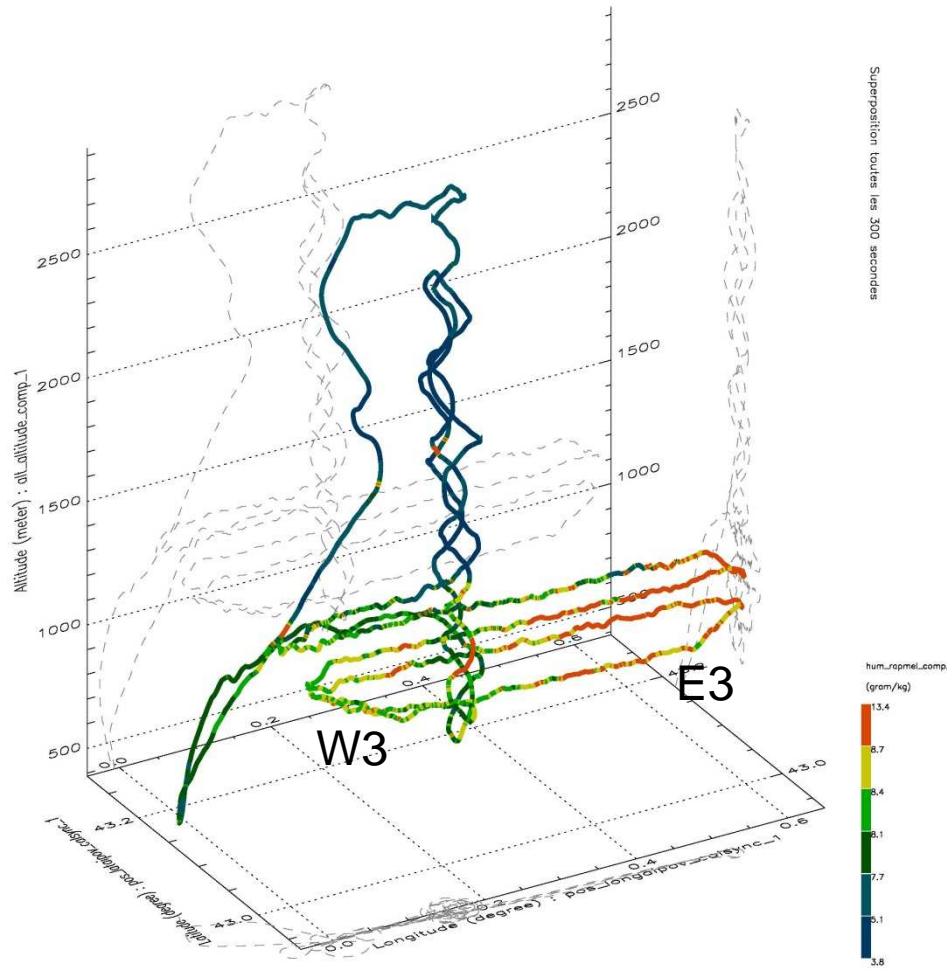


Zoomed perspective view from North



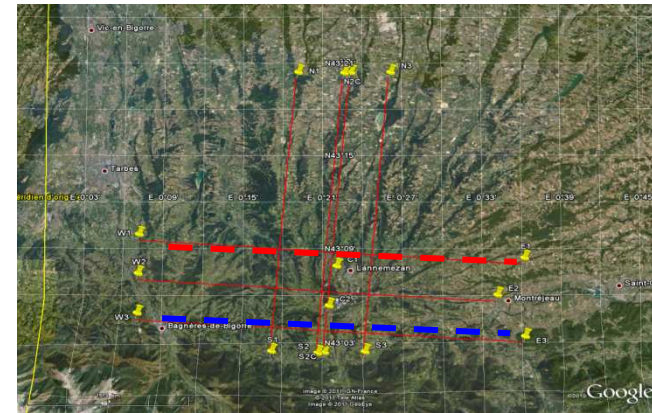
Flight strategy: example of IOP 5 (June 25)

Campagne BLLAST
 Vol AZTEC az110013 du 25/06/2011
 de 13h35m29 a 15h27m45 UTC



Superposition toutes les 300 secondes

Stacked level runs on **W3-E3**,
 concurrently with the **Sky Arrow on W1-E1**
 1330 – 1530 UTC
 and
 1700 – 1900 UTC



Flight strategy: example of IOP 6 (June 26)

Campagne BLLAST
 Vol AZTEC az110016 du 26/06/2011
 de 17h26m09 a 19h19m58 UTC

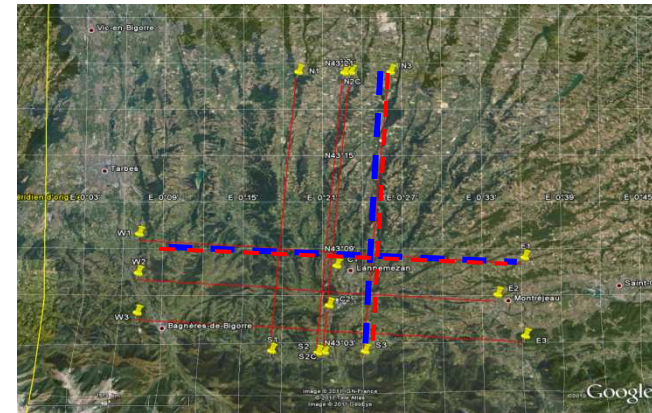
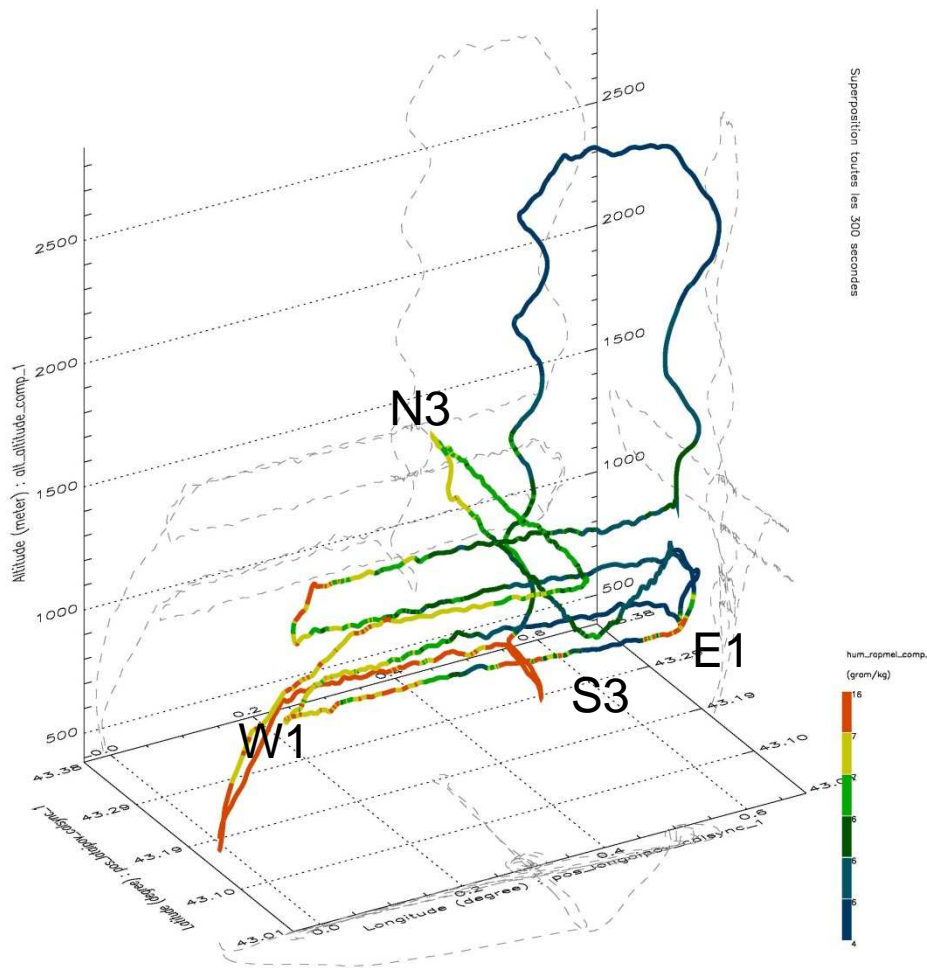
Identical and alternate flights **PA – SA – PA**

Stacked level runs on two perpendicular plans
 (W1E1 and S3N3)

1330 – 1530 UTC

and

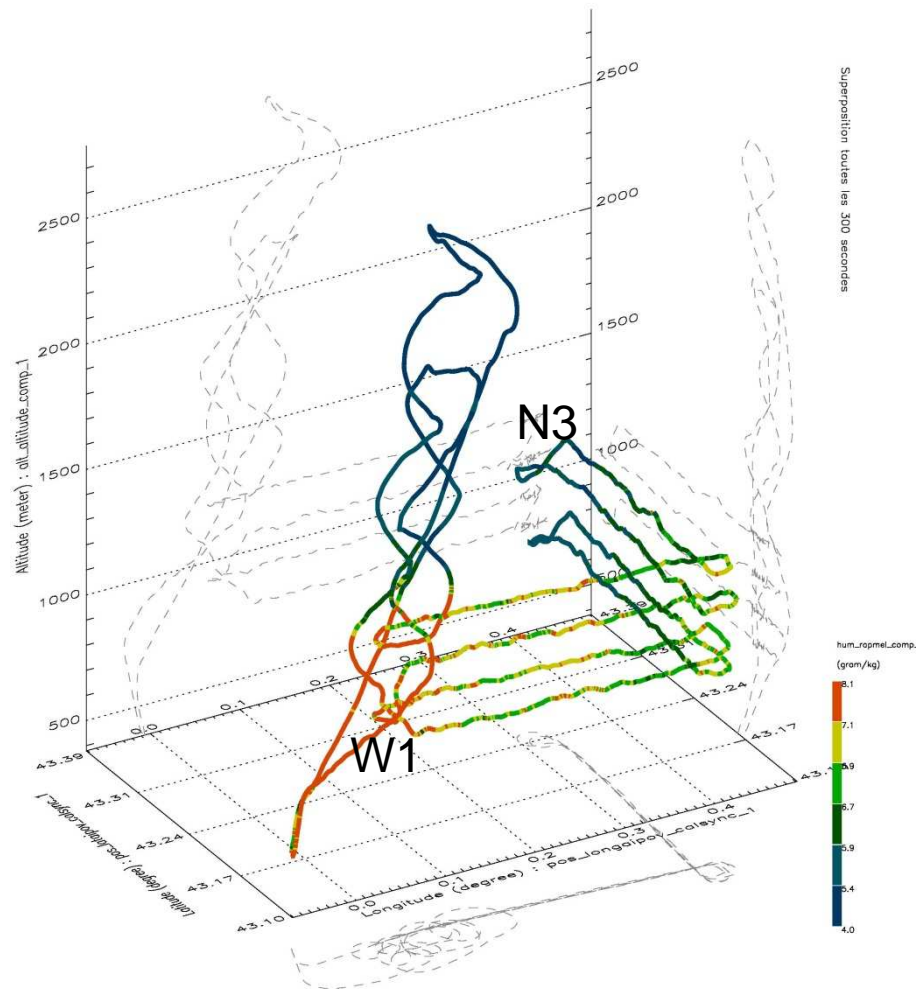
1700 – 1900 UTC



Flight strategy: example of IOP 10 (July 2)



Campagne BLLAST
Vol AZTEC az110023 du 02/07/2011
de 12h37m29 a 14h23m47 UTC



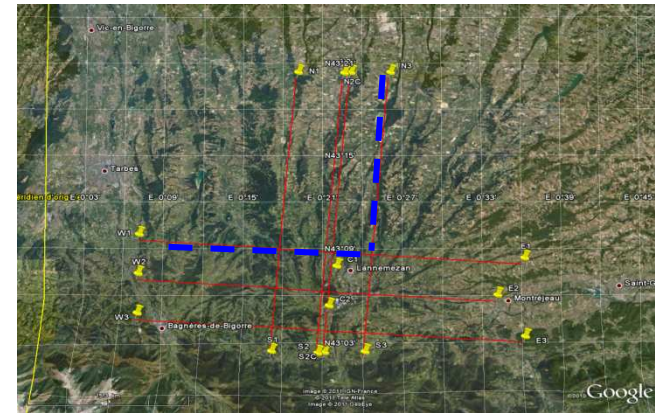
Two identical PA flights

Stacked L-shaped level runs

1230 – 1430 UTC

and

1530 – 1710 UTC



Flight strategy: example of IOP 11 (July 5)

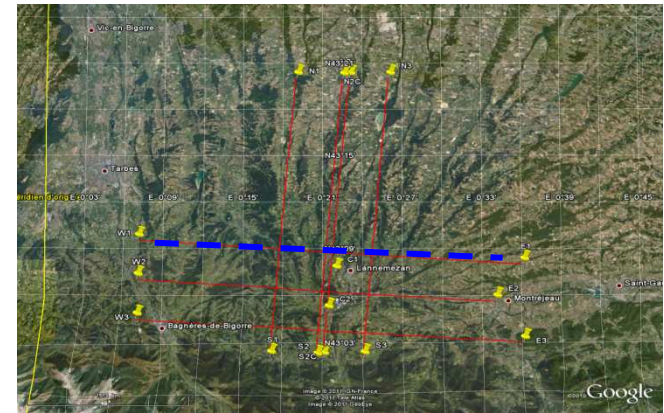
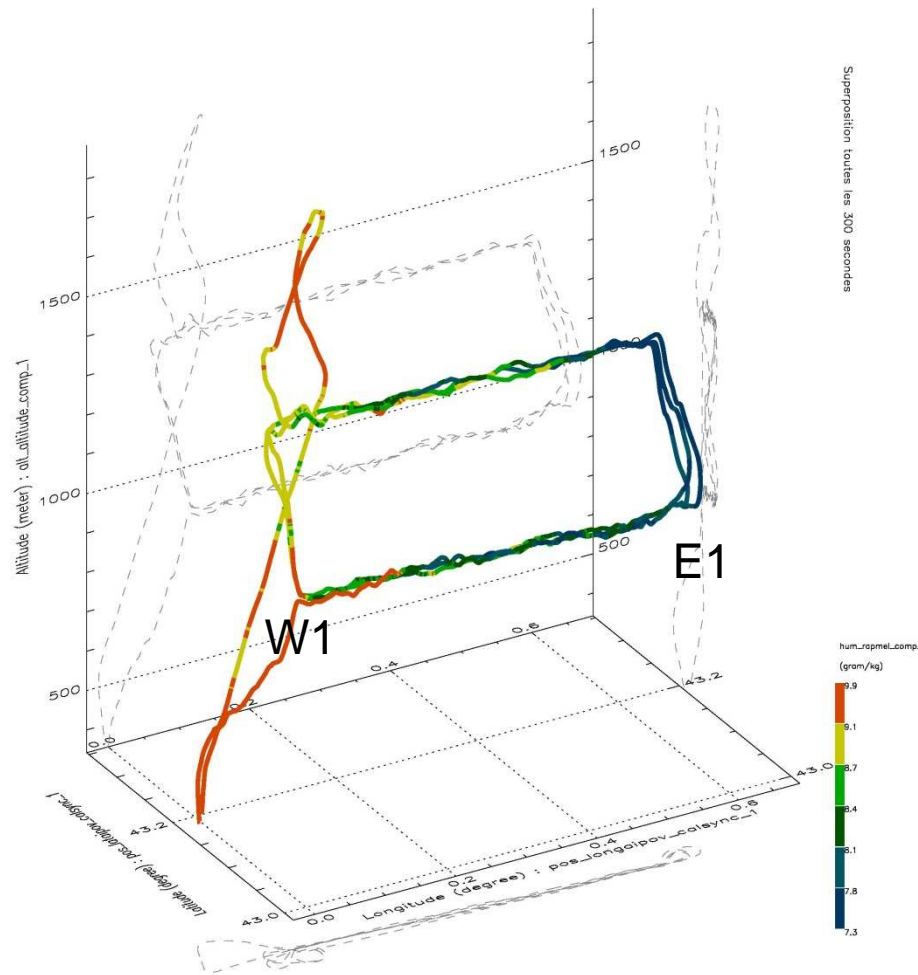


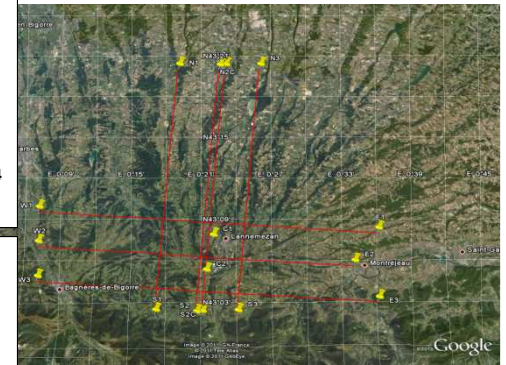
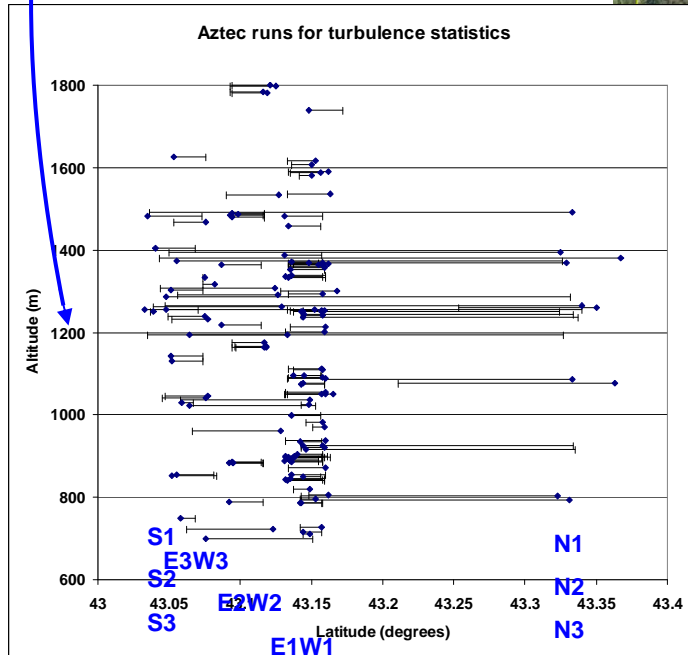
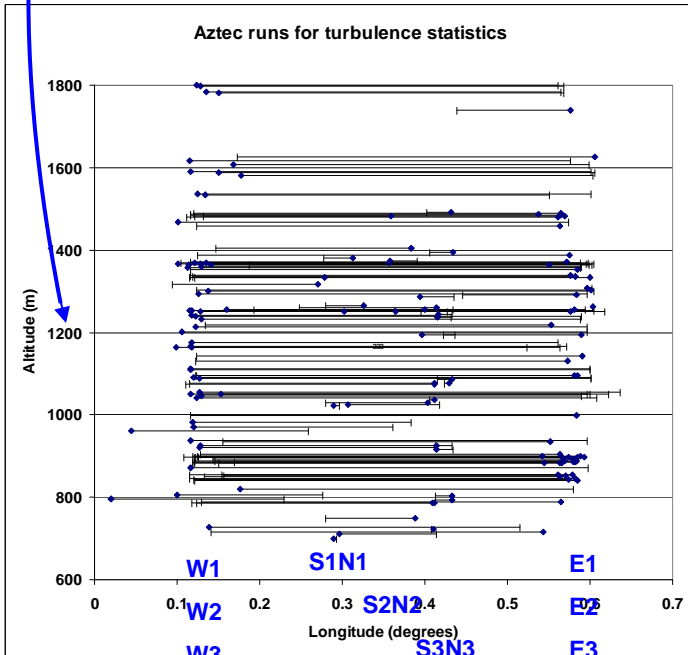
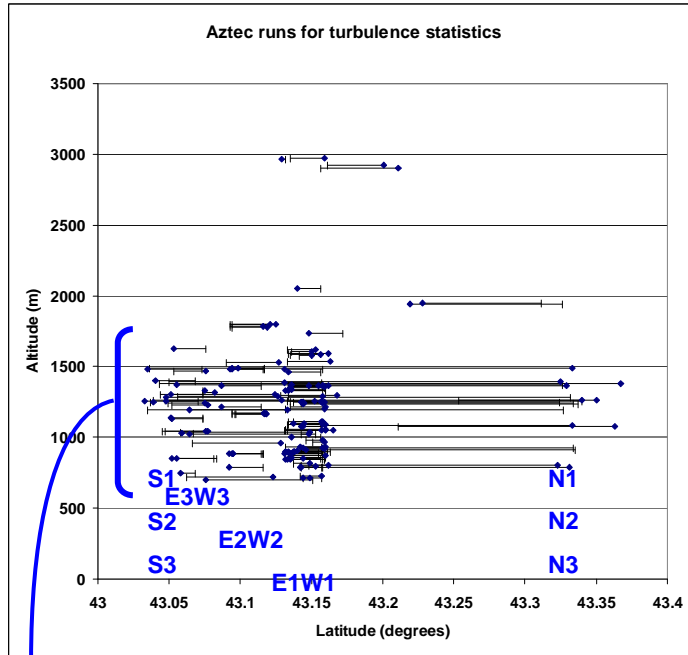
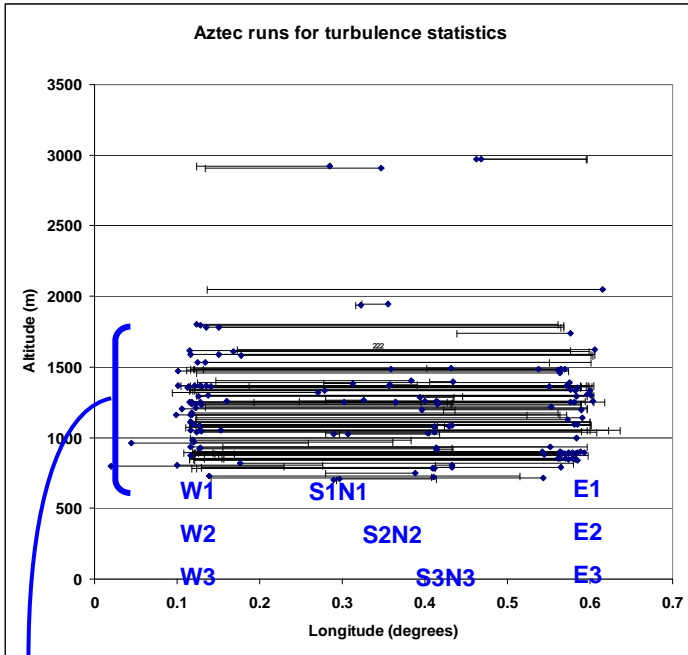
Campagne BLLAST
 Vol AZTEC az110027 du 05/07/2011
 de 18h06m13 a 19h33m52 UTC

Three identical PA flights

Repeat two stacked level runs on W1-E1

1200 – 1930 UTC





Geographical description with horizontal runs

Piper-Aztec data set

1) Time series at 1 s (produced by Bruno PIGUET)

See on the data website « Description of the "Aztec_core_1" files containing measurement of SAFIRE's Piper-Aztec during BLLAST. », by Météo-France CNRM/GMEI/TRAMM November 2011

11 parameters [time, lat., lon., alt., Pres., Temp., r, DD, FF \(+north, east components\)](#)

2) Time series at 25 s⁻¹ (to be produced by Bruno PIGUET)

More complete data set, allowing turbulence statistics

3) Turbulence statistics on straight and level runs (ex.: W1-E1, etc.) (P. Durand)

Available on the data base :

variances of along-, cross- and vertical wind components.

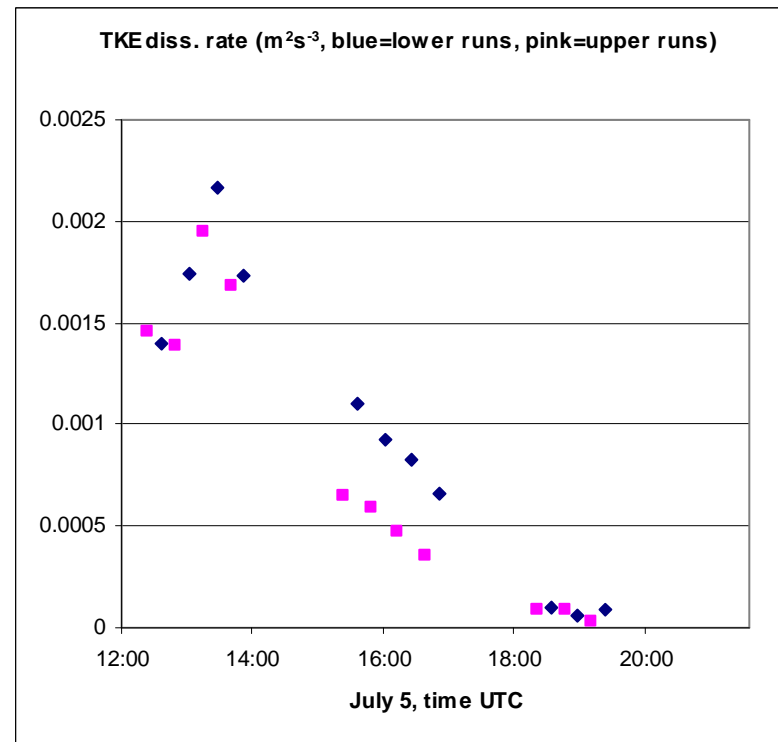
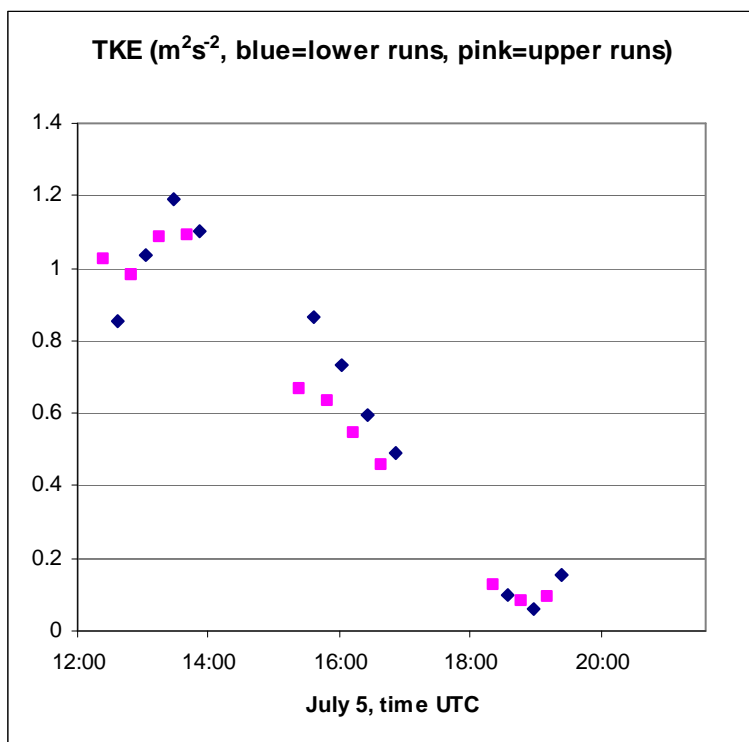
vertical wind spectrum peak scale

+ mean parameters on the run

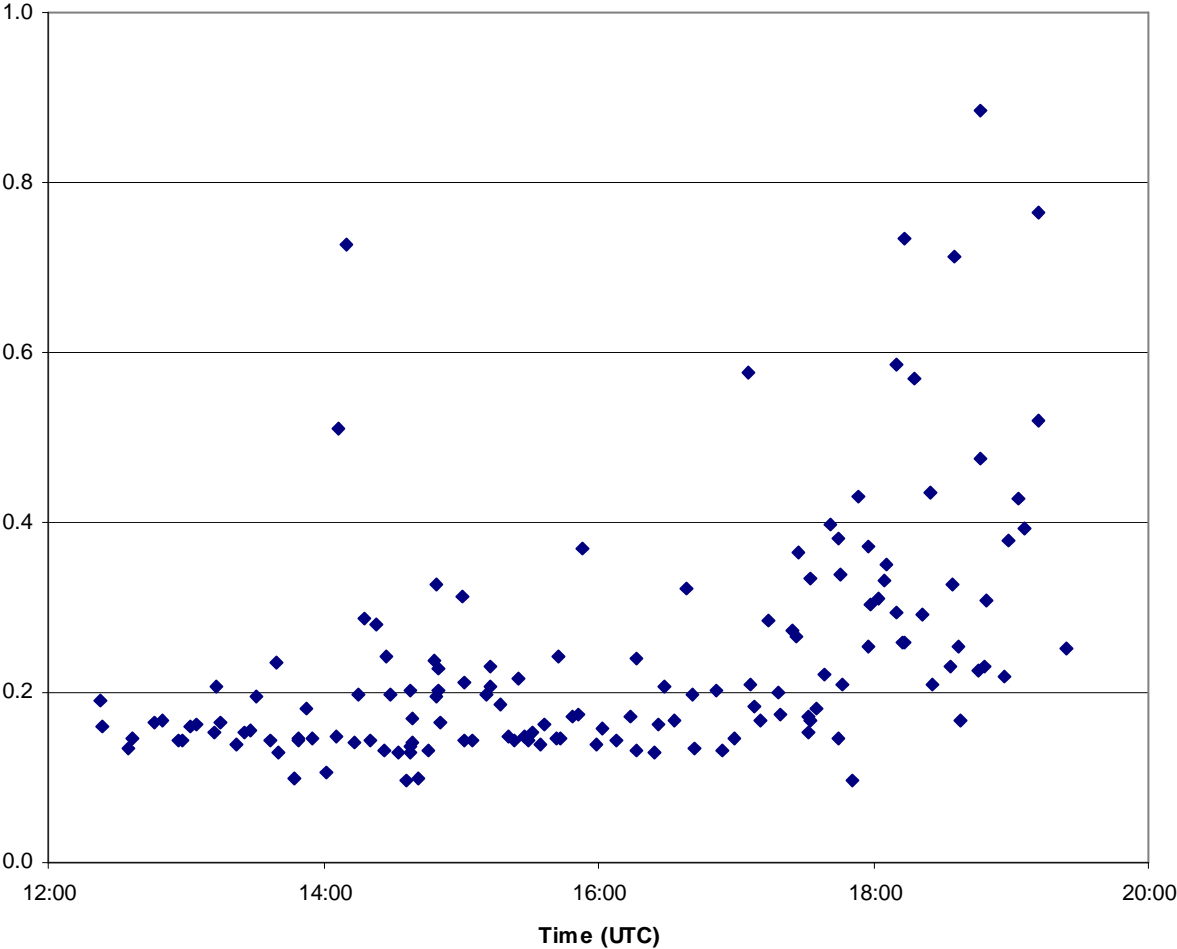
A more complete data set has been computed including:

co-variances, variance dissipation rates, integral scales; however, given the « non-qualified » status of Piper-Aztec for turbulence, these data cannot be used without care. If interested, contact us !

Example of IOP 11 (July 5)



BLLAST - Int. Scale / peak scale - W



Piper Aztec – all flights

Perspective view from North

