We thank the reviewer for his/her relevant comments, which should help us to improve the manuscript.
Below is a copy of the comments (in italic below), with included answers to each point.
References are made to the revised manuscript, that will be made available to the reviewer.

Reply to comments made by Reviewer 2

1. It is not very clear why the location near the Pyrenees was selected for the experiment? It is probably due to practical and logistical reasons. The problem with this location is that it consists of complex terrain with height variability and heterogeneous vegetation cover. No doubt it will induce a complex meso-scale flow with its own diurnal cycle which will be difficult to disentangle from the evening transition. Meso-scale and LES models will help but also in these models it will be a challenge to prescribe a boundary condition, that is realistic and does justice to the variability in momentum, heat and moisture fluxes. The current manuscript is glossing over this issue, but it would be good to dedicate more discussion to this point, because I feel that a strategy is needed to handle the effects of meso-scale variability.

In synoptically forced regimes, with significant wind, the topography naturally produces a strong complex forcing to the PBL processes.
In weak-wind synoptic conditions, which were the conditions of most of the BLLAST cases, the diurnal cycle that is imposed by the presence of nearby mountain generates very calm conditions during the late afternoon and evening, that are actually quite favourable to the AT study. Of course the diurnal cycle of the low level wind and the associated wind reversal needs to be considered with the transition processes.
Jiménez and Cuxart (2014a, 214b) have studied the wind reversal and influence of the Aure valley south of the Plateau: downslope winds are generated in the Aure valley and the air accumulated in the bottom of the valley generates down-valley winds. The later reach Lannemezan a few hours later, around 2100 UTC in the simulations. The large-scale advection during the evening are found smaller than during the central part of the day/night when upslope/downslope winds are present.
The large-scale subsidence might also show a diurnal cycle, according to previous studies (Whiteman, 1990) and to the first analyses of BLLAST dataset.
Several studies have started to address those issues and take account of the large scale forcing that is partly due to the influence of the mountains nearby (Blay-Carreras et al., 2014a, Pietersen et al., 2014, Darbieu et al. 2014).

We have added more discussion relative to this aspect (section 4.1.1 and 4.1.3).

2. Fig. 5 is nice, but perhaps not all that informative and therefore not necessary.

Figure 5 has been removed from the manuscript.

3. Fig. 7 is an important figure because it documents the meso-scale variability in surface fluxes. Unfortunately, the figure is too small and the individual lines are impossible to distinguish. Also the legend is difficult to read. I also suggest to have the same stations for all panels (except perhaps e), i.e. have solar radiation and wind also for the other stations.

Figure 7 (now Figs. 6 & 7) has been extended in width, and the space kept for the time of non-IOP days has been reduced to just a line separating the days, with thicker line when non-IOP days are skipped.

We have added other stations for the wind speed and wind direction, even if it is quite similar over the various surfaces.

Superimposing the measurements of the downward solar irradiance did not make much sense to us. One can see from just one station whether a given day was clear or had some cumulus clouds.

4. In Fig. 9, the thick black lines can be distinguished form the other lines, but the thick and thin grey lines look too similar.

Figure 9 has been put in colour for more clarity.

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