

We thank the reviewer for spending time and work in examining our manuscript. In the following we reply to the individual comments (in blue color).

This manuscript reports the current status of the RMR lidar at ALOMAR station. Many technical details of the subsystems (laser source, telescope and beam guiding et al.) of the lidar are introduced in this paper. This paper is well written, and will be a good reference for the experts in this field. The ability of remote operation is quite notable for the reason that to automatically operate such a lidar is quite difficult. The 30-years operation and technical upgrading makes RMR lidar a rare or even the only system in the world that can provide aerosols, temperature, and horizontal winds simultaneously day and night in the middle atmosphere. This paper is in the scope of AMT. Before final publication, some minor revision and clarification of technical details should be provided:

Line 20: typo error: “LIght”

Our intention was to indicate in capitals the origin of the acronym LIDAR. However, we have changed this as it might be confusing.

Figure 2: There is a beam monitor (BMON) module, is this for the beam direction stabilizing? If it is, the laser beam direction stabilization loop (as mentioned in line 107) should be described in detail.

Yes, this belongs to the beam direction stabilization. For the diode pumped power lasers this active stabilization is no longer necessary and the system is operated only in monitoring mode. We extended the text accordingly.

Line 165: the remaining beam fluctuations in the order of 6 to 20 urad. If the author could discuss this in more details and shown some raw camera and aligning methods (or give a reference), that would be helpful for the readers who intend to build similar systems.

We added some text and a reference which describes the initial technical realization of the stabilization system. An additional figure shows camera raw images as well as some details for finding the laser beam target position (new figure 3).

Table 1: The author only gives the beam parameters after expansion. It's better to show the parameters before expansion. The original beam parameters (divergence and pointing stability) of the Innolas Spitlight DPSS EVO-IV may be given by the factory technical report. However, did the author test them in the lidar lab? To my knowledge, the status of the laser may be changing during long term observations.

We exchanged the beam parameters with the ones before expansion (diameter measured, divergence taken from laser specs). Changing beam parameters, as experienced in the past, were mainly caused by aging of the flash lamps and are no longer a significant problem with the diode pumped lasers.