

## IV Workshop ADONI



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# PSF forecast - A preliminary feasibility study

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In recent years Manua Kea, LBT, and now also ESO, have been implementing an atmospheric turbulence forecast scheme. With advance knowledge of turbulence conditions becoming more and more available, and the availability of highly specialized simulation software such as PASSATA or the more recent TIPTOP, it has become conceivable to think about predicting the PSF figures of merit (namely SR and FWHM) for specific AO instruments and scientific targets. Such forecast is part of ALTA-2 project for LBT and potentially it can be of great help in planning AO observations to match the best atmospheric conditions and maximize the scientific throughput of a top-class telescope. In this contribution we present a preliminary evaluation of the current confidence limits of such an approach, comparing the results of PASSATA simulations to real time measurements of SR and FWHM obtained from SOUL (FLAO LBT upgrade) and SAXO (on SPHERE at Paranal). A comparison is also performed with respect to TIPTOP simulations.

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