









## 5. Conclusions

The study revealed that the effect of the planned reclamation areas on the average wind velocities in the present Macau city districts is rather small. Only in very few open places and wide roads  $v_r$  was significantly decreased. However, in some areas the wind velocities even increase due to channelling and overflowing effects. Most parts of the city won't be affected by the creation of the planned reclamation areas. Analysis of the output data showed that there are linear correlations between  $v_r$  and SCF, and  $v_r$  and FAD, respectively. For city planners these correlations can be used as an orientation for the expected average ventilation within city districts. The conducted virtual measurements demonstrated that LES could be an important tool for future urban studies, because it not only gives the average wind velocities and directions but also information about variances and peak values. The ongoing study is currently extended for the effects of thermal stratification, in order to better capture the real meteorological conditions in Macau.

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