Supporting information for: Investigation of the mixing layer height derived from ceilometer measurements in the Kathmandu Valley and implications for local air quality

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Table S1. Overview on the WRF-Chem setup and namelist settings.

WRF-Chem model setup	Description
Domain	
Domain D01	Resolution: 15x15 km^2
	Latitude: 15.5 $^\circ$ - 43.5 $^\circ$,Longitude: 67.6 $^\circ$ - 107.4 $^\circ$
	Number of grid cells: west-east 221, north-south 201
Domain D02	Resolution: 3x3 km^2
	Latitude: 25.4 $^\circ$ - 29.6 $^\circ$, Longitude: 82.6 $^\circ$ - 87.9 $^\circ$
	Number of grid cells: west-east 171, north-south 151
	No feedback between domains
Vertical levels	Number of levels: 31 Eta-Level
	Level top: 10hPa
Chemistry	
Chemistry option	RADM2/SORGAM with aqueous reactions included (option 41) (Ackermann et al., 1998; Schell et al., 2001)
Biogenic emission	MEGAN biogenic emissions online based upon the weather, land use data (Guenther et al., 2006)
Biomass burning	Biomass burning emissions and plume rise calculation
Dry deposition	Dry deposition of gas and aerosol species
Dust	GOCART dust emissions with AFWA modifications (Ginoux et al., 2001)
Input data	
Boundary cond. meteorology	ERA-Interim (Dee et al., 2011)
Anthropogenic emissions	EDGAR HTAP (Janssens-Maenhout et al., 2015)
Boundary conditions chemistry	MOZART (Global CTM)
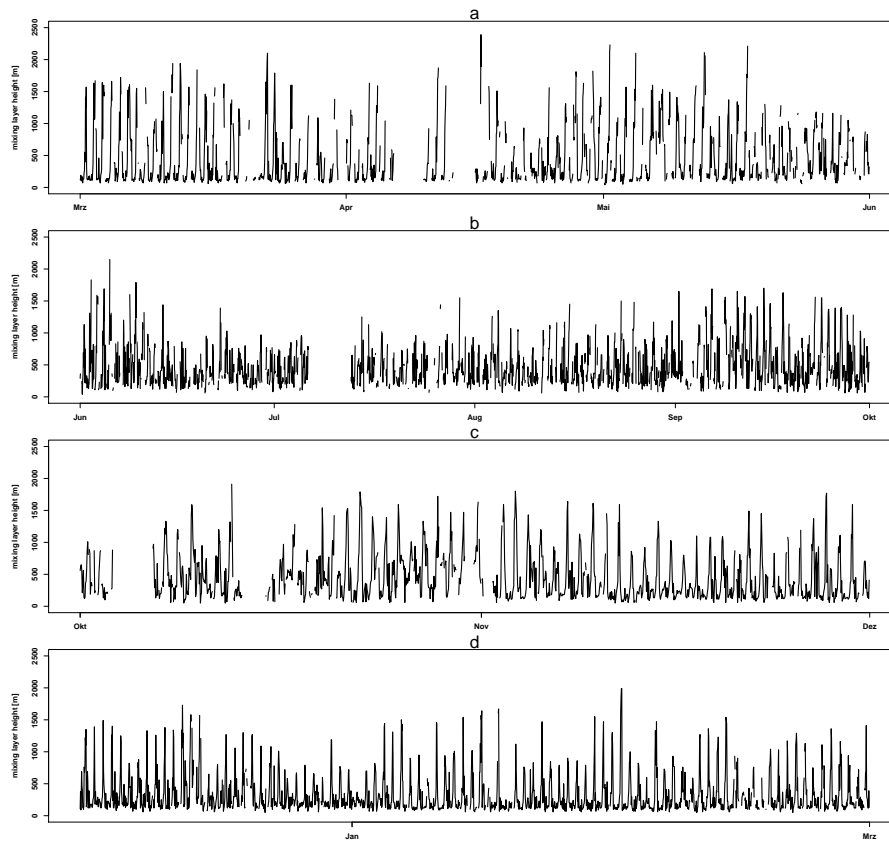
Figure S1. Hourly mixing layer height derived from the ceilometer measurements for the time period March to May 2013 (a), June to September 2013 (b), Ocotber to November 2013 (c) and December 2013 to 2014 (d).

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