

Letter to the Editor

Manuscript Number: acp-2014-473

Manuscript Title: Fast transport from Southeast Asia boundary layer sources to Northern Europe: Rapid uplift in typhoons and eastward eddy shedding of the Asian monsoon anticyclone

Dear Peter Haynes,

many thanks for your response. Sorry, I mixed up the different versions of Figure 5. The revised version of Figure 5 indicating the position of the cross-section is included in the revised manuscript (revised Fig. 5 see below).

I apologise for difficulties to identify the revisions. The response of the form of an itemised list was included in the author comments to the referee comments. Therefore I thought it is redundant to do the same in the 'response to the editor'. I assumed that a document indicating all changes could be helpful for the review process. I am really sorry that my response caused additional work.

Best wishes

Bärbel Vogel

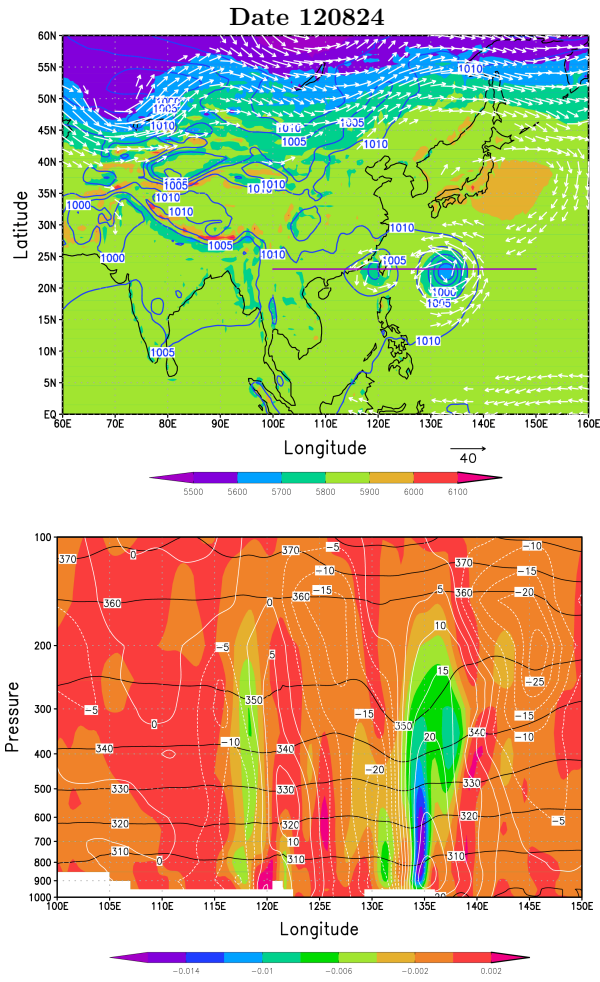


Fig 5: Geopotential height in [m] (colour) and horizontal winds in [ms^{-1}] (white arrows) at 500 hPa on 24 August 2012 taken from ERA-Interim reanalysis data (top). To show the position of the typhoons Tembin ($\approx 23^\circ \text{N } 118^\circ \text{E}$) and Bolaven ($\approx 23^\circ \text{N } 135^\circ \text{E}$) the mean sea level pressure in [hPa] is shown as blue thick lines. The thick purple line indicates the position of the longitude-height cross-section shown in Fig. 5 (bottom).

Longitude-height cross-section showing the typhoon Tembin and Bolaven at 23°N (bottom). The vertical velocity (ω) in [hPa s^{-1}] (colour), the horizontal winds in [ms^{-1}] (white line (positive values) and white dashed line (negative values)), and potential temperature in Kelvin (black lines) are shown. Very rapid uplift up to $-0.014 \text{ hPa s}^{-1}$ is found at the eastern flank of typhoon Bolaven ($\approx 135^\circ \text{E}$) and up to $-0.006 \text{ hPa s}^{-1}$ is found at western flank of typhoon Tembin ($\approx 118^\circ \text{E}$).