

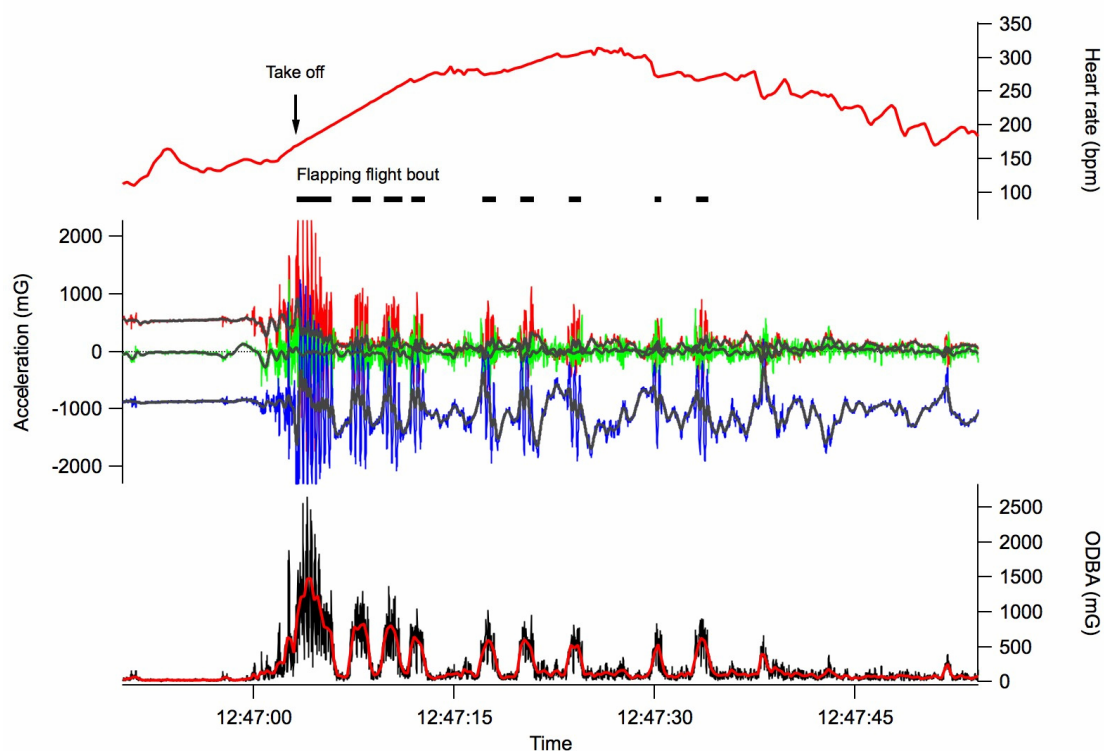
## Supporting Information

### Figure S1.

[http://www.vyssotski.ch/Publications/PLoSOne2014\\_Figure\\_S1.kmz](http://www.vyssotski.ch/Publications/PLoSOne2014_Figure_S1.kmz)

**Sample flight path.** 3-D position during one flight of the Himalayan vulture (same as in Fig 1) with superimposed information on heart rate (gradient of colour from red (HR>300 bpm), orange, purple, to blue (HR<100 bpm)) and behaviour (small triangles = soaring; small dots = gliding; large dots = flapping). The KML file is viewable with Google Earth software (<http://www.google.com/intl/en/earth/index.html>). A click on each dot displays time, altitude, HR, ODBA and behaviour.

### Figure S2.



**Acceleration, ODBA and Heart rate.** Example of the first minute of one flight of Eurasian griffon vulture, showing the concordance between Heart rate (red line on top, in bpm), 3-D acceleration data (heave in blue, surge in red, sway in green, in mG, middle graph), and derived ODBA (in mG, black in 100 Hz and red line in 1 Hz, bottom graph). Each single wingbeat is determined by a peak on the heave and surge accelerations and the corresponding flapping bouts are shown as black rectangles above acceleration data.