**SDC 10, Figure 6**. Early effects of abrupt increase in respiratory rate (from 70 to 130 bpm) on respiratory system dynamic compliance (Cdyn,RS).



Three representative tracings from 3 different rats. Respiratory system dynamic compliance (Cdyn,RS) during the abrupt increase in RR from 70 to 130 bpm. Just after the increase in RR, the Cdyn,RS is seen to decrease. This likely represents narrowing of the inspiratory time, which may promote ventilation of fast alveolar units.