GCM profiles at  $\phi_{\text{mean}}$ , latitude=+45° 40  $10^{-4}$ 20 Longitude (degrees east of substellar point) 0 10<sup>-3</sup> **-**20  $10^{-2}$ -40  $10^{-1}$ -60 -80 10<sup>0</sup> -100  $10^{1}$ -120 100  $10^{-4}$ Mean  $\frac{dT}{dP}$  [mbar K $^{-1}$ ] inside line forming region Line-forming region 50 10<sup>-3</sup> 10<sup>-2</sup> 0  $10^{-1}$ -50 10<sup>0</sup> -100  $10^{1}$ **₽** 1000 2000 3000 Temperature [K]