Description of Video

Video 1—A volume-rendered surface display of air-filled structures and face in Subject 3, a 3-y-old boy with obstructive sleep apnea syndrome and Down syndrome (see also Figure 1 in the main manuscript). The video shows the dynamics of the entire airway during one respiratory cycle with dilation of the airway during expiration and near complete collapse during inspiration; the hypopharyngeal and retroglossal airways collapse and nasopharyngeal airway regions remain relatively stable (Figure 2B in the main manuscript). The soft palate is outlined by air in the oral cavity, but the oral cavity is cut off from the airway flow through the mouth. The facial surface is in the image to show the location of the nose and mouth.