



Fig. A3 Calculation the volume of terrain above the lowest elevation of an area unit ( $V_u$ ) and its largest vertically projected area ( $S_v$ ) utilizing 3-dimensional box counting.  $d$  is the edge length of the side of the area unit;  $V_u$  represents the cumulative volumes of the constituent cubes; and  $S_v$  indicates the total area of the shaded regions.  $P_d$  is calculated by the ratio of  $V_u$  to the product of  $S_v$  and  $d$ .