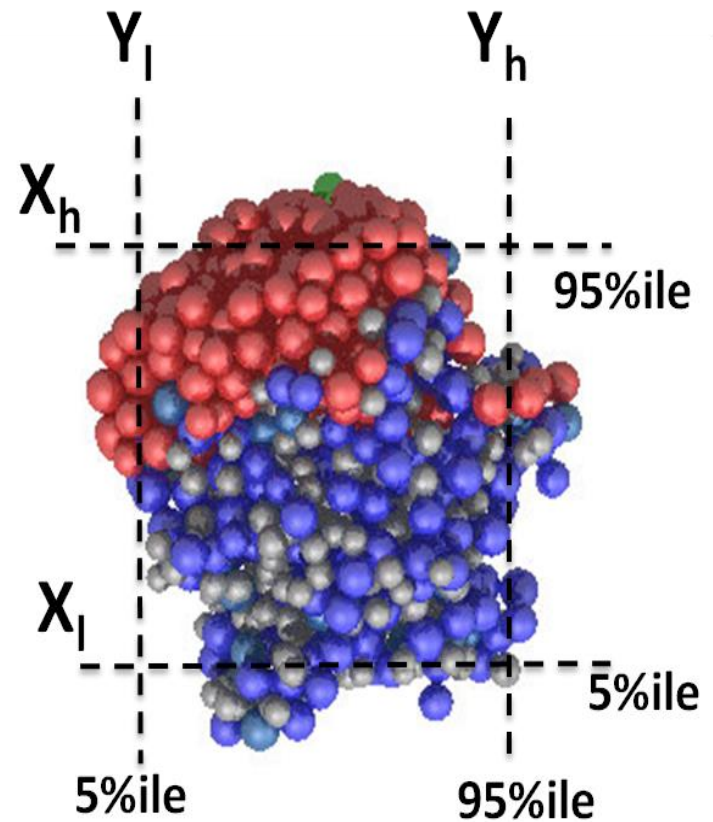


$z_{av}$  as a function of time is calculated as weighted mass mean of the particles present at time  $t$ .

$$Z_j^{av} = \frac{\sum_{i=1}^N m_{ij} z_{ij}}{\sum_{i=1}^N m_{ij}}$$


$X_l$  = mean of the 5%ile particle coordinates  
 $X_h$  = mean of the 95%ile particle coordinates

$$X_{span} = X_h - X_l$$

$$Span = (X_{span} + Y_{span})0.5$$