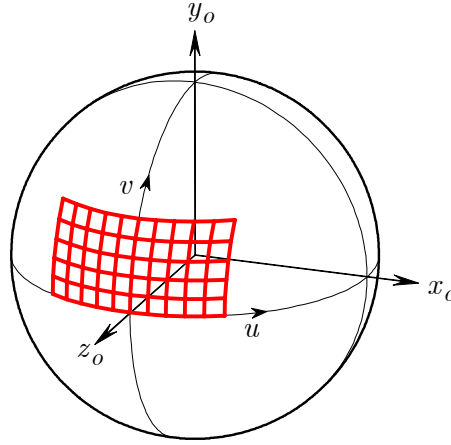


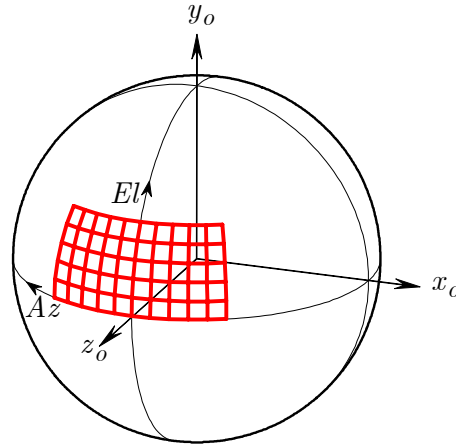
$$Y_1 = NINT(Y_o / \Delta Y) \cdot \Delta Y$$

The function  $NINT(x)$  gives the nearest integer to  $x$ . It is seen that a beam direction different from (0,0) has the effect that the field grid is translated by an integer number of grid spacings so that the new grid is centred as close as possible around  $(X_o, Y_o)$ .

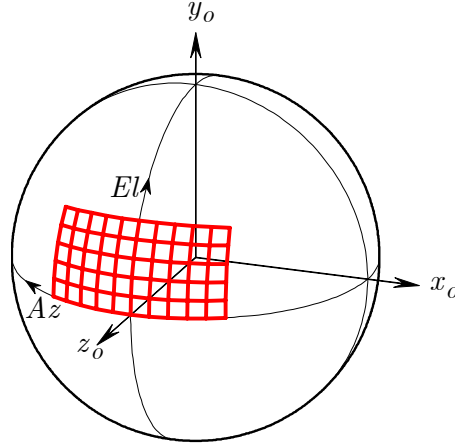
The  $X$  and  $Y$  variables of the grid are related to the direction to the field points according to the selected value of the attribute *grid\_type*. The different possibilities are illustrated in the following figures.  $x_o y_o z_o$  is the output coordinate system as defined by *coord\_sys*.



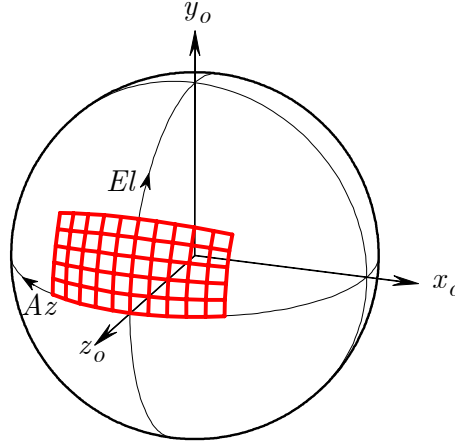
'*grid\_type*: uv'. The grid is drawn for  $-0.5 \leq u \leq 0.5$  and  $0 \leq v \leq 0.5$  with a spacing of 0.1 in both  $u$  and  $v$ .



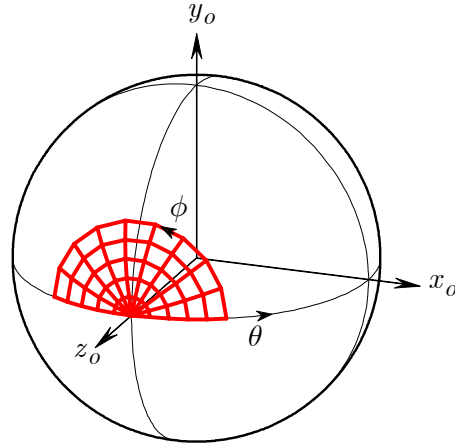
'*grid\_type*: elevation\_over\_azimuth'. The grid is drawn for  $-30^\circ \leq Az \leq 30^\circ$  and  $0^\circ \leq El \leq 30^\circ$  with a spacing of  $6^\circ$  in both  $Az$  (azimuth) and  $El$  (elevation).



'*grid\_type*: elevation\_and\_azimuth'. The grid is drawn for  $-30^\circ \leq Az \leq 30^\circ$  and  $0^\circ \leq El \leq 30^\circ$  with a spacing of  $6^\circ$  in both  $Az$  (azimuth) and  $El$  (elevation).



'*grid\_type*: azimuth\_over\_elevation'. The grid is drawn for  $-30^\circ \leq Az \leq 30^\circ$  and  $0^\circ \leq El \leq 30^\circ$  with a spacing of  $6^\circ$  in both  $Az$  (azimuth) and  $El$  (elevation).



'*grid\_type*: theta\_phi'. The grid is drawn for  $0^\circ \leq \theta \leq 30^\circ$  and  $0^\circ \leq \phi \leq 180^\circ$  with a spacing of  $6^\circ$  in  $\theta$  and  $20^\circ$  in  $\phi$ .