Axes and Overlays

<u>Axes and Overlays</u>: Orthogonal and crystallographic axes can be displayed in the visualiser, to inform users of their current view directions. Text overlays are also available to display information about the current state of the visualiser.

Various display options are available for information overlays within the visualiser which can all be accessed in the "View" menu. By default, the text overlay is turned off, while the axes are turned on and set to orthogonal mode. Users can switch between orthogonal axes and crystallographic axes (defined by the non-primitive unit cell of their loaded .vis file), by selecting either "Display Axes xyz" or "Display Axes abc", respectively. Selecting the currently enabled option will toggle the axes on or off. The colours of the axes denote the x / a axis (red), the y / b axis (green) and the z / c axis (blue). The axes arrow lengths can also be scaled relative to the size of the unit cell parameters by selecting the "Scale Axes to Unit Cell" option (Figure 13).

For the text overlays, the default information shown is the number of frames and the title of the data file loaded. Users can toggle the display of the overlay on or off by selecting the "Display Overlay" option in the "View" menu. Extra information can be displayed (including the



Figure 13: An AFI crystal rendered in the visualiser with scaled crystallographic axes (red rectangle) and a text overlay (green rectangle). Additional information shown by the full overlay is shown in the blue rectangles. The rectangles are only for illustrative purposes and are not shown in the visualiser.

current camera position and depth buffer positions) by selecting the "Display Full Overlay" option. Users can also change the colour of the overlay text or add a white background to make the text stand out when falling over the displayed structure by selecting the "Change Overlay Colour" and "Add Overlay Background" options, respectively (Figure 13).