What are padding sectors and how does Eclipse handle them?

For DVD images, the DDP specifications require that DLT tape images be writing using a fixed blocking factor of 16 sectors. A partial final block (less than 16 sectors) i snot allowed. Therefore, in order to make the tape an even multiple of 16 sectors in length, up to 15 blank padding sectors are added (as necessary) to the final block to satisfy this requirement.

The confusion this creates is that there are now two lengths associated with the image:

1) Image_Length: the length of the original disc image before padding sectors were added.

2) Tape_Length: the length of the tape including the padding sectors.

When handling a DLT image, the Eclipse software has always preserved the padding sectors . The Eclipse software will include those padded sectors when it displays the lengths in the ETOC. In other words, the ETOC shows the Tape_Length. If you calculate the Lead-out start based on the DVD information (Info | DVD -- End Sector of Main Data + 1), you will often find that the length in the ETOC will be between 1 and 15 sectors longer than the Lead-out start you calculated.

When mastered on an ImageEncoder, the padding sectors are removed and the the lead-out location will reflect the Image_Length (as contained in the Control data/DDP information). Unlike the original padded DDP image, the ETOC for a replica will not include any padded sectors.

Assuming we are dealing with a DVD-5, if the ISO information is correct, then the length of the user data will always match the Volume Space Size. Again, this reflects the Image_Length and does not include as padding sectors.