NAME

bip - convert to/from band-interleaved by pixel from/to band-interleaved by line

SYNOPSIS

bip < inseq > outseq

DESCRIPTION

Depending on whether the header parameter 'bil' or 'bip' (byte) is set to 1 *bip* performs a band-interleaving by line of the input band-interleaved by pixel sequence or a band-interleaving by pixel of the input band-interleaved by line. If 'bip' was set the header parameter 'bil' is set to 1. If 'bil' was set the header parameter 'bil' is set to 1.

When making linear transformations of image sequences, e.g. principal components analysis, it is necessary to access pixels from all bands at the same time twice. First when computing relevant covariance matrices, second when making the actual transformation. To do this in a memory efficient way, the pixel values may be band-interleaved by line. This means rearranging the pixel values, so that row 0 of frame 0 is followed by row 0 of frame 1, and so forth.

SEE ALSO

bil(1), maf(1), roprc(1), jefmat(1), lintrans(1), unmix(1), spam(1), project(1)

AUTHOR

Allan Aasbjerg Nielsen, M.Sc., Ph.D. IMM, Department of Mathematical Modelling Technical University of Denmark e-mail aa@imm.dtu.dk, internet http://www.imm.dtu.dk/~aa