

“DIMITRIS SKIING” SEQUENCE - RESULTS FOR MULTIPLE FRAMES

In order to further qualitatively study the performance of Algorithm 3, we estimated the motion field for a sequence of 30 frames (frames 252 to 282). Experimental results are given in Figure 1, Figure 2 and Figure 3. In Figure 1, one can observe the periodicity of the estimated motion field. Similar conclusions can be drawn from Figure 2 and Figure 3. Such a periodicity of the motion field is in accordance with reality, since the “skiers” moves periodically forward-left and then backward-right.

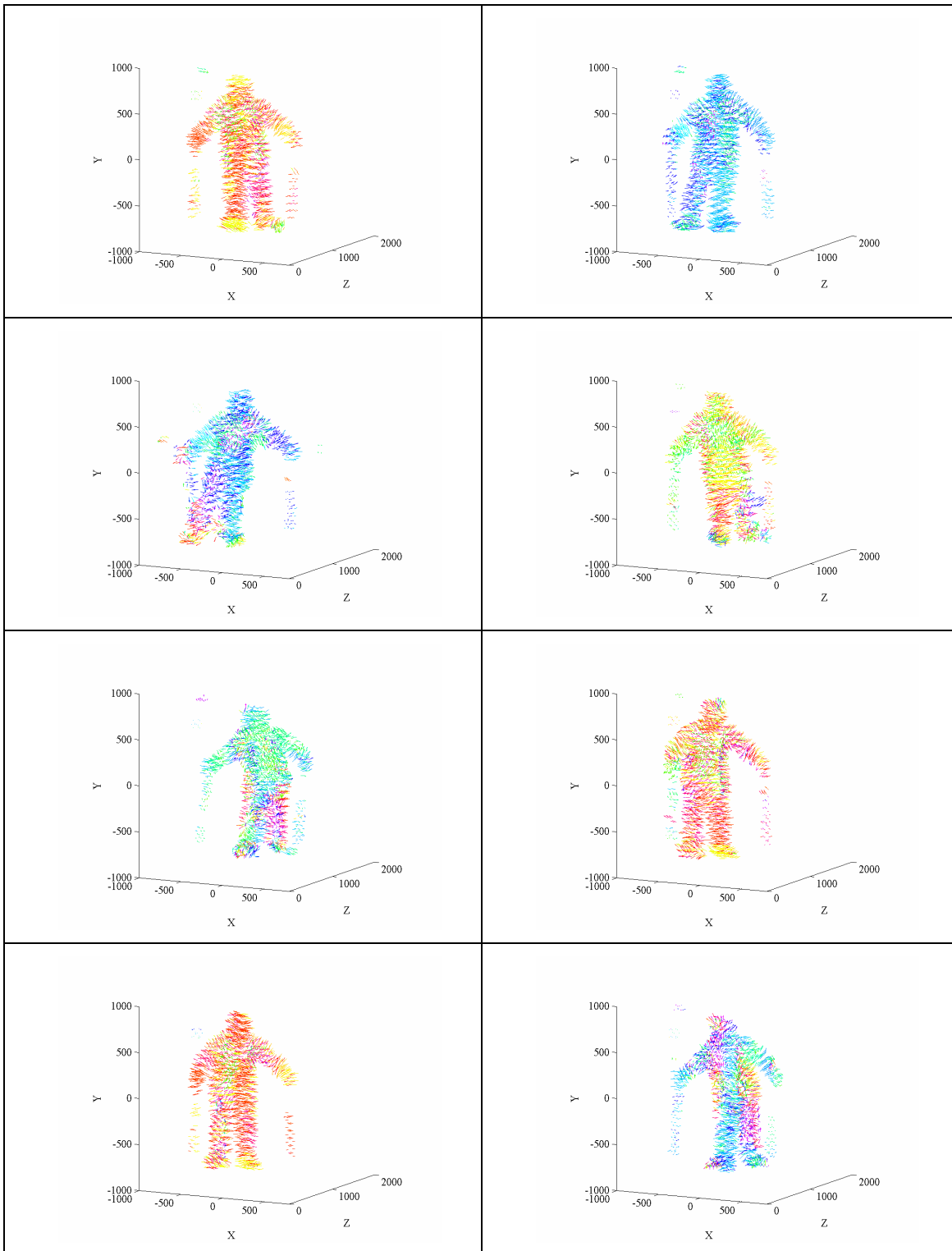


Figure 1. “Dimitris SKIING” – The estimated 3D motion field for frames 252, 256, 260, 264 (first column) and 268, 272, 276, 280 (second column). Observe the periodicity, from hot to cold colours.

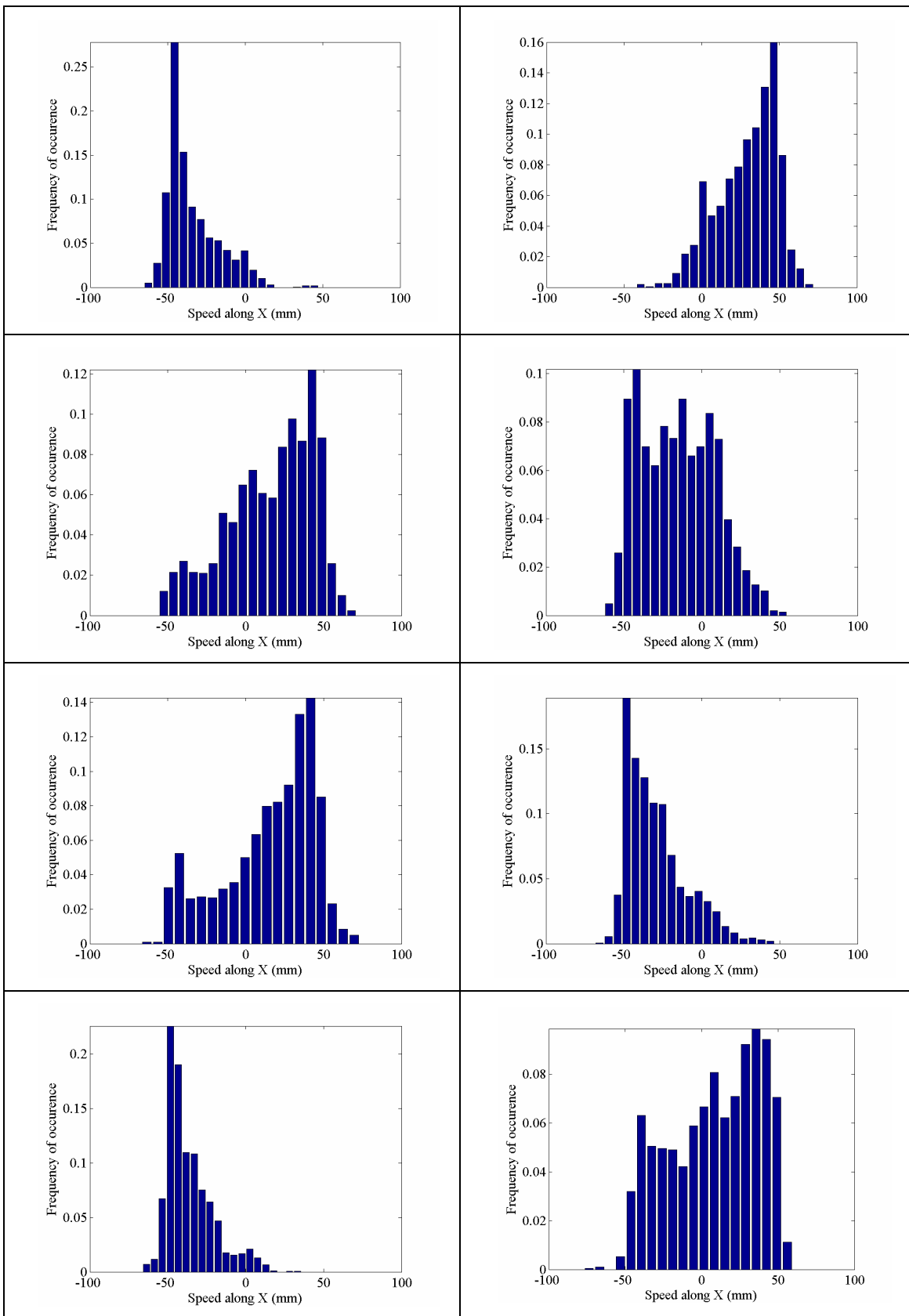


Figure 2. “Dimitris SKIING” – The histogram of the speeds along X, for frames 252, 256, 260, 264 (first column) and 268, 272, 276, 280 (second column). Observe the periodicity from negative to positive values.

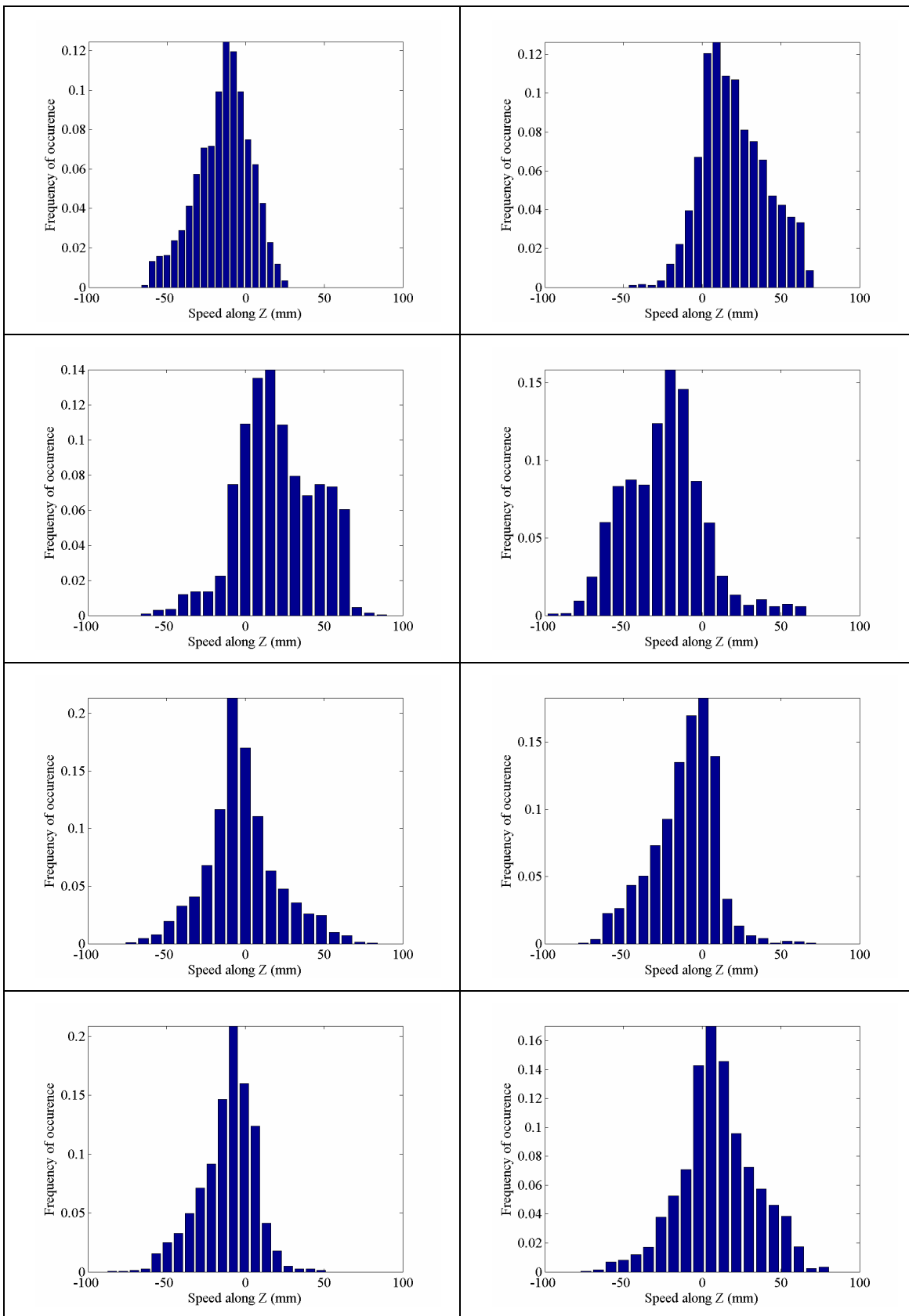


Figure 3. “Dimitris SKIING” – The histogram of the speeds along Z, for frames 252, 256, 260, 264 (first column) and 268, 272, 276, 280 (second column). Observe the periodicity from negative to positive values.