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## Notes on the reproduction of moving virtual sound sources

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Wave field synthesis and higher-order Ambisonics are two representatives of sound reproduction systems that are based upon the concept of physical recreation of a desired sound field. Conventional implementations of such systems typically reproduce moving virtual sound sources as a concatenation of static source positions that change over time. This approach introduces various artifacts which are reported in the literature to be strongly audible. It was recently shown by the authors that the explicit consideration of the physical properties of the sound field of moving sources in the reproduction algorithm avoids these artifacts. It thus allows for the accurate reproduction of the Doppler Effect. In practical implementations of such sound field reproduction systems unavoidable artifacts arise. These are mainly a consequence of sampling and truncation of the loudspeaker distribution and appear both for static and moving virtual sound sources. For static sources, they are well documented in the literature. We revisit these investigations and point out the particularities of these artifacts with respect to the time-variant property of the reproduced sound field.