Are There Signatures of Sprites in Whistlers?

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During the northern hemisphere summers of 2003 and 2004, parallel to the sprite observation campaigns in Southern Europe, broad-band VLF measurements were conducted in Sutherland, South Africa. Several whistlers were found in the broad-band recording that could be associated those lightning strokes that were identified as excitation source both for sprites and whistlers. These mid-latitude whistlers were analysed to obtain the propagation and plasma parameters. Another group of lightning-whistler pairs that could not been associated to any recorded sprite were also selected during the same period and analysed on the same way. The obtained parameters of the two groups were compared to find any significant signature of sprites on whistlers. The structure of generating lightning stroke can appear in the hyperfine structure of whistler traces, thus fine analyses were also made to reveal the sprites as source effects.