

THE USE OF GEOPHYSICS AS AN AID FOR CRICKET UMPIRES

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A particularly difficult part of cricket umpiring is judging whether the batsman has 'nicked' the ball on its way from the bowler to wicket keeper. If they have then the batsman is dismissed, if not, or if the batsman has hit his pad rather than the ball, then the batsman remains in. Even with modern high-speed cameras discerning a nick by eye is virtually impossible so during international cricket matches the umpire is aided in their decision making by an audio recording. This can be inconclusive, however, if there is considerable other noise being made (usually by the crowd), and especially if there is the possibility that the batsman may have hit the ground or another part of his body or equipment. To a geophysicist the solution to this problem is obvious, attach three component vibration sensors to the bat, record the data, and then look for any impacts, and this is in-effect what we have done. The results are convincing, not only can we detect impacts but also the type of impact and even the position of the bat upon which the impact occurred. Not only is the data superior to audio recordings but can be obtained more easily and cheaply making its application to the lower levels of cricket possible.