Preliminary results of low cost digital HF receiver

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Many RF devices for ionospheric observations have been developed since in the past. However, most of them are limited in their functionality to the hardware. Dealing with the software instead of the hardware is one of the ways to overcome such a drawback. This paper presents a development of the software-defined radio based HF receiver for evaluation of the radio propagation simulator named HF-START (HF Simulator Targeting for All-users' Regional Telecommunications) with the cost as low as about 400 USD per set. Step-by-step to develop and implement the receiver will be introduced. Preliminary results obtained from the receiver will be presented. The developed low cost digital HF receiver is expected to be affordable even for those who are in Southeast Asia and Africa.

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