The development of software defined FMCW ionosonde based on the GNU Radio (2)

*Hiromitsu Ishibashi[1], Takuya Tsugawa[1], Takumi Kondo[1], Mamoru Ishii[1]

1. National Institute of Information and Communications Technology

We are developing a GNU Radio based software defined FMCW ionosonde system.
The initial result has been already presented at the SGEPSS 2016 fall meeting: as for the receiving system, we successfully got ionograms using the transmitting system of current FMCW ionosonde in Kokubuji and the
Ettus Research USRP N210. One of the main purposes of this work is to inherit peripheral units of current FMCW ionosonde system, which is currently operated in the Southeast Asia low-latitude ionospheric network (SEALION).
So, we have adopted X300 USRP instead of N210 and updated programs which is suitable for X300.
The additional frontend unit necessary to inherit peripheral units of current FMCW ionosonde system is being manufactured now.
This presentation is a subsequent follow-up report for these past 6 months.