

Radio Quiet Zones in China

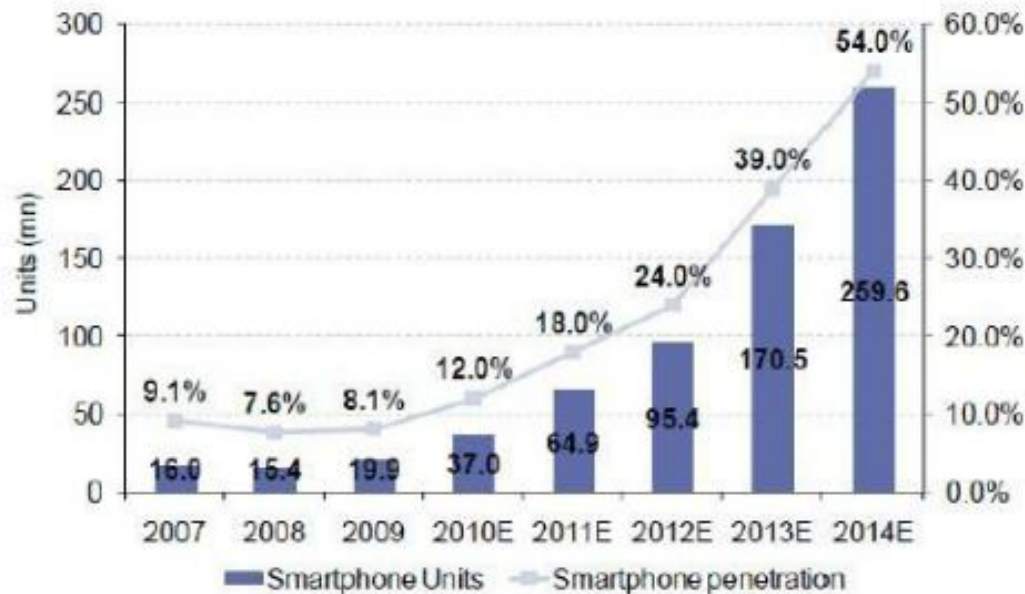


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Maozheng Chen, Yingxi Zuo, Min Wang

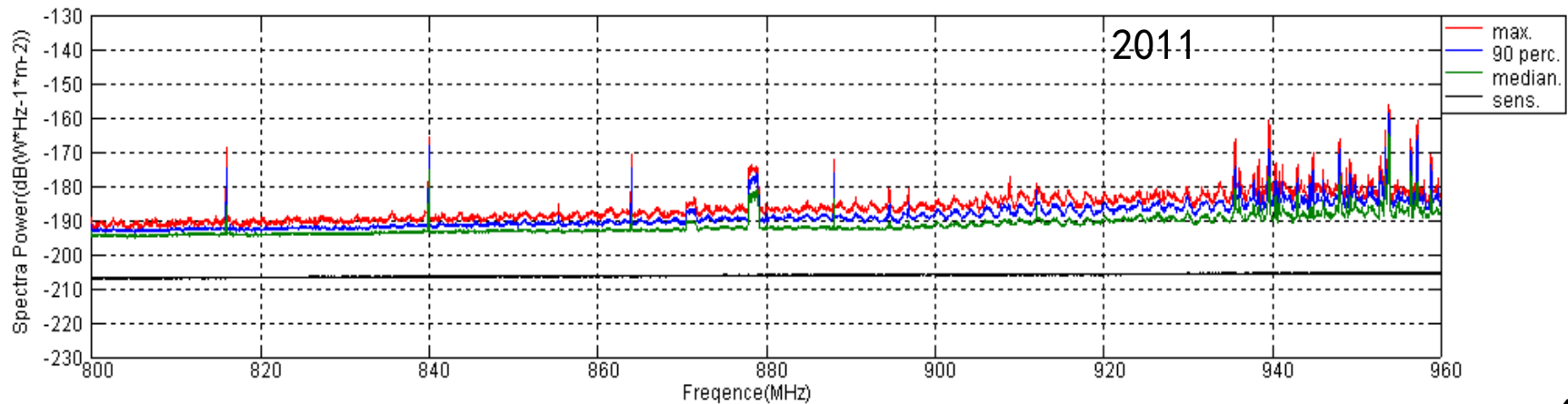
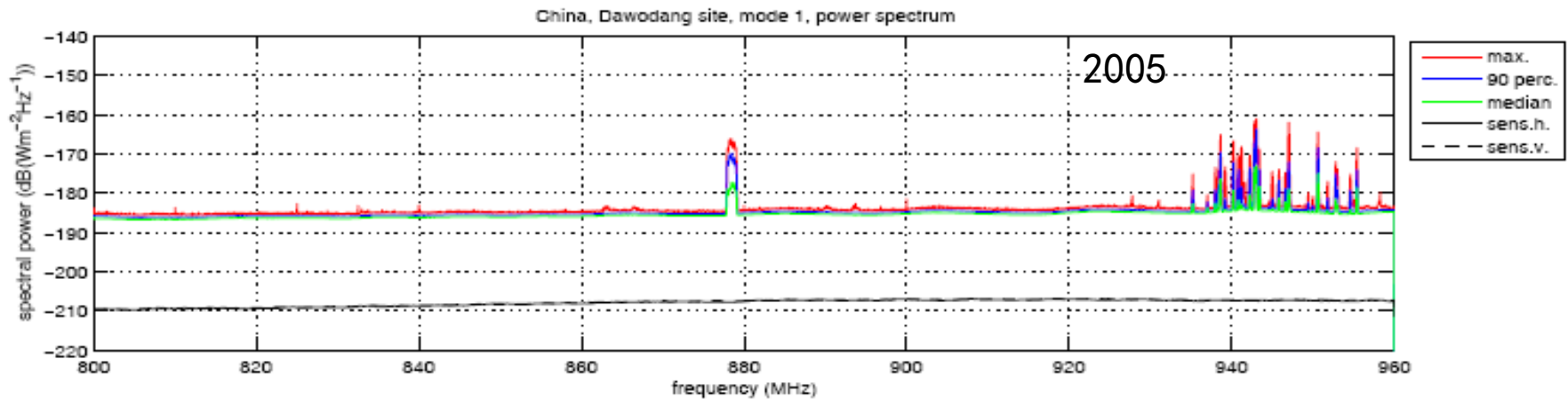
RAS protection in China

Goal : Protect RAS from radio frequency interference

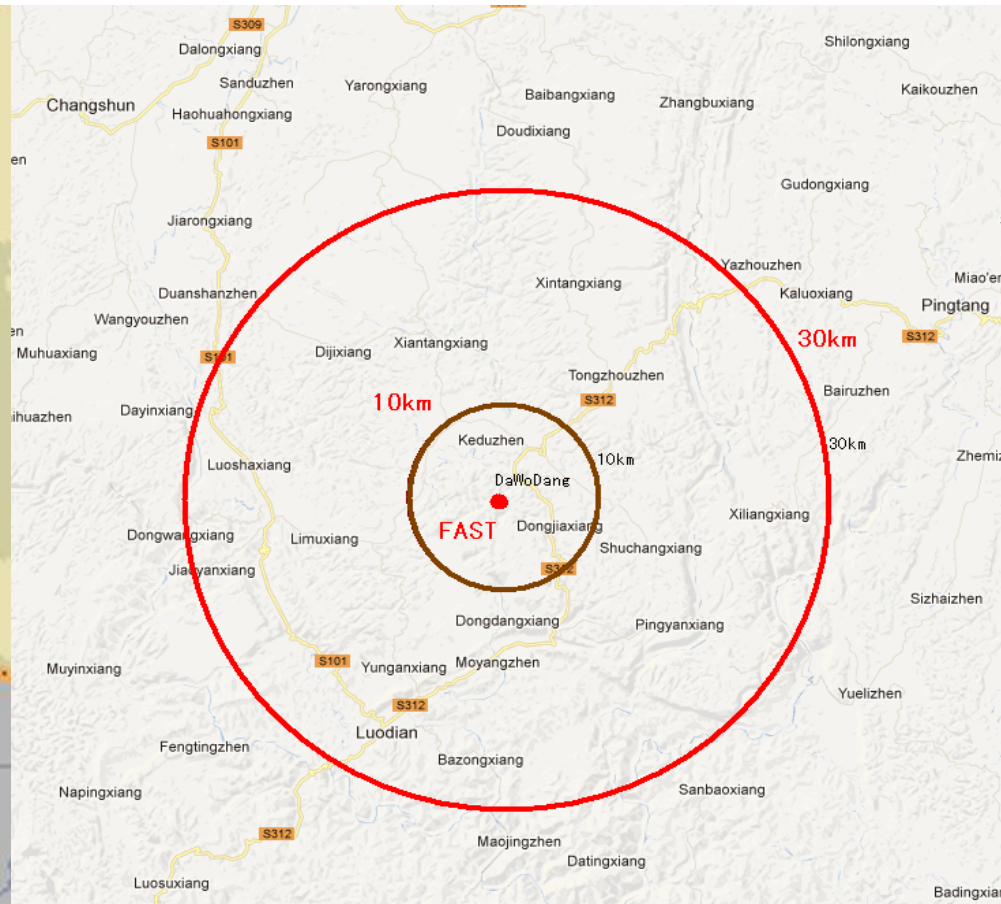
- ✓ **Radio quiet zone**
- ✓ **EMC on site (telescope, observatory)**
- ✓ **RFI mitigation**



FAST site radio environment measurements



Radio Quiet Zone around FAST

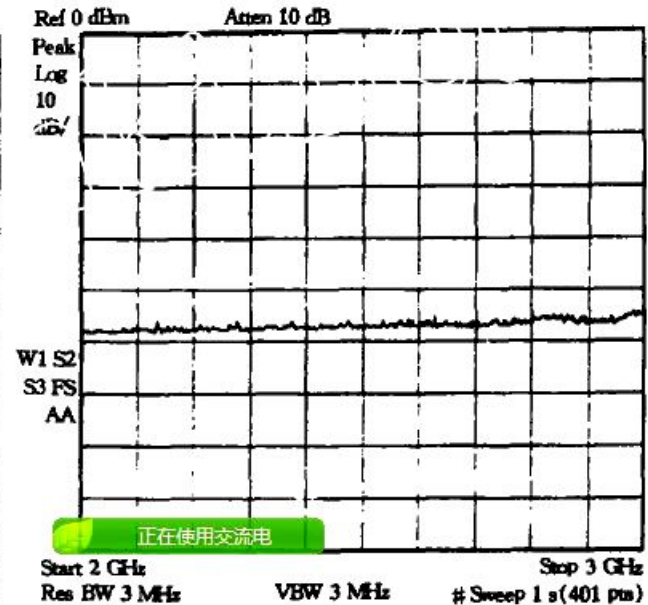
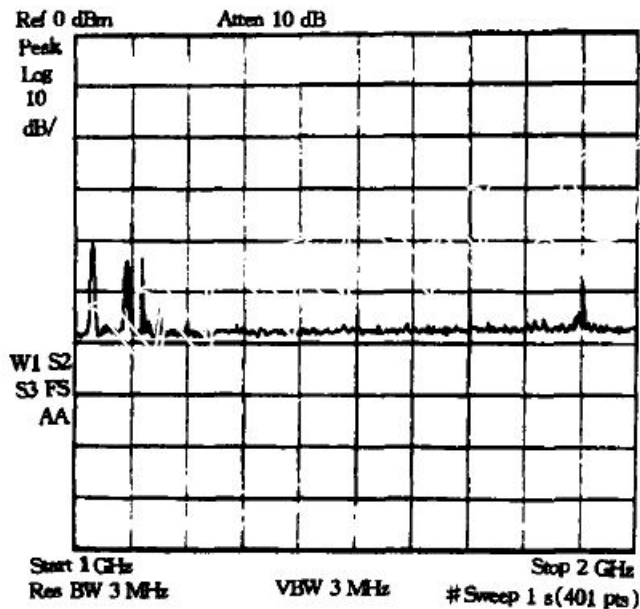
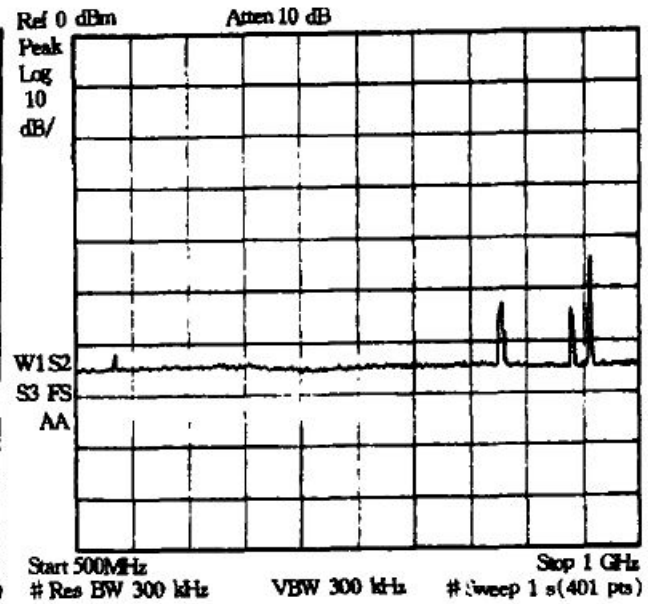
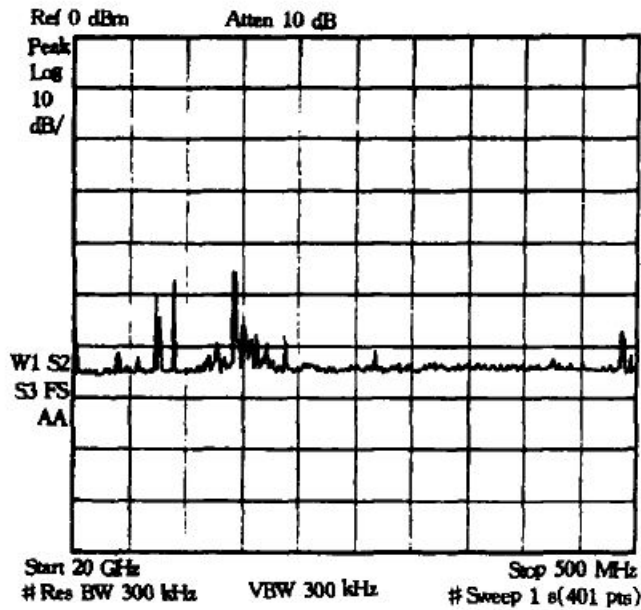


The legislation of FAST RQZ had been approved finally by Guizhou government in June 2013

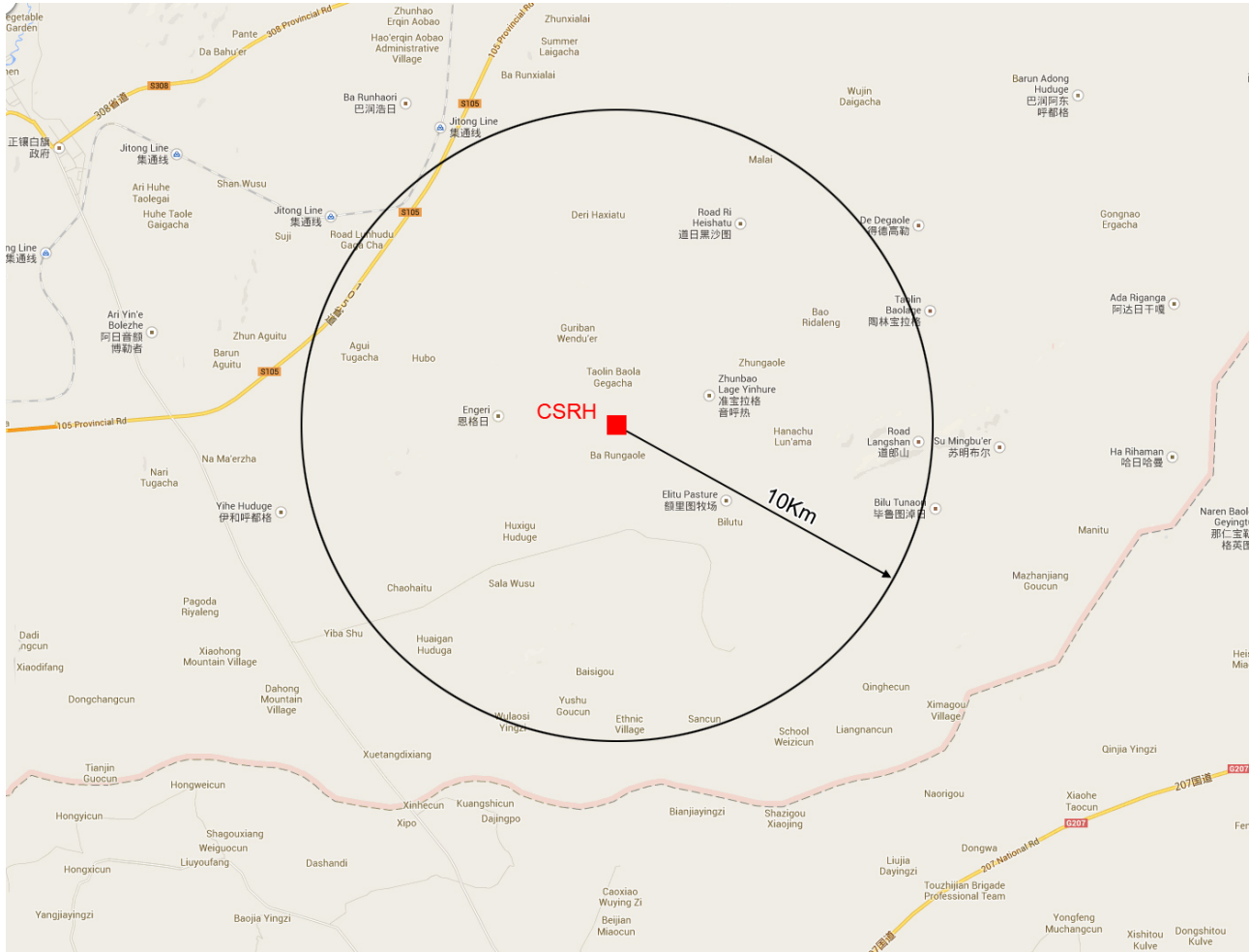
Chinese Spectral Radio Heliograph (CSRH)



CSRH RFI measurement



Radio Quiet Zone around CSRH



The administrative regulation of CSRH RQZ had been approved by Inner Mongolia spectrum management office in 2008

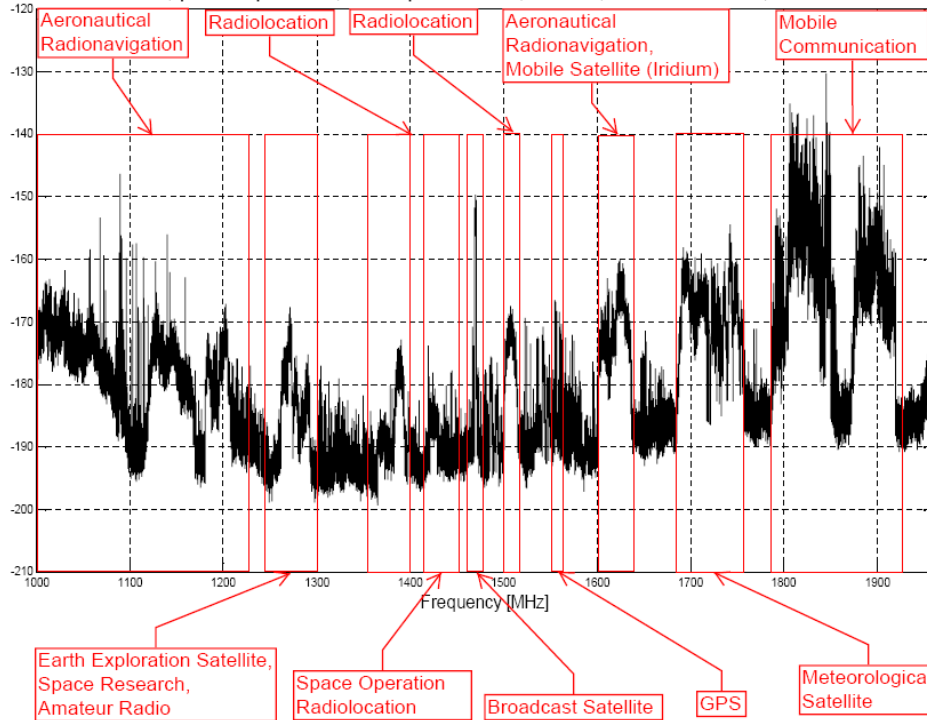
Tianma Radio Telescope (TMRT)



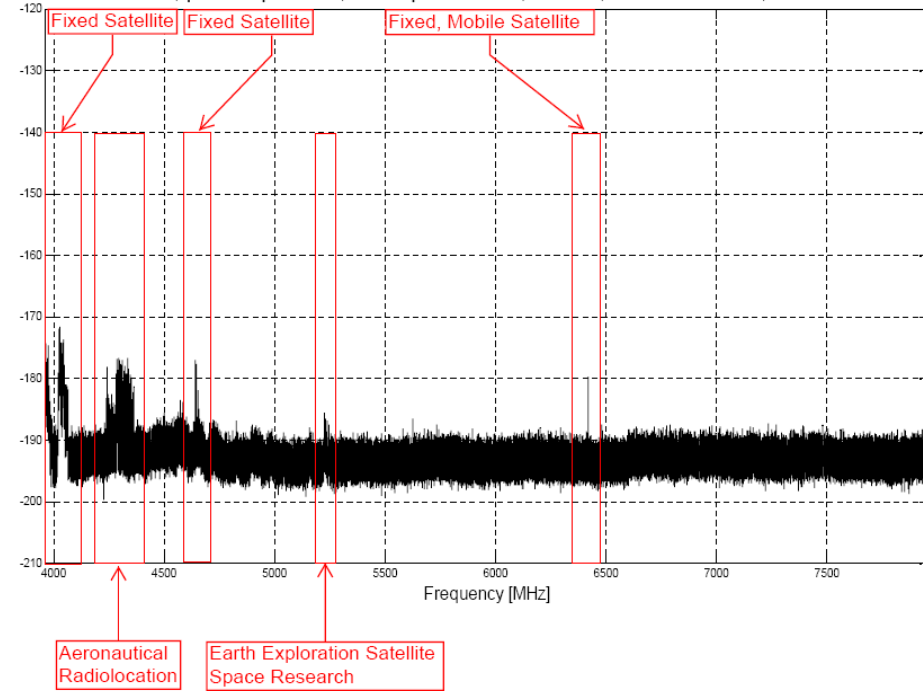
Tianma 65 meter radio telescope near Shanghai had been successfully performed the testing observations in October 2012

TMRT RFI measurement

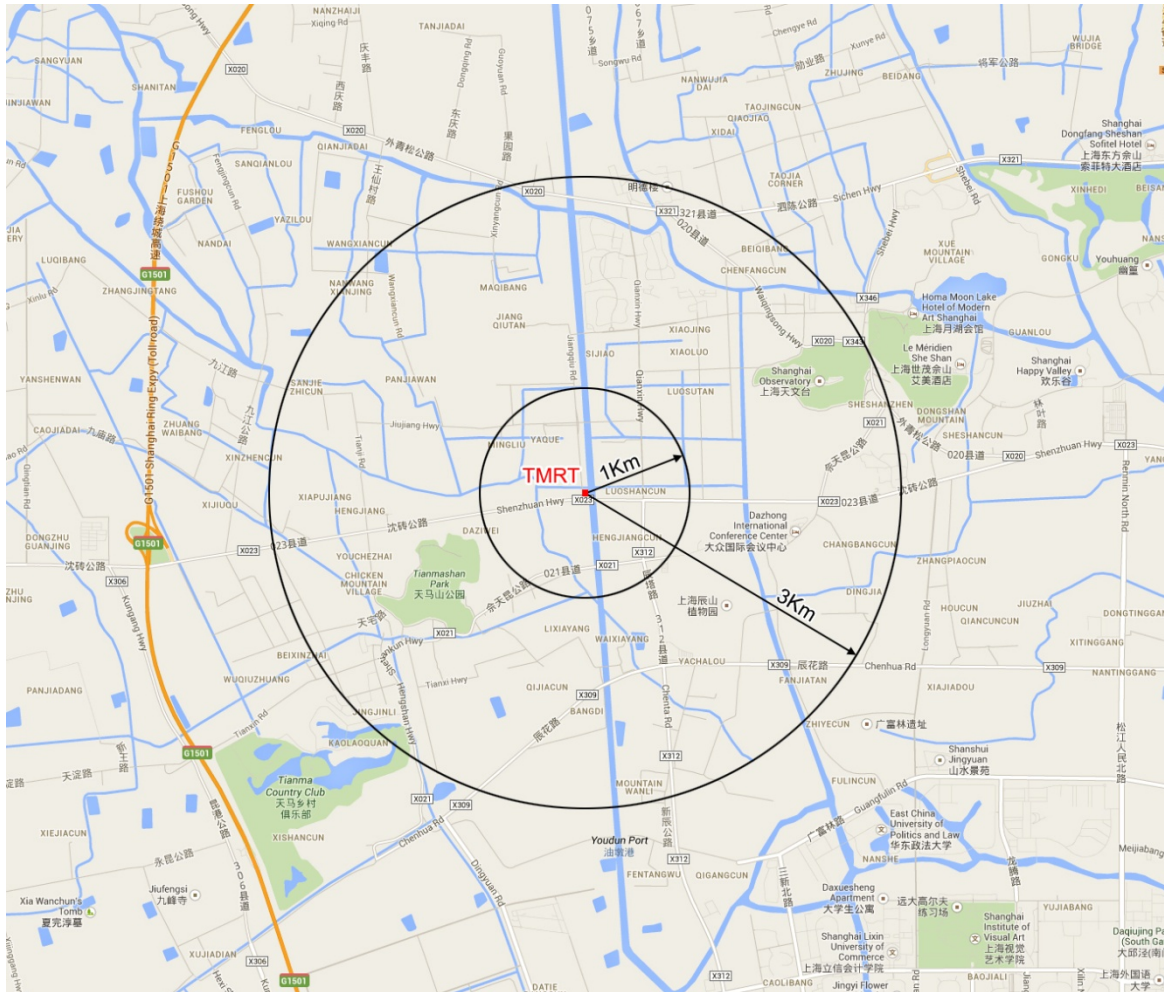
SH65M, power spectrum, linear polarization, vertical, 1000-1960 MHz, Nov. 2010



SH65M, power spectrum, linear polarization, vertical, 3960-7960 MHz, Nov. 2010

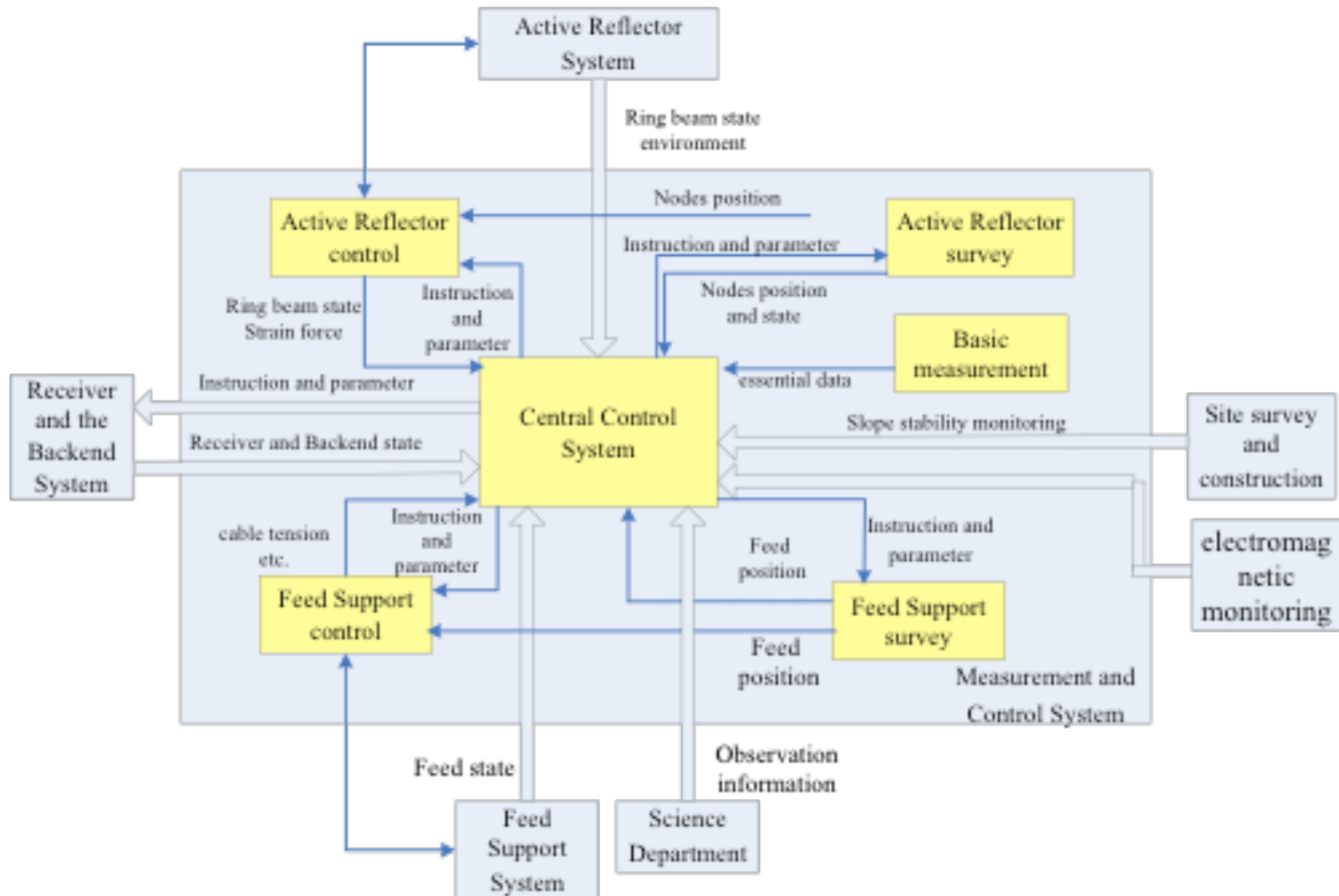


Radio Quiet Zone around TMRT



The administrative regulation of TMRT RQZ had been approved finally by Shanghai spectrum management office in 2011

Central Control System



Future works

- ✓ Coordination on Agenda items of WRC15
- ✓ Radio Quiet Zone
- ✓ Coordination with active services
- ✓ Collaboration closely on the joint research on EMC issues and RFI mitigation

Thanks!

