**2017/12/12**

* Assumptions about Antenna Gain
* Horizontal Gain = 0
* Use vertical gain only
* Did not consider the UE Antenna Pattern
* Generating Transformed LSPs part is complete( but not verified)

**2018/02/22**

* Small scale parameter part is added
* Debugging is needed

**2018/05/08**

* Delays, cluster powers, AOD, AOA, ZOA, ZOD are calibrated with IMT-2020 CM\_BUPT
* Channel coefficient is not calibrated yet.

**2018/05/26**

* Some coding error modified

**2018/07/05**

* MIMO Channel coefficient

.**2018/09/06**

* Visual studio project files are added

.**2018/10/30**

* Small scale parameter generation modified

.**2019/05/17**

* analog Beamforming

**2019/05/17**

* analog Beamforming calibration

**2019/08/22**

* dft channel generation

**2019/11/26**

* PF algorithm