

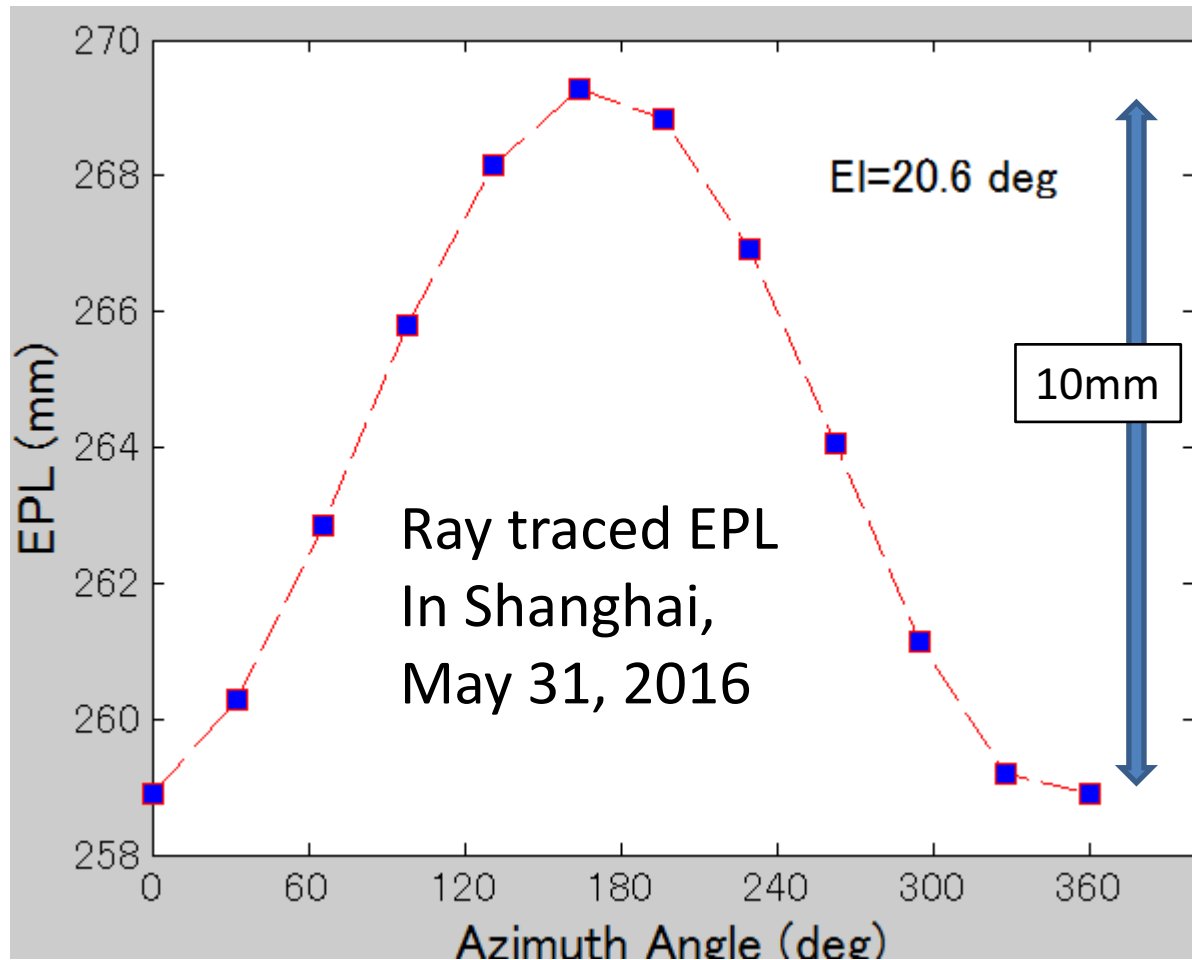
2018年度VLBI懇談会シンポジウム@熊本大学
2018年12月1日16:30-16:50

大気中水蒸気の空間分布計測 結果報告

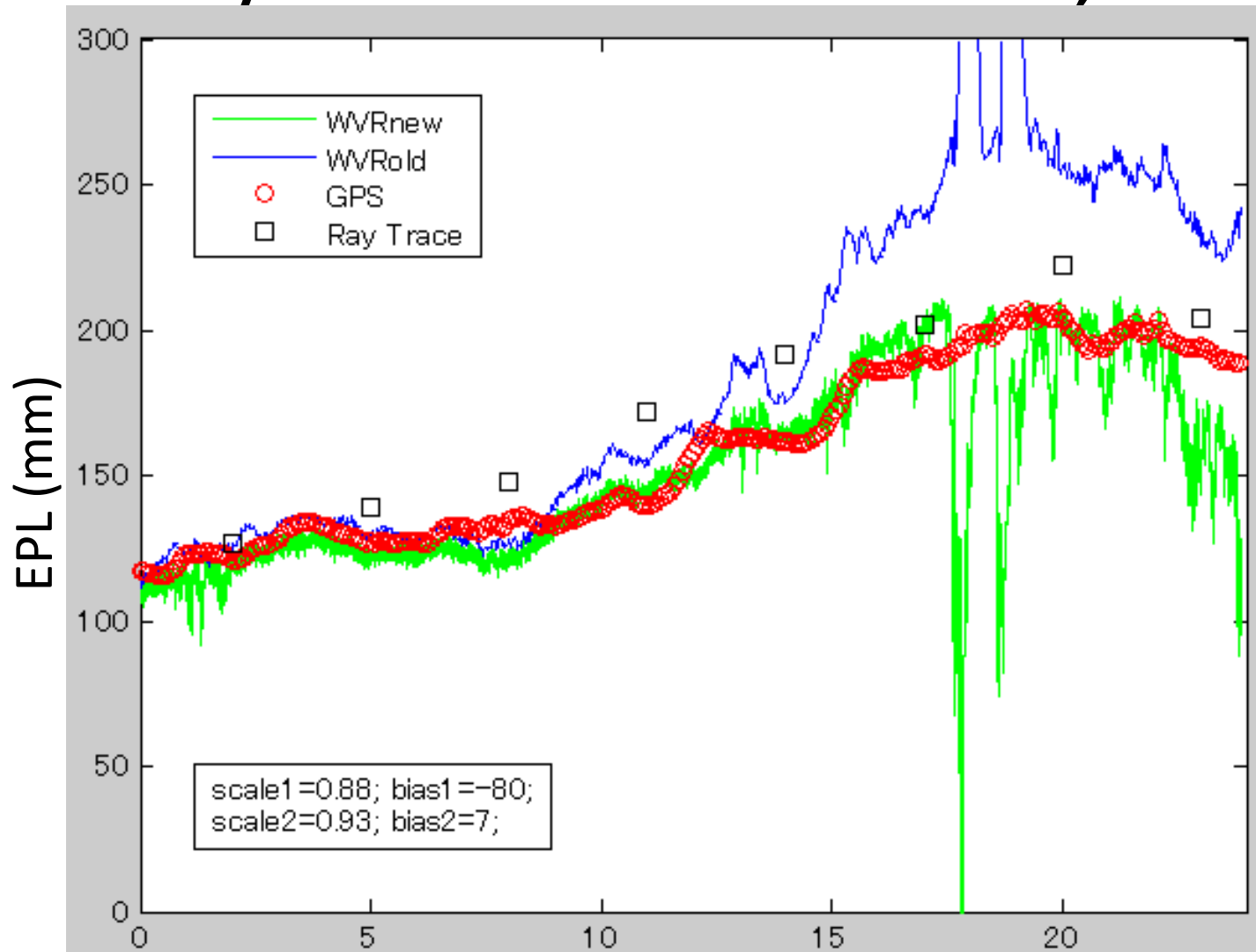
国立天文台名誉教授
川口則幸

Azimuth Dependence at $El \approx 20$ deg

The 10mm change is not disregarded for precise geodetic measurements by VLBI.



SHAO/WVR December 22, 2015

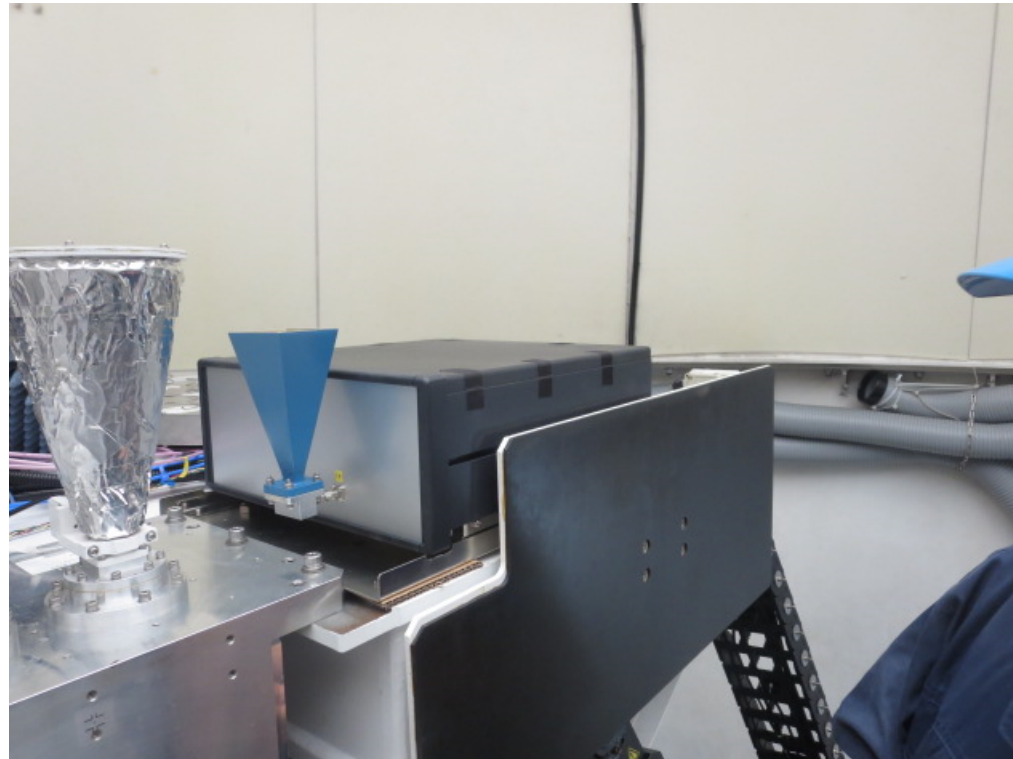


CST hour on December 21

Mechanical Attachment

2018年7月6日

試験評価機の受信機台への最終設置状況



Weather condition

2018年7月6-8日

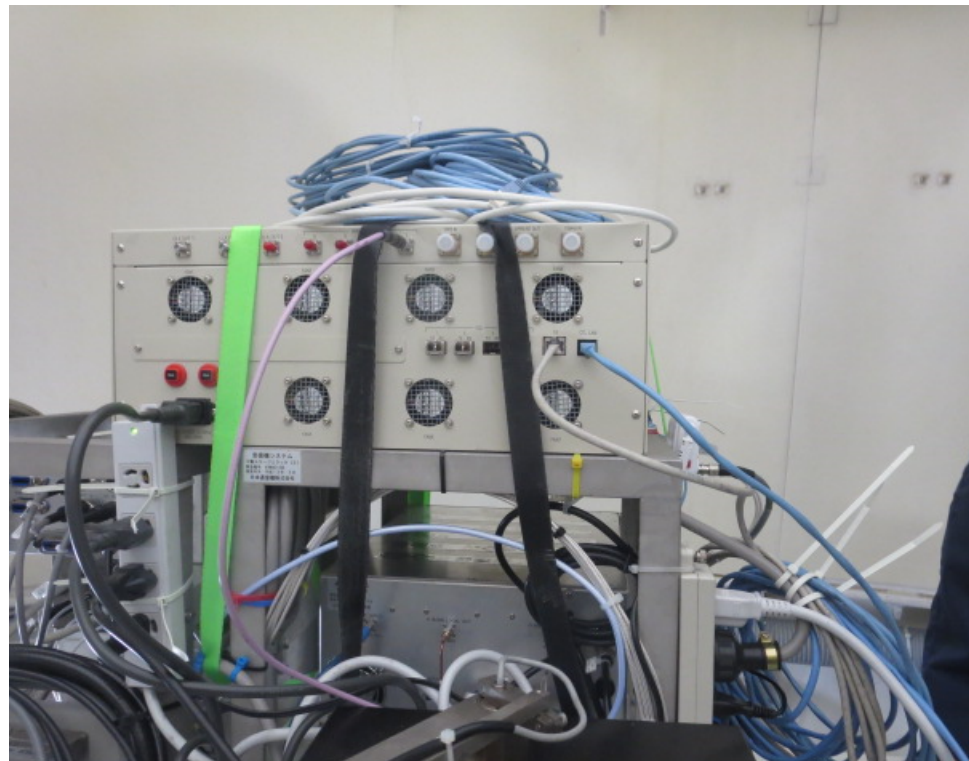
厚い雲に覆われ、時々雨が降ってきた。



AD converter fixed above VERA rack

2018年7月6日

OCTADはDCラックの上にベルトで固定した。正面パネルについているハンドルでの固定でしっかり固定できた。



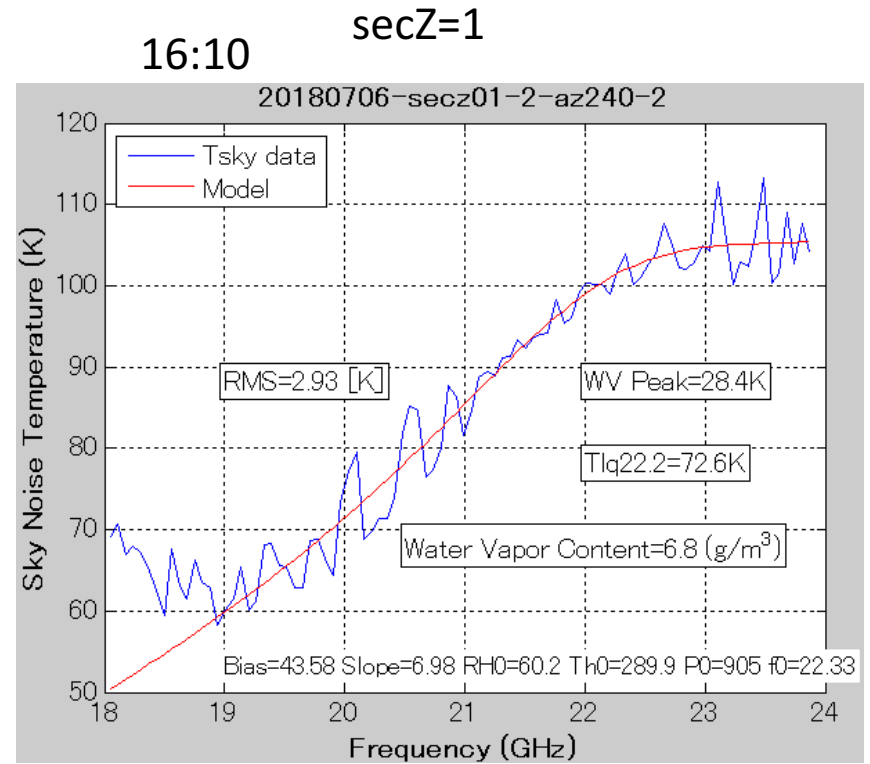
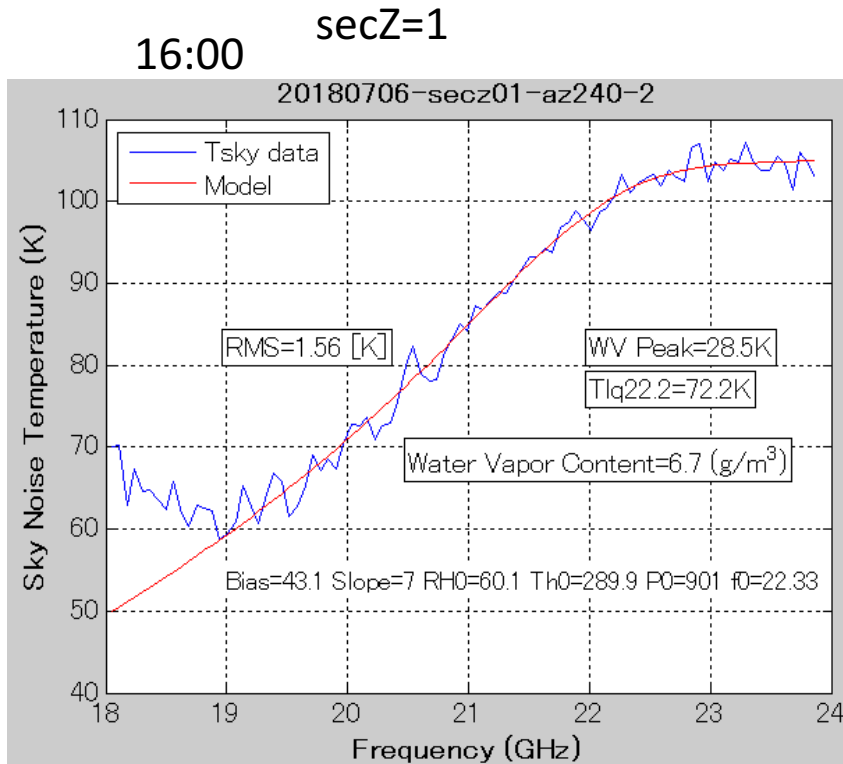
<u>El</u>	<u>SecZ</u>
90	1.0
41.8	1.5
30	2.0
23.6	2.5
19.47	3.0
16.6	3.5
14.48	4.0

secZ試験

水蒸気量の仰角依存性試験

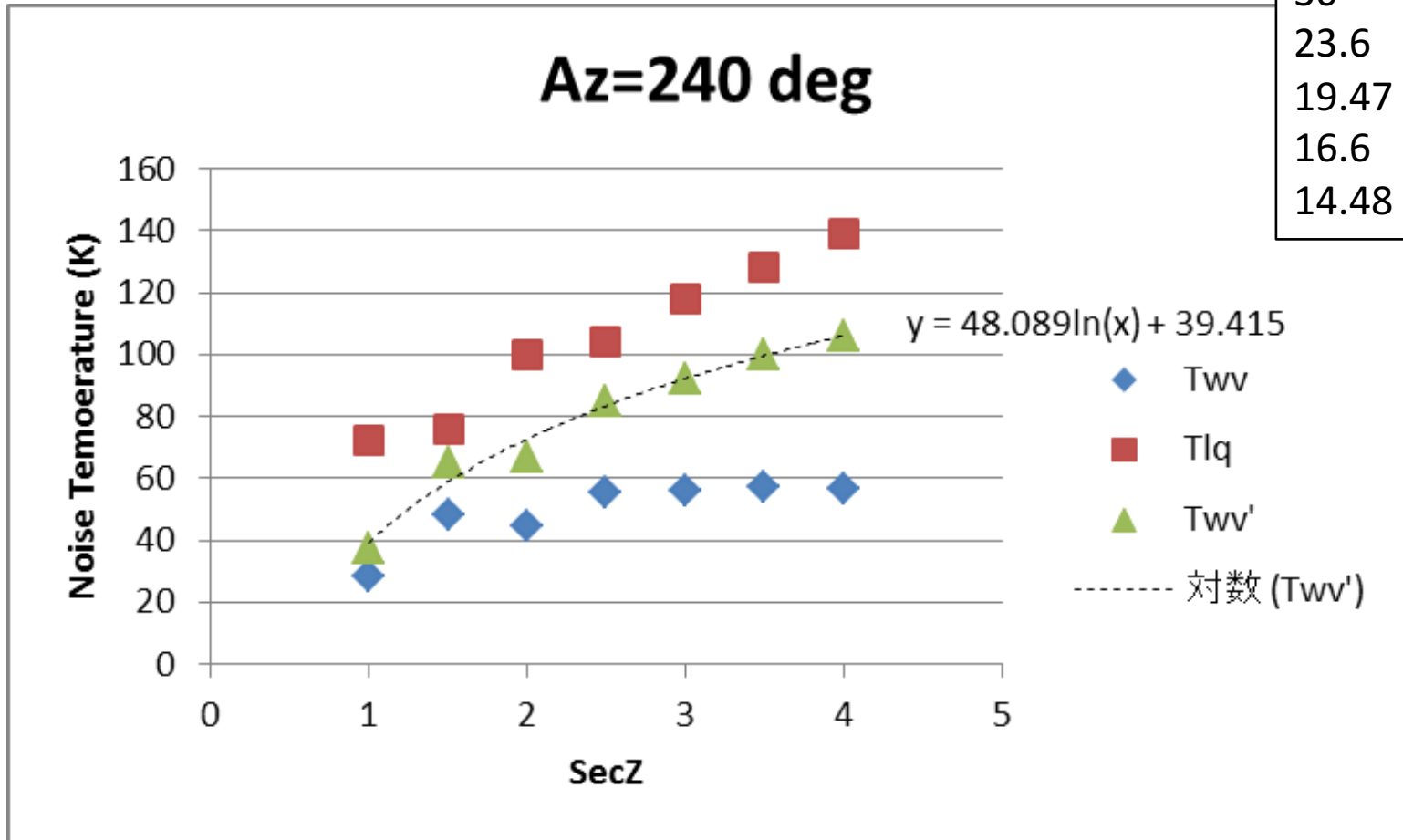
Repeatability Test at Zenith

2018年7月6日



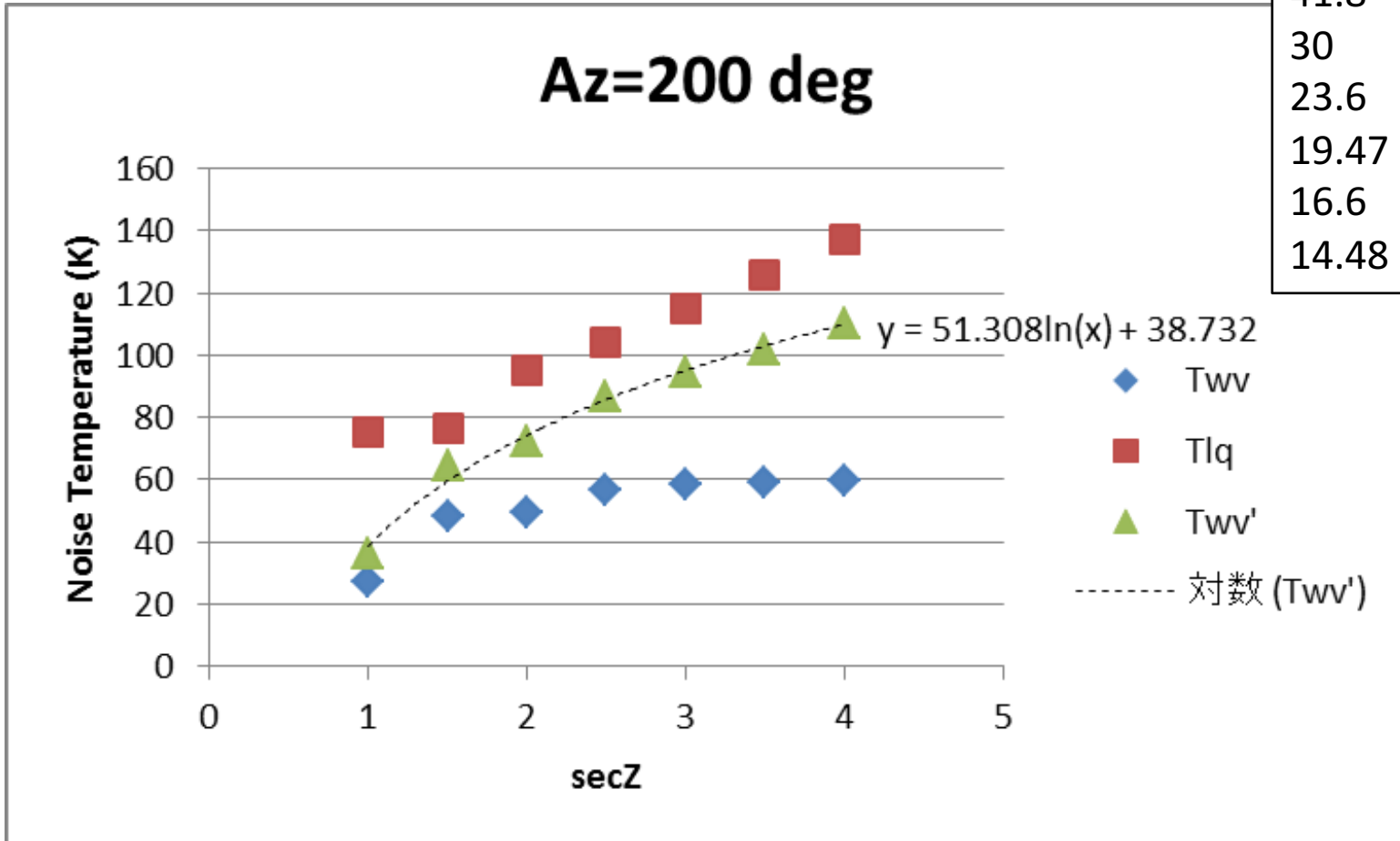
Tipping on July 6

El	SecZ
90	1.0
41.8	1.5
30	2.0
23.6	2.5
19.47	3.0
16.6	3.5
14.48	4.0



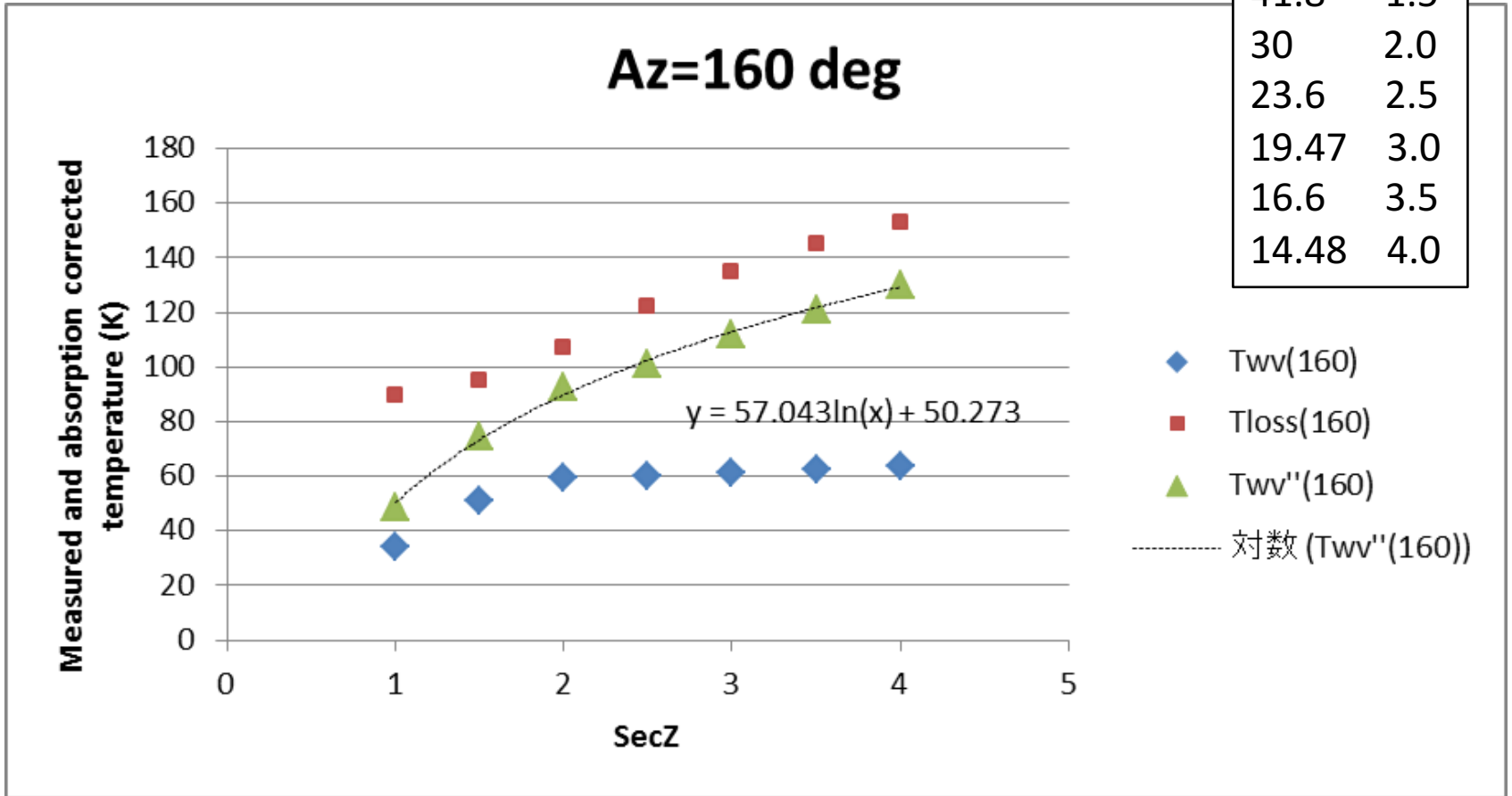
Tipping on July 6

El	SecZ
90	1.0
41.8	1.5
30	2.0
23.6	2.5
19.47	3.0
16.6	3.5
14.48	4.0



Tipping on July 7

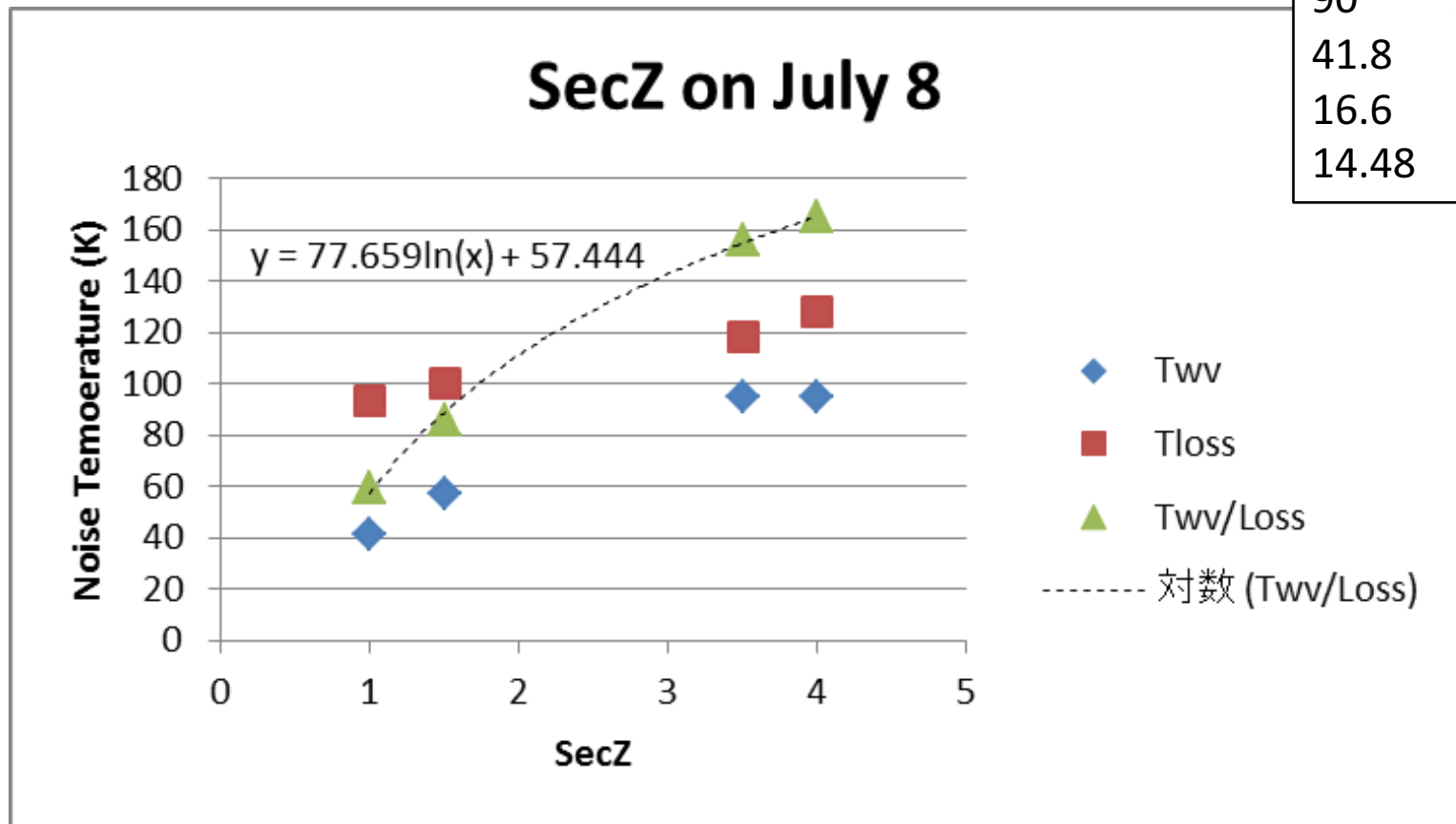
El	SecZ
90	1.0
41.8	1.5
30	2.0
23.6	2.5
19.47	3.0
16.6	3.5
14.48	4.0



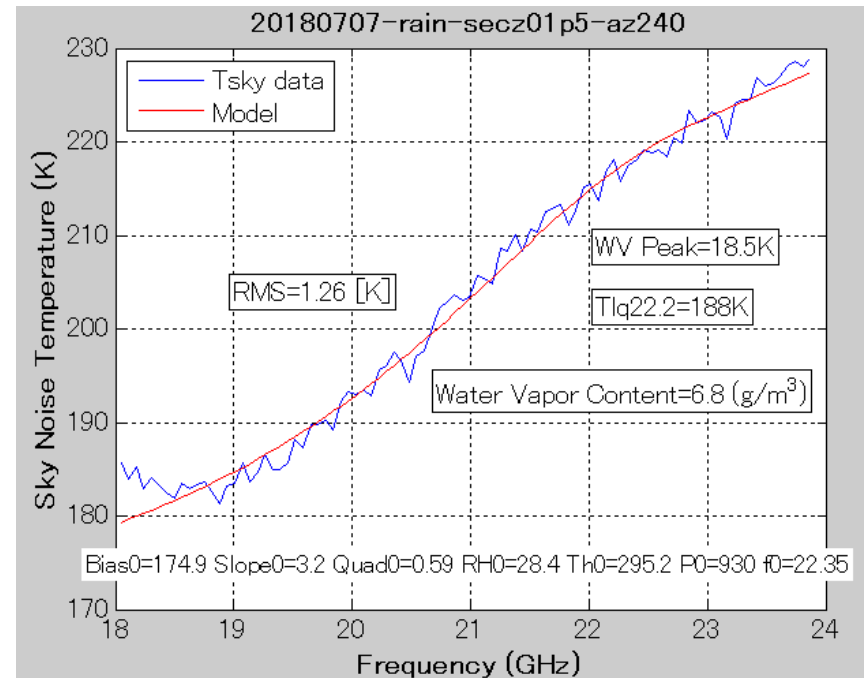
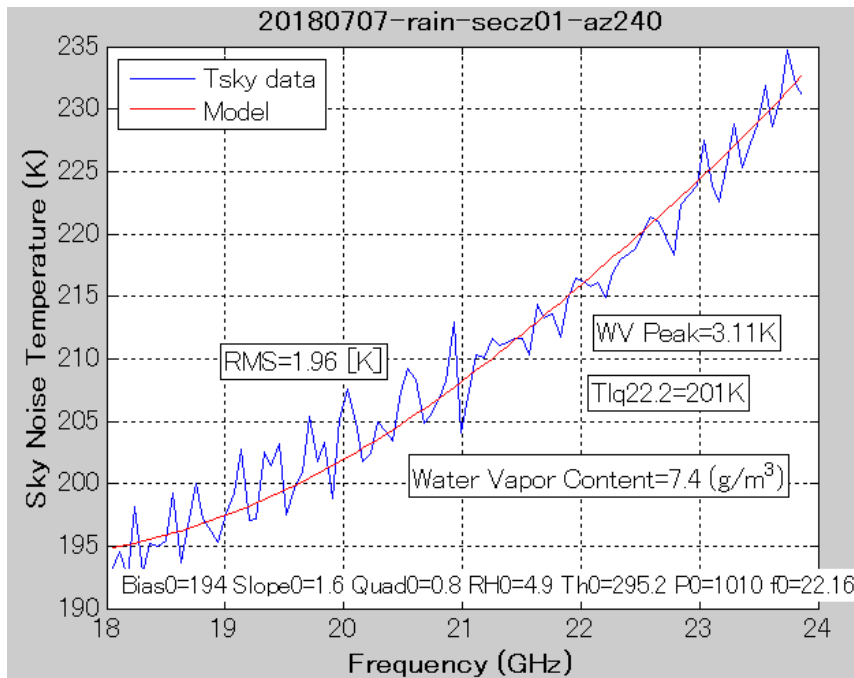
Tipping on July 8 at Az=120 deg

Az=120 deg

El	SecZ
90	1.0
41.8	1.5
16.6	3.5
14.48	4.0

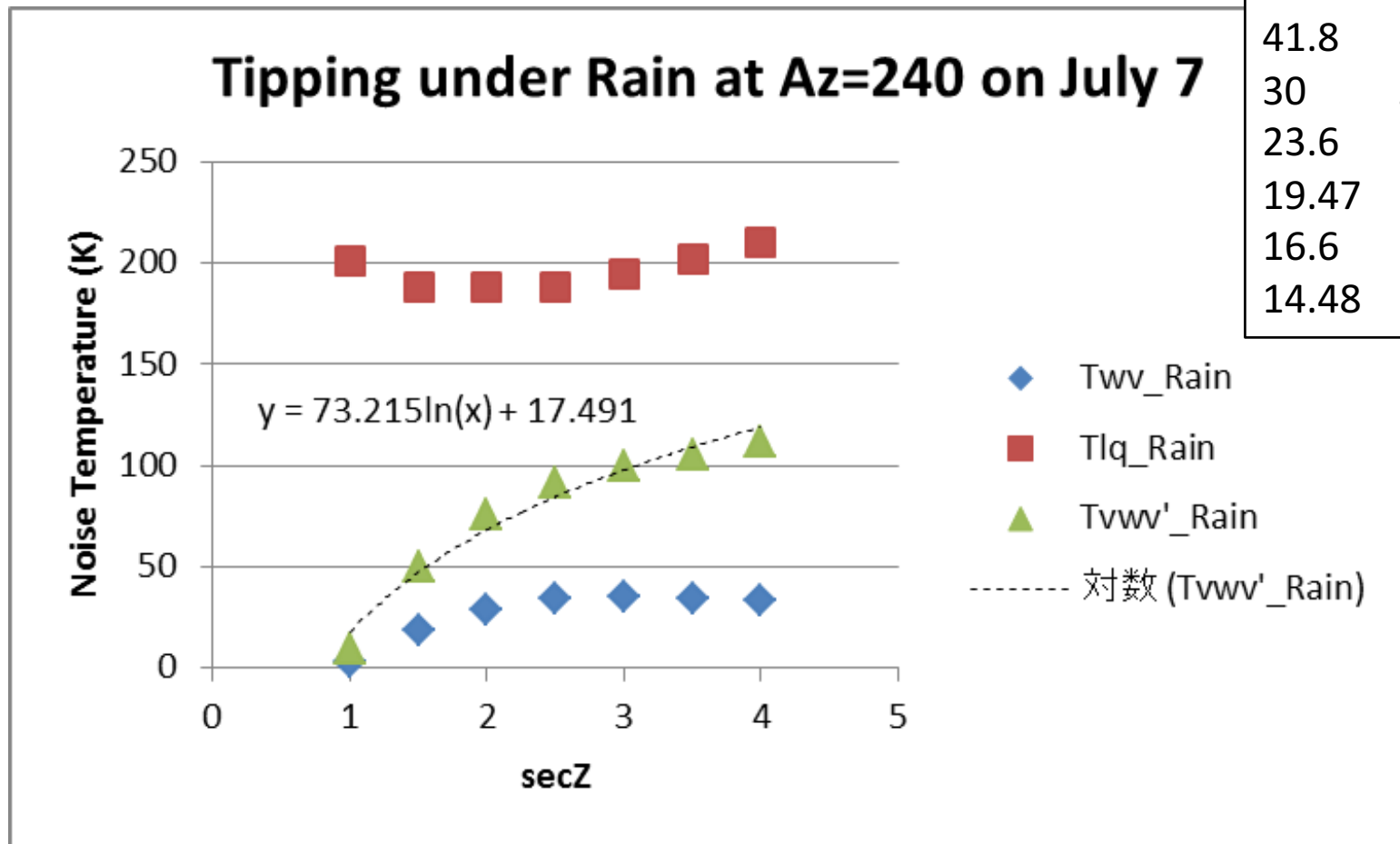


Tipping at Az=240 deg under raining



Tipping result under raining

El	SecZ
90	1.0
41.8	1.5
30	2.0
23.6	2.5
19.47	3.0
16.6	3.5
14.48	4.0

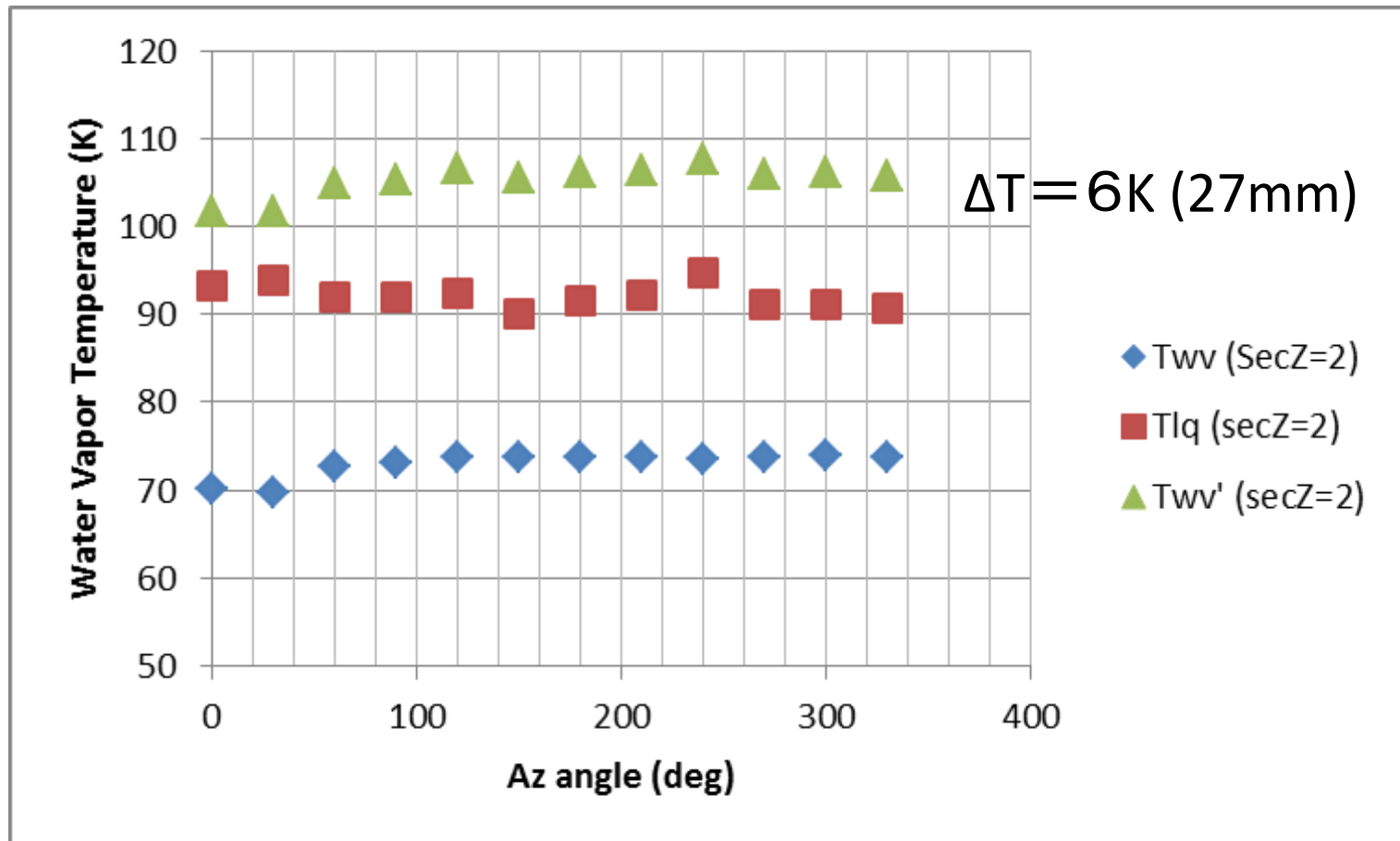


方位角スキンの結果

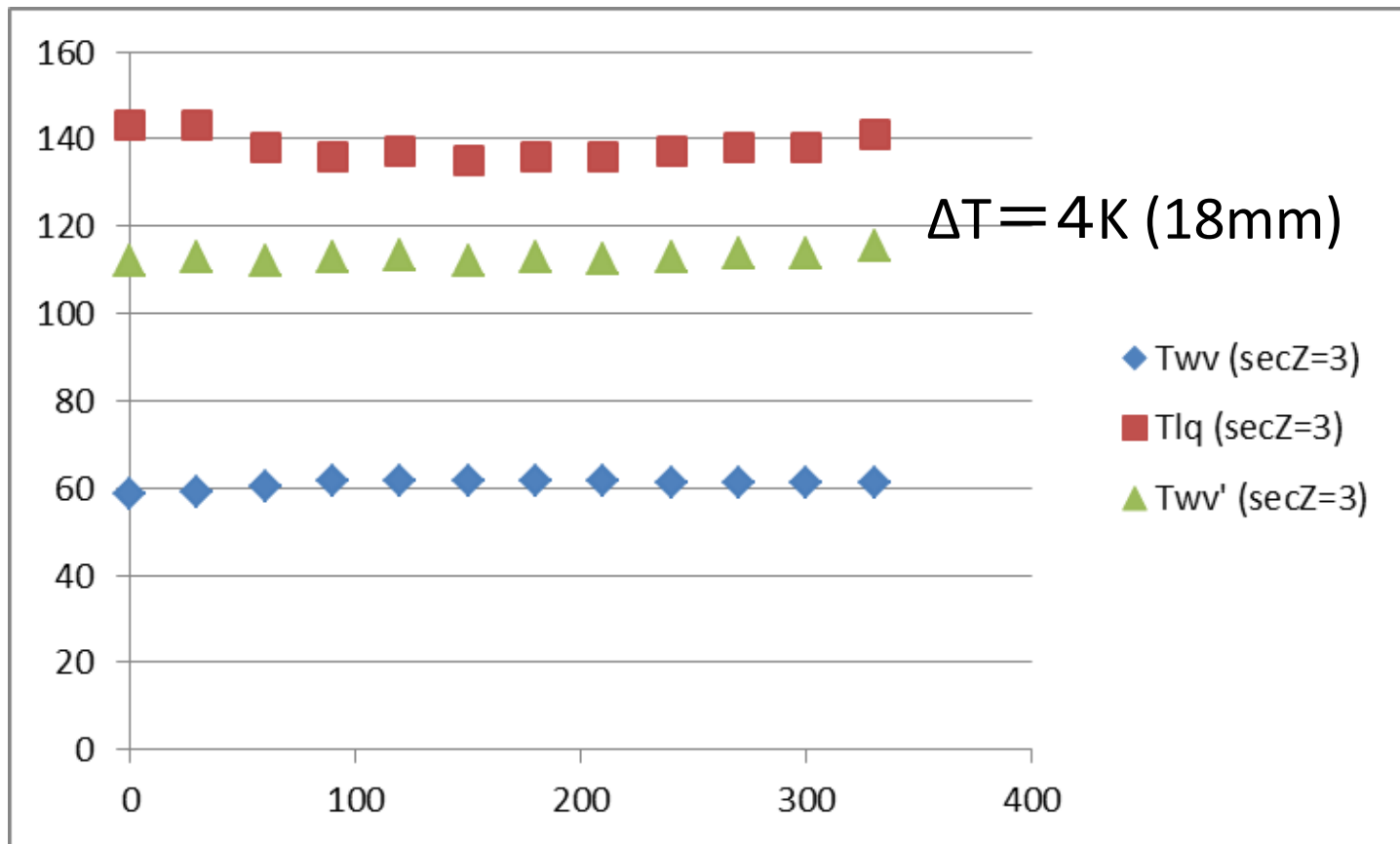
水蒸気の水平分布

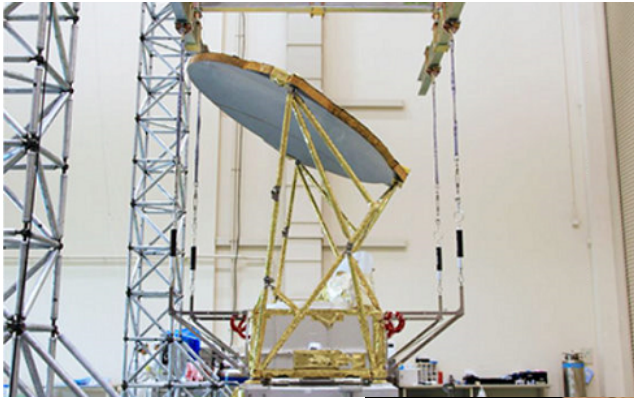
Summary of Az Scanning at secZ=2

2018年7月7日

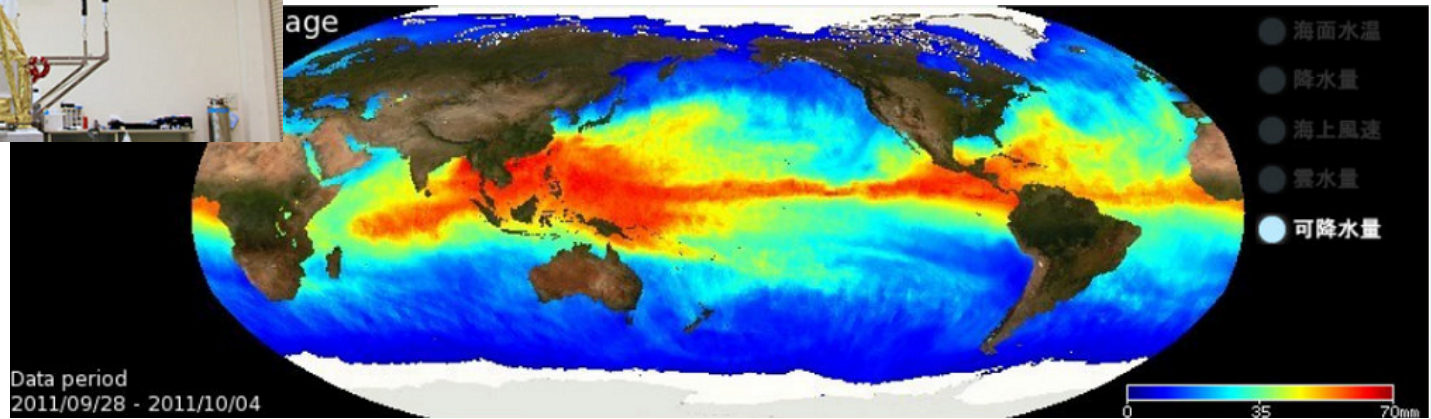


Summary of Az Scanning at secZ=3





AMSR2「しずく」

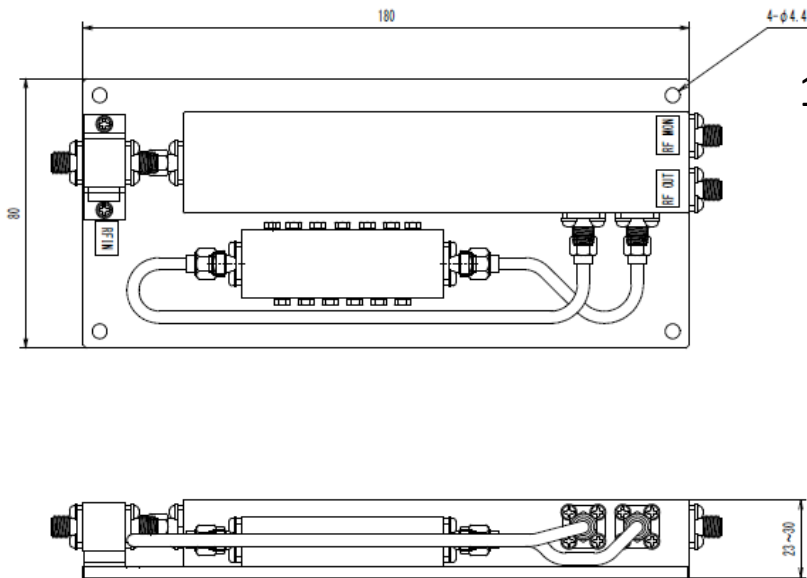


JAXAとの共同研究

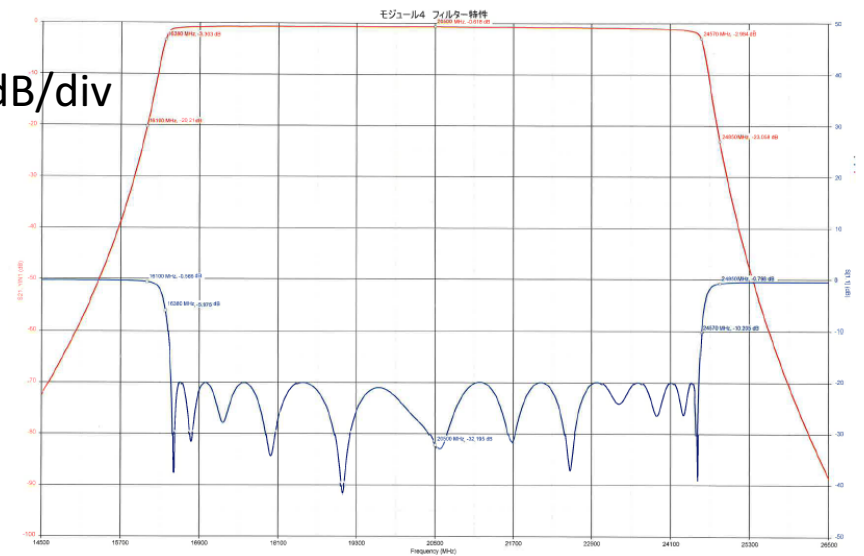
2号機の開発

アナログ部

3dB帯域: 16.38-24.57GHz for 16.384Gbps



10dB/div



14.5GHz

16.5GHz

デジタル部 (AD + FFT)

