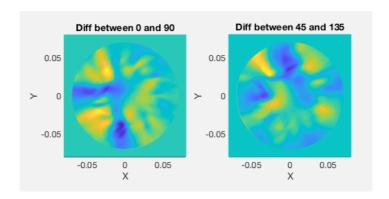
## Deriving the loss map for S-pol

### Note

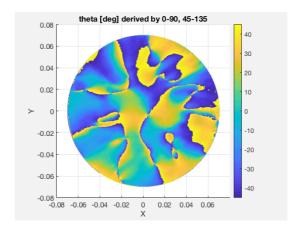
- Calculation is based on Aso & Enomoto, JGW-
- Mirror maps were provided by Caltech

## A. Using maps at 0, 90, 45, 135 degree rotations

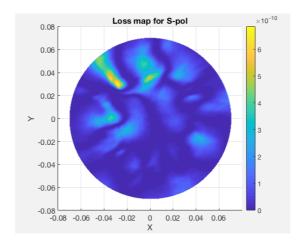
1. a(0) map (left) and a(pi/4) map (right) in Aso-san's calculation



2. Theta (angle between e' axis and S-pol axis, see, Aso-san's calculation) map

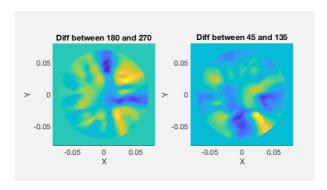


3. Loss map in S-pol (see, Enomoto-san's calculation)

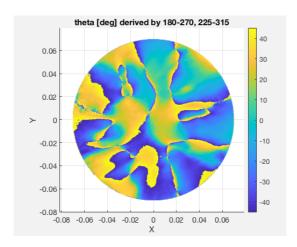


# B. Using maps at 180, 270, 225, 315 degree rotations

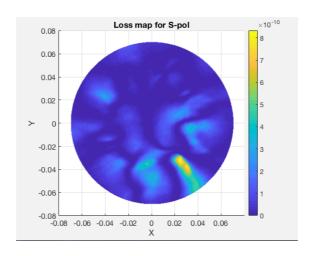
# 1. a(180) map (left) and a(5\*pi/4) map (right) in Aso-san's calculation



#### 2. Theta map



## 3. Loss map in S-pol



### C. Comment

A.2 and A.3 agree with B2 and B3, respectively, with a 180 degree rotation. It makes sense. Loss maps are calculated correctly by Aso-Enomoto formulae.