

## ***Interactive comment on “Coseismic slip inversion based on InSAR arc measurements” by C. Wang et al.***

**C. Wang et al.**

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We would like to thank the anonymous Reviewer #2 for the constructive comments and corrections. We would revise our manuscript accordingly. Our responses are as follows:

### 1. Integration of isolated patches

Thanks for the comments. Because our inversion equation is based on arc measurements, we do not need to integrate the phased of isolated patches into a common reference system. As seen in equation 8, the arc observation in the right side can be used to constrain solutions no matter whether these arcs are connected together or not. It is the advantage of our method from standard inversion method. So we think

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our method can already handle low-coherence interferogram well without any additional ground-based measurements. I will revise some unclear sentences in the manuscript.

### 2. Yushu earthquake case

Thanks for the suggestion. I have checked the Envisat ASAR interferogram of Yushu earthquake and found the coherence is also very good. I would find another case with low-coherence interferogram for better demonstration.

### 3. Minor comments

For comment 2-5, I will revise them accordingly and check the English style carefully with professional help. For comment 1, the equation 4 is an independent equation from equation 3. It should not contain the term of 'G'.

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