

**Supplementary material of**  
**Deep-Learning Spatial Principles from Deterministic**  
**Chemical Transport Model for Chemical Reanalysis: An**  
**Application in China for PM<sub>2.5</sub>**

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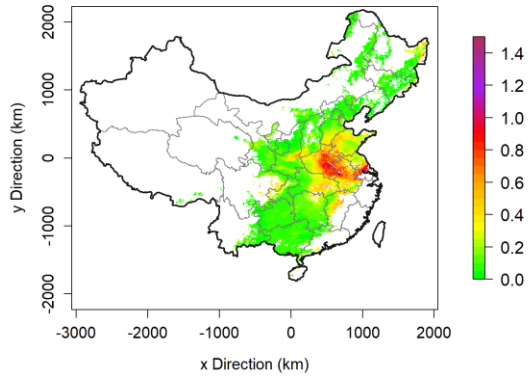
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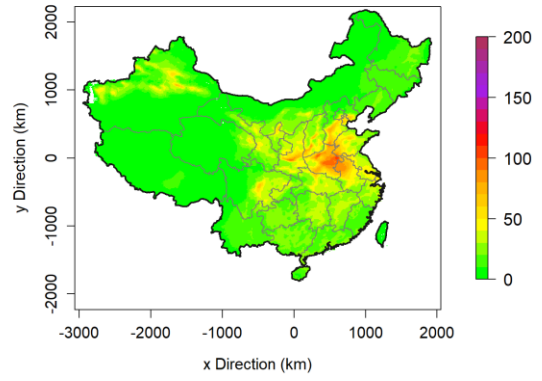
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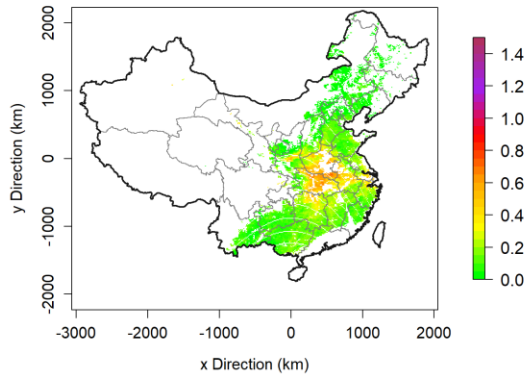
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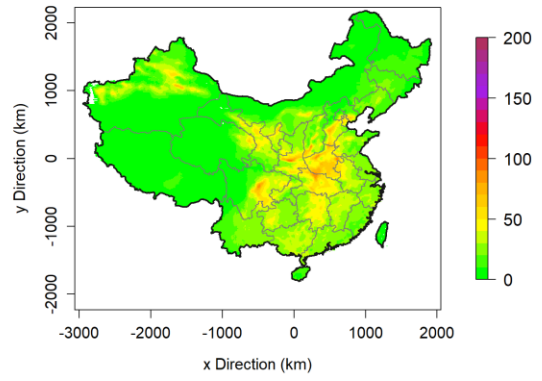
**PM<sub>2.5</sub> 20201022**



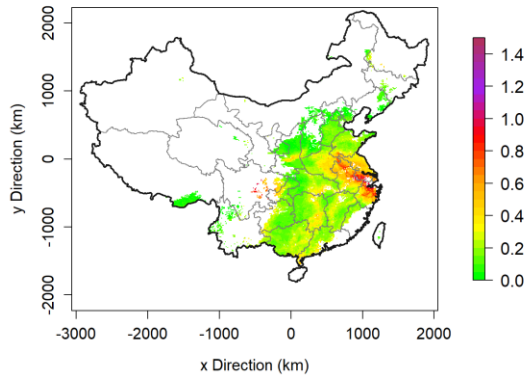
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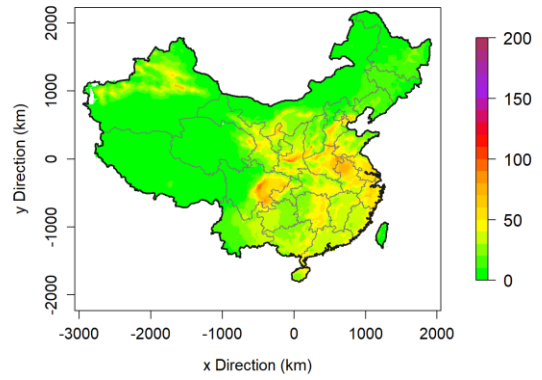
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**AOD 20201108**



**PM<sub>2.5</sub> 20201108**



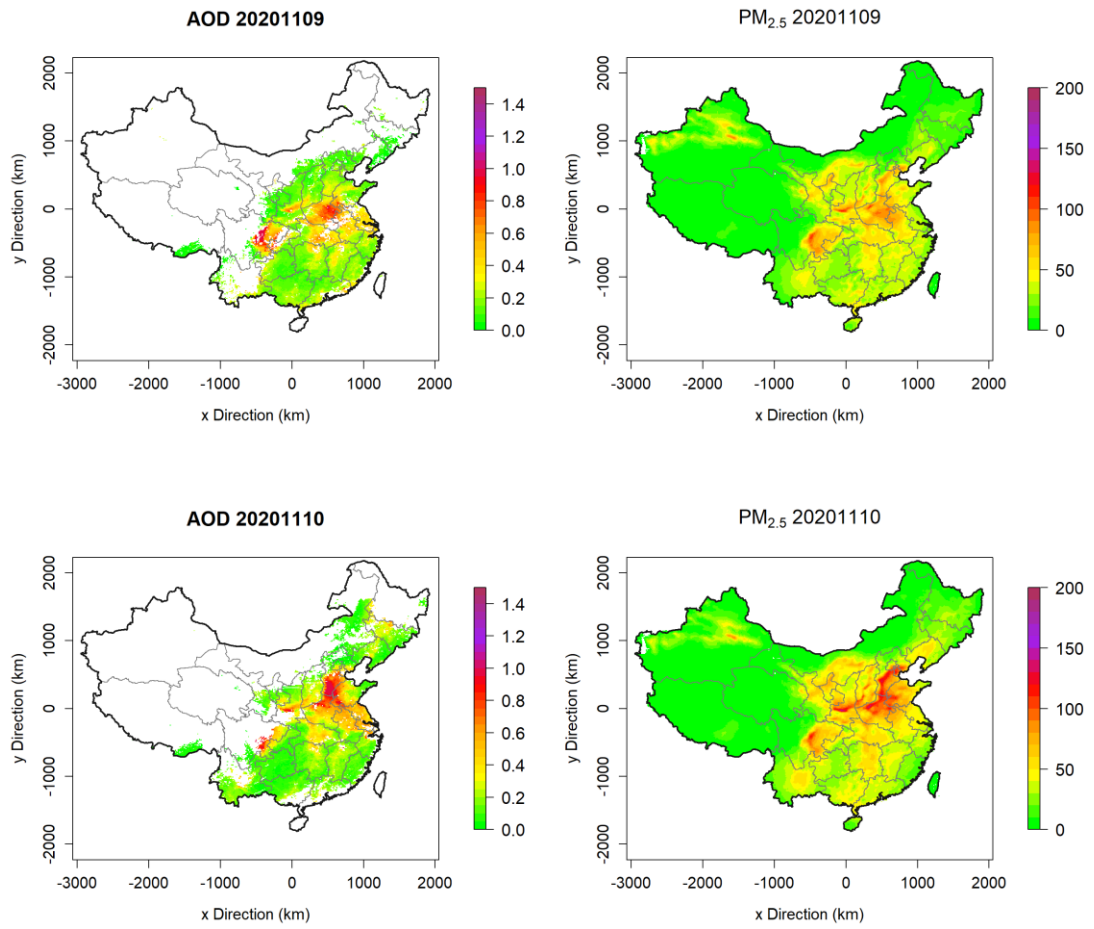


Figure S1 Comparison between fused PM<sub>2.5</sub> fields and MODIS AOD.