

## **Water Supply and the Middle East - using climate and remote sensing data to distinguish between natural and anthropogenic changes in water distribution**

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### **Summary**

We request funds in the amount of \$5,000 in order to purchase remote sensing images covering 3 distinct Middle Eastern climate zones. These images are a complementary aspect of our study, which is aimed at quantifying the impacts of natural climate variability in water supply to the Tigris-Euphrates headwater region. This is explored in contrast to environmental and socio-economic changes resulting from anthropogenic impacts associated with the \$21 billion Greater Anatolia Project (GAP) in south-eastern Turkey and the Al Thawra dam project in Syria. To dissociate the natural from anthropogenic signal we also employ a more traditional statistical approach, exploiting connections between Middle Eastern climate and better known global patterns of natural climatic variability.

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