

# Students wanted: Earth System Science meets Computer Science



Within the „**SmartClimate: Intelligent Fusion of Earth System Models with Observations**“ initiative we seek several student assistants at different levels of expertise. The initiative aims to exploit techniques from computer science and mathematics to better understand and ultimately predict weather and climate. We look for students from computer science, geophysics, mathematics, meteorology or similar study programs. Below you can find a list of topics.

- **Deriving water vapor gradients and advection from surface-based remote sensing**  
contact Ulrich Löhnert: [loehnert@meteo.uni-koeln.de](mailto:loehnert@meteo.uni-koeln.de)
- **Building a system for fast and efficient visualization of meteorologic data**  
contact Tatiana von Landesberger: [landesberger@cs.uni-koeln.de](mailto:landesberger@cs.uni-koeln.de)
- **Global impacts of covid-19 lockdowns on urban air pollution**  
contact Gregor Gassner: [ggassner@uni-koeln.de](mailto:ggassner@uni-koeln.de)
- **Design and analysis of in-situ „simulation data-to-simulation method“ feedback**  
contact Christian Sohler: [csohler@uni-koeln.de](mailto:csohler@uni-koeln.de)
- **Clustering analysis of warm air intrusions**  
contact Vera Schemann: [schemann@meteo.uni-koeln.de](mailto:schemann@meteo.uni-koeln.de)
- **Identifying convective hotspots using weather radar**  
contact Ulrich Löhnert: [loehnert@meteo.uni-koeln.de](mailto:loehnert@meteo.uni-koeln.de)

In case of general questions, please contact Sybille Schogger  
[sybille.schogger@uni-koeln.de](mailto:sybille.schogger@uni-koeln.de)