

# New Developments in Climate Information

Boris Orlowsky & Christian Huggel

University of Zurich, Department of Geography

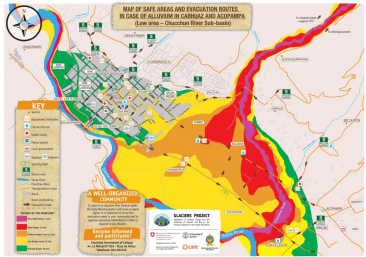
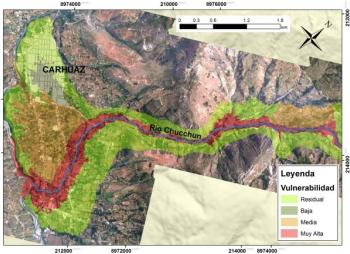
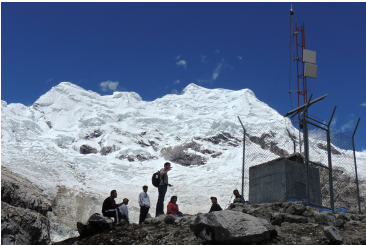
November 1st, 2016

# Observing shrinking glaciers



©Elmer Ayala/CARE

# Early warning system



Muñoz et al., 2016

# Climate Information

- ▶ understanding climate change and impacts
- ▶ with augmenting climate change impacts: national/regional adaptation
- ▶ informing global climate policy (IPCC)
- ▶ enabling countries to adapt to and mitigate climate change
- ▶ enabling countries to participate in international climate finance mechanisms

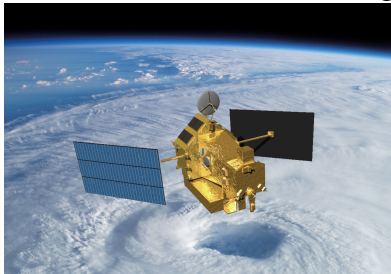
# Sources of Climate Information

## In-situ



<http://meteo.besse83.free.fr/>

## Remote sensing



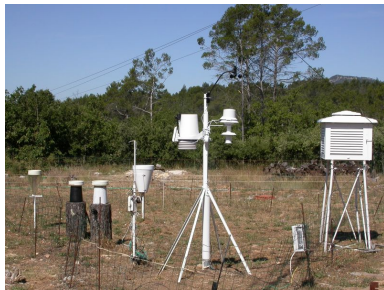
<https://pmm.nasa.gov>

## Local knowledge



<http://www.cooperacionsuizaenperu.org.pe>

# In-situ

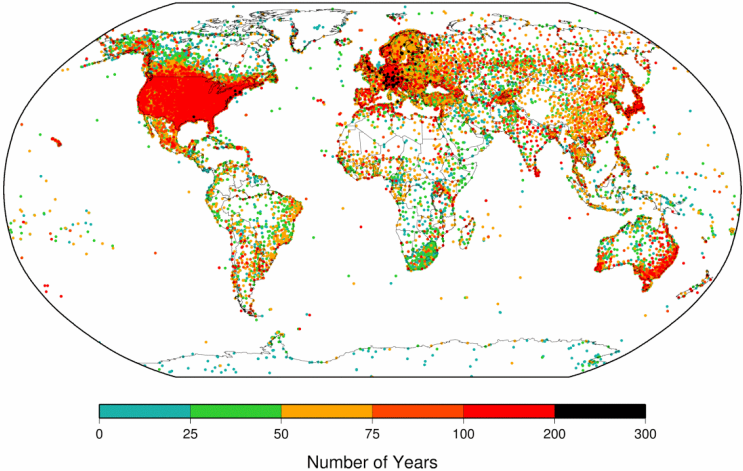


<http://meteo.besse83.free.fr/>

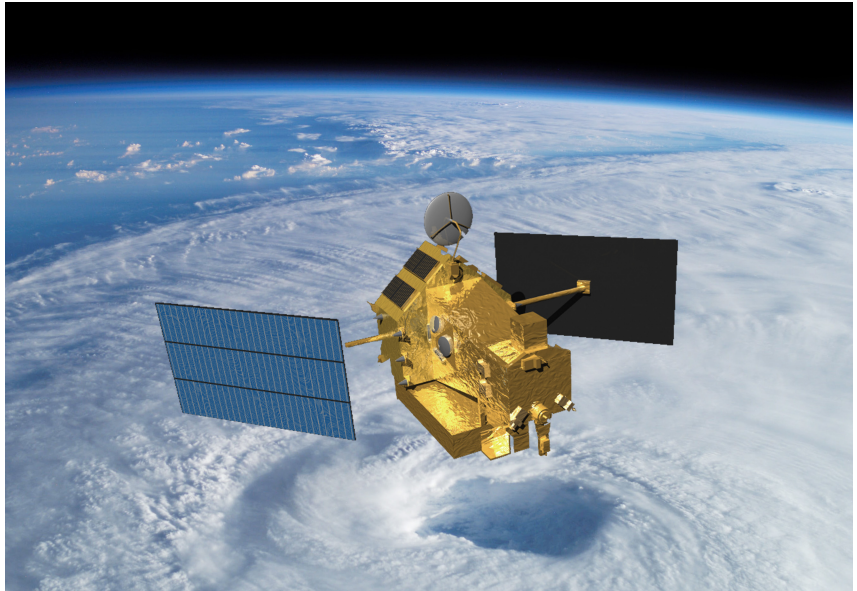


<http://www.sternwarte-hagen.de>

**ALL Stage Three Monthly**  
Recommended\_Merge



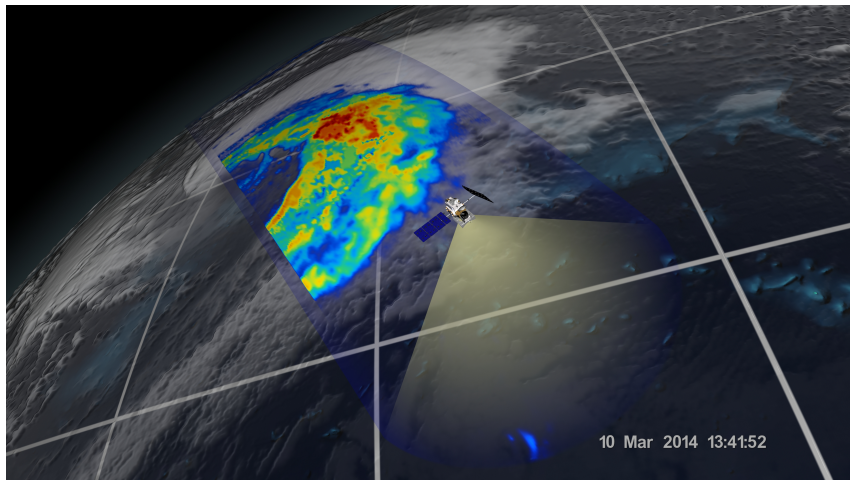
# Remote sensing



<https://pmm.nasa.gov>



# Remote sensing



<https://pmm.nasa.gov>

# Local Knowledge



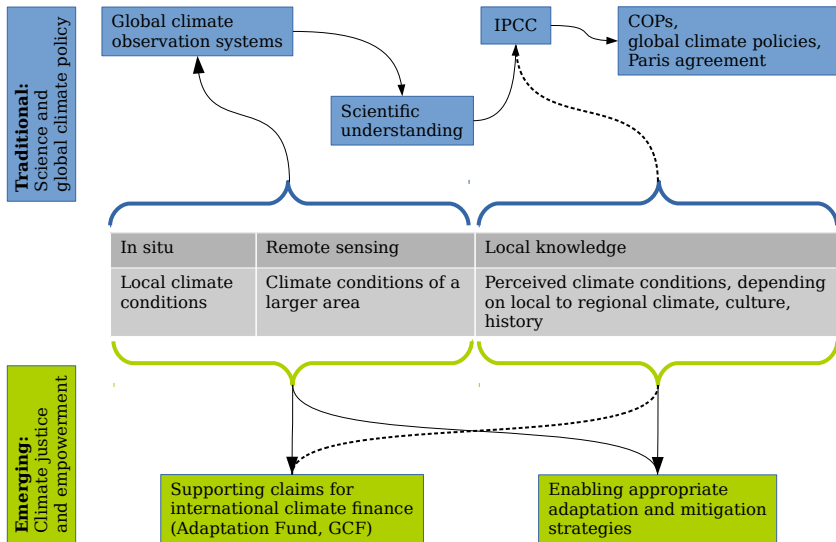
<http://www.cooperacionsuizaenperu.org.pe>

## 1st summary

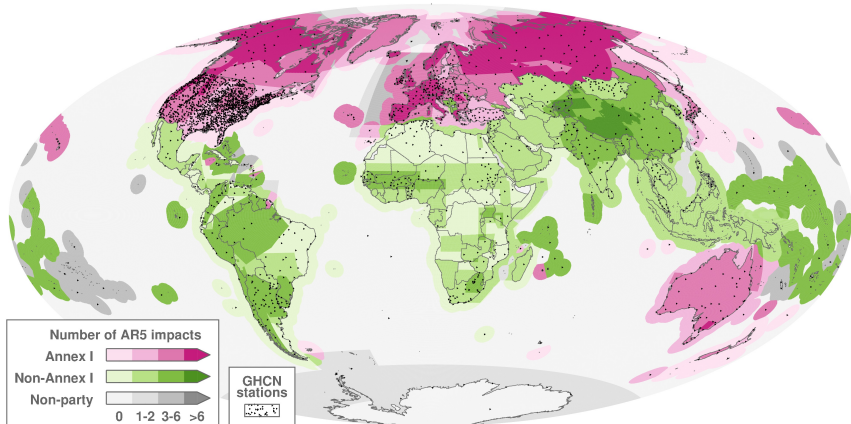
Observations from in-situ measurements, remote sensing and local knowledge...

- ▶ reflect different aspects of reality
- ▶ are not generally substitutable for one another
- ▶ potentially produce diverging conclusions

# Usage of Climate Information

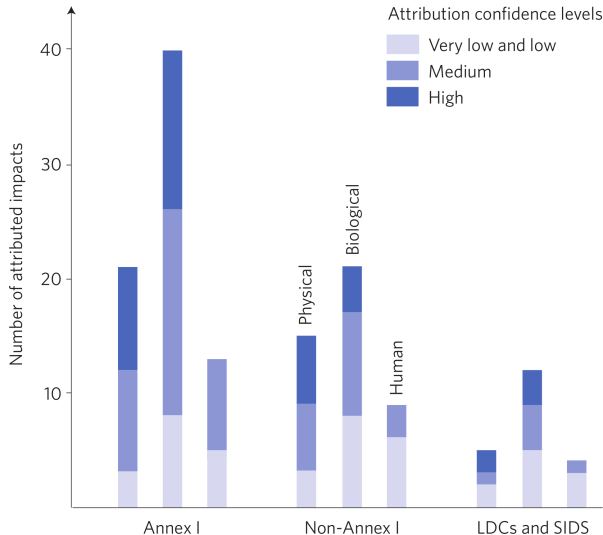


# Distribution and observation of climate impacts



Huggel et al., 2016

# Distribution and observation of climate impacts



Huggel et al., 2016

## Possible points for discussion

- ▶ Challenges from missing in-situ observations
- ▶ Experiences with local knowledge and importance for practice
- ▶ Managing different sources of climate information for adaptation
- ▶ Perspectives of different sources of climate information for global climate policy and climate financing