Eleonora Demaria Statement of Interest for Participating in WAS*IS

Growing up at the margin of one of the largest rivers of the world, the Paraná River in South America, I was always intrigued by what seemed to be, at that time, the unpredictable behavior of the river. Its periodic high floods always brought destruction and despair to settlers of coastal regions in densely populated countries such as Brazil and Argentina. The river behavior motivated me to pursue undergraduate studies in the field of Hydrology and Water Resources Engineering. To acquire a holistic understanding of hydrologic processes behind the occurrence of those extreme phenomena, I joined a graduate program at the University of Utah where I gained a Masters degree in Meteorology. After its completion, I started doctoral studies in Hydrology and Water Resources at the University of Arizona.

Since I started my doctoral studies, I have focused on the development of reliable and efficient flood forecasting tools that would allow people to anticipate the occurrence of extreme flow events in undeveloped regions around the world. Another area of interest is to understand how global changes, natural or anthropogenic, can be foreseen and how a better knowledge of droughts, floods, and rainfall occurrences could help communities prepare for extreme events that threaten their livelihood. I am also interested in the communication of science, particularly climate change science with the general public, and how such messages can be more effectively framed to ease the understanding and to raise activist behaviors within individuals. I think that public perception directs behavioral preparations, mitigation, adaptation strategies, and responses to climate events affecting them at different timescales.

I believe this workshop will provide me with useful tools on how to make climate science more accessible to the general public. It will help me to make connections with researchers from multiple backgrounds and understand how they relate to climate/weather research. I will gain insight in how various segments of society utilize forecasts and how we, climate scientists, can make those forecasts more accessible to a larger audience other than academics and scientists. After completion of my PhD in summer 2008, I hope to join an organization dedicated to implementing climate science into policies at the regional to global levels that lead to a more integrated use of water resources.

Finally, I work well with others and enjoy learning for other people's experiences. Having a broad understanding of the hydrologic cycle, I hope I will be an asset to WAS*IS. Many climate/weather scientists use numerical models to replicate how the climate system works. I see numerical models also as a tool to be used to respond to the needs of the people. In addition, I have work experience with local communities that have used forecasts, have been affected by extreme climatic events and have useful insights on how valuable forecasts are for their day to day life.