Sectoral impacts of climate extremes: The Expert Team on Climate Risk and Sector-Specific Climate Indices (ET-CRSCI)

L. Alexander[†]; R. Martinez; L. Malone [†] World Meteorological Organization (WMO), Switzerland Leading author: <u>adelju@wmo.int</u>

The Commission for Climatology has a long-standing and well respected approach of high quality analysis, assessment and detection of trends in climate extremes, through the activities of the Expert Team on Climate Change Detection and Indices (ETCCDI). With the advent of the Global Framework for Climate Services (GFCS) and the intent for GFCS to provide climate information and services to meet user requirements, new work is now underway to identify the sectoral applications of the ETCCDI indices and associated software. In addition, in cooperation with WMO and Sector experts in agricultural meteorology, water resources and health, the new Expert Team on Climate Risk and Sector-Specific Climate Indices (ET-CRSCI) is working to identify and evaluate additional sectorspecific indices, both single- and multi-variable types, to define both simple and complex climate risks of interest to user groups. Relying on the principles of ETCCDI, this work will focus on systematic and globally-consistent approaches using high guality data and appropriate statistical methods to help characterize the susceptibility of various sectors to climate variability and change in an authoritative manner. This poster will highlight the objectives of the ET-CRSCI including the sector-focused indices. and give examples of the importance of such uniformly-developed indices (e.g. droughts and heatwaves) to the relevant sectors. It will describe plans to build the necessary partnerships for interdisciplinary knowledge development, to facilitate and promote the use of this information in users' decision-support systems for climate risk management and adaptation strategies, and for development of the requisite training materials.