学位授与記録簿 Degree Registry (Ph.D)

アジア太平洋研究科

Graduate School of Asia Pacific Studies

	Graduate School of Asia Pacific Studie			a Pacific Studies
Name · DOB · Nationality	MBEREGO Seth		6/22/1978	Zimbabwe
Last Institution Attended	September, 2013 Graduate School of Asia Pacific Studies Ritsumeikan Asia Pacific University Prospective Completion			
Degree Type	Doctor of Philosophy in Asia Pacific Studies	Date of Award	September 20, 2013	
Requirement for Degree Conferral	Refer to the Ritsumeikan Asia Pacific University Degree Regulations Article 13 Section 1 [Degree Regulation Article 4 Section 1]			
Title of Dissertation (日英)	ジンバブエにおける降水量と植生のダイナミクスおよびエルニーニョ南方振動との関係 Precipitation-Vegetation Dynamics over Zimbabwe and Their Relationship to the El Niño-Southern Oscillation			
Examiners	(Supervisor) SANGA NGOIE, Kazadi		COOPER, Malcolm J. M.	
	SHIOTANI Masato (Kyoto Univ.)			
Summary of Dissertation Contents	Climatic variability is a big challenge for semi-arid African economies that rely on agricultural productivity as the backbone of their economies. In recent years there has been increased interest in the region to use seasonal climate forecasts as a tool to assist agriculturalists for better risks management. Unfortunately the existing climate forecast systems are still limited in their resolution and precision. This study using Zimbabwe as a case study examines the possibility of using both locally captured data and high resolution satellite data for enhancing climate forecasting. The local level analysis includes both interviews to agricultural extension personnel and statistical analysis of locally captured data. The potential of using locally captured data is shown and the need to make this information accessible to farmers is stressed. The investigation using satellite data reveals for the first time in Zimbabwe, a number of important climatic patterns and trends that need to be factored into the existing climate forecast system. The significance of including the El Niño-Southern Oscillation in seasonal climate forest models for the country is emphasized. At the end of the study practical recommendations are given for both the local level and the national level.			
Summary of Dissertation Screening Results	This highly scientific work is very well done and built upon a very well-established documentation. The outstanding results are strongly confirmed and supported by a very constructive and solid methodology, as well as by data sets collected according to international scientific norms. We expect the findings in this work to bring new insights in the way governmental officers, scientists and agricultural can blend their knowledge for sustainably mitigating the negative sides of climatic change and variability not only in Zimbabwe, but also in many other sub-saharan countries in Africa. The findings of this work have all been accepted for publication in highly acknowledged international scientific Journals. All the 3 screeners agreed to give it the mention: PASS.			
Summary of Exam Result or Academic Skills	PhD Candidate Mberego brilliantly presented the contents of his Thesis, using very well done power point slides, and clearly summarizing his findings within the allocated time. His responses to all the questions by the screeners did convincingly show that he commends a solid knowledge about his science and the methodological tools of investigation, highlighting his high academic skills in the domain of his research. All the screeners agreed to give him a very high evaluation for his outstanding work and performance, in partial fulfillment of the requirements for being given the Doctor of Philosophy Degree in Asia Pacific Studies.			