Ratings Sheet 1 of 3

Score for Parker, Samuel

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

The applicant presented a compelling personal story that demonstrates a clear ability for introspection and carefully thought out decision making, two important traits for a successful graduate career. The applicant has an excellent undergraduate record and highly successful post-baccalaureate work experiences that demonstrate the intellectual ability and commitment to a successful graduate and post-graduate career. The applicant's references attest to the leadership ability, competence and intellectual abilities of the applicant. The applicants proposed research is complex, including multiple methods of measuring the parameter of interest, modeling, and post-model validation with new measurements. It is well referenced and written - at the level of an advanced graduate student.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Very Good

Explanation to Applicant

The applicant had a fine undergraduate record and established a very productive post-graduate consulting career, contributing to numerous projects with immediate societal impacts. The applicant brings this ethic to graduate studies. The applicant clearly delineates the potential broader scientific impacts of the proposed project to local and national audiences. The applicant also considers how this work can be integrated into G9-12 classrooms (applicant's high school, though previous experience with this is limited) and through professional society connections via webinar.

Ratings Sheet 2 of 3

Score for Parker, Samuel

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The applicant has a good academic record and was actively involved in undergraduate research, from which the applicant made two presentations and co-authored peer review publication. The applicant has experience of working in consulting firms, including URS, and seems to work well both independently and as a team member.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Very Good

Explanation to Applicant

The proposed research is well introduced with sufficient literature background, clearly defined objectives, and testing hypothesis. The proposal has outlined plans on how to collect data, how to utilize the data to test the hypothesis, and how to link the proposed research with education to benefit the local communities.

2013 NSF GRFP Applicant: Samuel Parker

Ratings Sheet 3 of 3

Score for Parker, Samuel

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The applicant has many research experiences in the Arctic region which are related to the proposed research.

The applicant has high potential for doing science well.

The applicant has good academic record.

The proposed research is important for global carbon cycle research and the methodology is workable targeting this question.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Very Good

Explanation to Applicant

The proposed research is important, which has broad impact on the scientific community, local people, and the policy making process.

The proposal will integrate research and education at all levels from high school students and early career scientist.

Proposal will benefit from a description of the contribution of the proposed research to policy makers.

2013 NSF GRFP Applicant: Samuel Parker