Overall Assessment of Intellectual Merit: Excellent

Explanation to the applicant:
The applicant’s determination to become an engineer is inspiring. Her life story shows her deep intrinsic motivation to do graduate work at the highest level. Through her internships at NASA, she has developed her own research agenda and has presented a complete and well thought out plan to test her hypothesis about rock weathering.

Overall Assessment of Broader Impacts: Excellent

Explanation to the applicant:
The applicant has worked as a teacher and mentor and is strongly motivated to give others the opportunities she wished she had had for herself. Her descriptions of her tutoring and mentoring experiences are moving.

Overall Assessment of Intellectual Merit: Very Good

Explanation to the applicant:
Your personal statement is compelling and convincing regarding your strength and perseverance against huge odds to make the academic progress that you have. Your willingness to write in such candid words reinforces your determination and your probability of success in whatever you attempt. Your history of sharing your knowledge with young people is also praiseworthy and you obviously understand that the reward is gained in the giving. Your research plan seems reasonable and well founded. You appear to have sufficient intellectual support to move forward.

Overall Assessment of Broader Impacts: Very Good

Explanation to the applicant:
Regarding your statement to address the “broader impacts,” your application could be improved if you would articulate those items more directly. Be specific. Be direct. Make it clear what you intend to do to make your research impact the best/biggest that it can be.

Overall Assessment of Intellectual Merit: Excellent

Explanation to the applicant:
Intellectual Merit. Your write-up about planning and conducting research shows that you learned from your experience. You show mostly that you can work independently but also as part of a team. Your essays show that you can interpret and communicate research. However, your presentation of past research is a bit disorganized. You mention several times your NASA mentor. Congratulations on your publication and presentations. I feel however that your research plan is not clear enough, you have hypotheses, tests to conduct, and then what? Will you model, will you come up with some theory? Based on what? Will you take geology classes? You should think more of the whole process.

Overall Assessment of Broader Impacts: Excellent

Explanation to the applicant:
You show high interest in integrating research and education and describe how to communicate this to others. I liked very much your enthusiasm and drive. You are aware of diversity issues, and show me how to broaden opportunities and enable the participation of others. Your participation in mentoring and teaching others is commendable. I do feel that you overcame many hardships and have shown how to succeed. You are however competing with top students, and your academic achievements are a bit below theirs. You show how your research will enhance scientific and technical understanding and impact the understanding of our own earth and you show how society will benefit from the work you propose.