Caring for and starting with Field Education Equipment

We are glad that you are participating in this geodesy field educational loan program. We hope you and your students will get a lot out of applying survey methods to geoscience questions. Please give feedback to the email below.

Caring for the equipment

1. Take a little time to familiarize yourself with everything that has been sent to you so it will be easy to keep track of. For example, each receiver set includes four items: carrying case, receiver, antenna, and charging cord.
2. Please spend some time at the beginning impressing upon your students that these instruments are a shared resource and it is upon all users to take good care of the equipment so we can keep sharing them for years to come.
   a. You could even ask them to brainstorm the appropriate way that equipment should be treated. Hopefully they would come up with at least a few of the following:
      i. Not knocking the receivers into other objects
      ii. When setting down a pole (say during a rest) the weight should rest on the pole, not the receiver
      iii. The base should be set up in a secure location where it would not be in danger of falling off a cliff, blowing over, getting hit by a vehicle, or being stolen, etc.
      iv. Be careful when screwing and unscrewing the antenna or pulling out the charging cord so the junctions do not get damaged
      v. Do not leave receivers in very hot vehicle for a long time.
   b. If something does get damaged, they should definitely tell you so you can tell us. Although we check the equipment between loans, if something like the antenna or cord stops working, we might not realize that and it could go out damaged to someone else.

Getting started

1. Emlid provides many great tutorials for getting started with the ReachRS2. https://docs.emlid.com/reachrs2/ We recommend spending some time becoming familiar with the resources they offer.
2. For more general information about setting up in the field, see the GEodesy Tools for Societal Issues (GETSI) module High Precision Positioning with Static and Kinematic GPS – Unit 1: GPS/GNSS Fundamentals https://serc.carleton.edu/getsi/teaching_materials/high-precision/unit1.html
3. We also provide a few documents to help with using the Emlid ReachRS2 – both a QuickStart Guide and a somewhat more detailed Instructor Manual. https://serc.carleton.edu/getsi/teaching_materials/high-precision/equipment.html#emlid