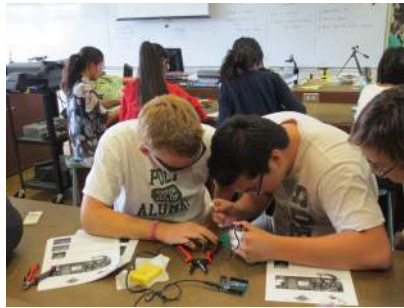


A total of eight flight-boards were flown with three students assigned to work on a single payload. While a variety of sensors could have been soldered on, we chose to just focus on the GPS unit this year. Hence all the base payload components such as the OpenLog, WiFly, and Arduino were attached but not the additional sensors provided. The hope is to incorporate these next year now that we have a successful first year under our belts. The pictures below show some of the students putting together the flight-boards.



Finally, students also put together the high-powered rockets on which their flight-boards flew. In addition to learning how to properly put together a high power rocket that can handle the stresses from the enormous accelerations endured, they learnt a great deal about using power tools (safely), communicating effectively with their group members, and the ability to properly plan out the build stages (since once the epoxy dried it could not be undone and a significant amount of time needed to be allotted to let the epoxy dry in the proper sequence). The pictures below exhibit some aspects of the build.



The completed flight-boards and rockets were flown at an event organized by the Rocketry Association of California at the Lucerne Valley dry lakebed. One of the S4 team members met us at the launch site to provide support in the field.



The final output file generated was an xml file that could then be opened using the Google Earth software. The second picture at the top of this document shows a plot of the trajectory of one of the rockets flown on that day.