High altitude balloon project

Outline:

* Hardware
  + Platform
    - Computer (Sean)
      * May need to handle several cameras
        + Beaglebone or pi
    - Power source (Tom) See if Dom wants to look into this
      * Batteries
      * Solar
    - Sensors (Tom unless specified)
      * Barometer
      * Accelerometer
      * Temperature
      * Camera (Sean)
        + Either several cameras or a gimbal
      * Gps
      * Geiger counter
      * Magnetometer
      * Gas sensors
    - Data storage (Sean)
      * Two sd cards
    - Communications (Tom)
      * Long distance transmitter
      * Short distance broadcast for location (?)
  + Balloon
    - What size balloon
    - What gas
    - Look into gas release system
    - Parachute

Research:

* Expected conditions at altitude (temp, press)
* Battery system than tolerates temperatures and pressures
* Sensors that can handle conditions
* Case for sensors (consider requirements for barom, geiger, transmitter
* Expected radiation
* Protection for high static, high moisture environment (inside cloud)
* Location
* Recovery vehicles