Data Analysis: Diurnal Responses
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I. Introduction
   a. Goals: to sample at times with maximal plant response differentiation, detect time of heat/water stress change
   b. Review of temporal responses for thermal infrared, VNIR, LiDAR, acoustic
   c. Time sampling: Single-time, two-times, solar angle, meteorology, plant stress
   d. Errors and uncertainties
II. Checking for data errors
   a. Outlier removal
   b. Location verification
   c. Soil vs. vegetation temperature screening
III. Comparing reflectances vs time of day, active and passive
IV. Comparing temperatures vs time of day
V. Comparing LiDAR (briefly)
VI. Comparing acoustic: small changes anticipated
VII. Conclusions/Recommendations
   a. Clarify which plant characteristics have meaningful diurnal change signatures
   b. Techniques to improve results:
      i. Plot level averaging
      ii. Temperature differencing
      iii. Increase sample size
      iv. Increase sample averaging times (but conflicts with iii)
   c. Mid-day sampling for VNIR & acoustics
   d. LiDAR may see plant stress response