

# SNR: Behavioral Results

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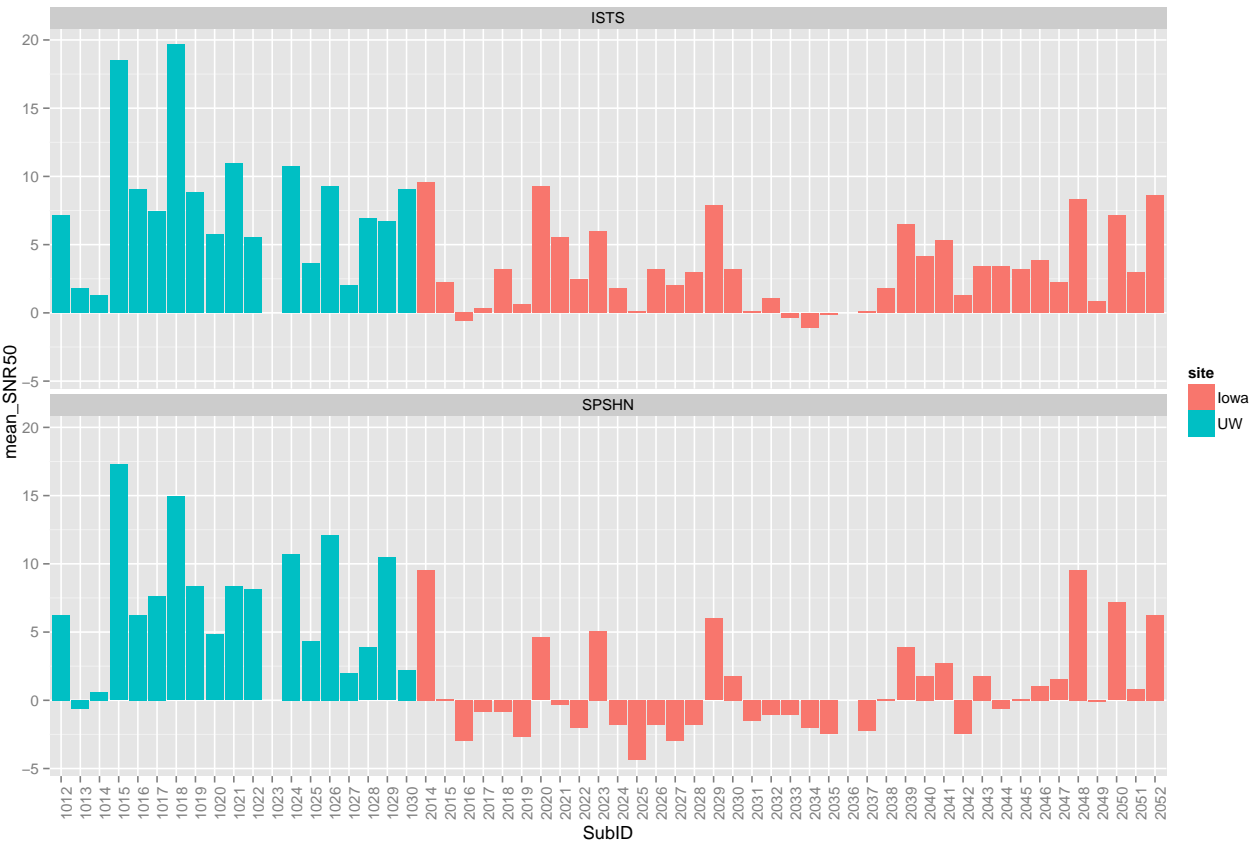
## Overview

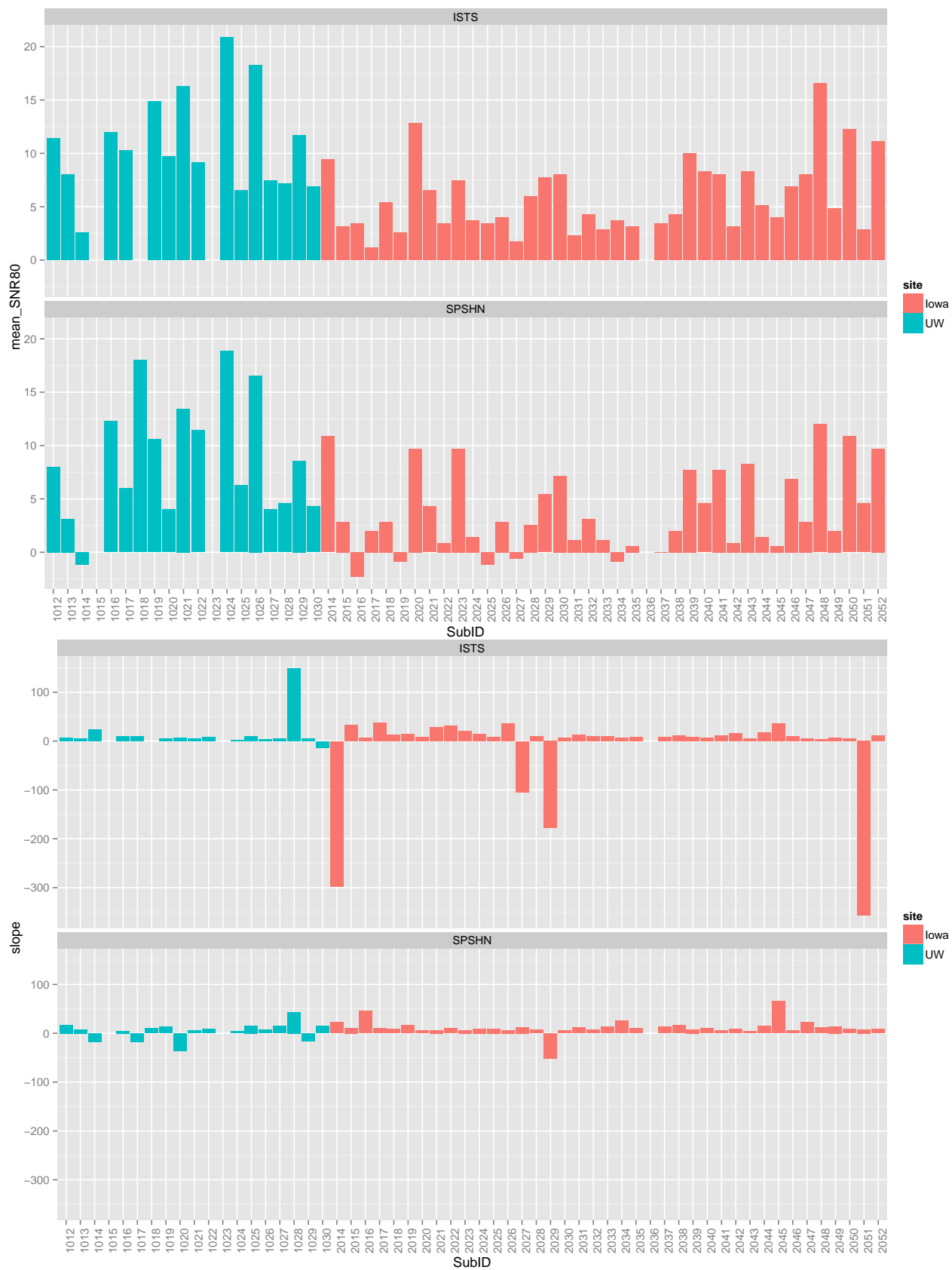
Michael Lee provided a preliminary pass of HINT data from UW/UofI. Here is a quick and dirty breakdown of the data.

### Default Scoring

Below are subject-by-subject data points from UW/UofI using the default scoring parameters.

**Note:** U of I has twice as many subjects as UW, so interpretations will need to be coloured accordingly.

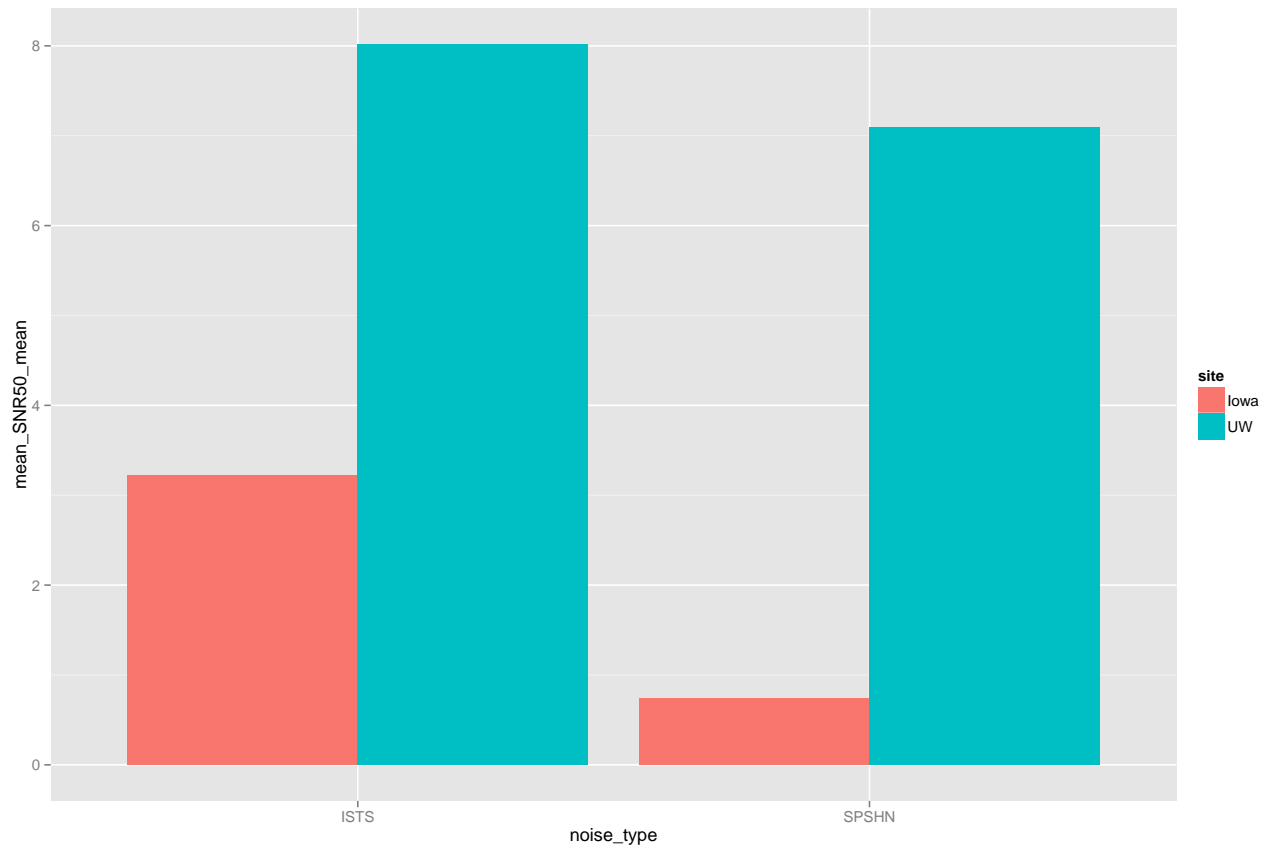


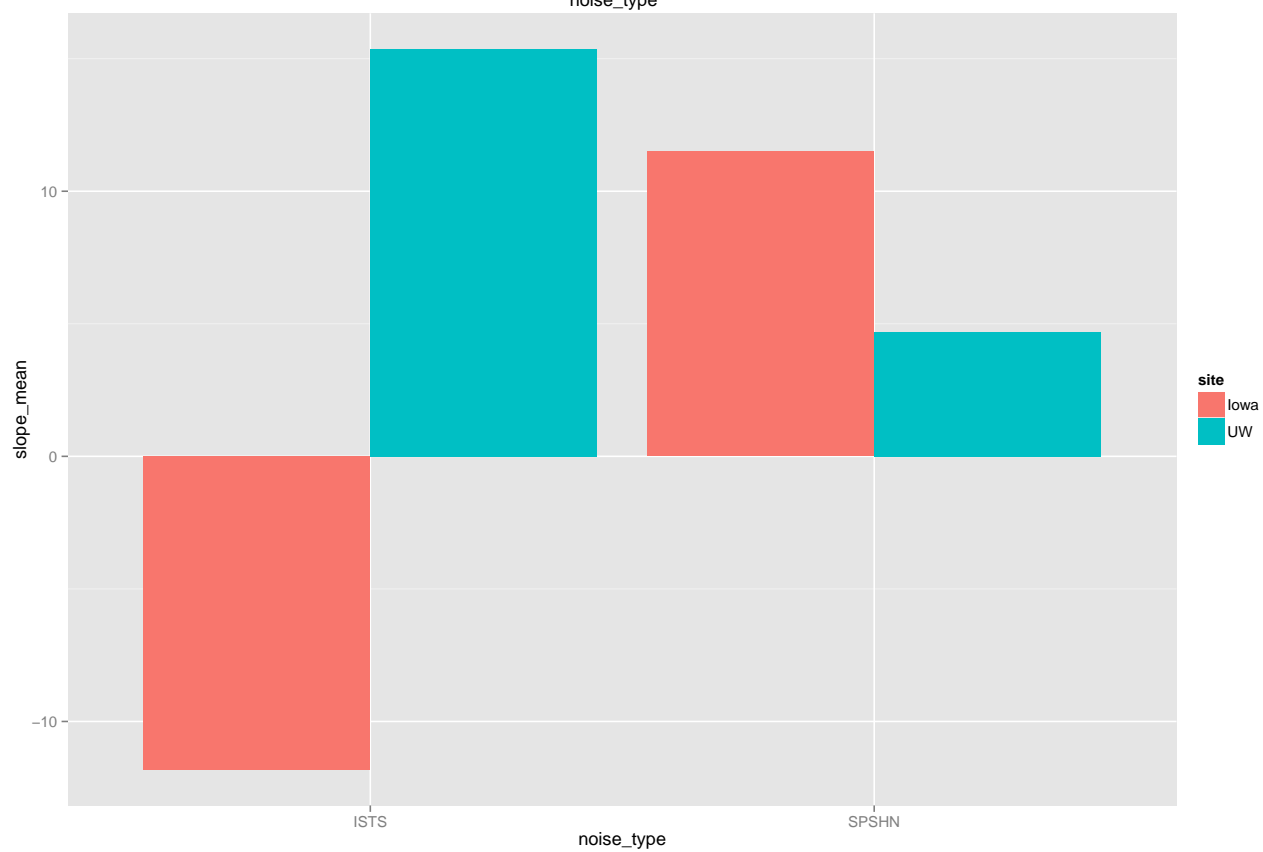
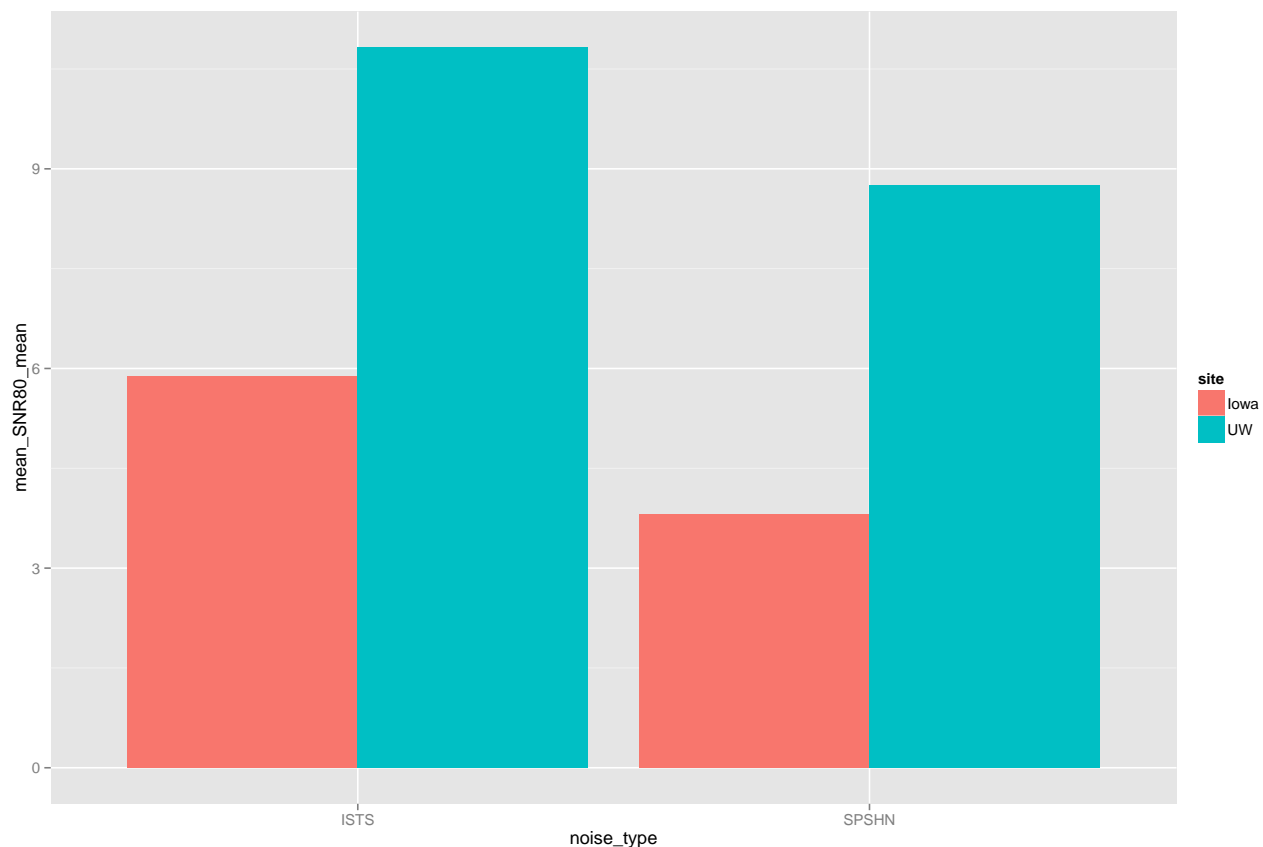


- Qualitatively, there seem to be intersite differences, particularly with SPSHN SNR80/SNR50 estimates.
- There are slope outliers we'll need to look into and deal with accordingly. Particularly interested in ISTS from Iowa.

**Michael:** Can you please provide some detail as to how you calculated slope\_dB? I know we've decided to throw that measure out, but I want to make sure we are calculating the slope appropriately ... and I'm not sure how slope and slope\_dB can differ as much as they do. And And sometimes (e.g., 1014), the two measures differ in sign.

Below are summary figures (no statistics yet) for each of the three measures plotted in detail above.





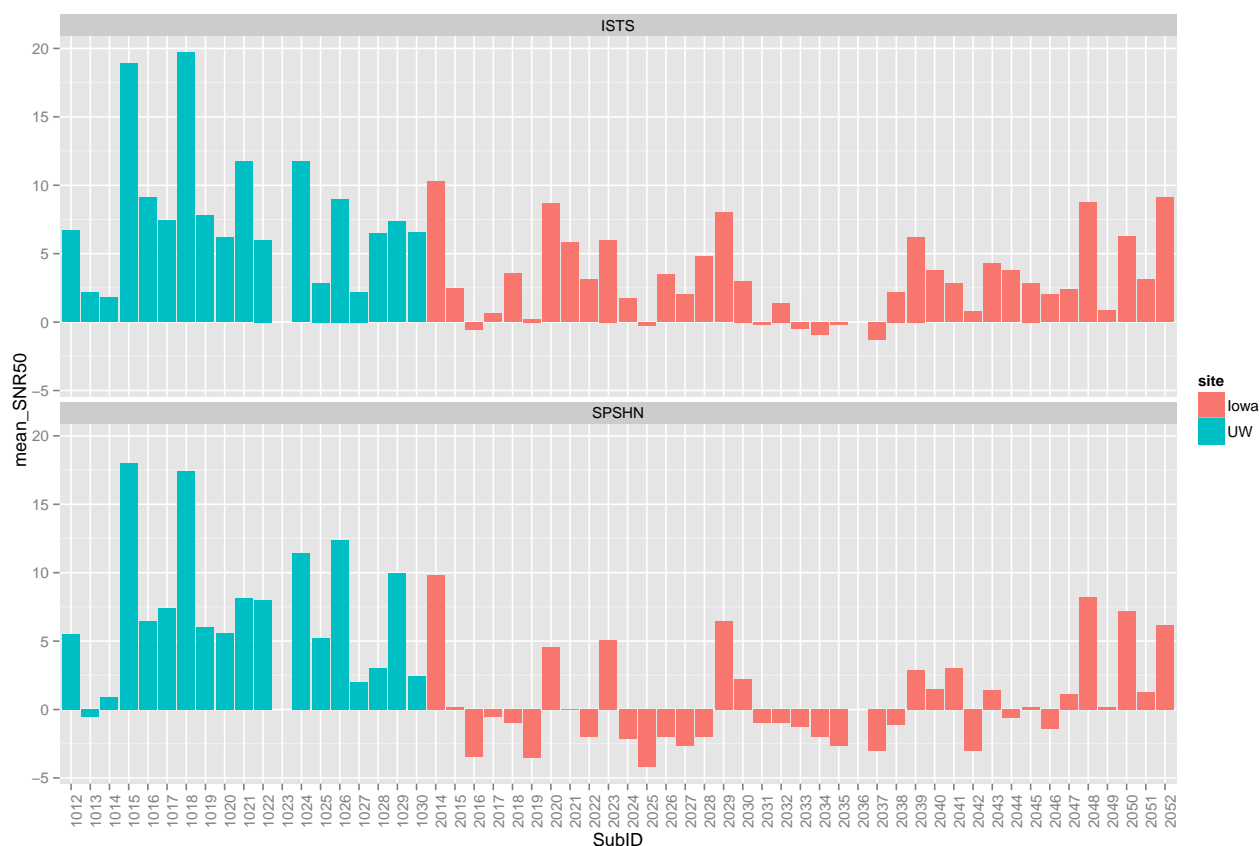
- These averages should be interpreted with considerable caution. I have done *nothing* to deal with outliers or impute missing data intelligently. Too tired to do either, at the moment.
  - Regardless, we are seeing some reasonably large intersite differences in our HINT scoring. Need to look into this.

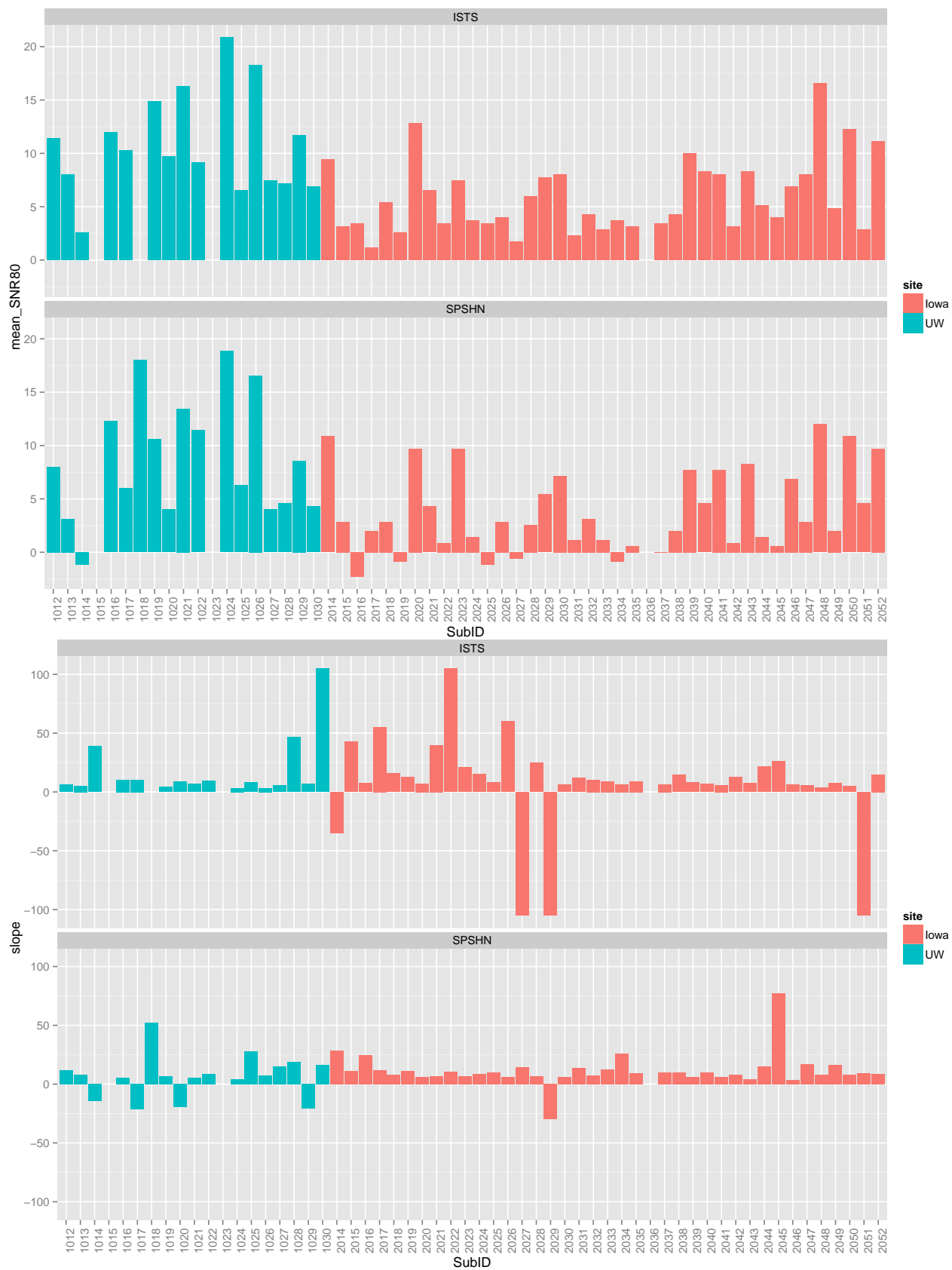
## Reversal Scoring

Below, SNR-50 and SNR-80 calculations are both scored using the mean of N reversals.

**Michael:** can you please confirm how many reversals we are using for scoring and their relative positions (e.g., reversals 2-6)? Do all subjects have all reversals? I seem to recall we adapted the SNR-50 protocol later in the game, so I wouldn't expect all subjects to have enough reversals unless we were extremely lucky. Or I'm very tired. One of those is a certainty.

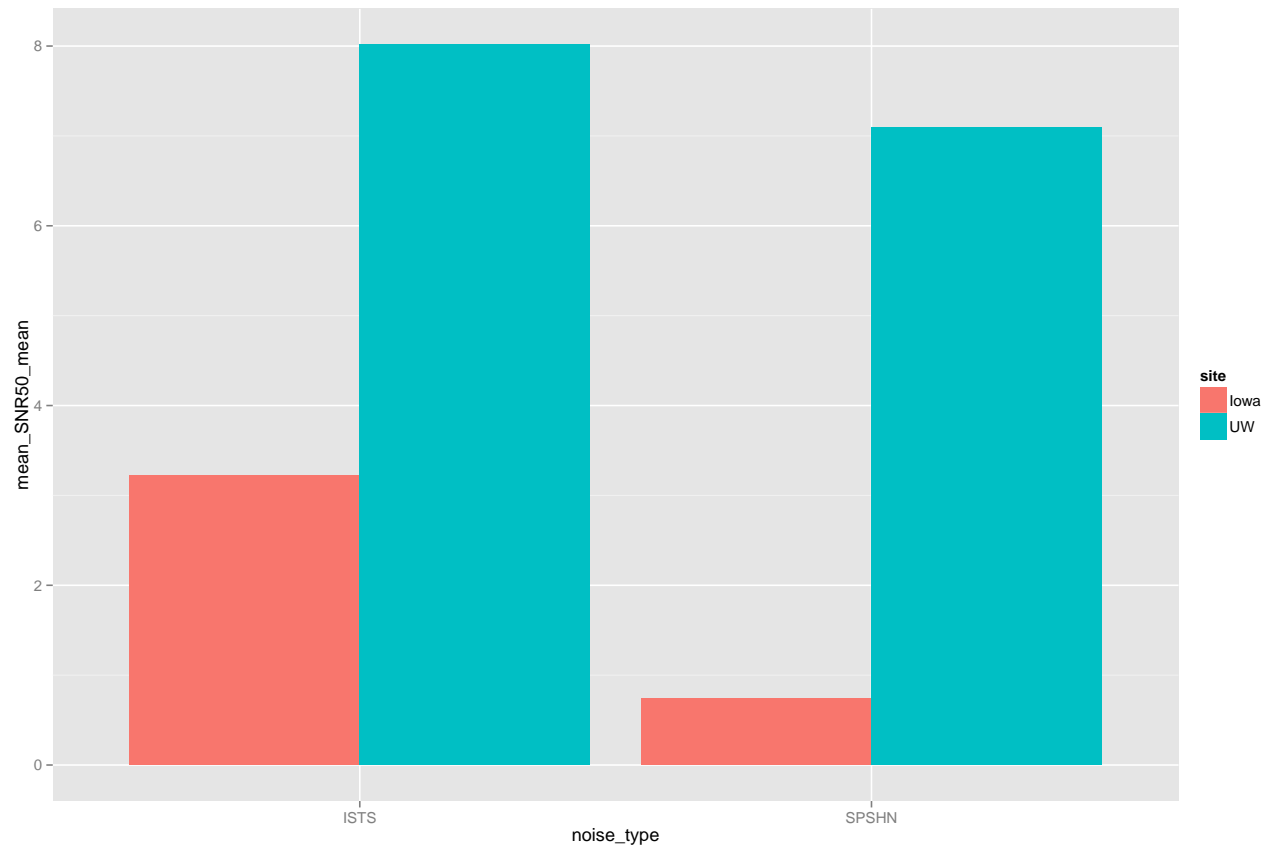
Below are subject-wise plots of SNR50/80/and slope.

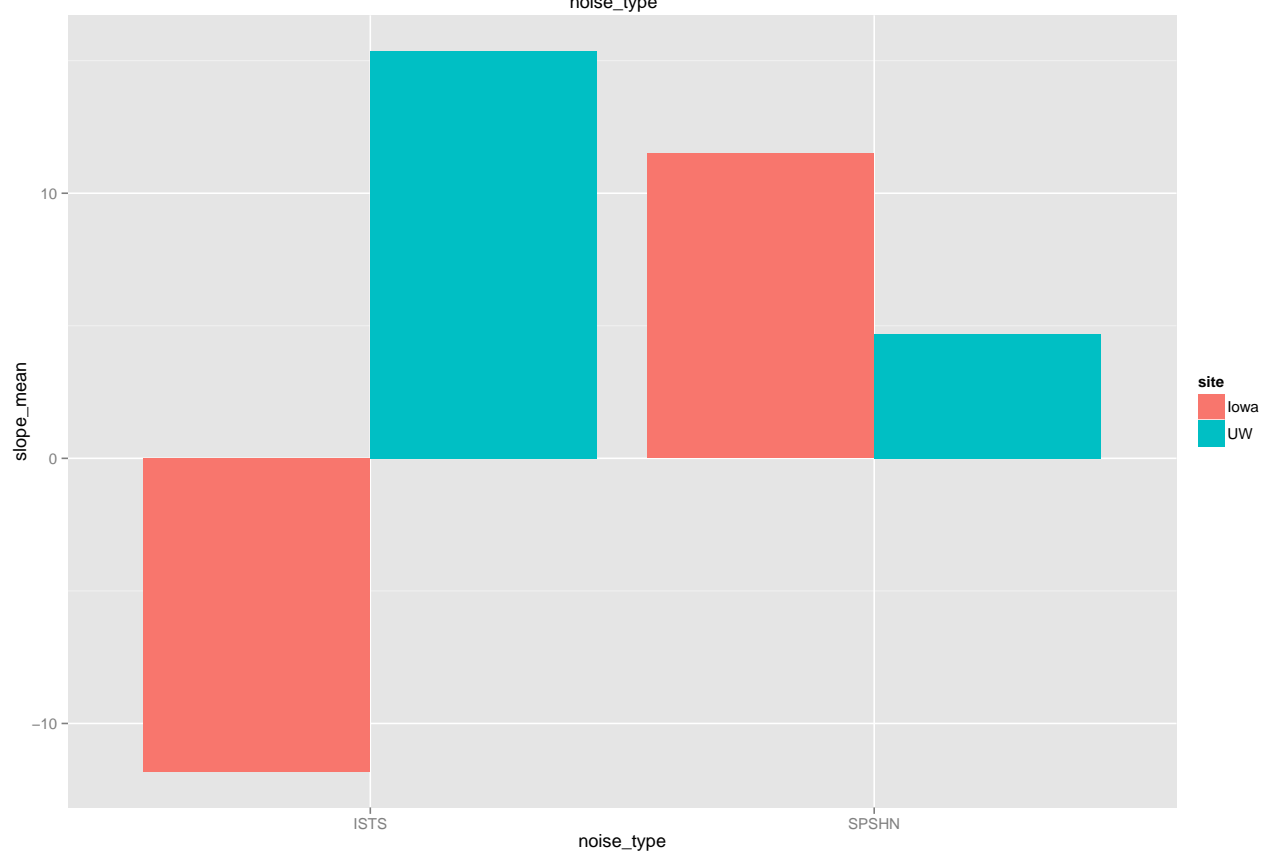
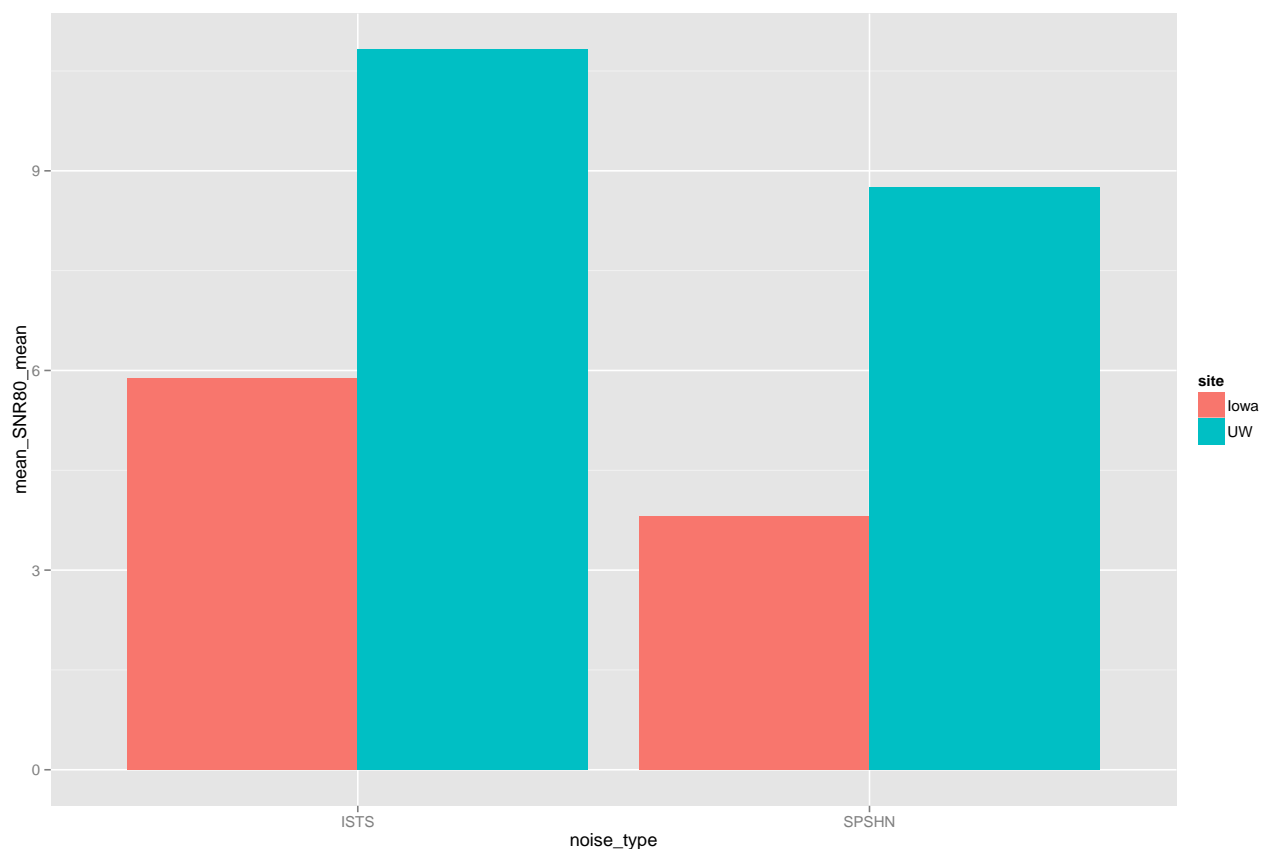




- Again, we're seeing outliers in slope, but they're far less extreme it seems.
- **Michael** can you cross-check these figures with those above? Are the outliers the same subjects?

Below are the measure summaries using reversal scoring.







- We're still seeing intersite differences, with generally higher SNRs at UW than Iowa.

**Anyone have any thoughts on why this might be?**

## **To Do**

- Rerun analyses and deal with outliers in an intelligent way.
  - Double check computations
- Combine with data from REDCAP!!
- Publish.