Session 2 Summary

How do we evaluate our current performance?

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- Introduction

- Status of the SSE PP and the plans for converting it to an operational product

- The BKG analysis and contribution to the PP, extended to 2000-2017.5

- Investigation on the status of the network:
  - data analysis from many s/c and all stations for many years (averaged over ~10000 residuals);
  - found interesting signatures correlated with the elevation and azimuth of the passes;
  - day/night split of the passes and the ascending vs. descending passes;
  - will need to study these results further in order to understand what they mean

- Presentation of a wealth of station parameters' distribution for the entire network (online), with a few examples during the presentation, focusing at the main sources of systematic error which map directly onto geodetic products.

- Presentation on three effects that impact NP RMS:
  - Limited physical sampling, statistical sampling variability, and background noise.
  - Leading edge reduction methods seem to work very well;
  - what that means in implementing these alternative reduction methods in practice not considered.
  - Different clipping methods require appropriate CoM values!

- Dave presented the theoretical study for the quantization errors, looking at the effects of pulse length, rise time, signal strength, and detection system used.

- Presentation of a new standard (T2L2 method) for keeping track of timing errors throughout the network with a lot of examples

- Presentation of the new system (Tochka) developed for deployment in future stations of the Russian network (Mendeleevo and Irkutsk for example, leading to co-located sites!)

- Web tools for use by station engineers and analysts for QC of their products:
  - JCET web tools

  - GOVUS website

  - The ILRS Rapid Service Mail tool