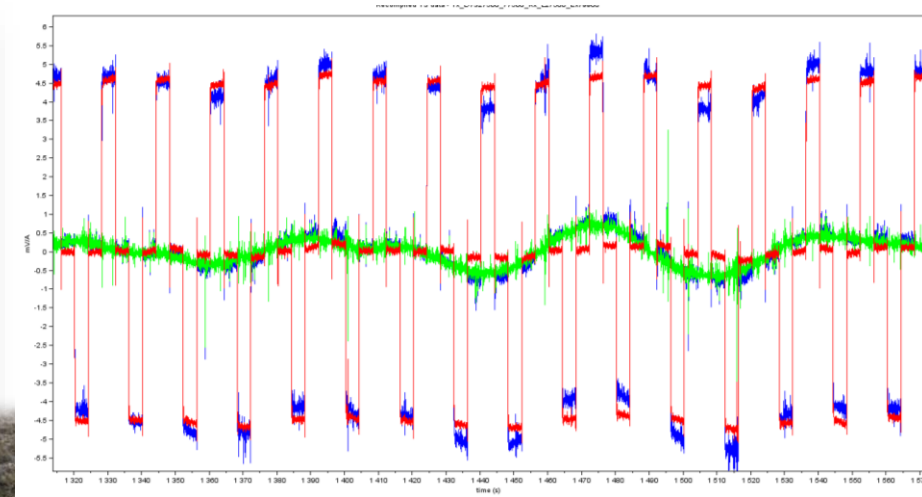
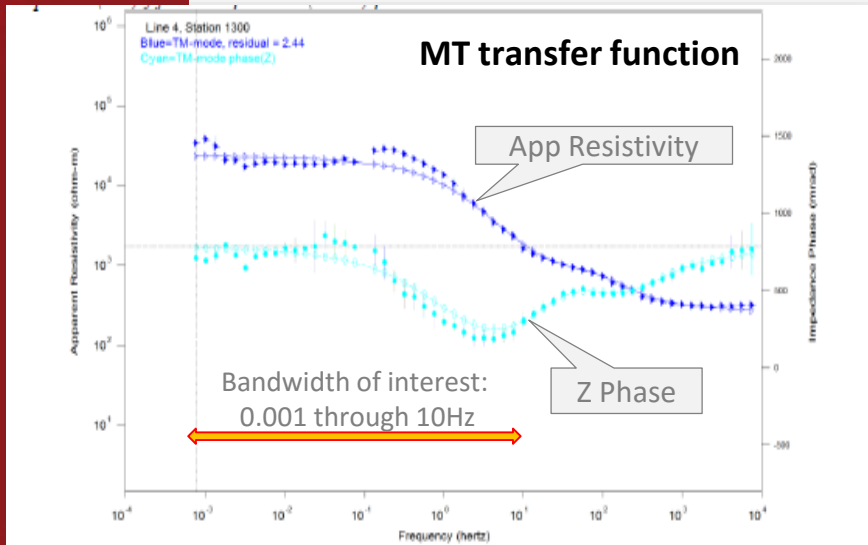


Telluric Cancellation

- Telluric cancellation usually uses a method in which Magneto-Telluric data acquired at each station provides a transfer function which permits the inference of the Electric field at that site to be drawn from measurement of the magnetic field variations at a remote site.



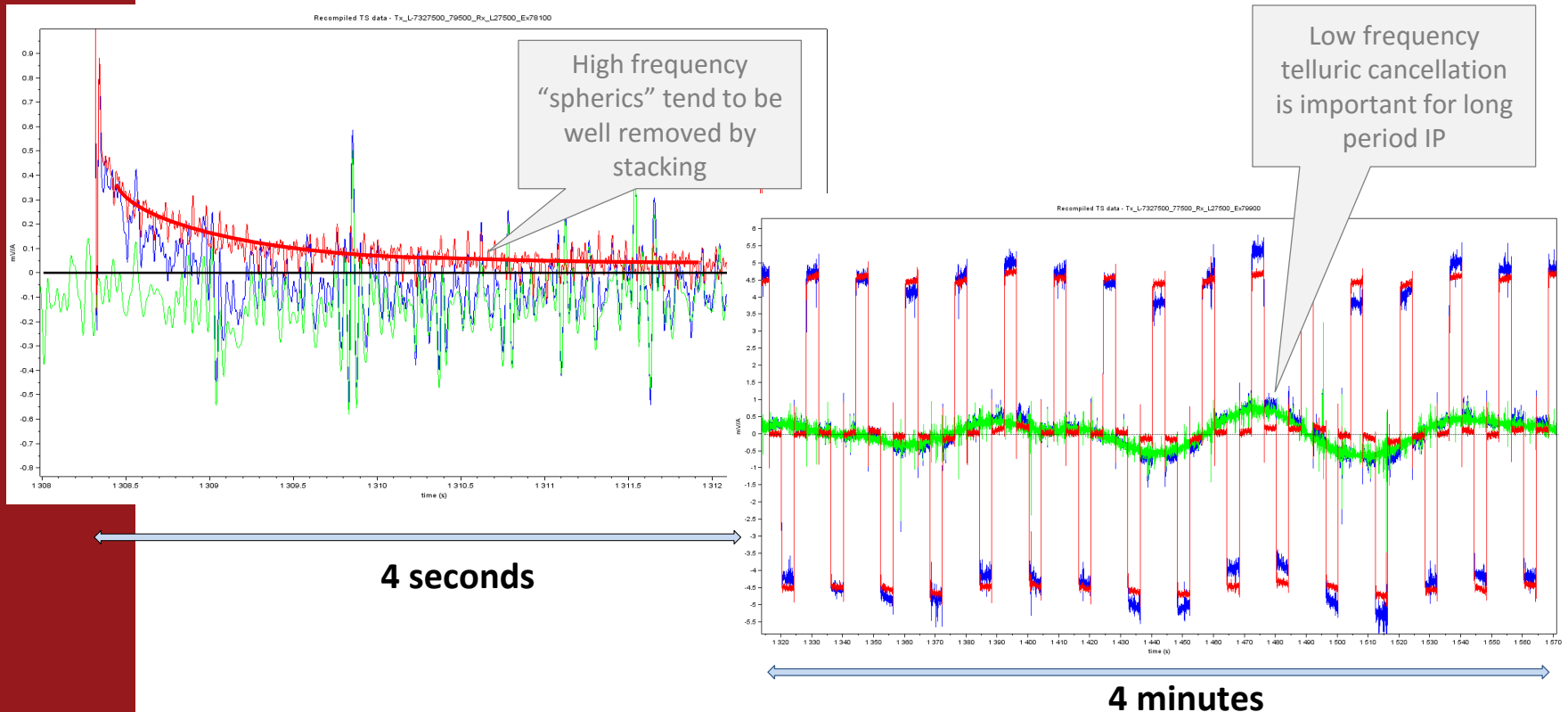
**Time Series with
Telluric Cancellation:**
Blue: Observed Time Series
Green: Inferred Telluric Noise
Red: Telluric Cancelled data

Remote Reference MT site



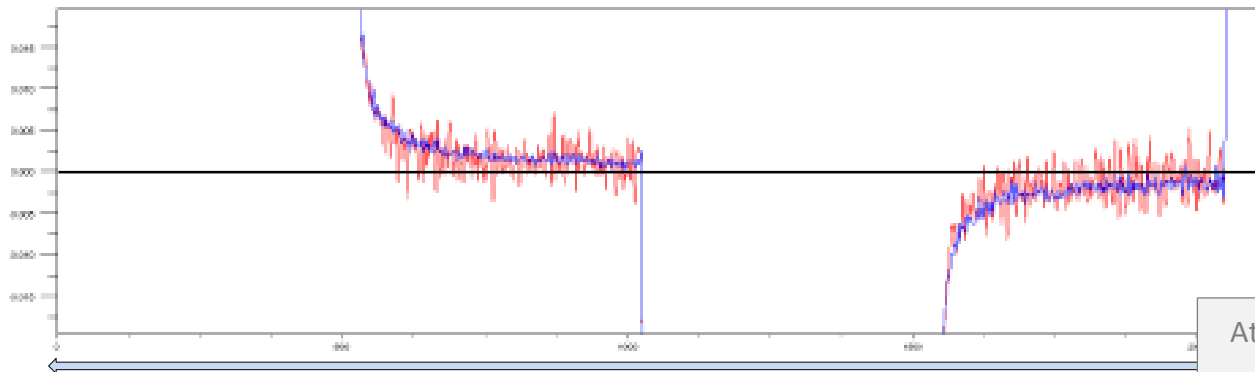
Telluric Cancellation

- The improvement achieved with telluric cancellation depends on the relative signal strength and the proportion of the noise arising from telluric signals.
 - If electrode noise is very strong for example the process may have only limited impact.



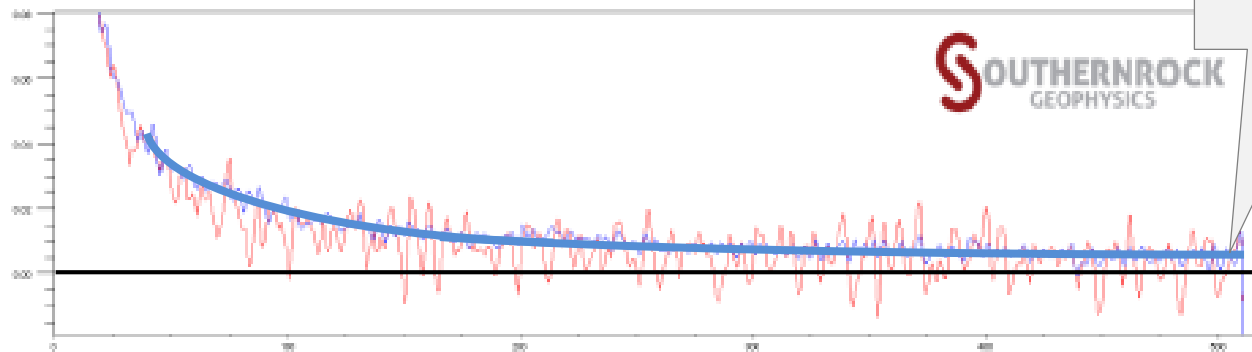
IP decay time constants

Telluric cancellation aims to improve data quality and may have vital application in surveying for very long time constant IP signals. IP is often thought of as a capacitive effect but the time constants tend to indicate a much slower chemical reaction source



16 seconds

At 4s after turn-off,
an appreciable
secondary response
is present



4 seconds

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