Increased recognition of the deep value of continuous recordings of Earth’s seismic wavefield has led to the discovery of a bestiary of new seismogenic processes as well as to the development of powerful new analysis methods. I will summarize representative historic and recent results from research arising from long-duration signals in areas of research that lie outside of the realm of traditional earthquake/monitoring-based seismology. Such work include studies of atmospheric (e.g., industrial accidents, bolides), glaciological (e.g., iceberg and glacial sources), volcanic/tectonic (e.g., tremor, very-long-period events), and fluid wave and transport (e.g., fluvial and microseism seismology) sources and processes at short to decades-long time scales. I will include significant emphasis on the growing field of cryoseismology and seismologically observable atmospheric/oceanographic/glaciological processes that bear on cryospheric stability and associated climate change studies.

Link to colloquium videos and announcement page: http://www.atmos.colostate.edu/dept/colloquia.php