

Figure A — Complete 8-month time series of east velocity, north velocity, and tidal pressure at SG_1338 and SG_1322, with the UTide harmonic fit (13 constituents) overlaid.

SG_1338 — KE per constituent (total tidal=1.584 total obs=10.997 cm²/s²)

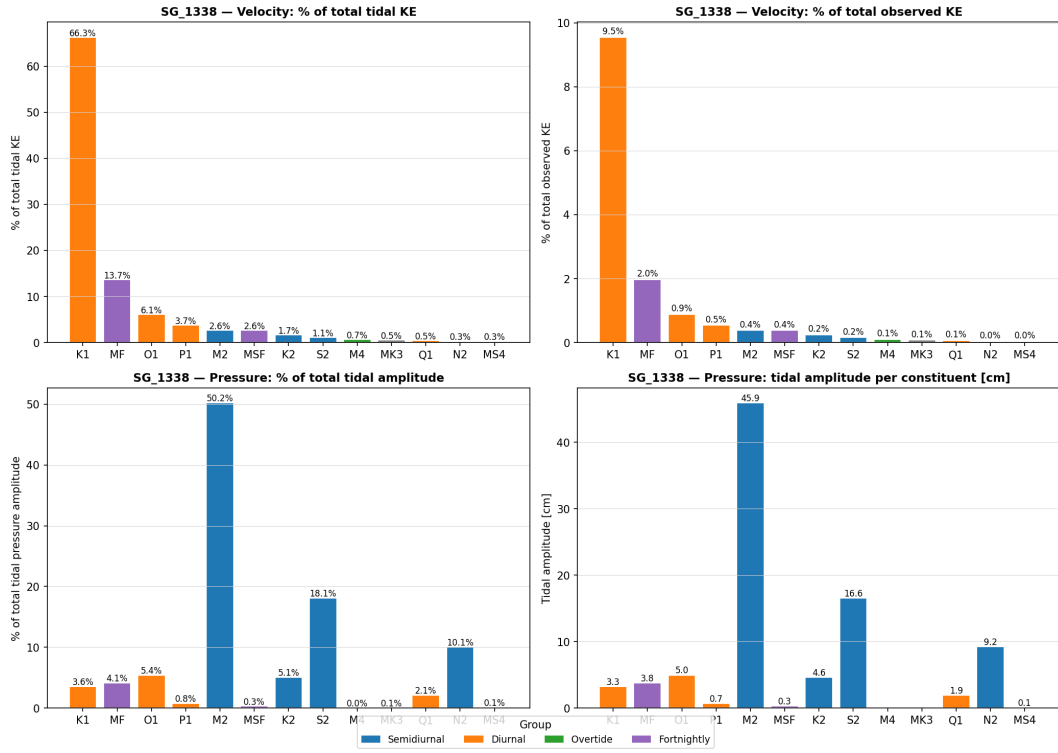


Figure B — Kinetic energy partition per tidal constituent at SG_1338 (summit, ~1151 m), showing K1 diurnal dominance within the tidal fraction.

SG_1322 — KE per constituent (total tidal=0.961 total obs=9.309 cm²/s²)

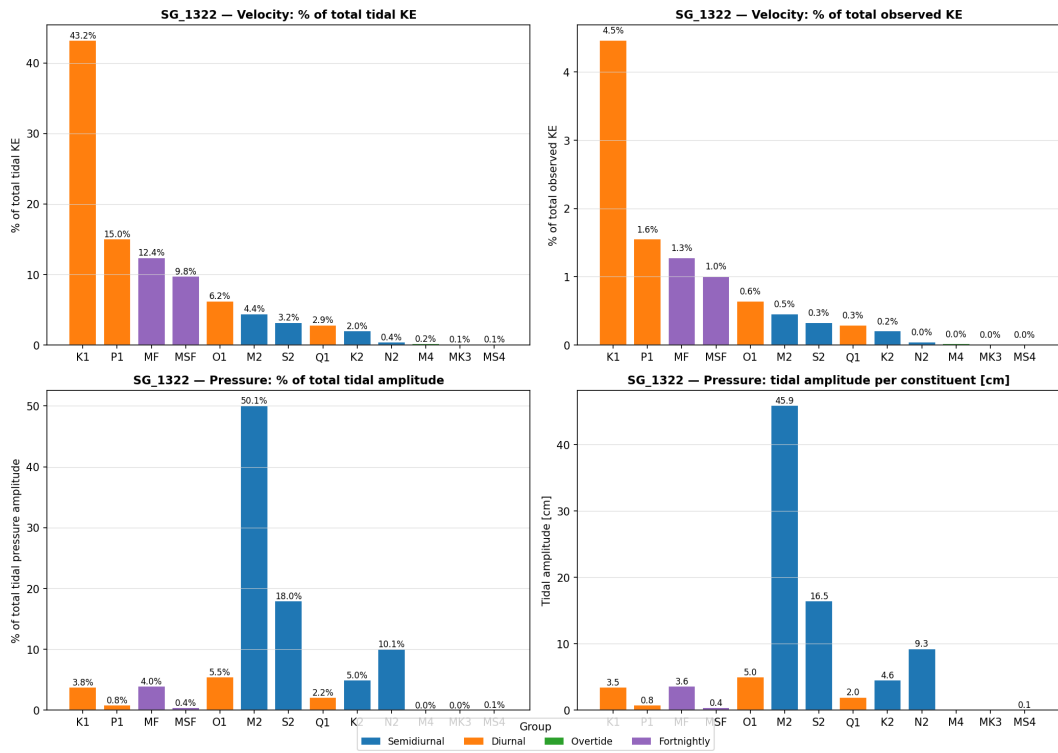


Figure C — Kinetic energy partition per tidal constituent at SG_1322 (base, ~1758 m).

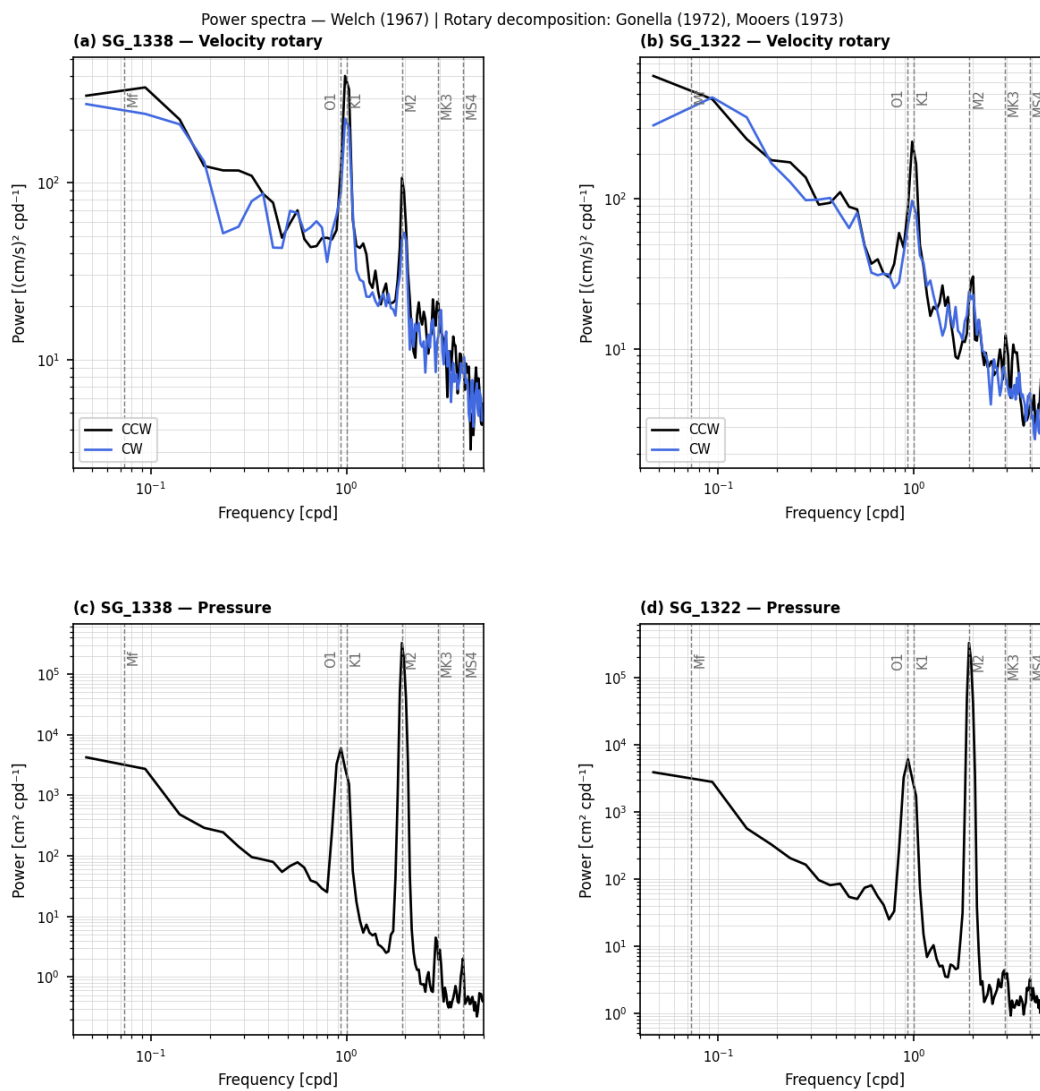


Figure D — Rotary power spectra (counter-clockwise in black, clockwise in blue; Welch periodogram) and pressure spectra for both stations. Tidal constituent frequencies are marked. The Mf and K1 peaks dominate the velocity; M2 peak dominates pressure.