WEEKLY LONGITUDINAL REPORT

# Butterfly Effect

Participant-facing research return built from the same route logic, participant-relative baseline frame, and caveat structure as the research engine. This is a weekly longitudinal readout, not a consumer sleep score and not a diagnostic statement.

| Participant | Window | Usable nights | Weekly confidence |
|---|---|---|---|
| pmdata_p06 | 2020-03-24 to 2020-03-30 | 7 | moderate confidence |

### Weekly readout

**Within this weekly window, the clearest repeated departure from the participant baseline appeared in sleep continuity under the same-day stress burden frame, with the overall week reading as clearly shifted.**

## WEEK AT A GLANCE

This weekly readout is based on 7 usable nights and 7 matched day reports. The current confidence label is moderate confidence.

The strongest repeated night pattern was concentrated in sleep continuity, which surfaced across 7 nights in the current window.

This week did not yet contain a repeated night-to-day pattern strong enough to support a firmer burden statement.

### Dominant night domains

- Sleep continuity: 7 nights, mean score 0.04
- Autonomic activation: 4 nights, mean score 0.02
- Sleep architecture: 2 nights, mean score 0.02

### Shift relative to baseline

- 7-night variability of Alcohol units: lower than usual, mean absolute shift 9.31
- 14-night variability of Alcohol units: lower than usual, mean absolute shift 8.14
- Awakening count z-score vs 7-night reference: higher than usual, mean absolute shift 5.65
- Sleep score overall z-score vs 7-night reference: lower than usual, mean absolute shift 4.19

### Observed links with burden

- No repeated in-window link crossed the current threshold.

### Nights worth reviewing

- Most shifted night: 2020-03-28 · burden 2.50
- Most stable night: 2020-03-26 · burden 2.50
- Highest burden follow-up: 2020-03-24 · burden 2.50
- Night with the weakest signal: 2020-03-24 · burden 2.50

### What this does not mean

- This report is not a diagnosis and should not be read as a disease-risk statement.
- This weekly view summarizes repeated patterns, not a single-night truth.
- This first participant-facing report is currently limited to the same-day stress burden frame over route PMData D0 contextual interpretation.

### What to keep tracking

- Keep tracking repeated daily burden on the same scale so that night-to-day links stay comparable.
- Continue tracking awakenings, wake after sleep onset, or any sleep-fragmentation proxy available in the cohort.
- Nightly cardiovascular signal remains informative here, so HR / HRV consistency should keep being captured.

Route: PMData D0 contextual interpretation · Weekly rows: 7 · Generated from /Users/damasomengodperez/neural-echo-planning/data/temporal_pmdata_stress.csv