

# Atheris: A Revolutionary Anti-G Suit System

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# Sizing



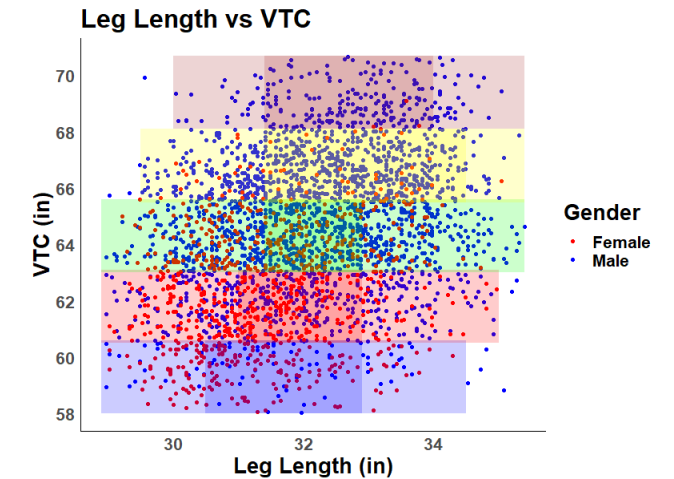
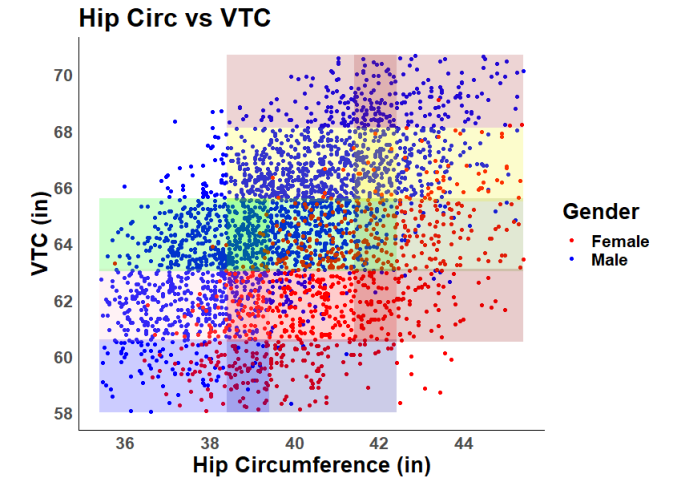
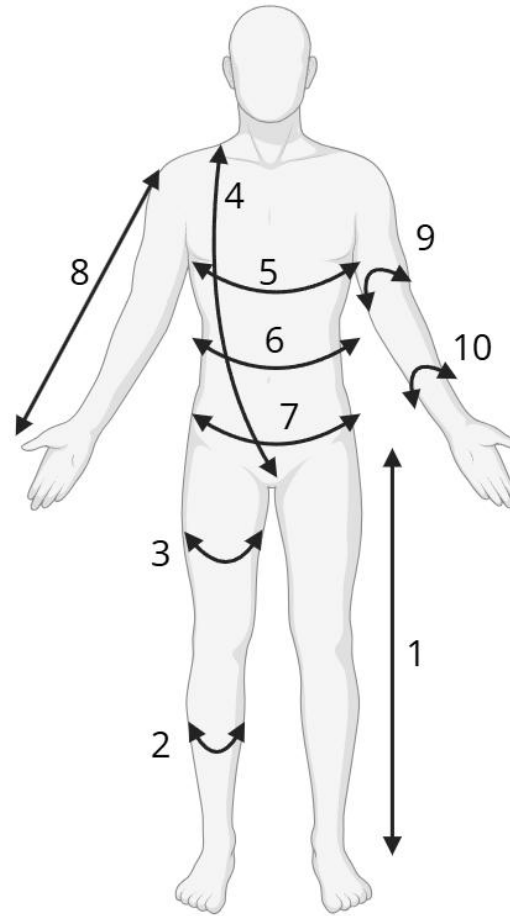
- Sizing analysis has been performed for all three layers
  - Number of sizes of each
  - Range of subjects that each size fits
- Inner suit sizing is much more forgiving than a traditional anti-g suit
  - Full pressure suit expands away from the body, rather than compressing towards the body
  - Inner layer can be significantly oversized, without detrimental effects
- Outer layer dictates the inflated geometry and requires more precise sizing
  - Adjustment panel in upper leg provides resizability of leg length



# Sizing



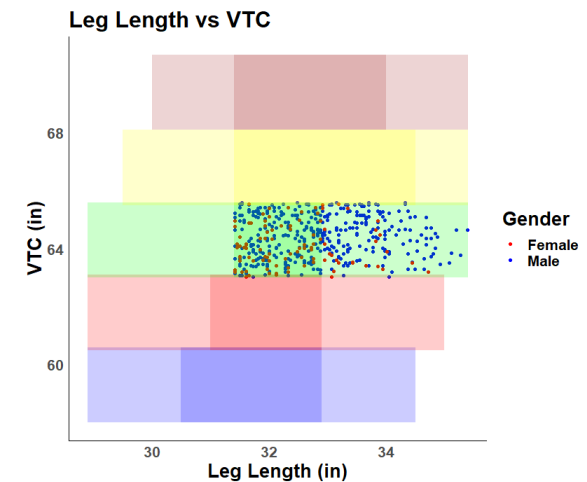
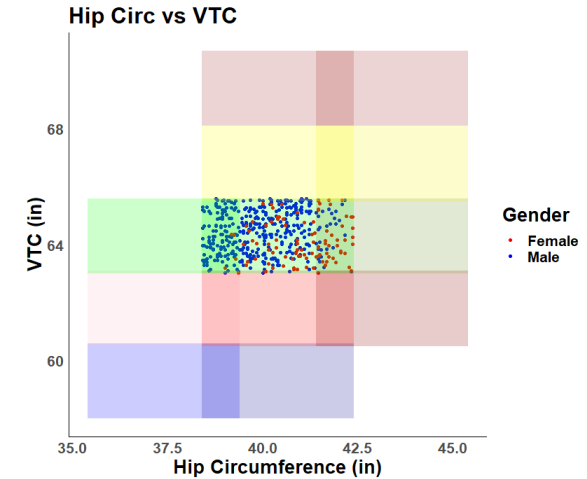
1. Leg Length
2. Calf Circumference
3. Thigh Circumference
4. Vertical Trunk Circumference
5. Chest Circumference
6. Waist Circumference
7. Hip Circumference
8. Arm Length
9. Bicep Circumference
10. Forearm Circumference



# Sizing



- Emphasis on optimizing male and female fit
  - A-shape and V-shape outer suit sizes included
- Emphasis on minimizing the number of sizes, while still fitting all key dimensions to ensure proper fit
- Preliminary analysis results to cover the anticipated anthropometric range (5<sup>th</sup> percentile female to 95<sup>th</sup> percentile male):
  - 7 sizes of Inner Half Suit
  - 13 sizes of IPG
  - 27 sizes of Outer Suit



Example of Outer Suit Analysis

