

DOCKET NO. **SA- 516**

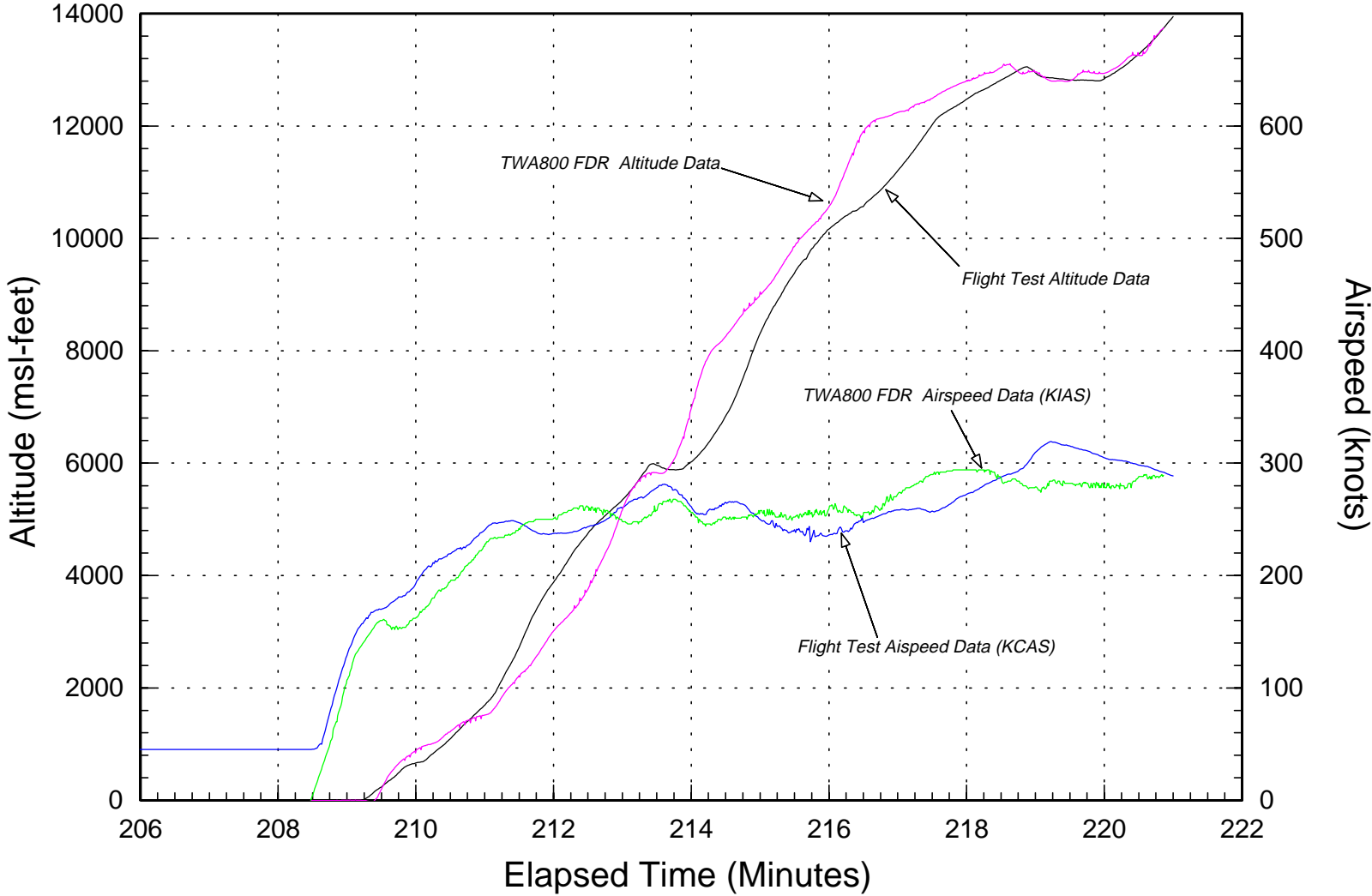
EXHIBIT NO. **23F**

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.**

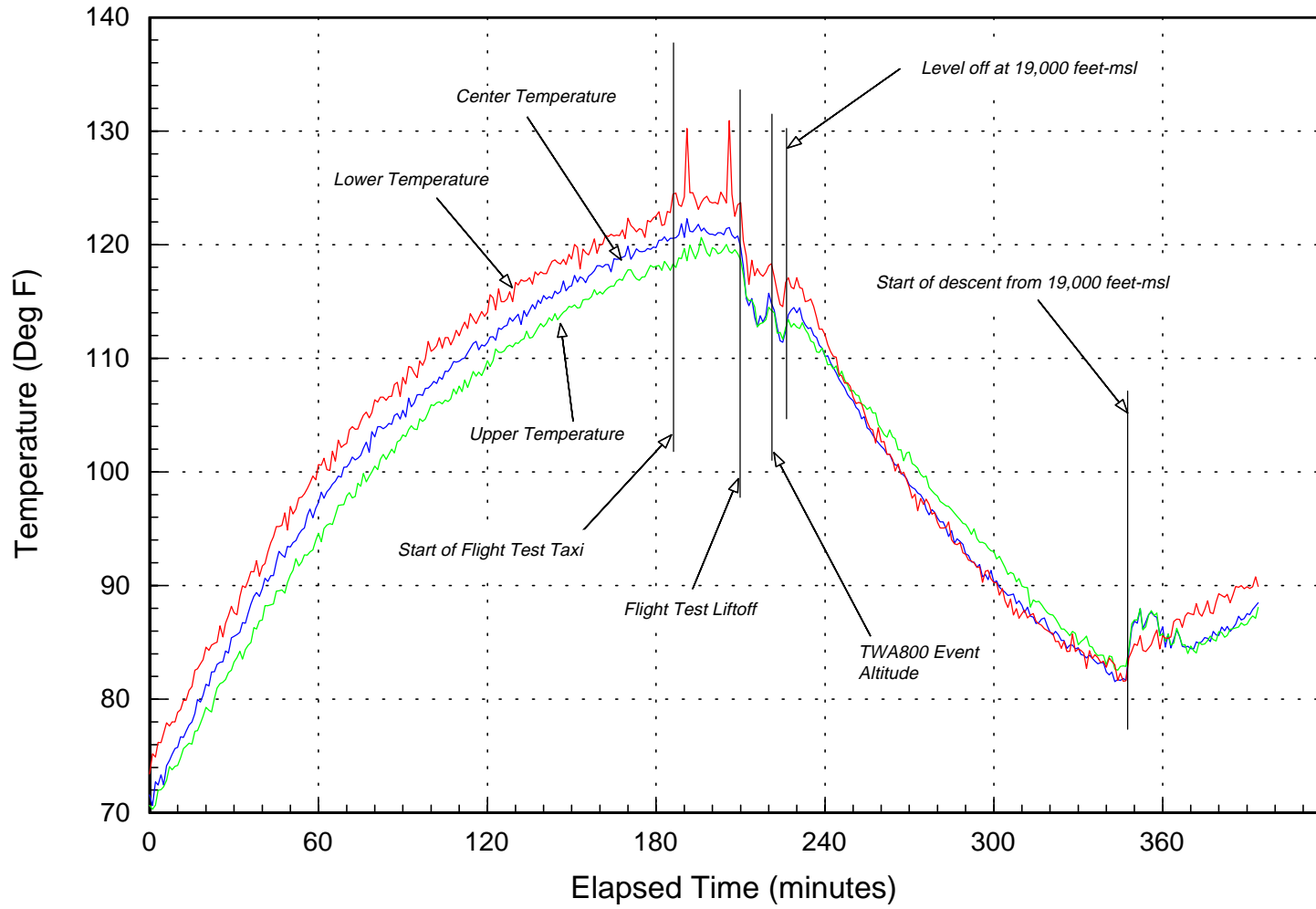
**FLIGHT TEST RESULTS:
TWA800 EMULATION FLIGHT**

(37 Pages)

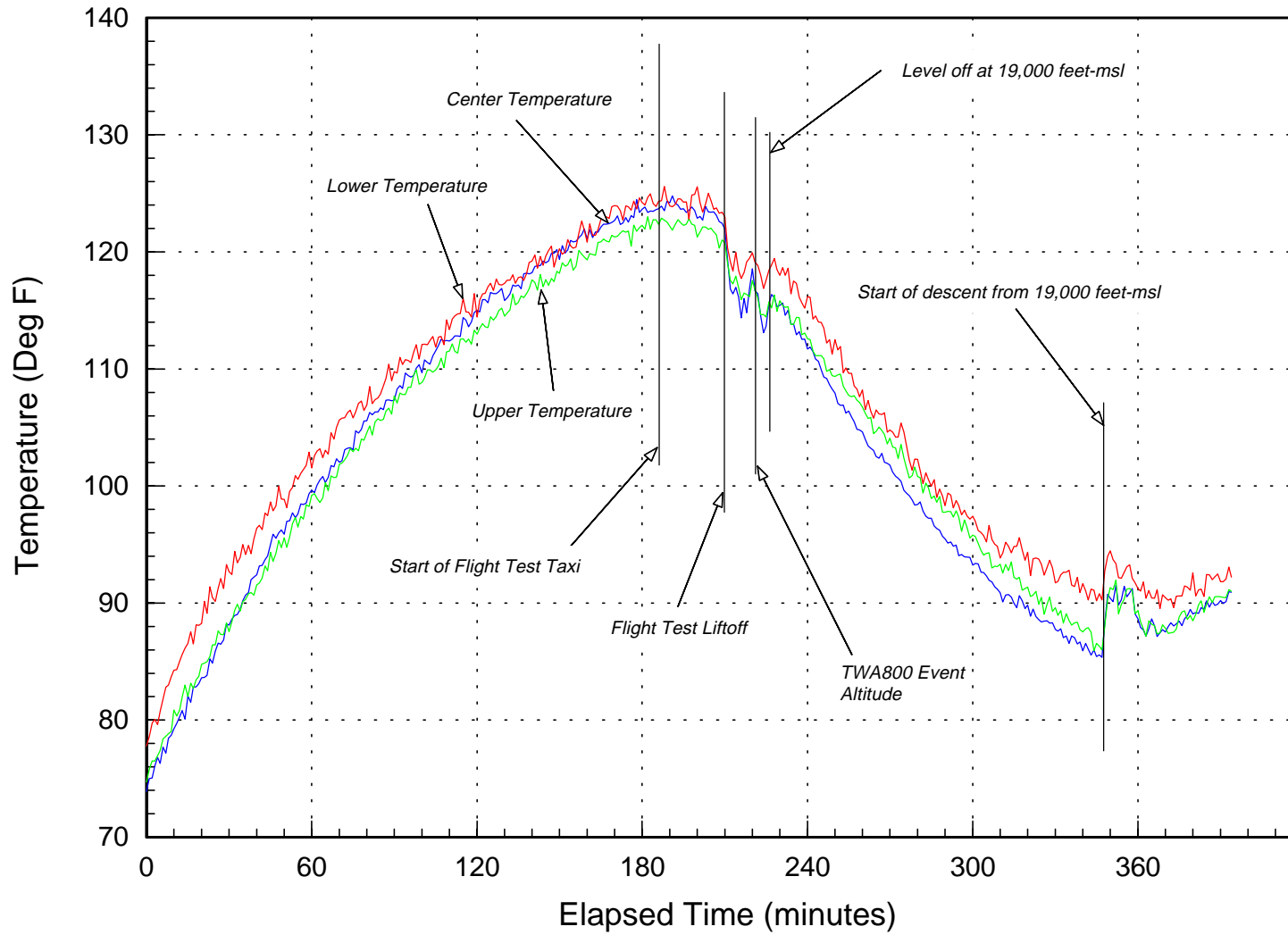
Flight Parameters TWA800 Emulation Test Flight Ascent Portion



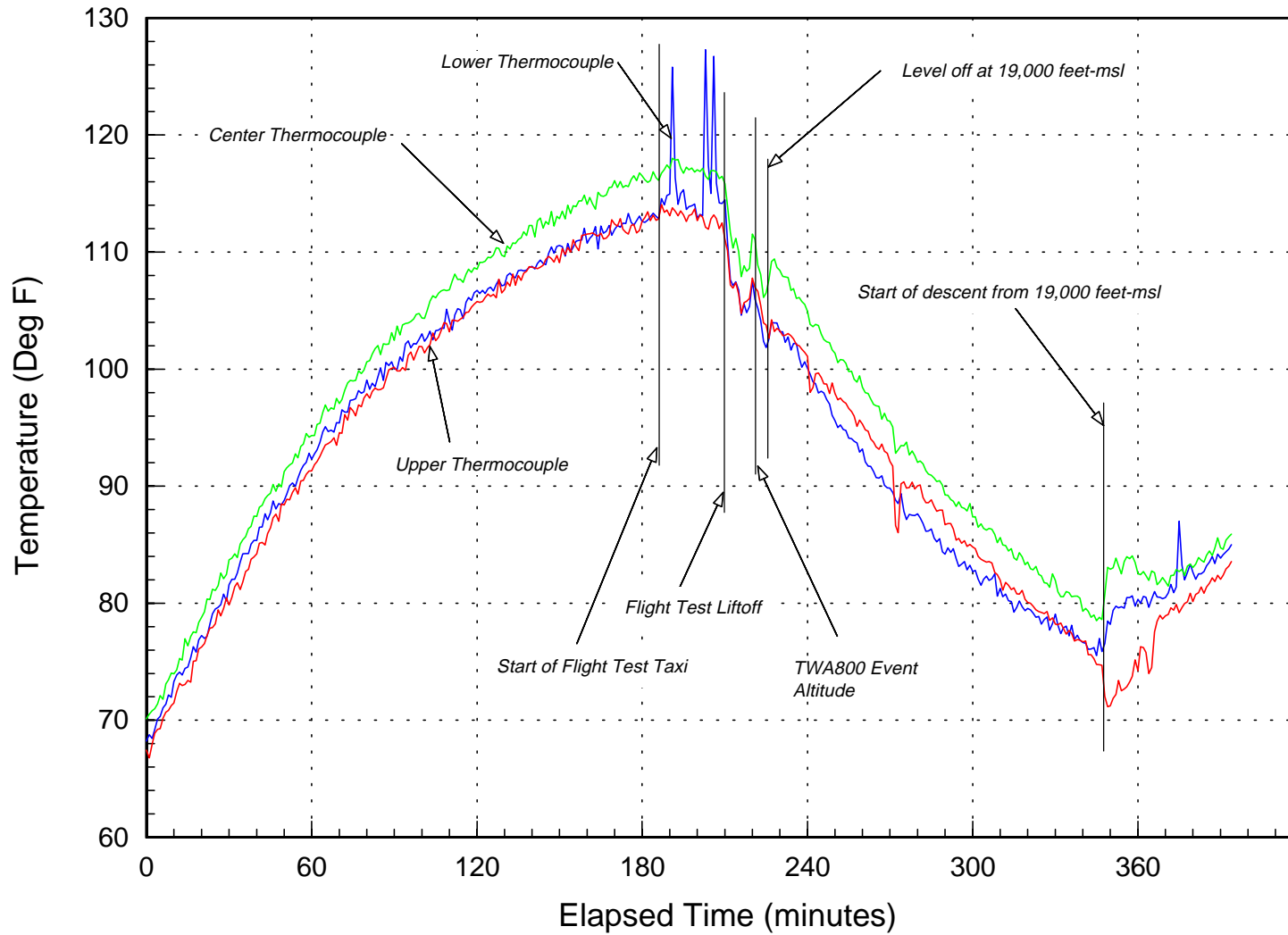
CWT Forward Bay Between Spanwise Beams 2 and 3
Ullage Temperatures
TWA800 Emulation Flight



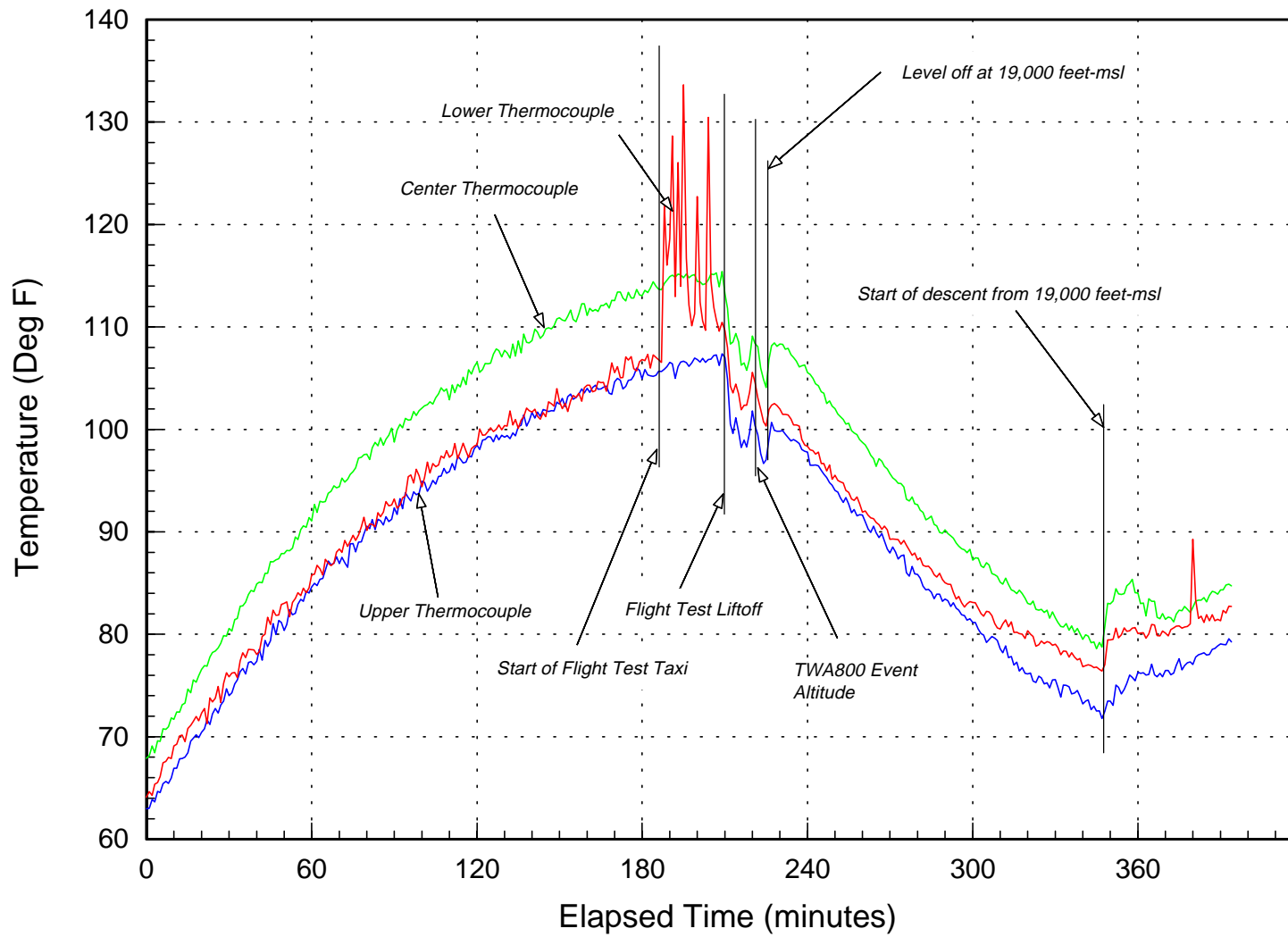
CWT Forward Bay Between Spanwise Beam 2 and Mid Spar Ullage Temperatures TWA800 Emulation Flight



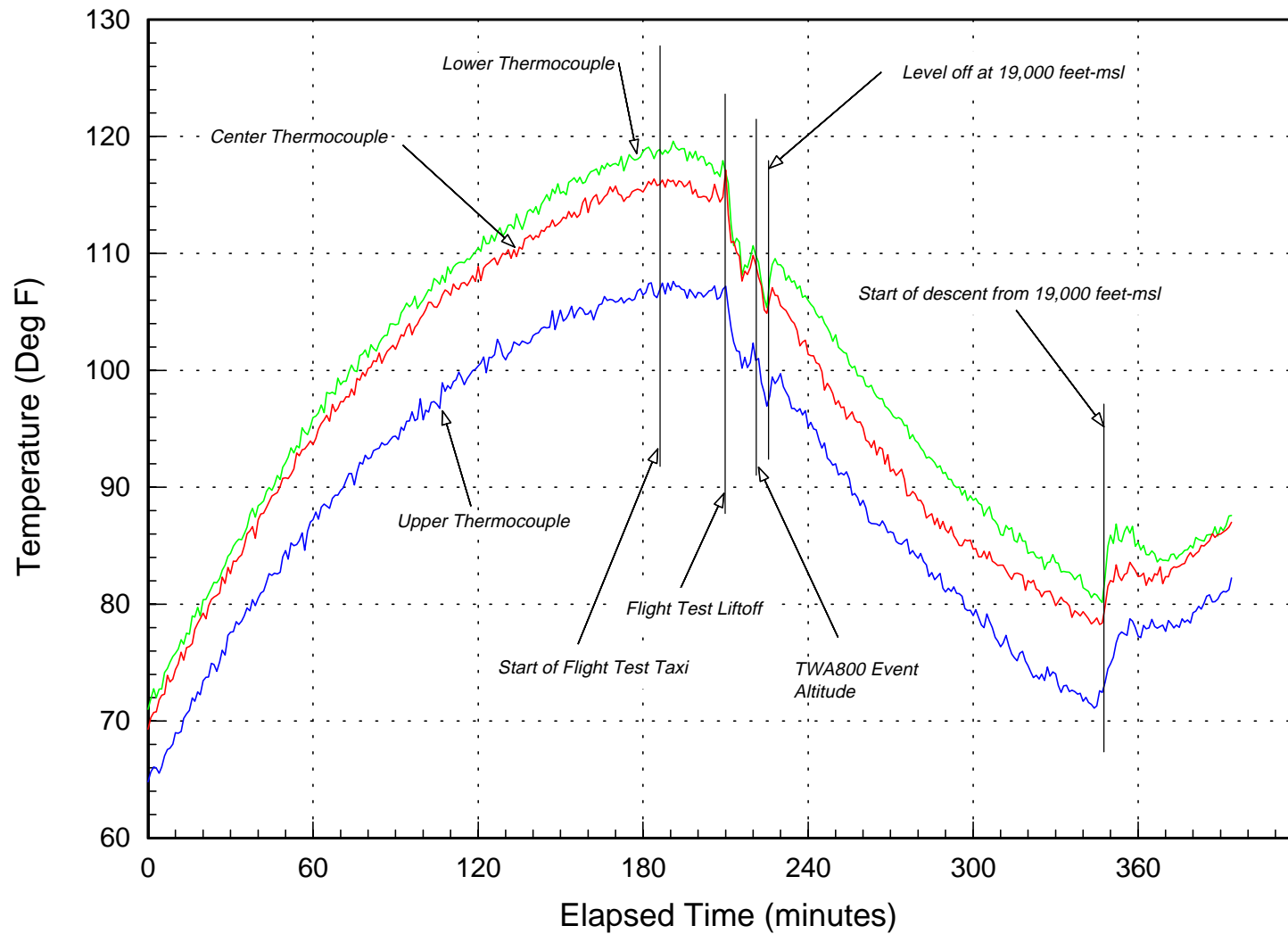
CWT Forward Bay Between Spanwise Beam 2 and 3 Ullage Temperatures near Left Side of Tank TWA800 Emulation Flight



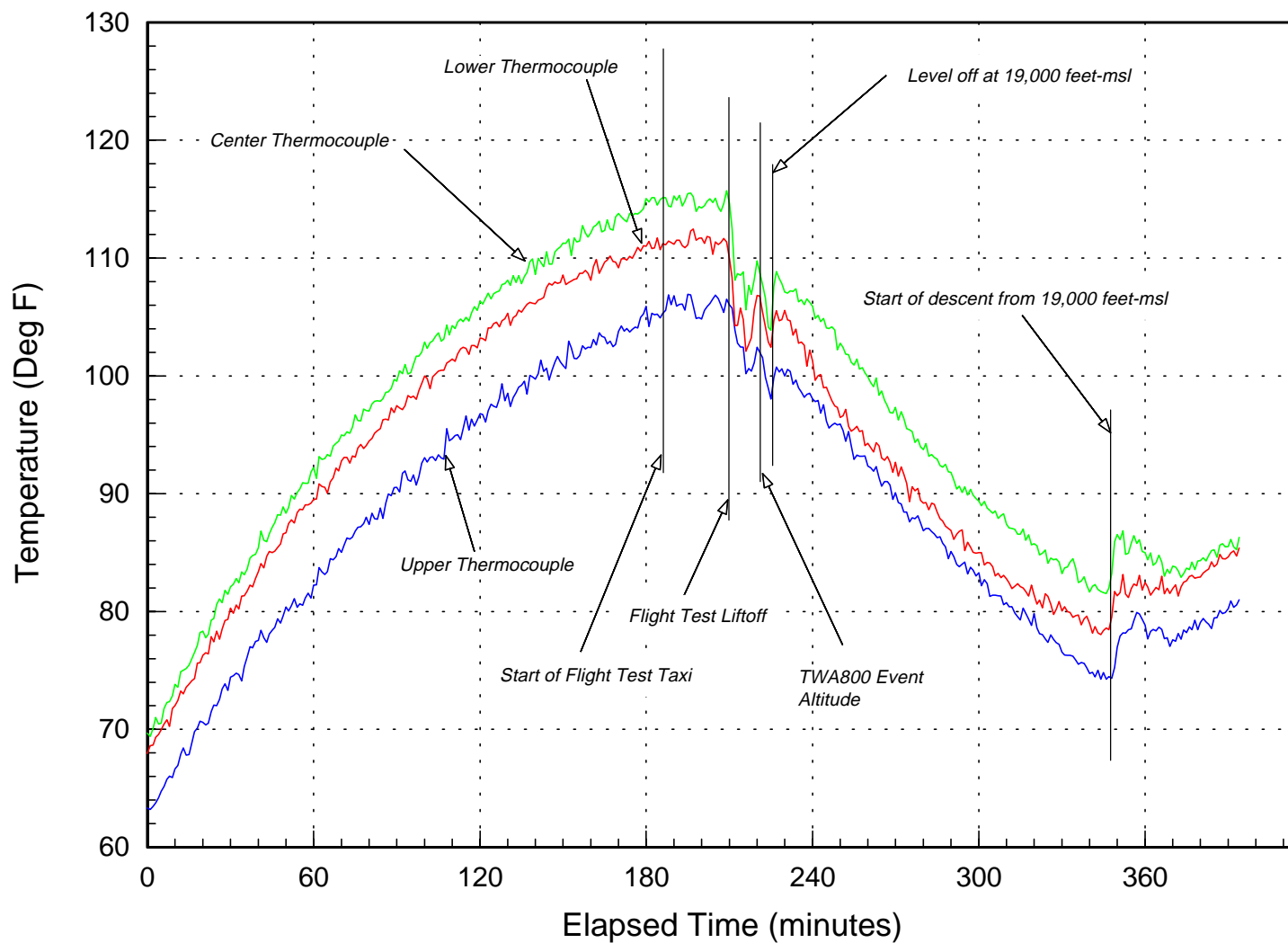
CWT Forward Bay Between Spanwise Beam 2 and 3
Ullage Temperatures near Right Side of Tank
TWA800 Emulation Flight



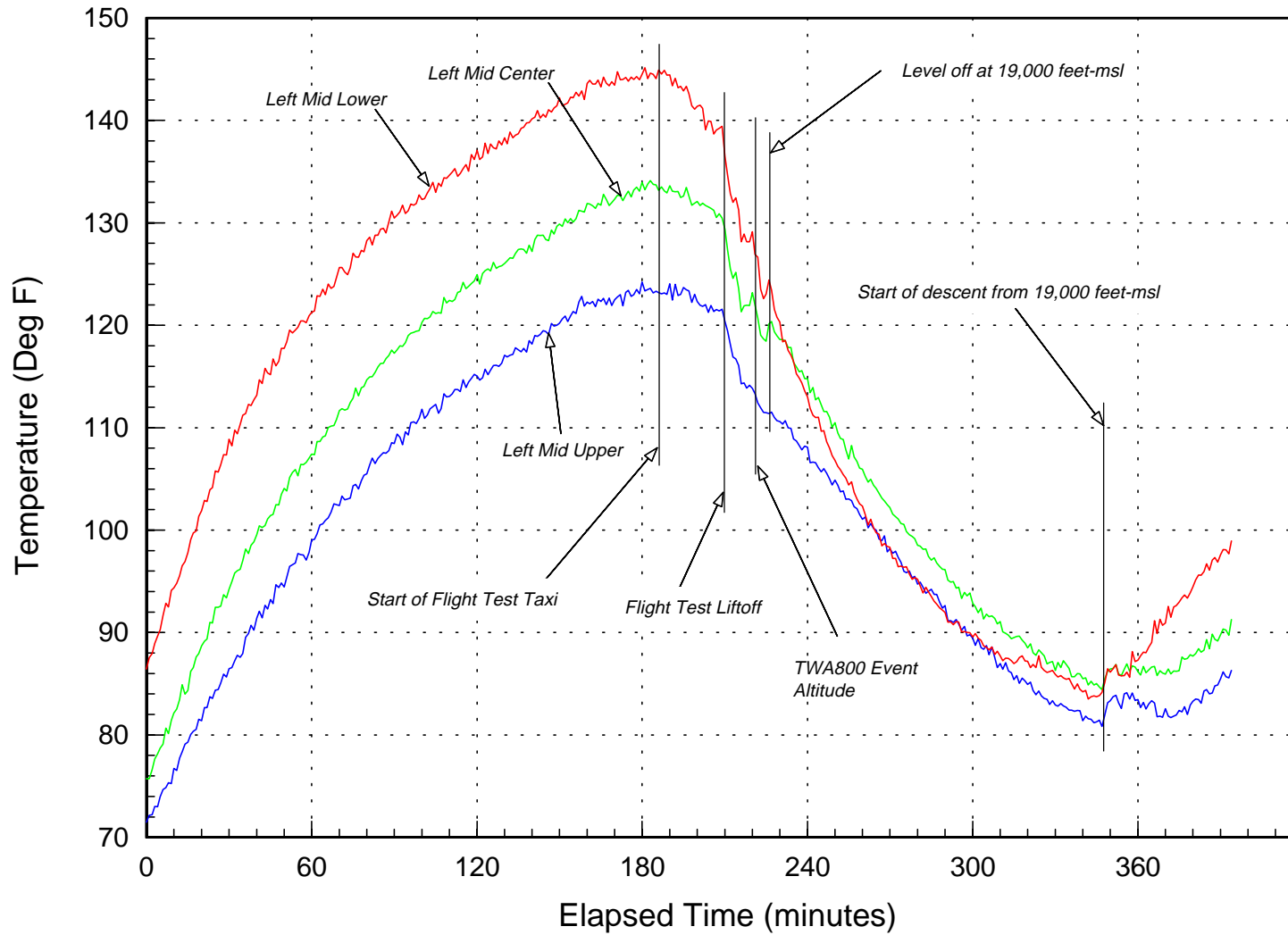
CWT Forward Bay Between Spanwise Beam 2 and Mid Spar Ullage Temperatures near Left Side of Tank TWA800 Emulation Flight



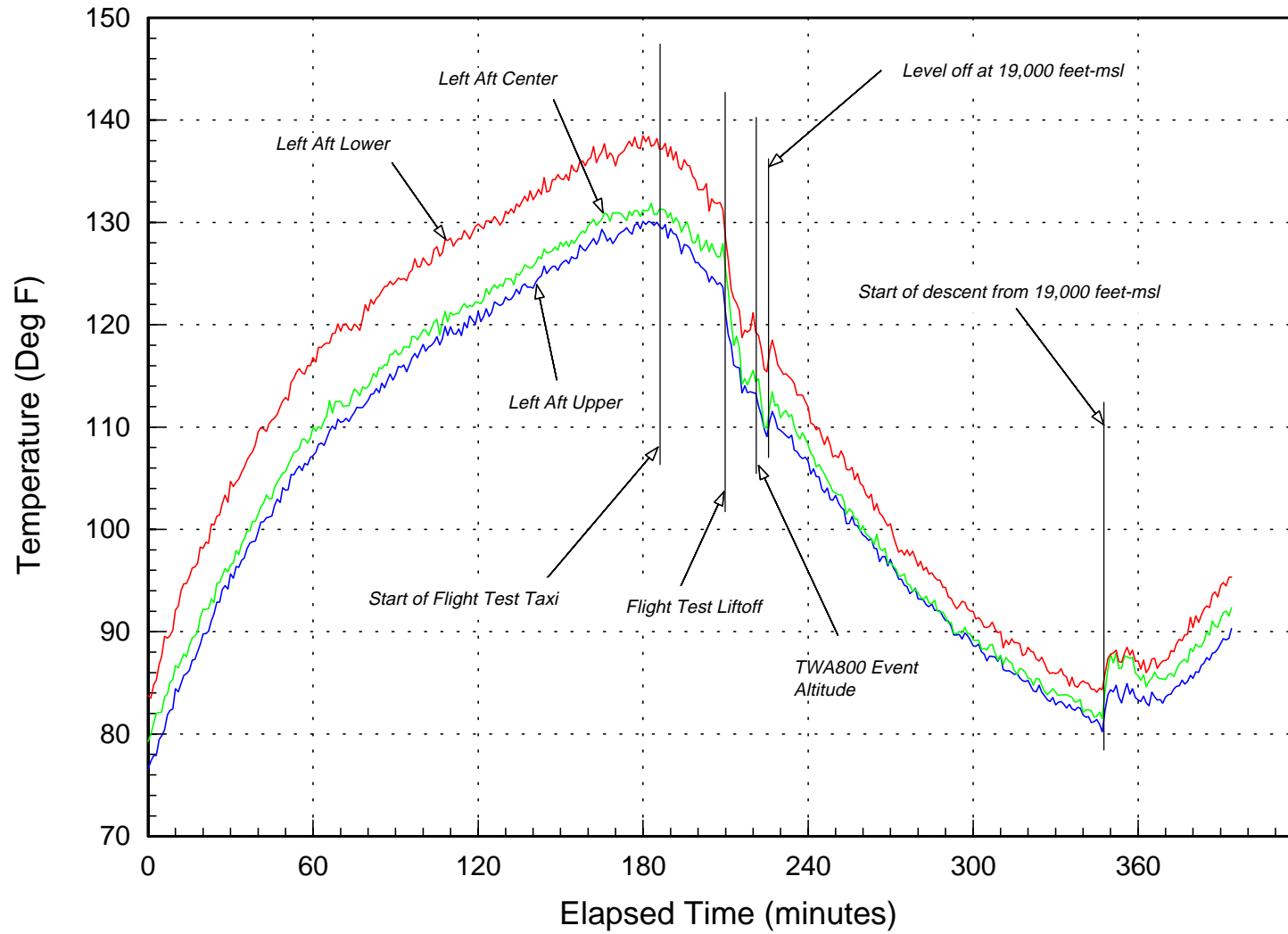
CWT Forward Bay Between Spanwise Beam 2 and Mid Spar Ullage Temperatures near Right Side of Tank TWA800 Emulation Flight



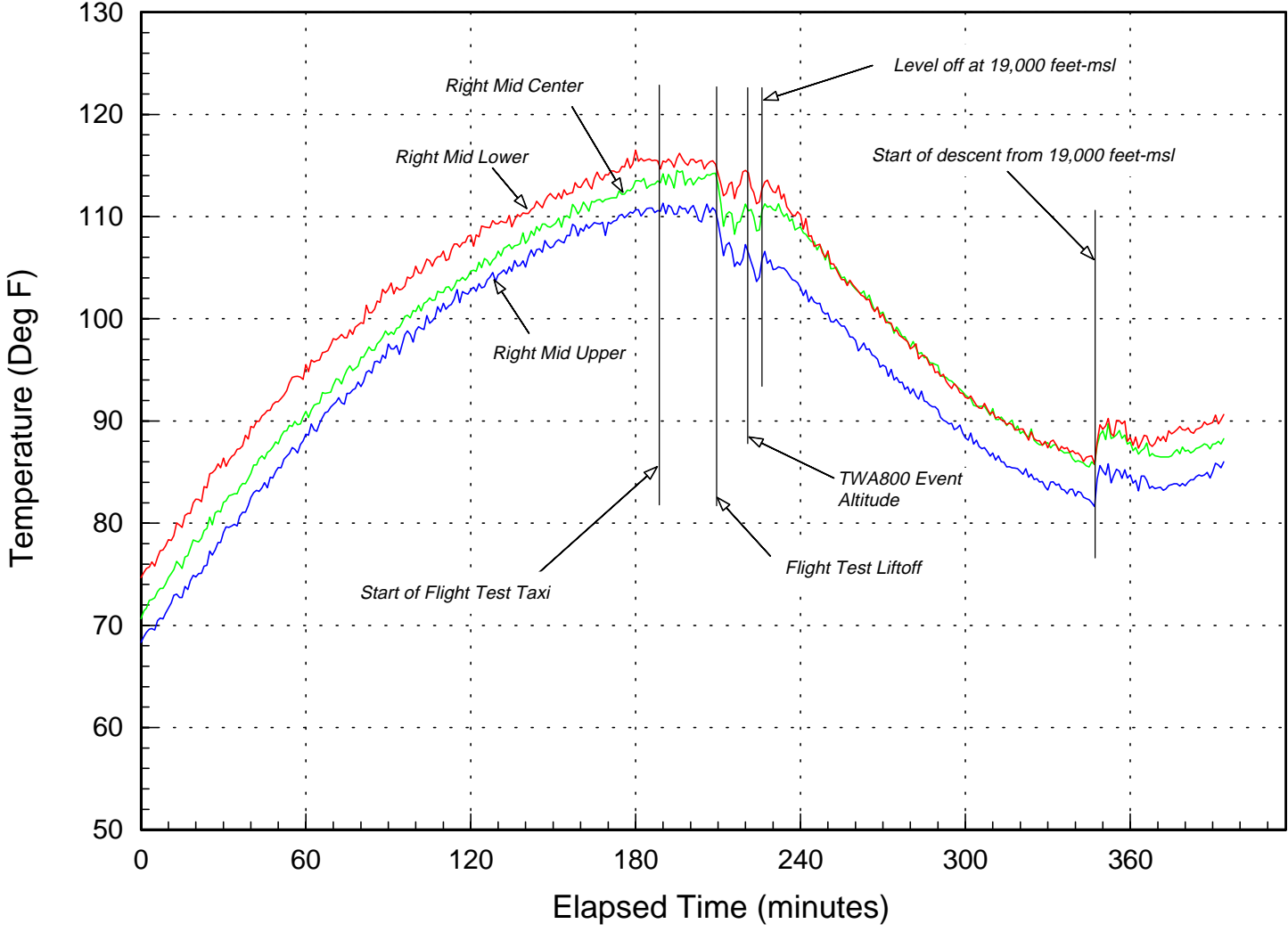
CWT Left Mid Bay Ullage Temperatures TWA800 Emulation Flight



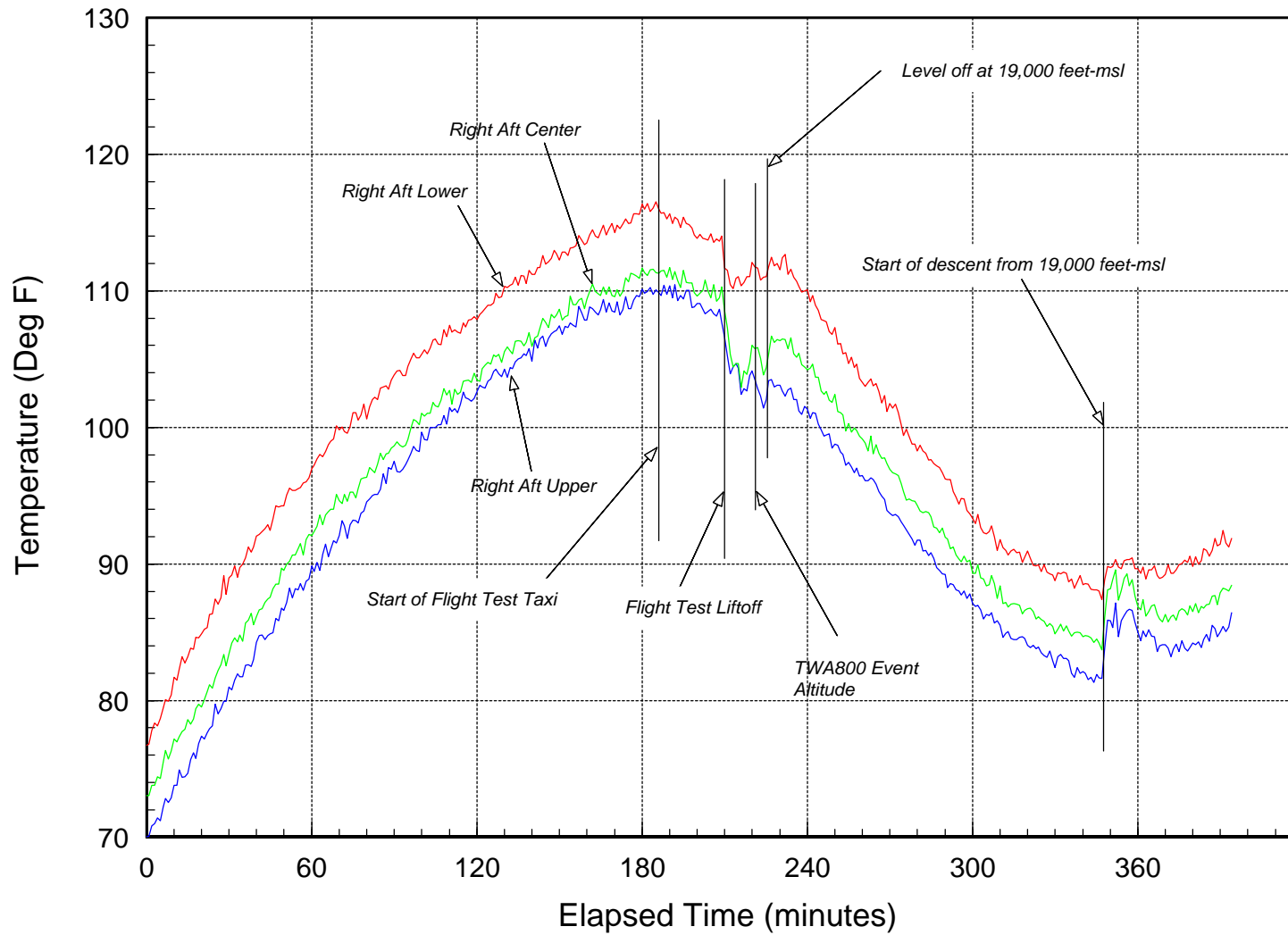
CWT Left Aft Bay Ullage Temperatures TWA800 Emulation Flight



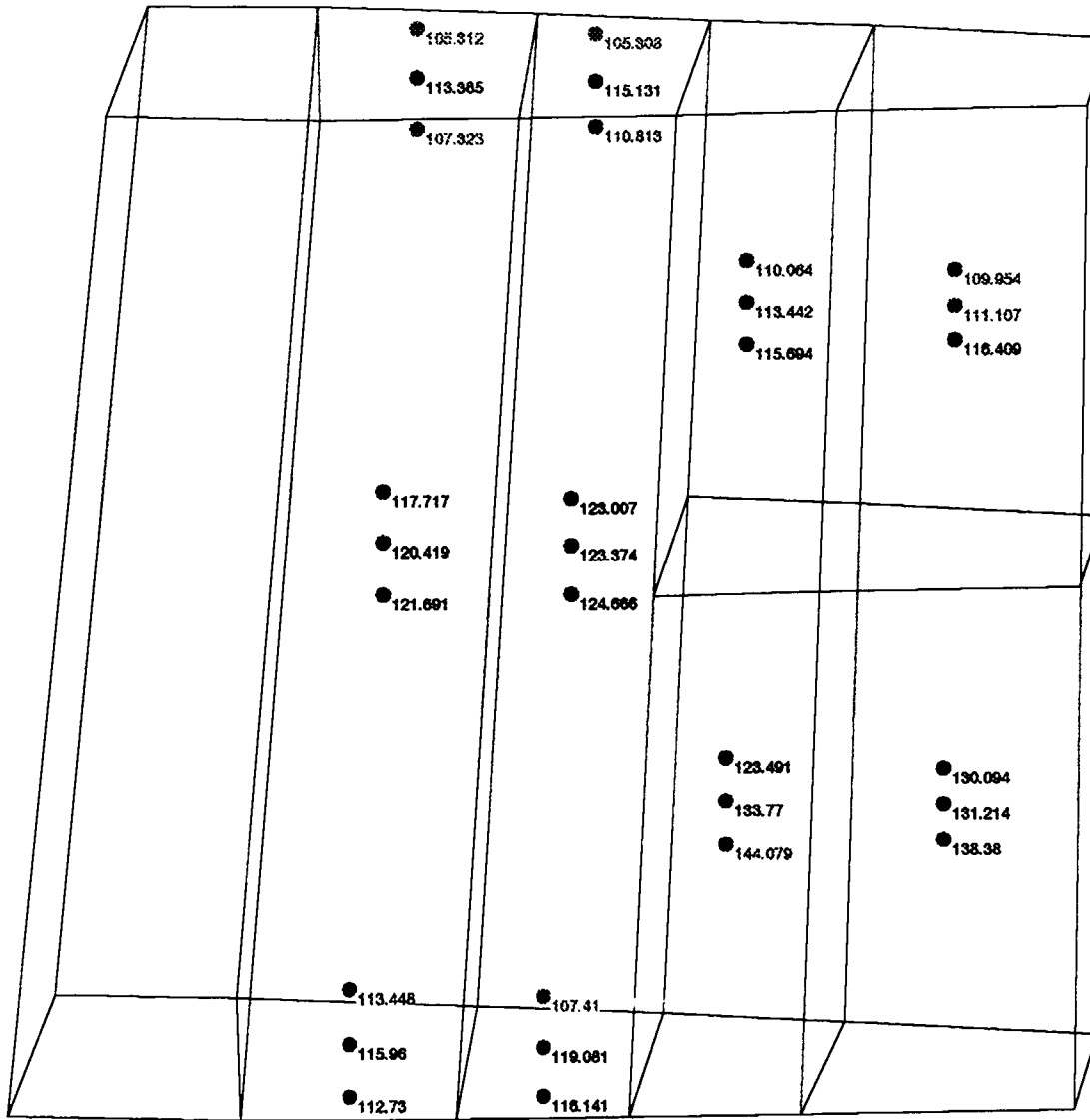
CWT Right Mid Bay Ullage Temperatures TWA800 Emulation Flight



CWT Right Aft Bay Ullage Temperatures TWA800 Emulation Flight



TWA800 Emulation Flight CWT Ullage Temperatures Prior to taxi

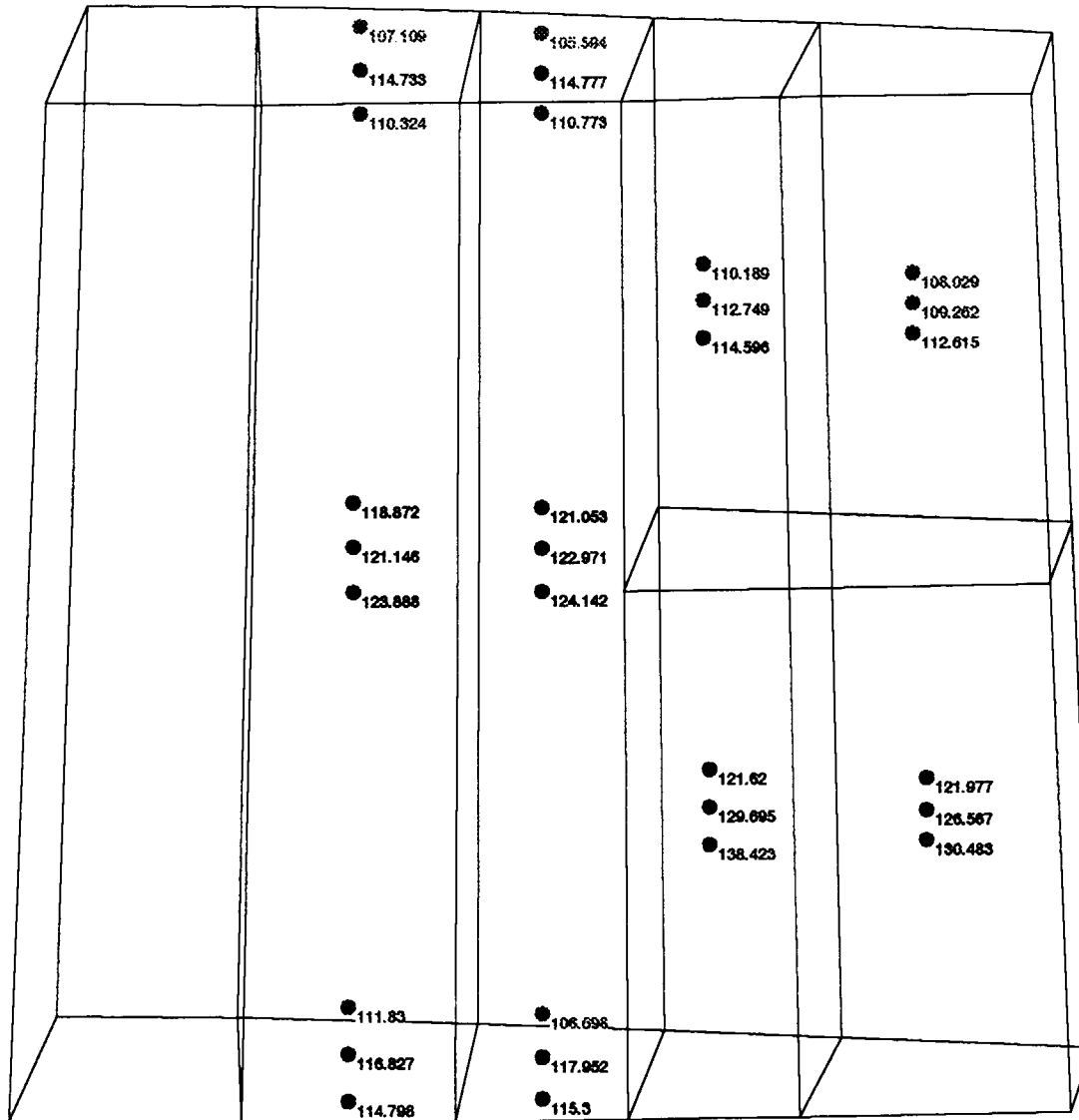


TIME, = 182

Color Key

- ▨ 70
- ▨ 90
- 110
- 130
- 150

TWA800 Emulation Flight CWT Ullage Temperatures at Takeoff

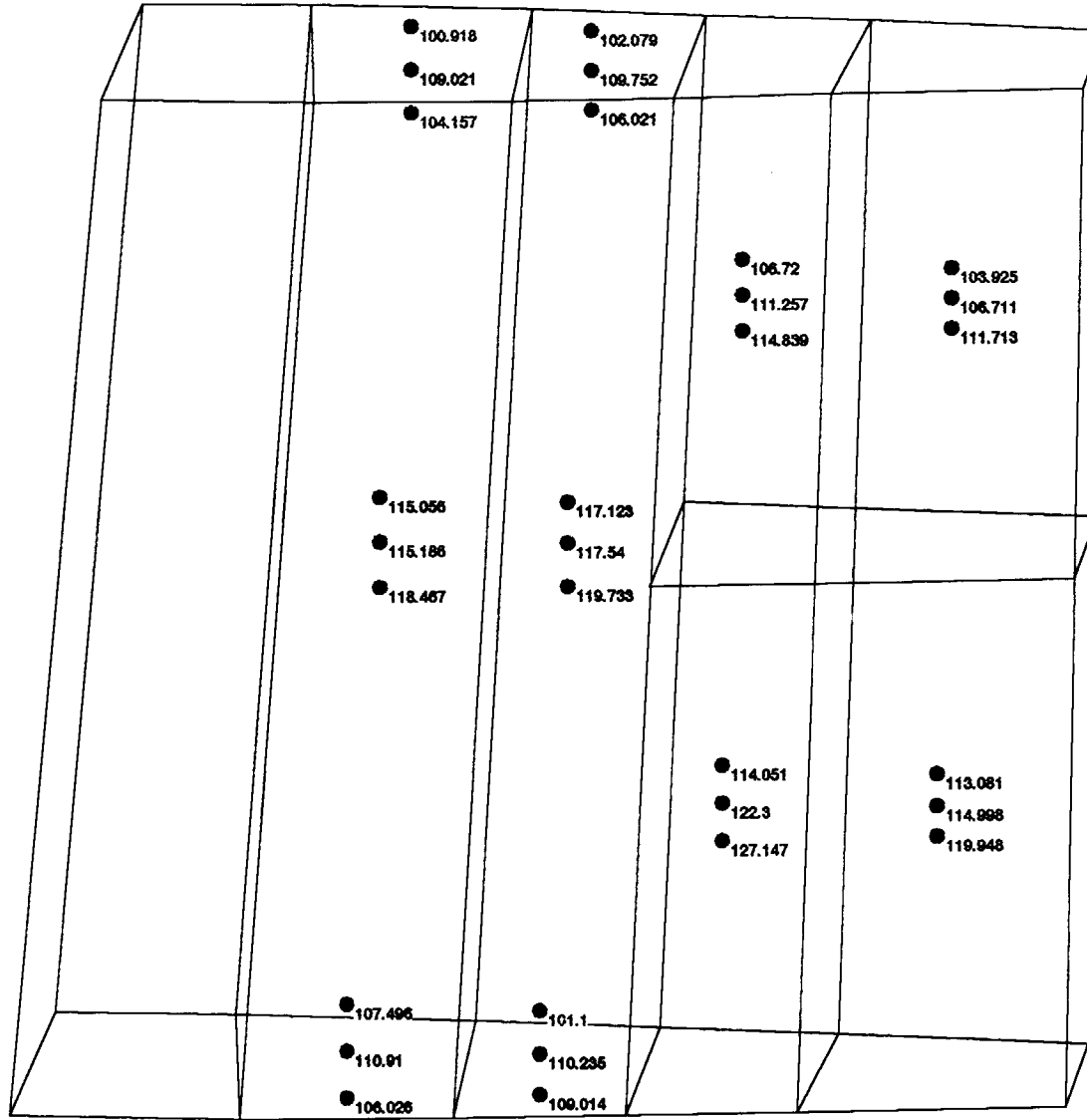


TIME, = 209.25
VCAS, = 159.391
ALTITUDE, = 9.39913

Color Key

- 70
- 90
- 110
- 130
- 150

TWA800 Emulation Flight CWT Ullage Temperatures at Event Altitude

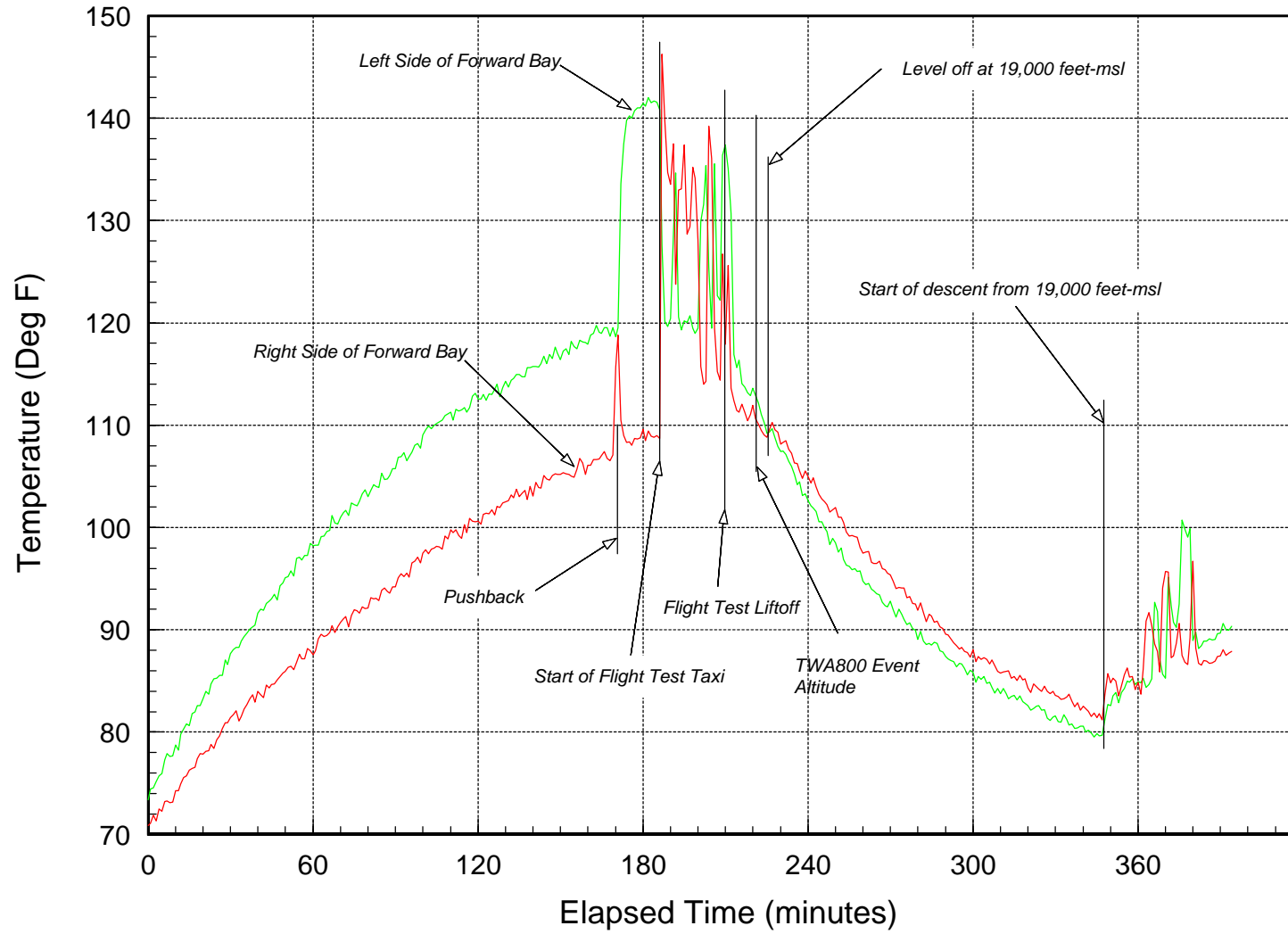


TIME, = 220.9
VCAS, = 290.829
ALTITUDE, = 13799.4

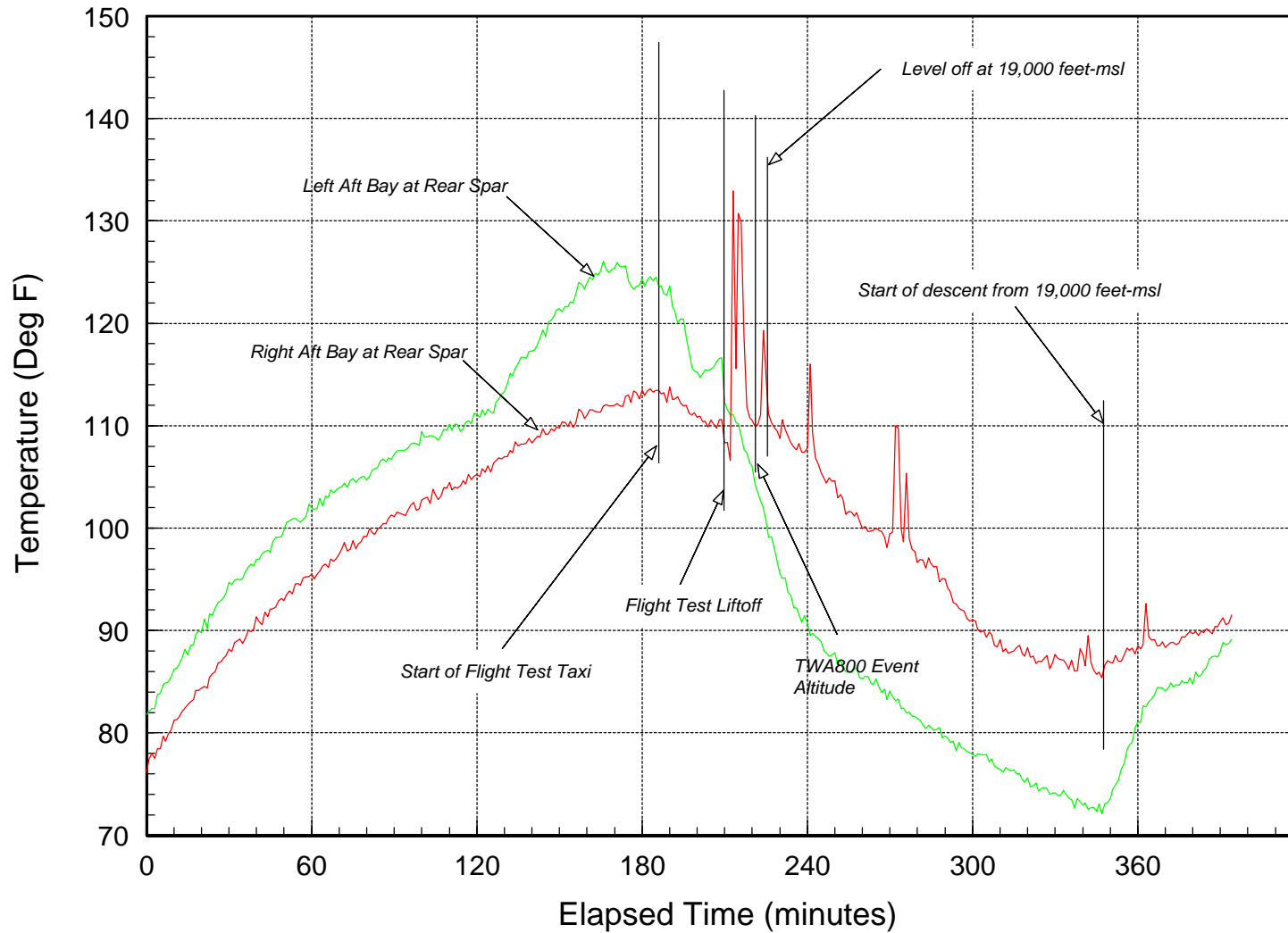
Color Key

- 60
- 80
- 100
- 120
- 140

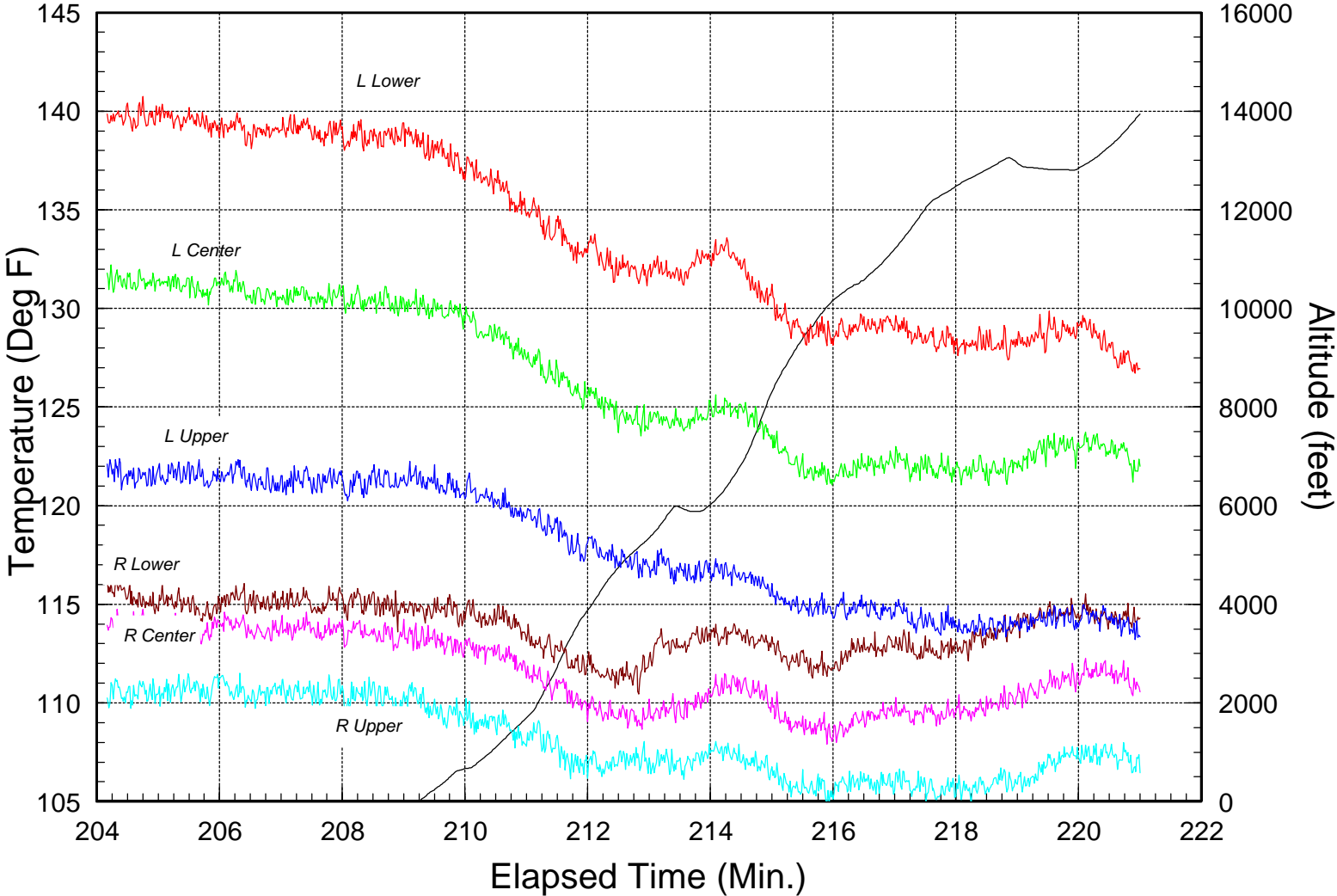
Fuel Temperatures Measured in CWT Forward Bay TWA800 Emulation Flight



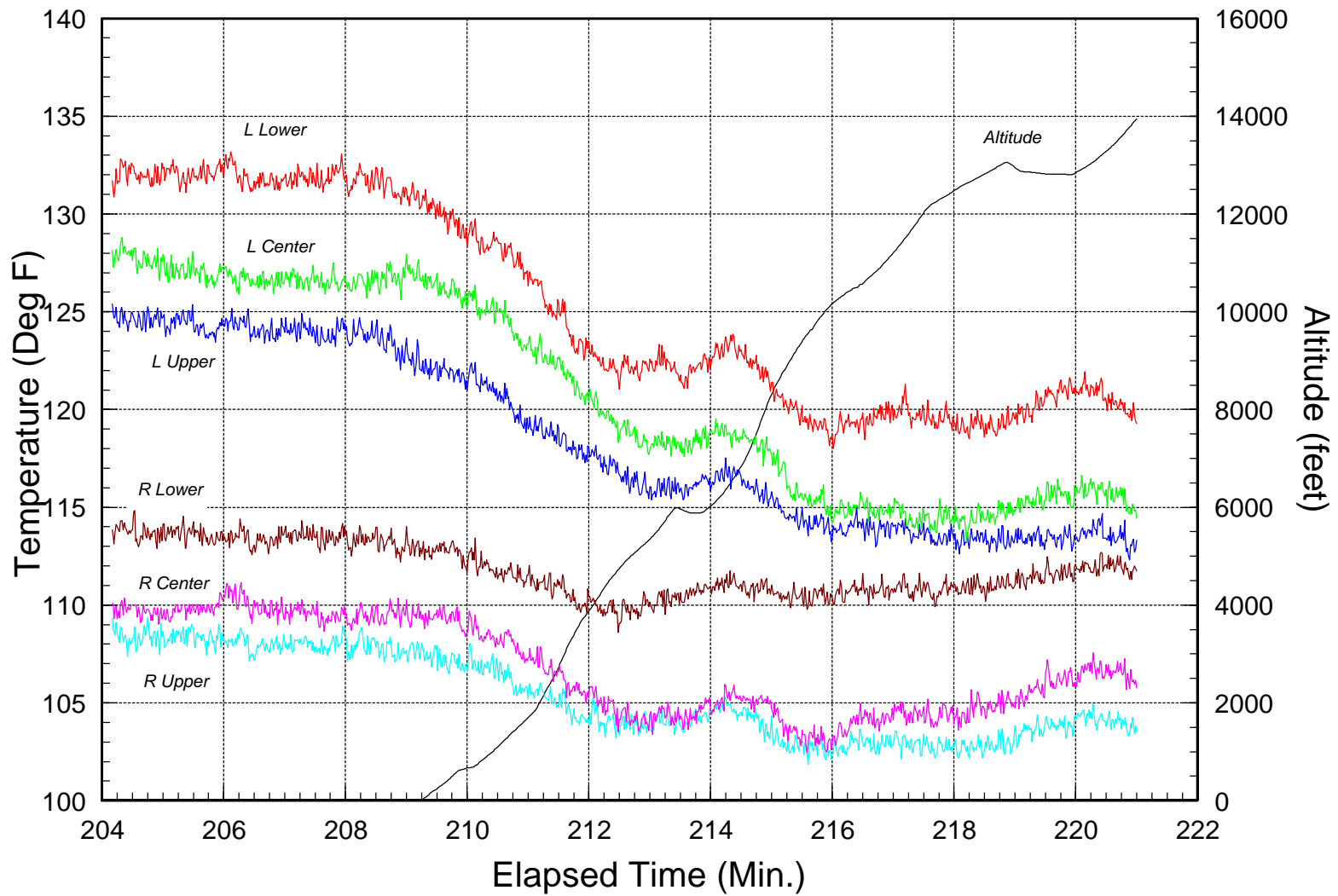
Fuel Temperatures Measured at CWT Rear Spar TWA800 Emulation Flight



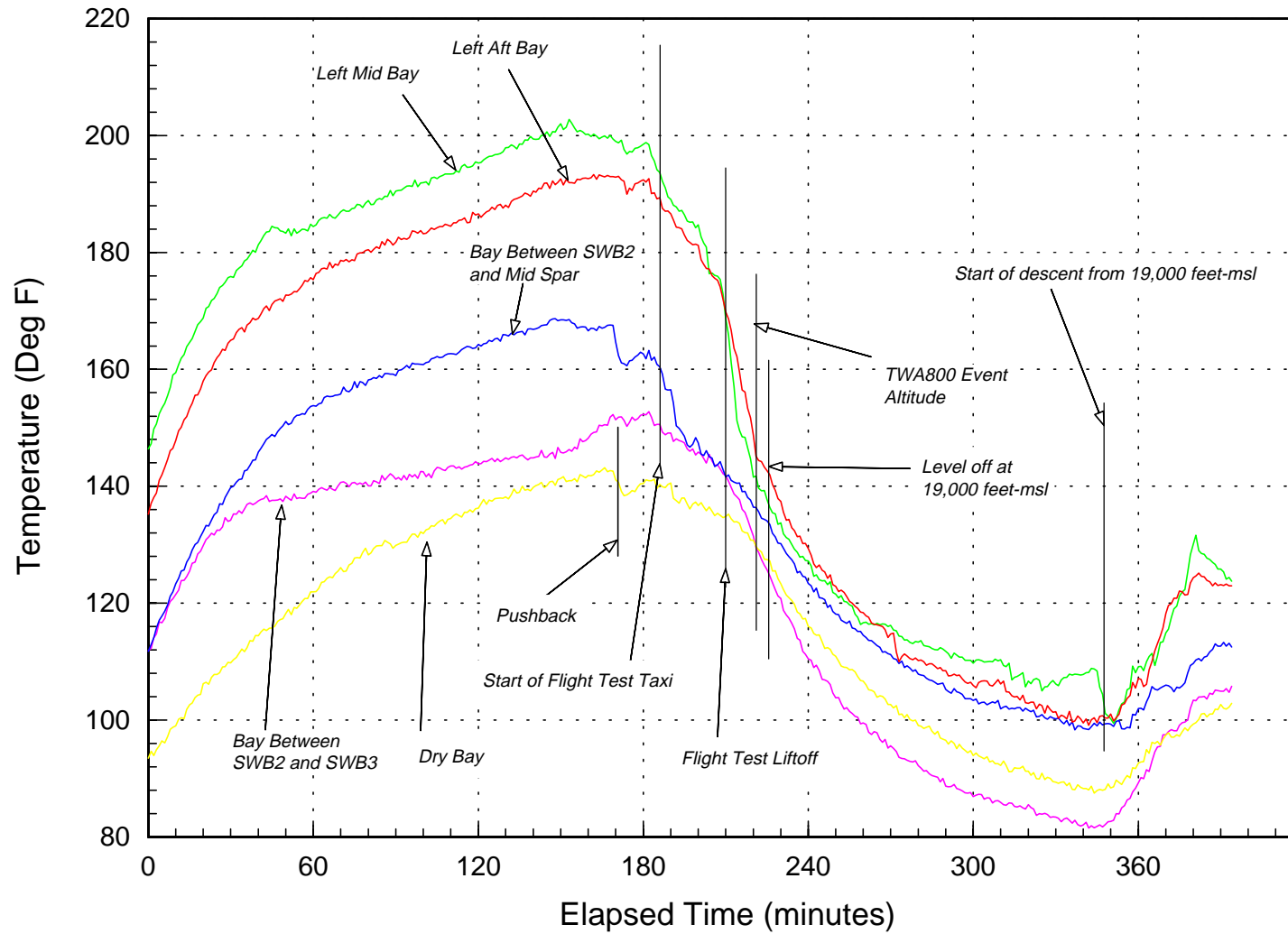
CWT Mid Bay Temperatures
TWA800 Emulation
Ascent Portion



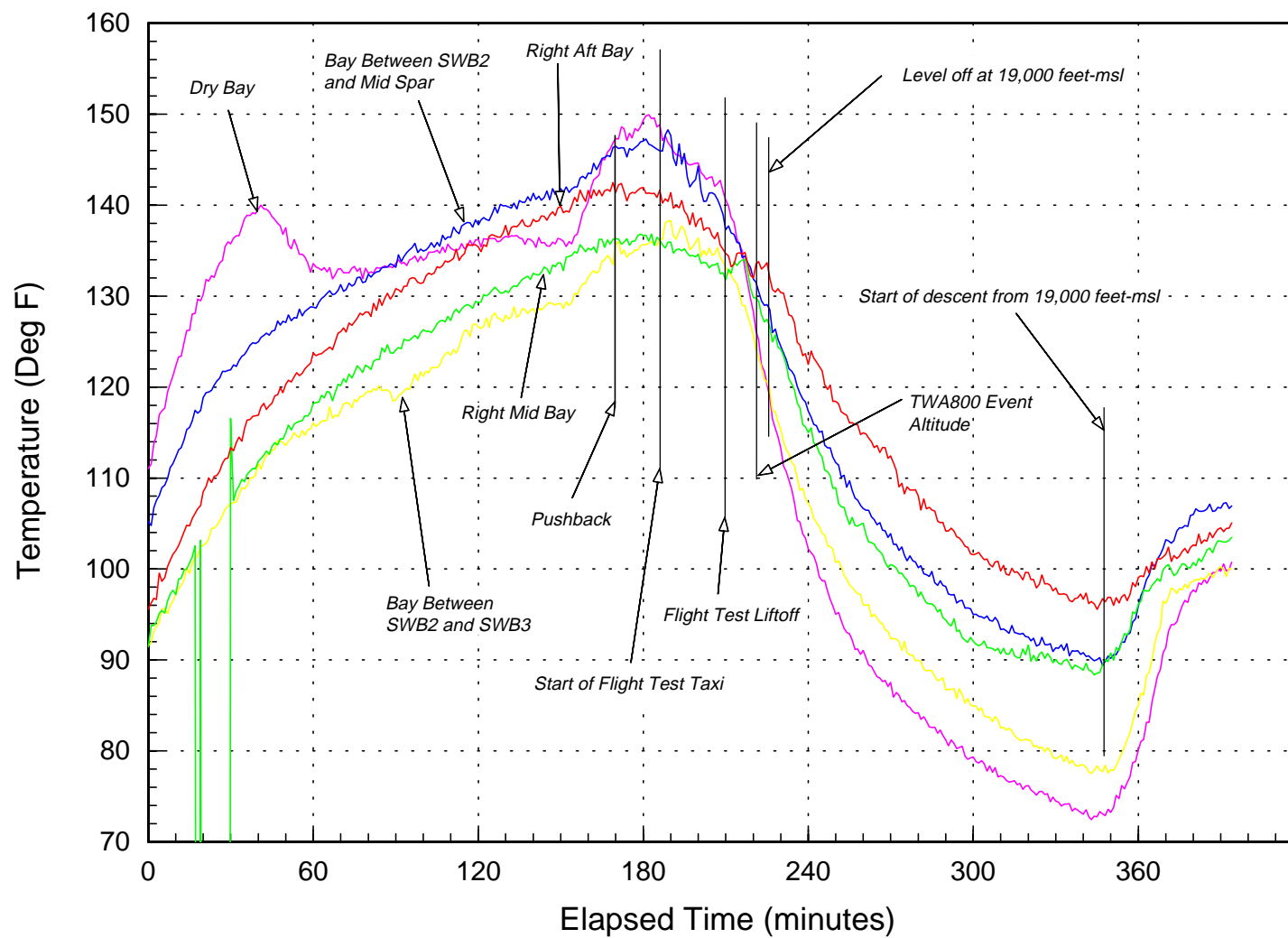
CWT Aft Bay Temperatures TWA800 Emulation Ascent Portion



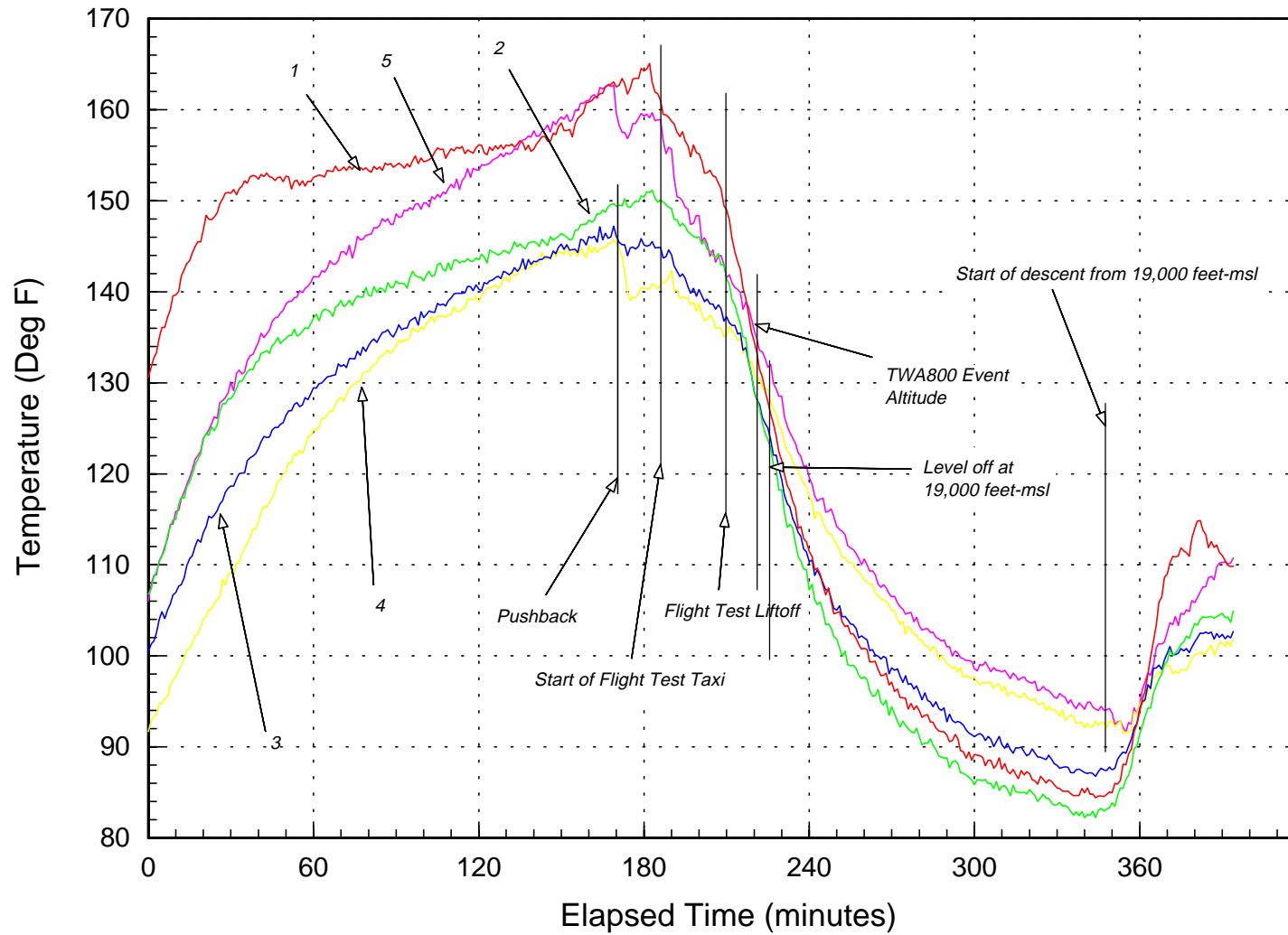
CWT External Bottom Surface Temperatures BL 22 on Left side of Keel Beam TWA800 Emulation Flight



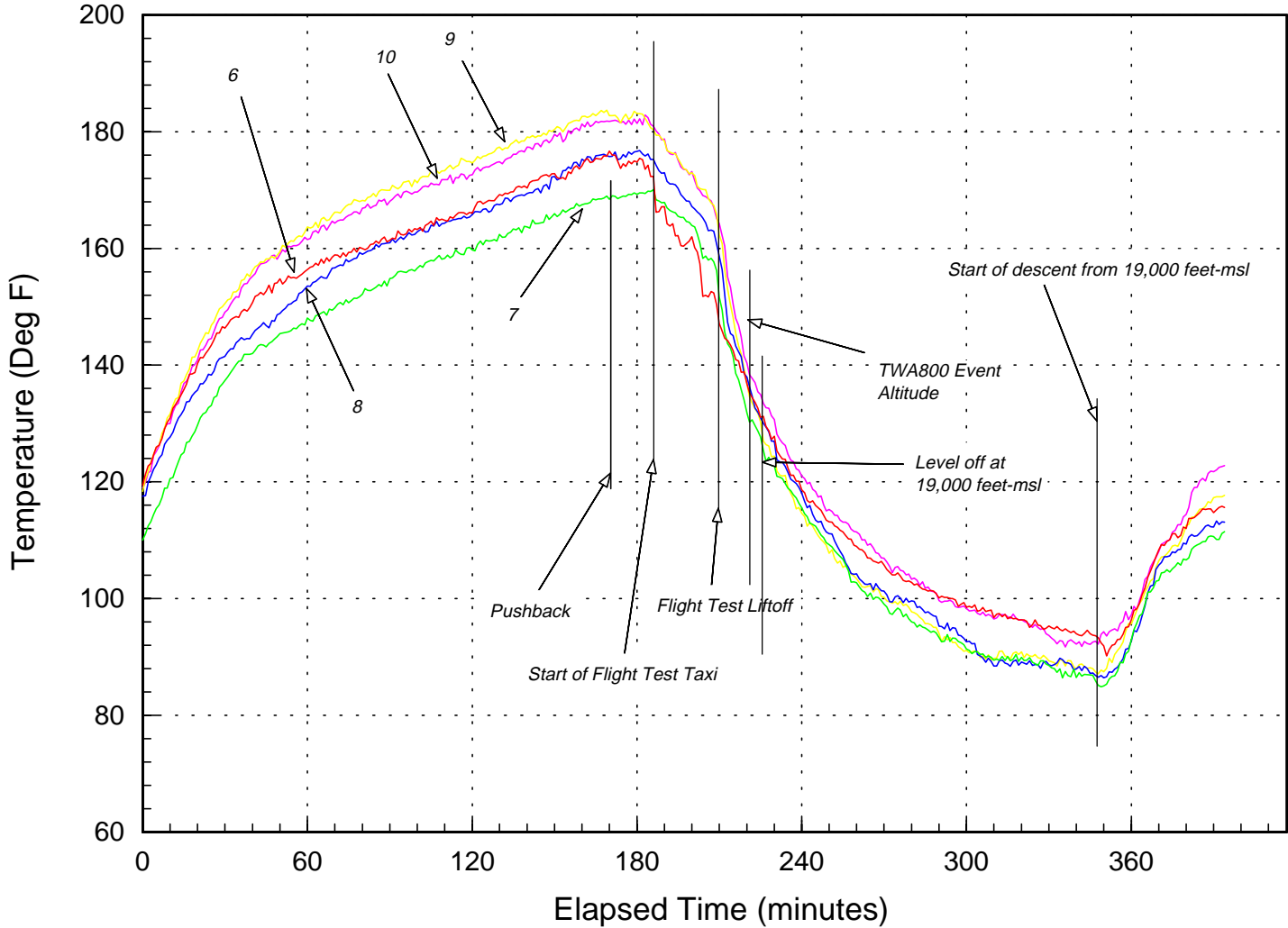
CWT External Bottom Surface Temperatures BL 22 on Right side of Keel Beam TWA800 Emulation Flight



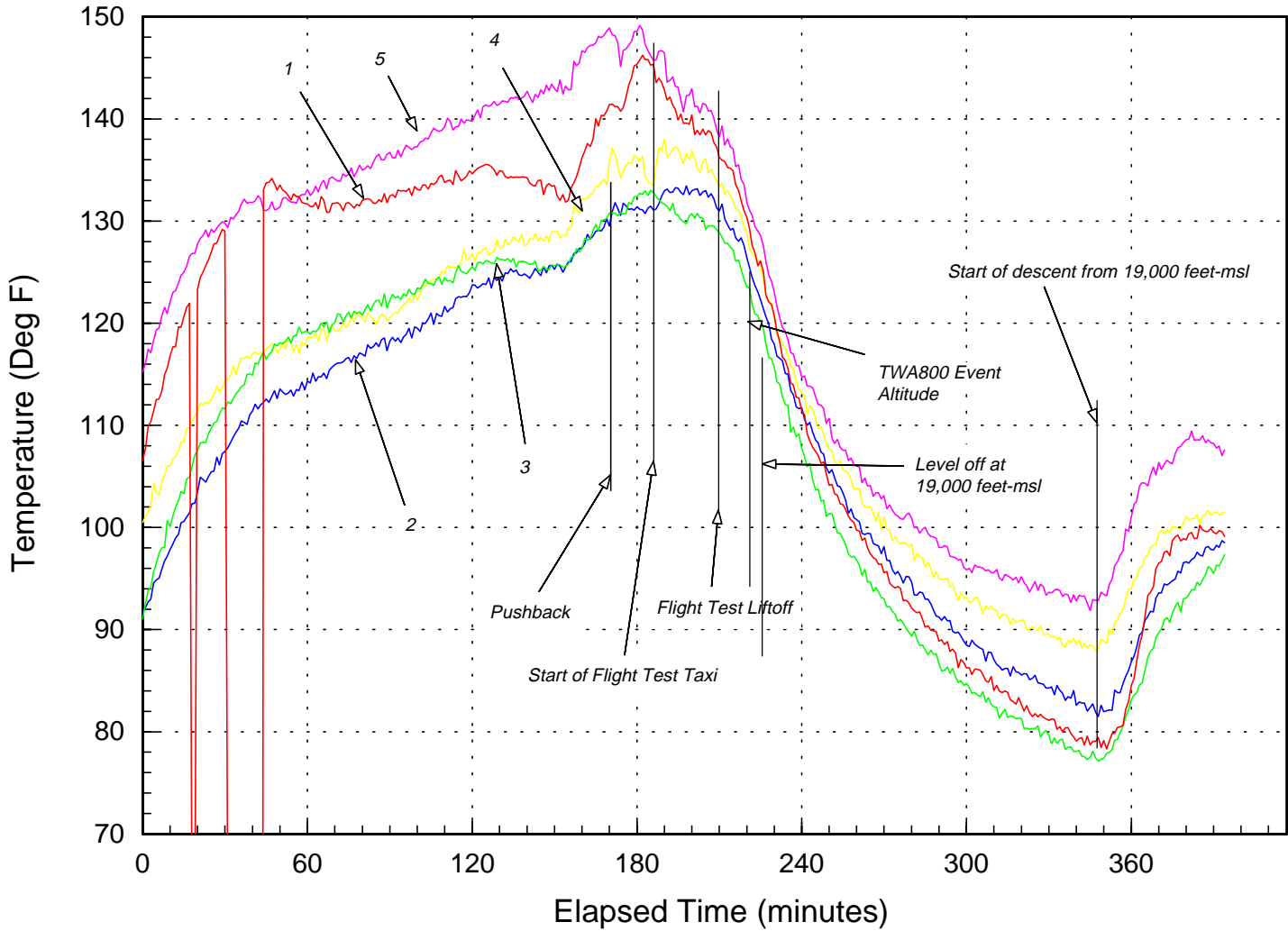
CWT External Bottom Surface Temperatures
BL 58 on Left side of Keel Beam
TWA800 Emulation Flight



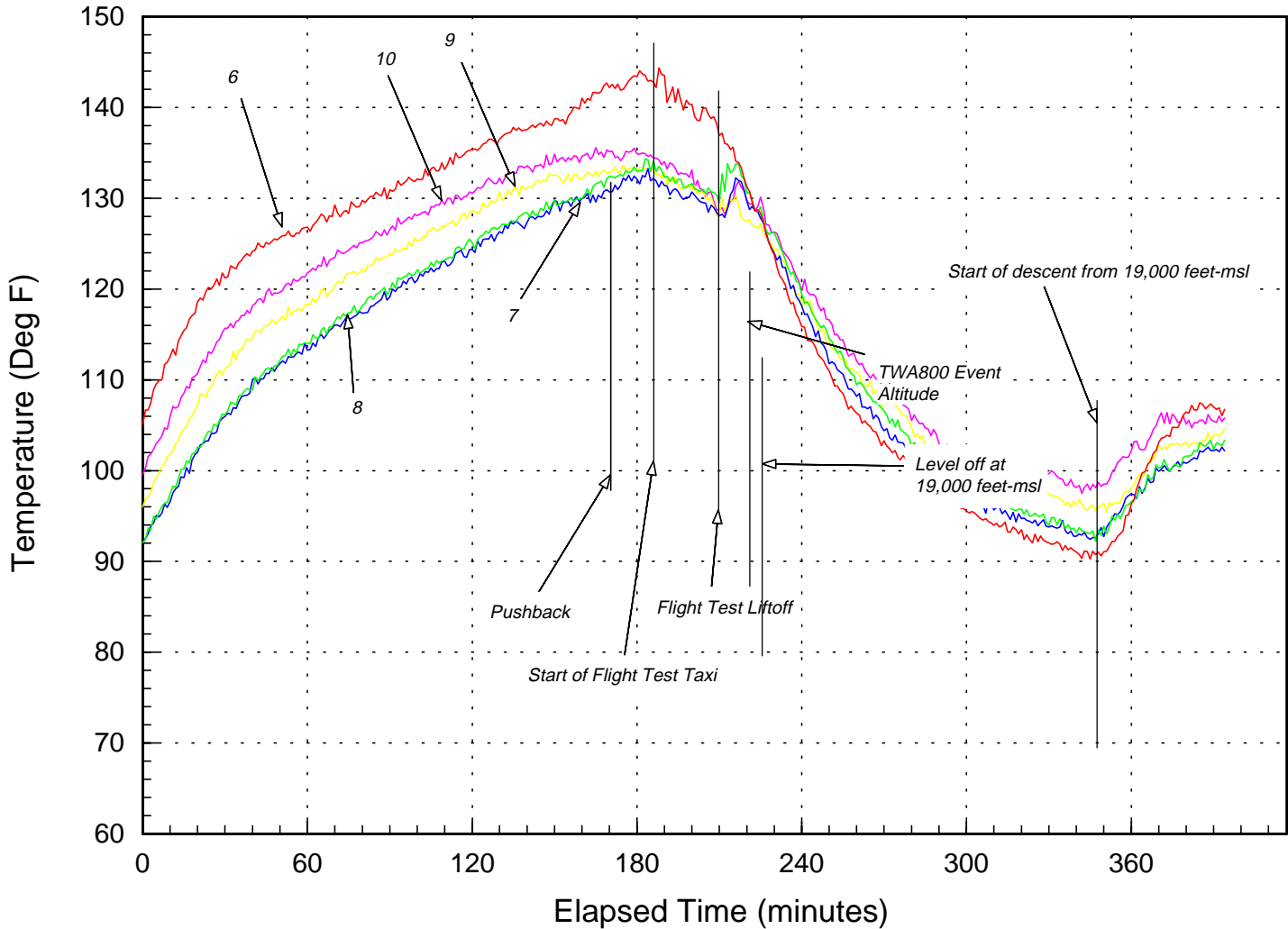
CWT External Bottom Surface Temperatures
BL 58 on Left side of Keel Beam
TWA800 Emulation Flight



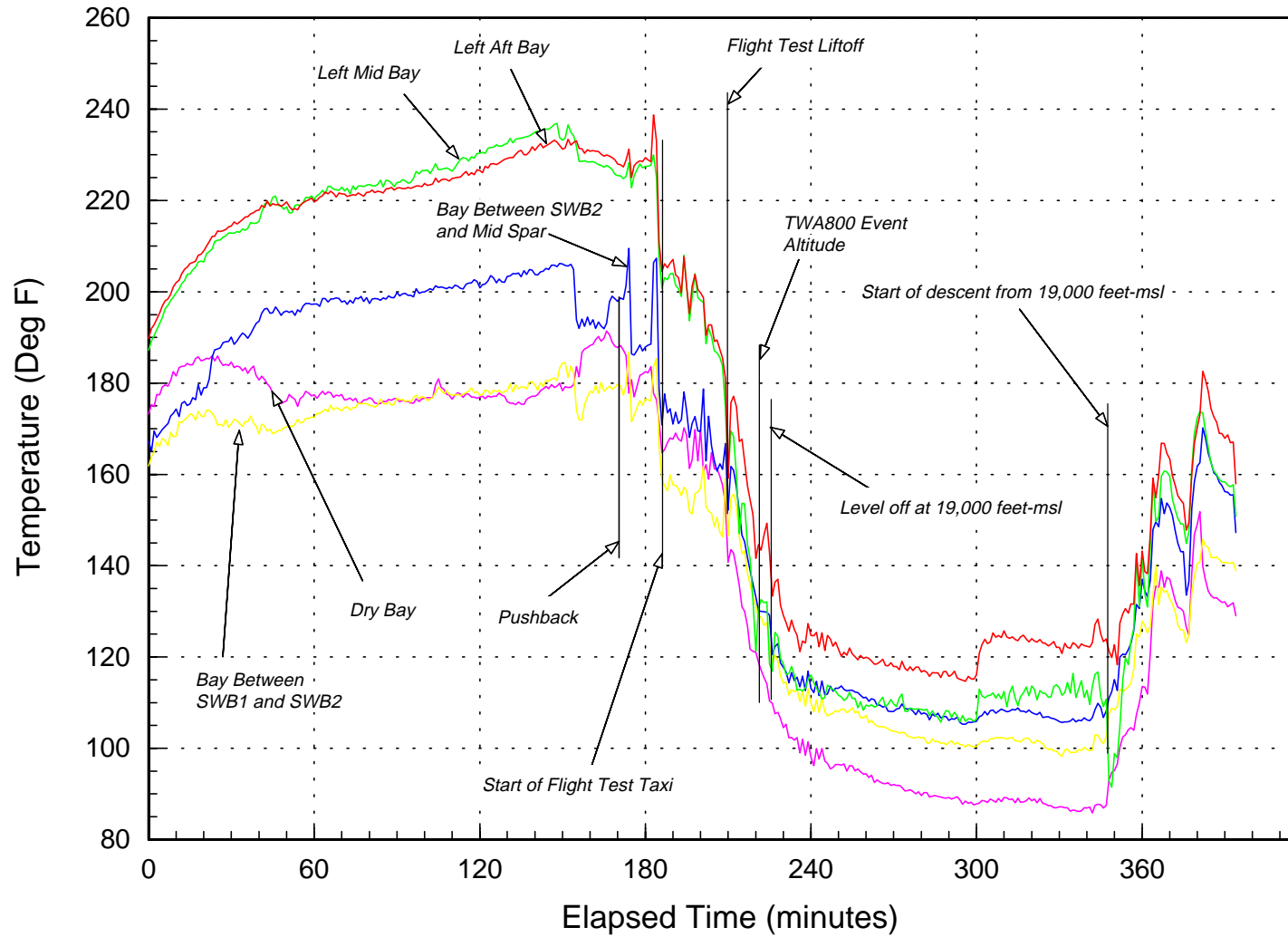
CWT External Bottom Surface Temperatures
BL 58 on Right side of Keel Beam
TWA800 Emulation Flight



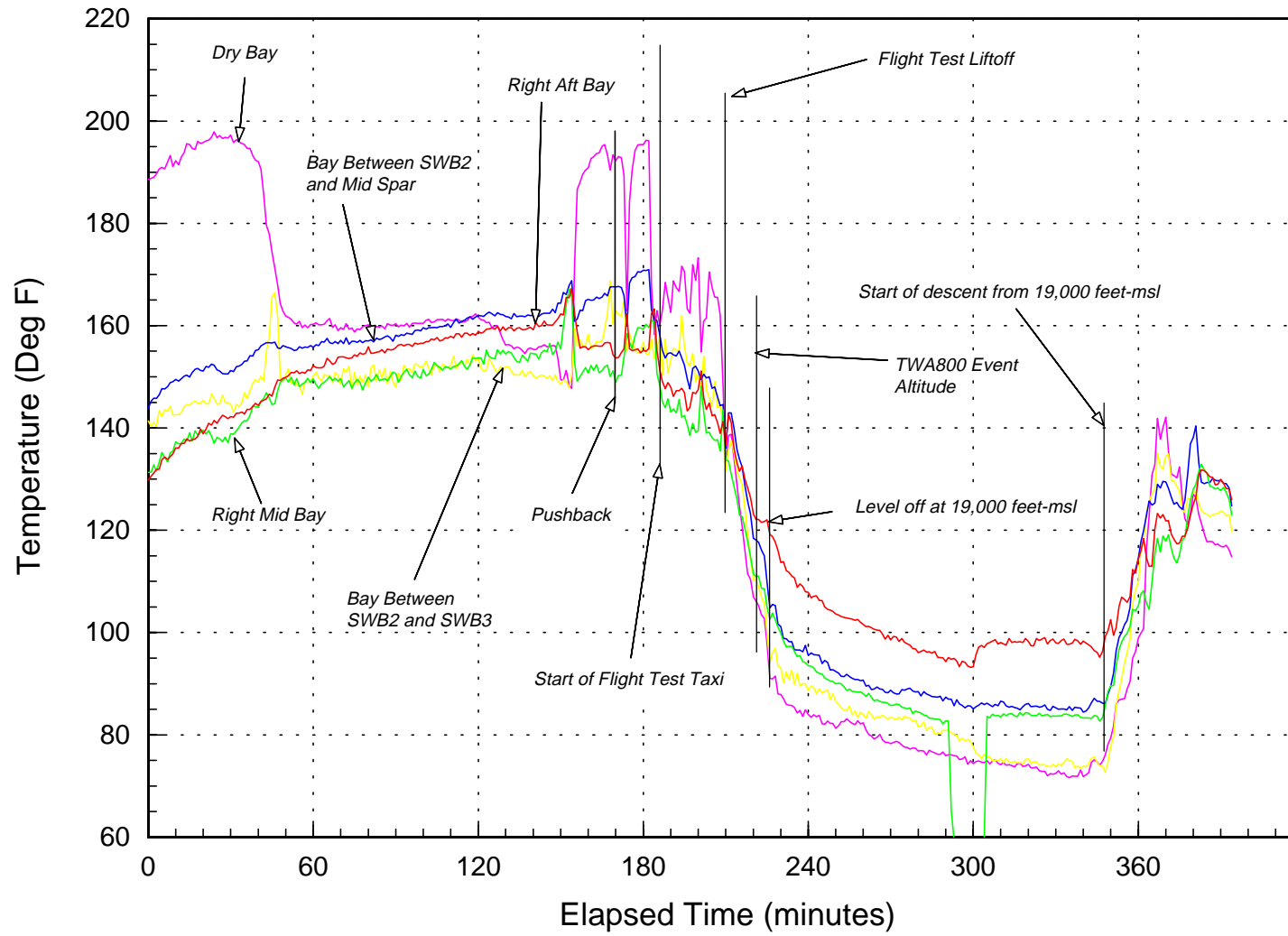
CWT External Bottom Surface Temperatures
BL 58 on Right side of Keel Beam
TWA800 Emulation Flight



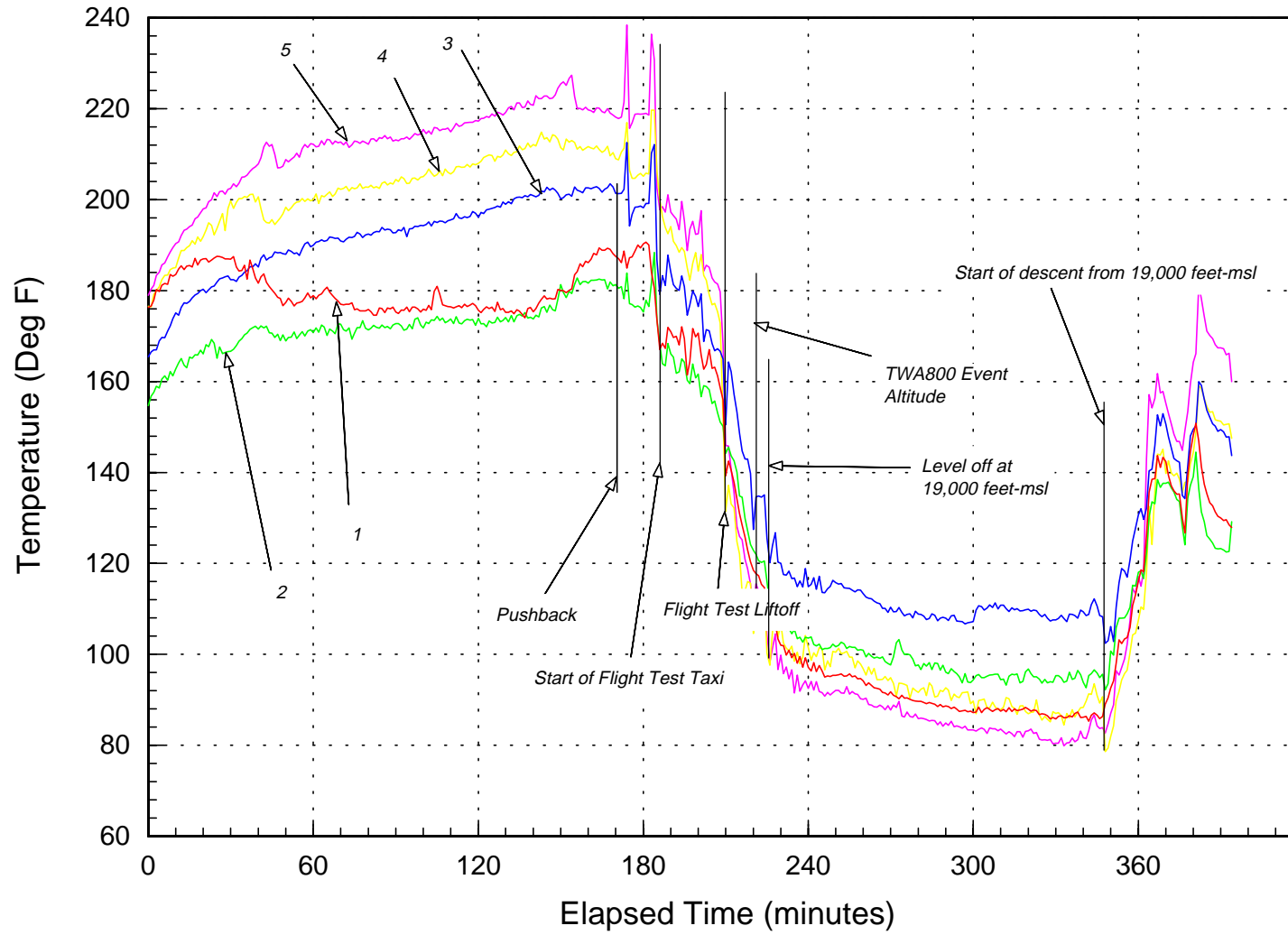
ECS Pack Bay Air Temperatures BL 22 on Left side of Keel Beam TWA800 Emulation Flight



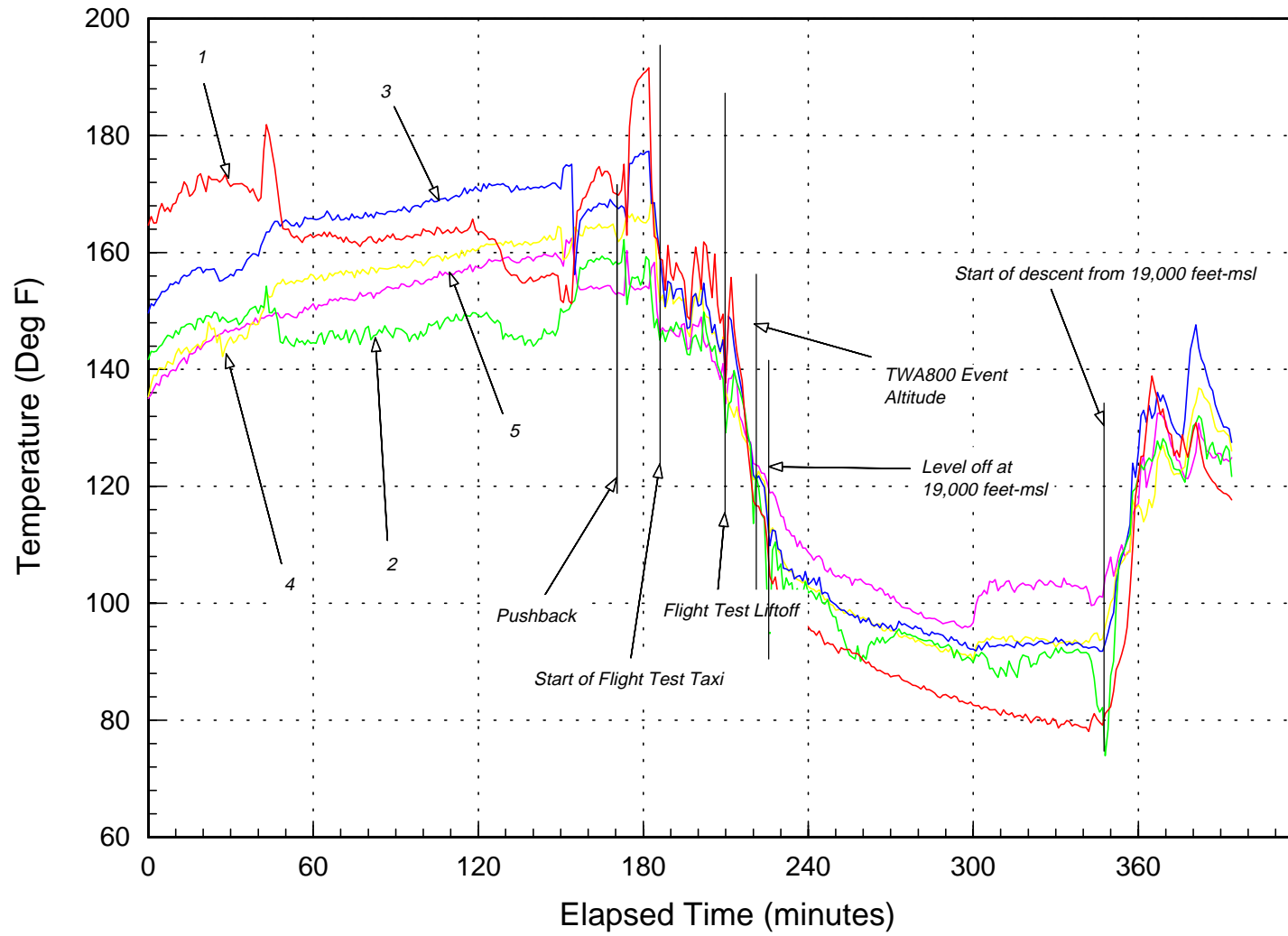
ECS Pack Bay Air Temperatures
BL 22 on Right side of Keel Beam
TWA800 Emulation Flight



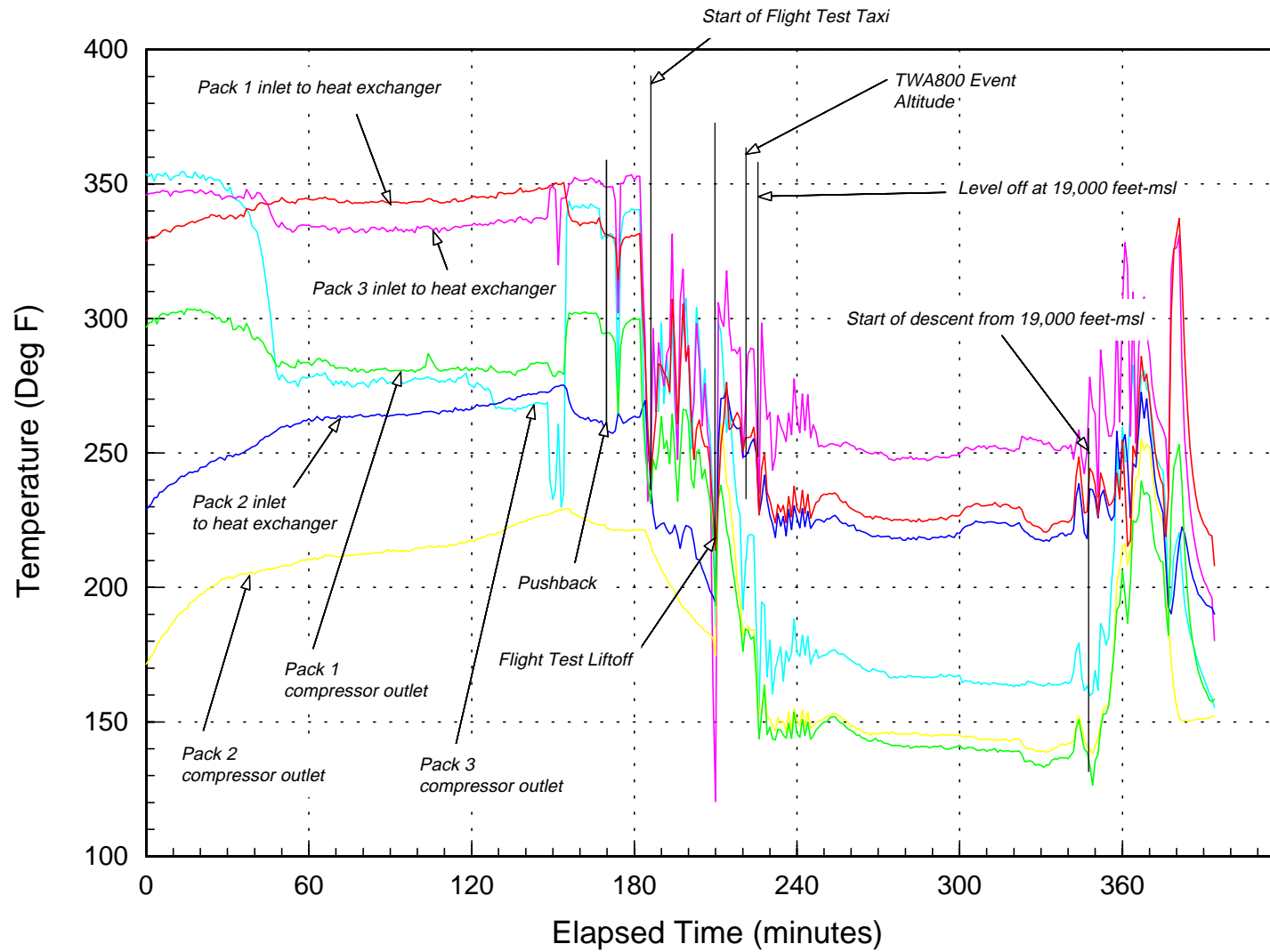
ECS Pack Bay Air Temperatures
BL 58 on Left side of Keel Beam
TWA800 Emulation Flight



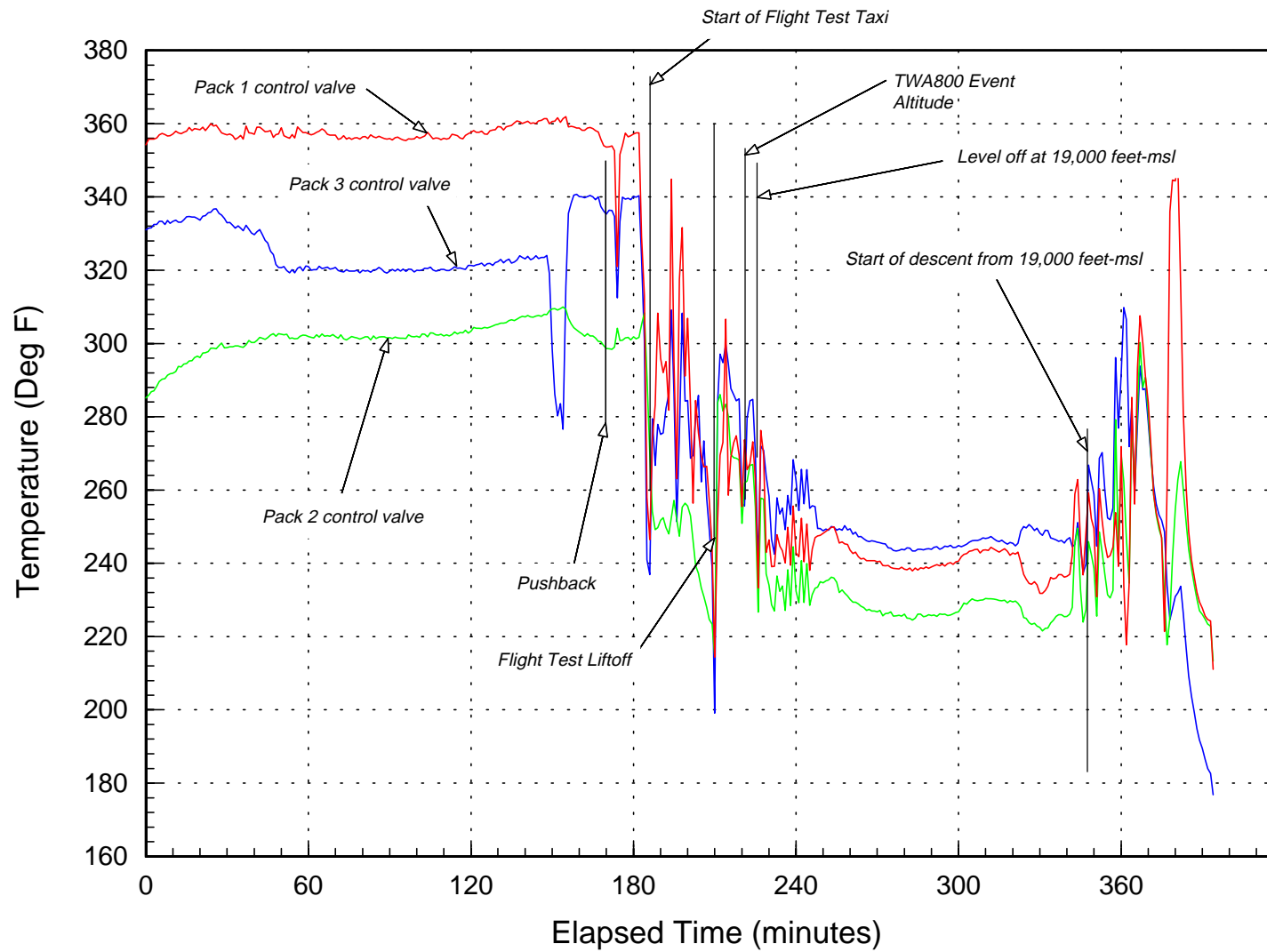
ECS Pack Bay Air Temperatures
BL 58 on Right side of Keel Beam
TWA800 Emulation Flight



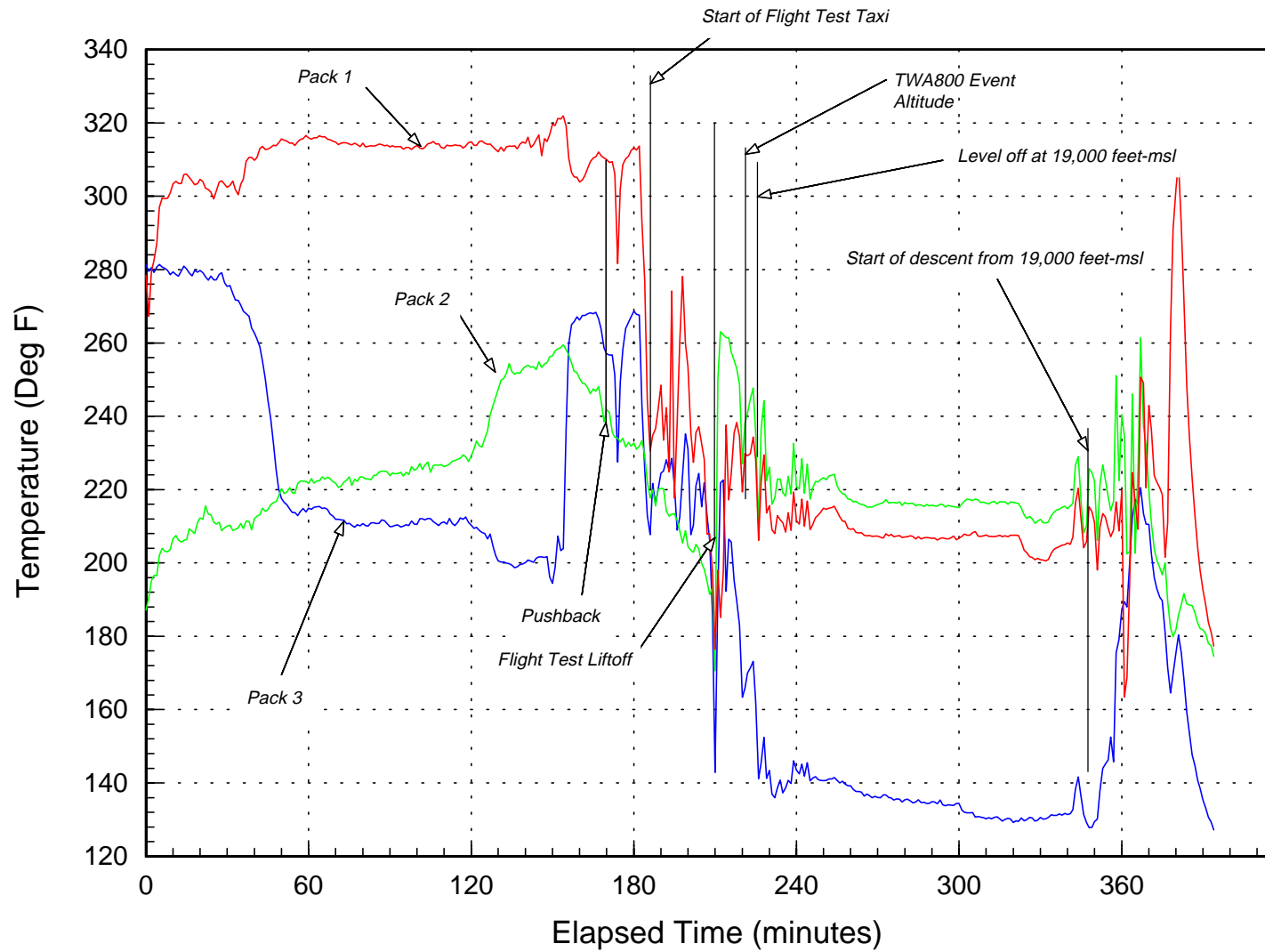
ECS Pack Component Surface Temperatures Heat Exchanger and Compressor TWA800 Emulation Flight



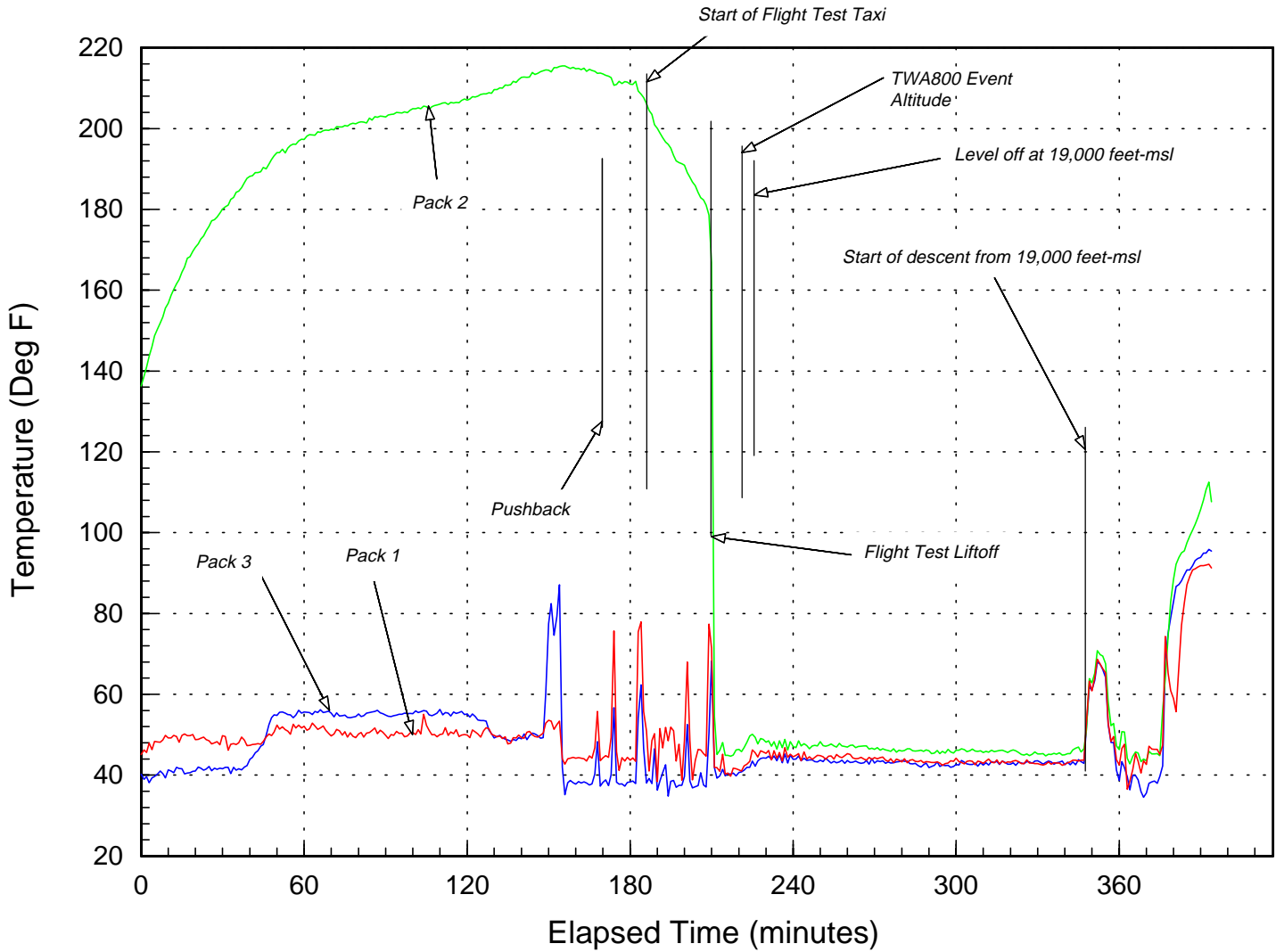
ECS Pack Component Surface Temperatures Pneumatic Bleed Flow Control Valve TWA800 Emulation Flight



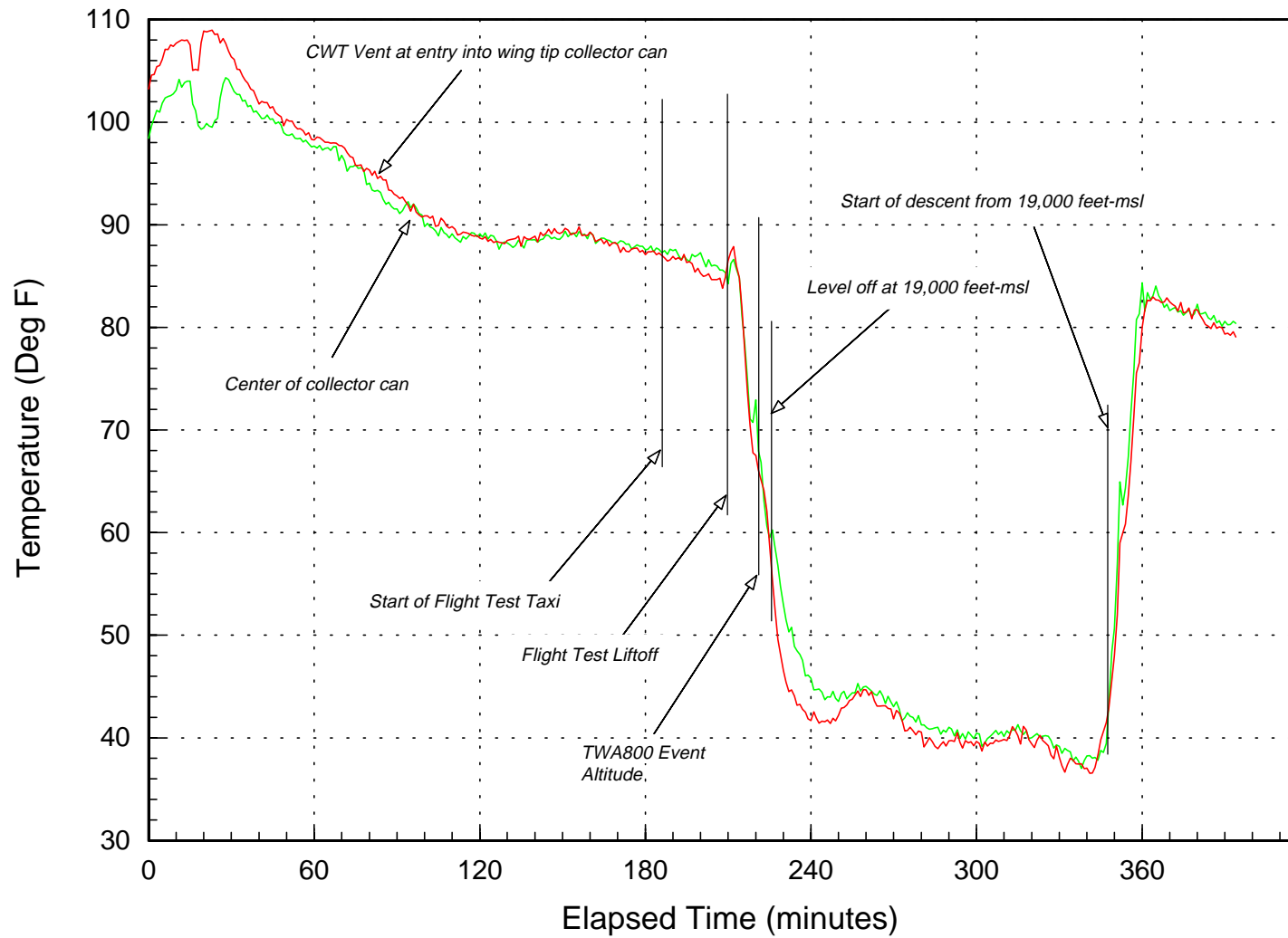
ECS Pack Component Surface Temperatures Exhaust Louvers TWA800 Emulation Flight



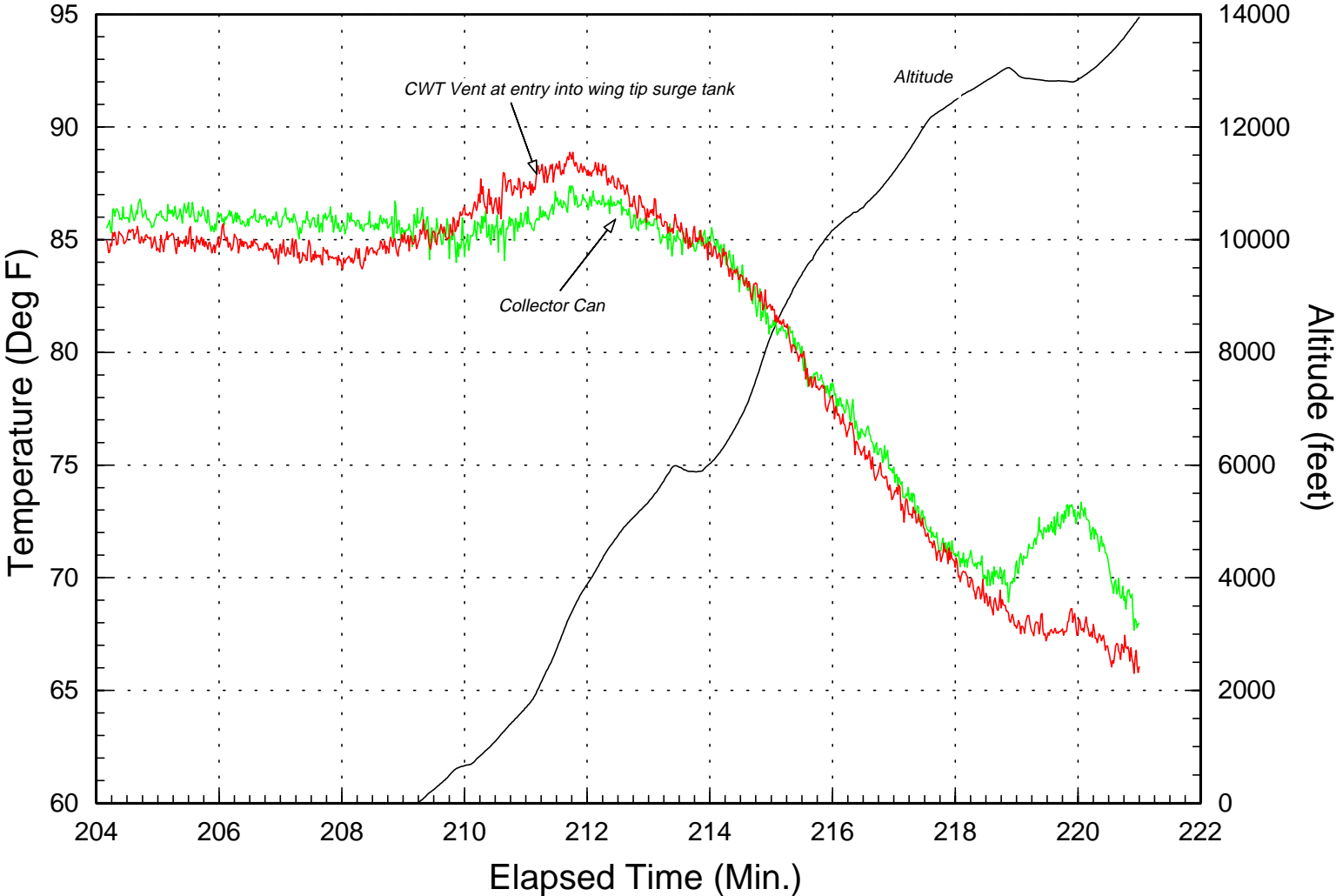
ECS Pack Component Surface Temperatures Water Separator TWA800 Emulation Flight



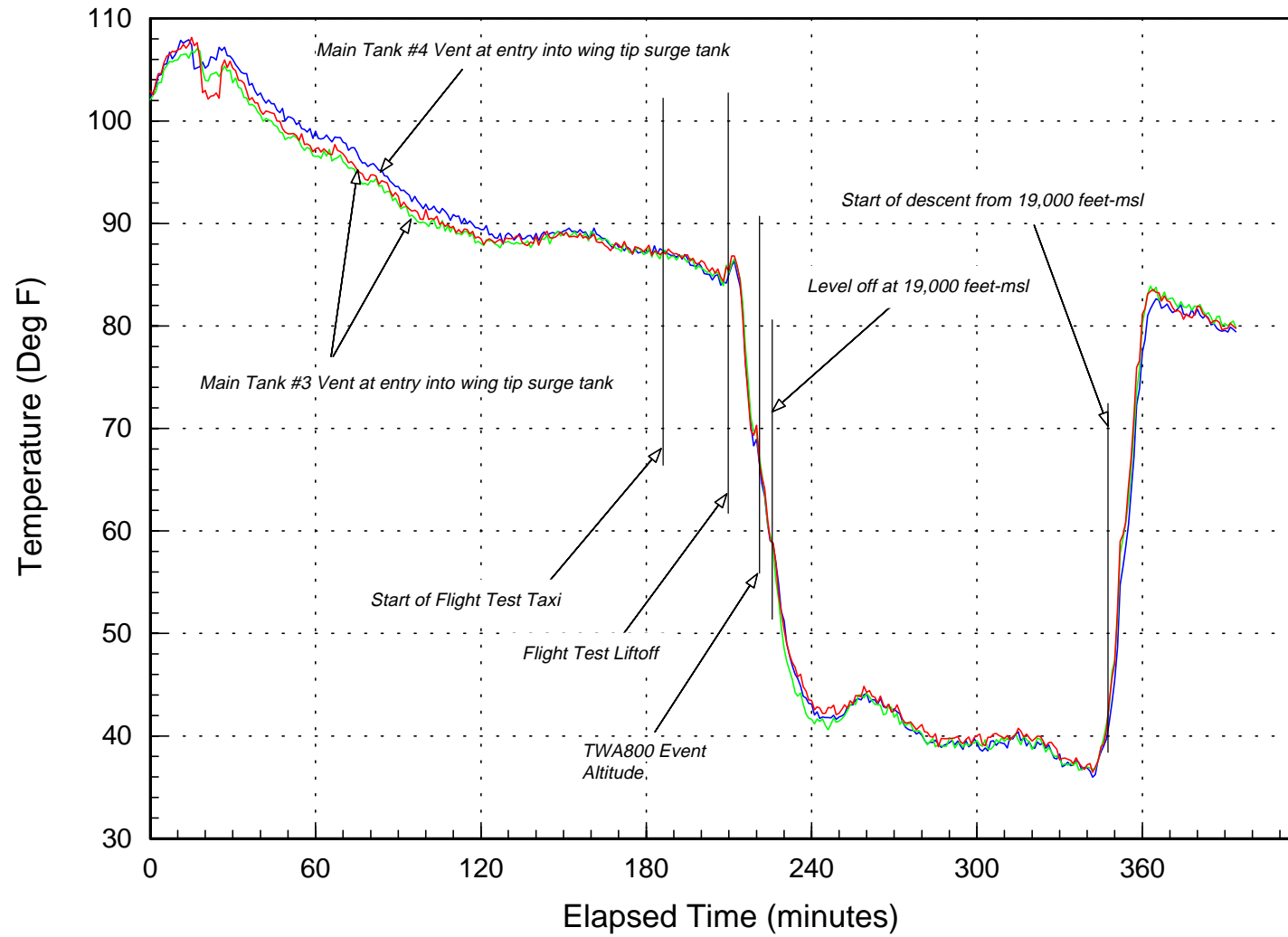
Right Wing CWT Vent Temperatures TWA800 Emulation Flight



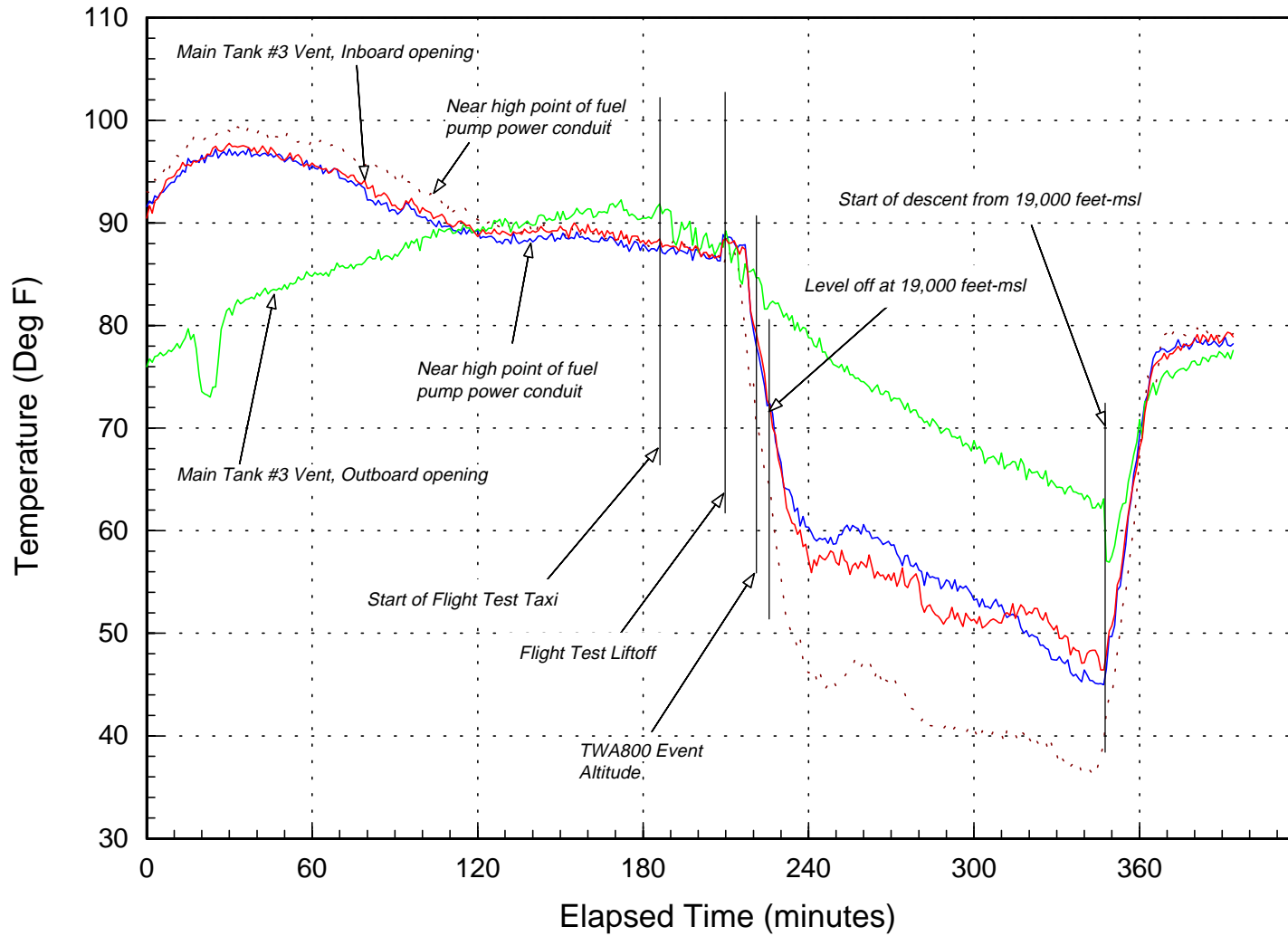
Right Wing CWT Vent Temperatures
TWA800 Emulation
Ascent Portion



Right Wing Tank Vent Temperatures TWA800 Emulation Flight



Main Wing Tank #3 Ullage Temperatures TWA800 Emulation Flight



Main Wing Tank #3 Ullage Temperatures TWA800 Emulation Ascent Portion

