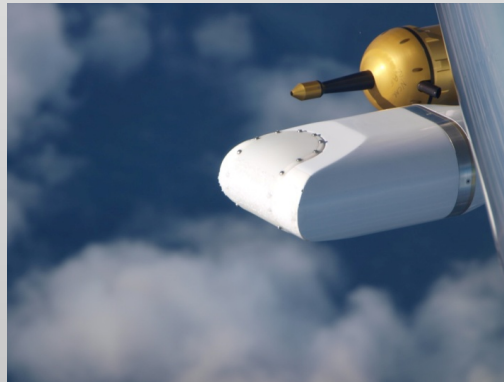


Summary of the Microwave Temperature Profiler Data Set from HIPPO-1,2,3

Julie Haggerty and M.J. Mahoney

HIPPO Science Team Meeting

25 May 2010



MTP in HIPPO-1

Data set includes:

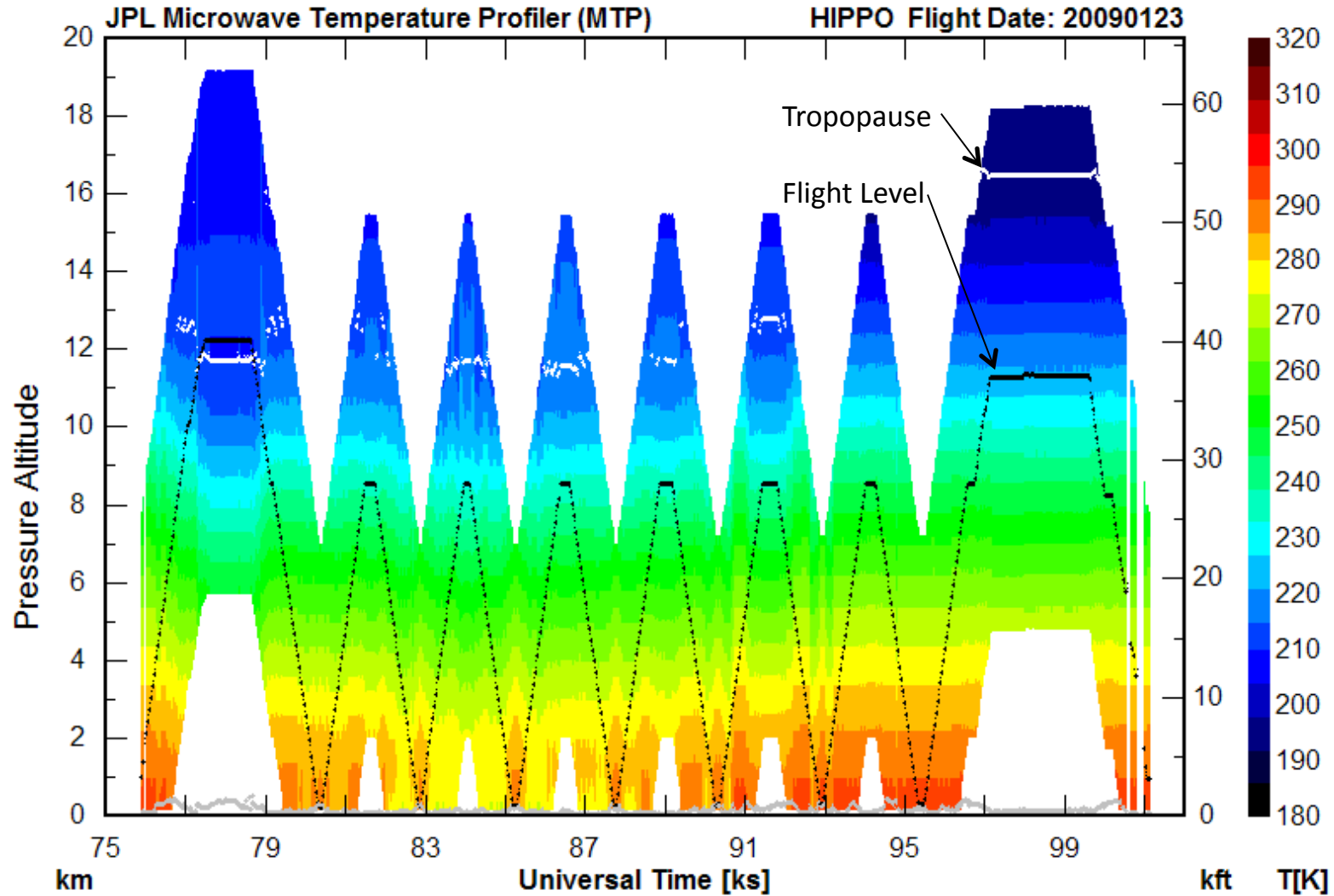
- 88.5 hours of useful data
- Very good quality
- Icing of transparent window near Alaska and on descent into Tahiti may compromise short portions

Data processing status:

- Sufficient radiosondes from island and continental sites were available for calibration and retrievals
- Tropopause height files delivered in Feb
- Expect to submit full data set by July 1; currently resolving a small bias in final profiles
- COSMIC temperature profiles obtained for comparisons with final MTP retrievals

HIPPO-1 RF08

Christchurch - Tahiti



Principal Investigator: MJ Mahoney (Michael.J.Mahoney@jpl.nasa.gov)

Flight: 2009 01 23 00:00:00 Retrieved: 2009 12 03 10:47:05 Edited: 2010 02 01 15:21:39 Plotted: 2010 02 01

MTP in HIPPO-2

- MTP performed well following adjustments to sampling frequencies
- 87 hours of useful data
- Some icing encountered, but less than in HIPPO-1
- Contractual issues between JPL and UCAR have delayed data processing; negotiations currently in progress

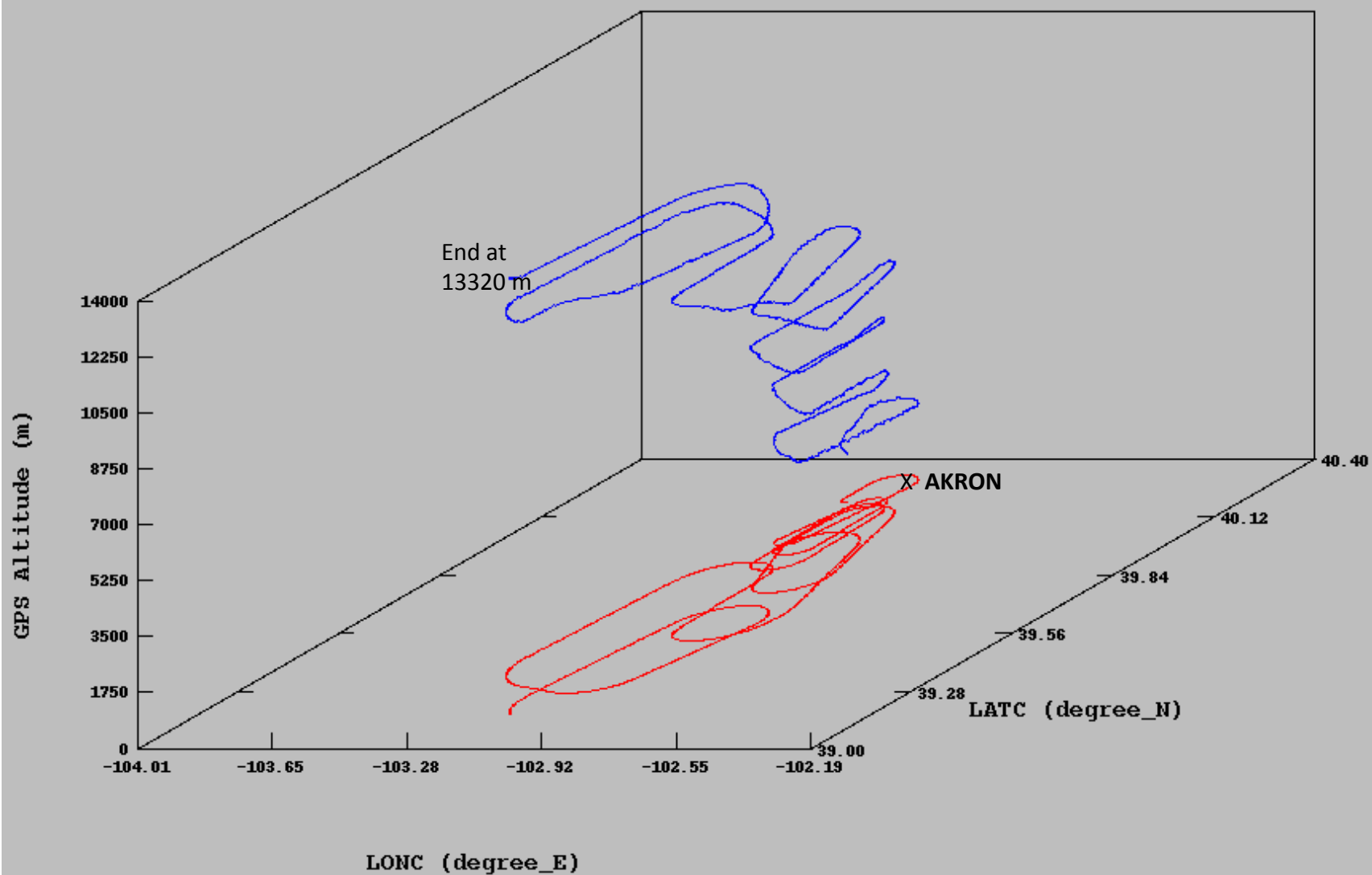
MTP in HIPPO-3

- New frequency synthesizer installed between HIPPO-2 and HIPPO-3; appears to have caused problems
- The usual 3-channel sampling reverted to a single channel on RF03, RF04 and to a lesser extent on RF05, RF11
- 67 hours of good (normal) data were obtained; another 6 hours is potentially salvageable
- Raob intercomparison at Akron, CO during TF01
- Intercomparison with Global Hawk MTP during RF09

HIPPO-3, Flt #tf01, GV/raob comparison

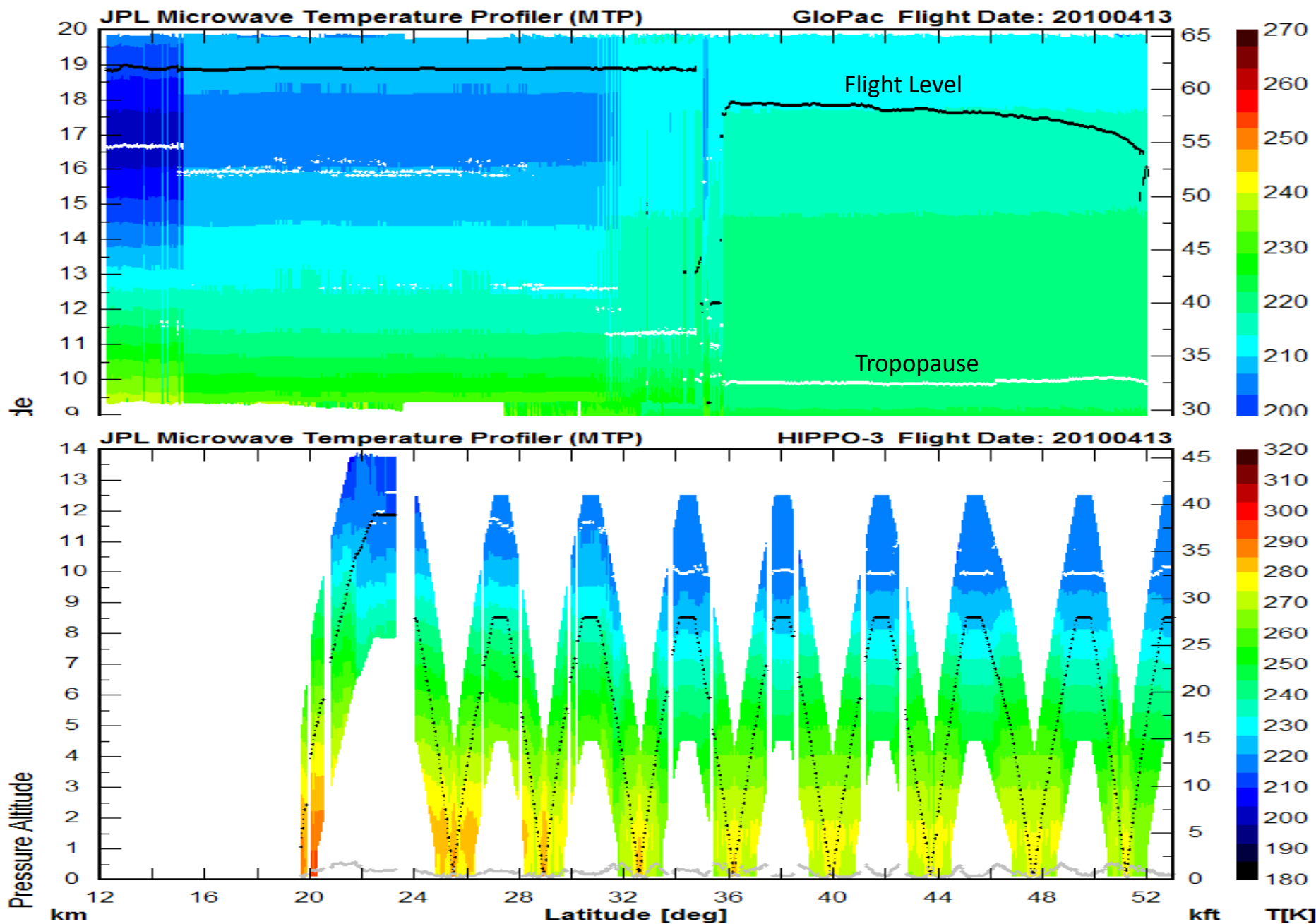
03/16/2010, 18:42:45-19:45:00

This plot contains preliminary data



MTP Preliminary Retrievals

HIPPO-GloPac Intercomparison



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Flight: 2010 04 13 00:00:00 Retrieved: 2010 04 15 08:15:23 Edited: 2010 04 16 11:32:25 Plotted: 2010 04 16