

Data Analysis and Mechanical System Performance

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**NATIONAL
ENDOWMENT
FOR THE
HUMANITIES**

Some Examples

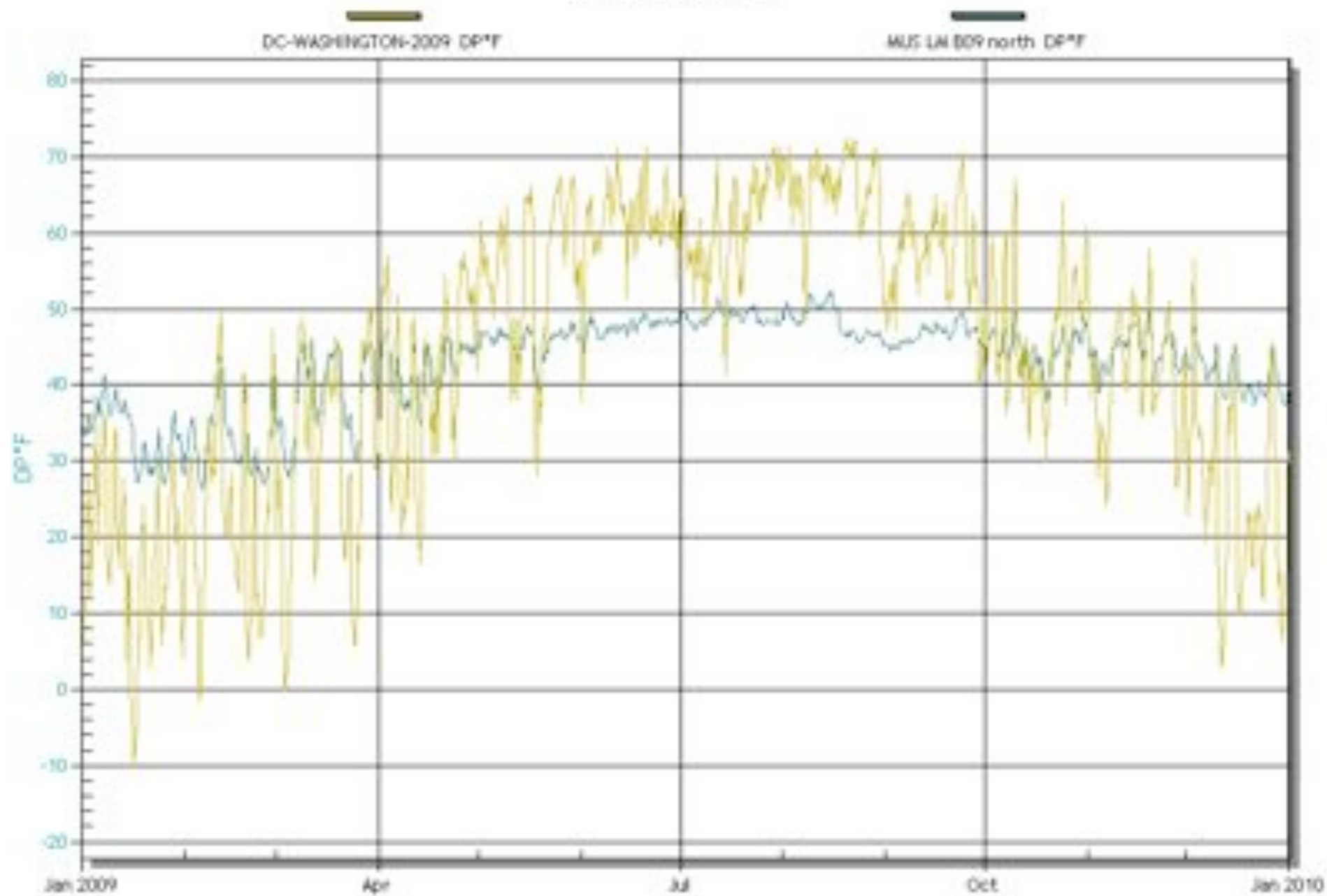
- Overlay indoor / outdoor dew points
- Which system serves my space?
- Are we using night setbacks / When do lights go on or off?
- Is our humidifier working?

Overlaying Dew Points

- What to Notice:
 - Outdoor DP in Yellow
 - Indoor in Blue
 - Major outdoor dips and rises are echoed indoors
 - Winter require humidification
 - Summer requires dehumidification
 - Transitions require neither

DP°F of DC-WASHINGTON-2009 et al.

2008-12-31 - 2009-12-31

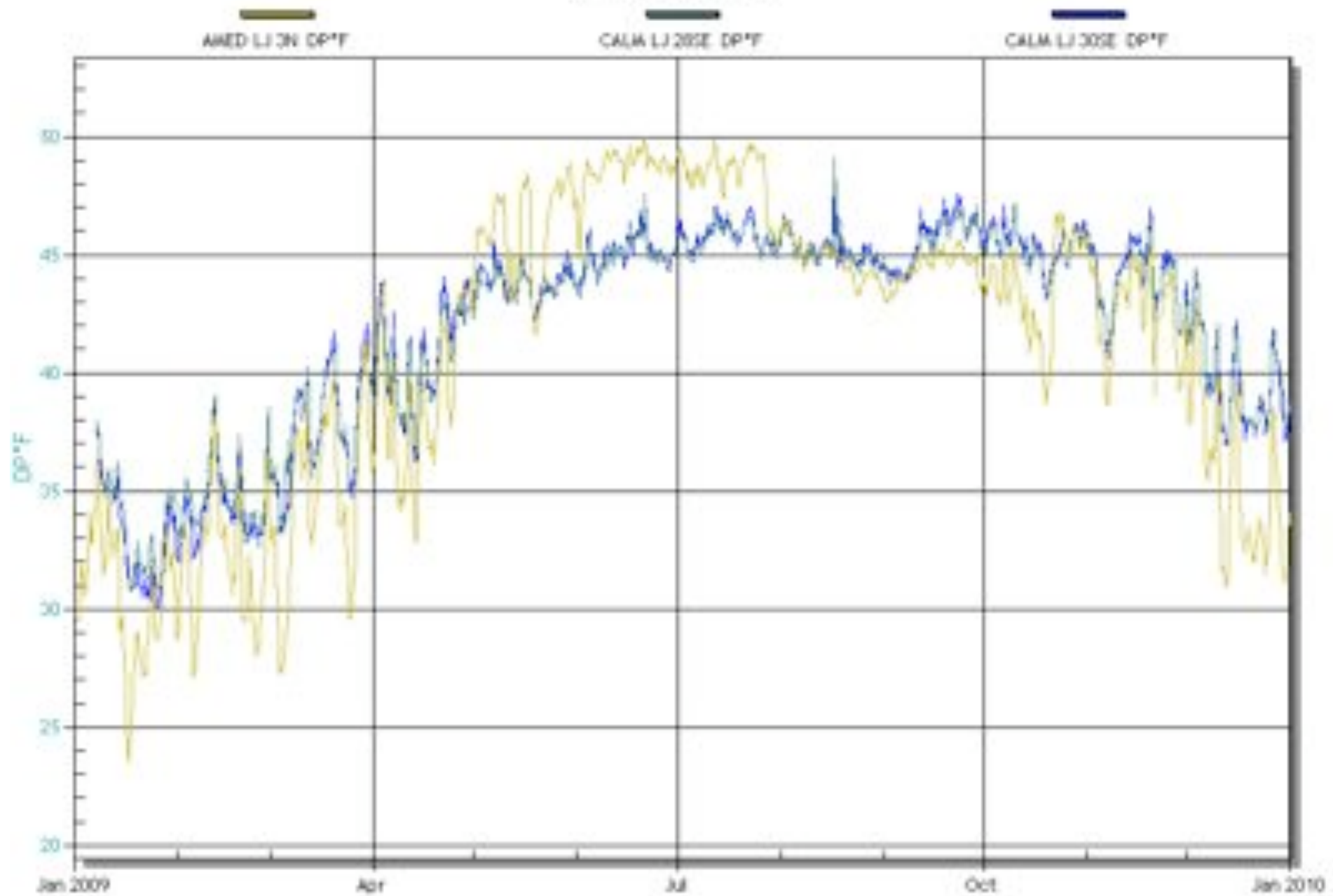


Which System Serves My Space?

- Overlay DPs from adjacent rooms
- What to Notice
 - AHUs tend to have a DP ‘signature’
 - When same system serves two rooms, DP curves will be nearly identical

DP°F of AMED LJ 3N et al.

2008-12-31 - 2009-12-31

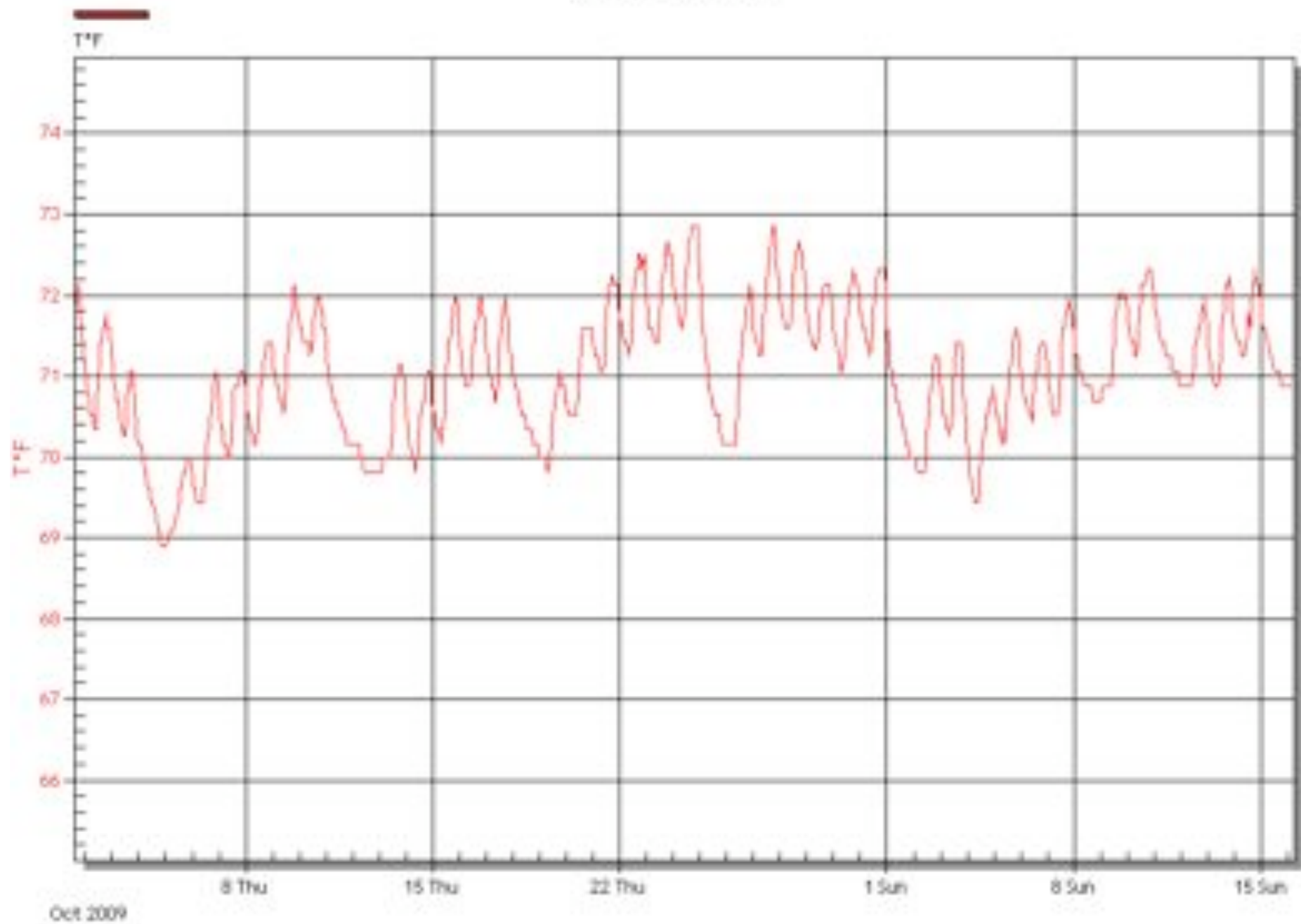


Setbacks / Lights Off?

- Temperature Graphs
- What to notice
 - Sawtooth patterns
 - Note days of week

T°F of MSS Stack 109M

2009-10-01 - 2009-11-16



Humidifier Not Working?

- Use DP Graph
- What to Notice
 - Compare last year to this year

DP°F of Deck C east end

2008-11-20 - 2010-09-11

