Distance between planes (km)

UTC

Altitude (km)

n_Butane (pptv)

DC8 - GV

Start Time
20:53:10

End Time
21:23:15

Avg = 28.9 ± 48.6

y = a + bx

\[ a = -15.9 \pm 21.9 \]

\[ b = 0.970 \pm 0.046 \]

\[ R^2 = 0.978 \]

05/25/12
Start Time 20:14:20

End Time 21:00:00

Altitude (km)

UTC

Distance between planes (km)

n_Butane (pptv)

DC-8 - GV

$y = a + bx$

$a = 11.9 \pm 58.7$

$b = 0.943 \pm 0.043$

$R^2 = 0.969$

06/01/12
**n-Butane (pptv)**

- **DC-8**
  - Start Time: 20:27:16
  - End Time: 21:35:15
  - \( y = a + bx \)
  - \( a = -2.6 \pm 9.2 \)
  - \( b = 0.855 \pm 0.022 \)
  - \( R^2 = 0.985 \)

- **GV**
  - \( y = a + bx \)
  - \( a = -2.6 \pm 9.2 \)
  - \( b = 0.855 \pm 0.022 \)
  - \( R^2 = 0.985 \)

**Altitude (km)**

- Start Time: 20:27:16
- End Time: 21:35:15

**Distance between planes (km)**

- Start Time: 20:27:16
- End Time: 21:35:15

**Average**

\[ \text{Avg} = 43.4 \pm 57.2 \]
Distance between planes (km)

UTC

Altitude (km)

n_Butane (pptv)

DC8 - GV

Start Time
23:05:45

End Time
23:34:55

DC-8

GV

Distance

DC-8 n_Butane (pptv)

y = a + bx

a = -13.6 ± 7.9

b = 1.212 ± 0.074

R^2 = 0.960

Avg = -6.3 ± 18.5

06/17/12
### Time Series Data

<table>
<thead>
<tr>
<th>Comparison Date</th>
<th>DC-8 WAS</th>
<th>GV TOGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/25/12</td>
<td>dc3-WAS_DC8_20120525_R2.ict</td>
<td>DC3-TOGA_GV_20120525_R2.ict</td>
</tr>
<tr>
<td>05/30/12</td>
<td>dc3-WAS_DC8_20120530_R2.ict</td>
<td>DC3-TOGA_GV_20120530_R2.ict</td>
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<td>DC3-TOGA_GV_20120601_R2.ict</td>
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<td>dc3-WAS_DC8_20120605_R2.ict</td>
<td>DC3-TOGA_GV_20120605_R2.ict</td>
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<td>06/17/12</td>
<td>dc3-WAS_DC8_20120617_R2.ict</td>
<td>DC3-TOGA_GV_20120617_R2.ict</td>
</tr>
</tbody>
</table>

### Correlation Data

- Merged GV TOGA to DC-8 WAS time step.
- Fit lines are derived from orthogonal distance regressions.
- R² values are calculated independently, not from orthogonal distance regression.
- Average and standard deviation are calculated over the comparison time frame.
• Numbers on Colorbar correspond to the 5 intercomparison days
  1: 05/25/12, 2: 05/30/12, 3: 06/01/12, 4: 06/05/12, 5: 06/17/12

• Avg Bias denotes the difference between y and x, calculated by (y-x)