Table of Boundary-Layer Heterogeneity Flights* (green = east track; yellow = central track, tan = western track)

| $\begin{gathered} \hline \text { BLH } \\ \text { no } \end{gathered}$ | $\begin{aligned} & \hline \text { KA } \\ & \text { no } \end{aligned}$ | Date | Track | $\begin{gathered} 65-\mathrm{mWind} \\ (\mathrm{~m} / \mathrm{s}) \end{gathered}$ | Cloud | BL Depth (magl) | Legs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | $\begin{gathered} 19 \\ \text { May } \\ \hline \end{gathered}$ | W | -0.76,13.19 | Clear | 700 m beg to 1.6 km end. Narrow Entrainment Zone | 10 legs: 6 at 200 feet, 2 in EZ, 2 at 0.5 h |
| 2 | 3 | $\begin{gathered} 20 \\ \text { May } \end{gathered}$ | W | -4.89,12.12 | One cloudy period over site 3 | 1000 m , top EZ 1200 m beginning to 1400 m end | 10 Legs: 2 at $200^{\prime}, 2$ at $0.15 \mathrm{~h}, 2$ at $0.3 \mathrm{~h}, 2$ at 0.7 h , 1at top EZ , 1at about 0.85 h |
| 3 | 4 | $\begin{gathered} 21 \\ \text { May } \\ \hline \end{gathered}$ | C | -3.53,10.09 | Scat-Broken Ci, Cu humulis | 1500 m during entire period; EZ top about 1900 m . | 7 Legs: 6 at 200 feet, 1 at 0.6 (could count 2 more if use P3 I/C legs) |
| 4 | 7 | $\begin{gathered} 25 \\ \text { May } \end{gathered}$ | W | -1.79,1.69 | Scat-Broken Ci | 300 m beg - 1200 m end; EZ top 600 m beg to 1350 m end | 12 Legs: 10 at 200 feet, 1 at $2 \times$ BL height, one in EZ |
| 5 | 8 | $\begin{gathered} 27 \\ \text { May } \\ \hline \end{gathered}$ | E | $\begin{gathered} -1.81,5.24 \\ \text { (W to E only) } \\ \hline \end{gathered}$ | Broken Ci, Altocumulus | 250 m beg -400 m end; EZ top 300 m beg -800 m end. | 15 legs: 8 at 200 fet, 7 in EZ |
| 6 | 9 | $\begin{gathered} 29 \\ \text { May } \end{gathered}$ | W | 0.97,4.82 | Clear Exc Cu to West | 300 m beg - 1200 m end, EZ 500 m beg - 1800 m end. BL top variable from both soundings and WCR | 15 legs in stacks: 5 at $200 \mathrm{ft}, 4$ nominally at $0.7 \mathrm{zi} ; 4$ nominally at $0.4 \mathrm{zi}, 2$ above EZ. |
| 7 | 10 | $\begin{gathered} 30 \\ \text { May } \end{gathered}$ | E | -1.39,3.69 | Scat Ci, Few Cu humulis | 600 m beg - 900 m end; EZ top $20 \%$ higher. | 16 legs: 8 at 200 feet, 5 at $0.7 \mathrm{~h}, 2$ above h. |
| 8 | 11 | $\begin{gathered} 31 \\ \text { May } \\ \hline \end{gathered}$ | C | 0.67,6.55 | Few Ci, Cu humulis | 900 m beg - 1300 m end; EZ $10 \%$ higher. | 10 Legs: 7 at 200 feet, 3 at 0.7h. |
| 9 | 15 | $\begin{gathered} 6 \\ \text { June } \end{gathered}$ | C+ | 2.01,4.93 | Few $\mathrm{Cu}, \mathrm{Ci}$ | 700 m beg - 1500 m end; top EZ 1 km beg -2 km end. WCR show significant variability | 12 legs: 3 ea at $0.3 \mathrm{~h}, 0.8 \mathrm{~h}, 0.55,1.4 \mathrm{~h}$. First 0.8 h leg too high. 2 sorties; leg extended W; length 100 km . Used h because Falcon needed continuous fluxes. |
| 10 | 16 | $\begin{gathered} 7 \\ \text { June } \end{gathered}$ | W | 3.45,10.06 | Scat Ci | 400 m beg - 1200 m end; EZ top 800 m beg -1600 m end. Variable. | 13 legs: 7 at 200 feet, 6 at 0.7 zi (note zi used here instead of $h$ ). |
| 11 | 22 | $\begin{gathered} 16 \\ \text { June } \end{gathered}$ | C | -0.78,-0.28 | Scat Cu | 800 m (steady), top EZ 1 km beg -2 km end (cloud base to cloud top?) | 12 legs: 8 at 200 feet, 2 at $0.7 \mathrm{~h}, 1$ at 0.5 h , 1 at 0.3 h . |
| 12 | 23 | 17 | E | 2.73,7.17 | Scat Altostrat; | 900 m beg - 1200 m end; EZ or | 18 legs: 6 at 200 feet, 6 at $0.7 \mathrm{~h}, 6$ at 0.15 h |


|  |  | June |  |  | Cu humulis | cloud top 1.2 km beg -1.5 km end |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | 26 | $\begin{gathered} 20 \\ \text { June } \end{gathered}$ | E | -1.60,5.08 | Scat Cu h, Ci | 750 m beg - 1000 m end; EZ top 1200 m beg -1500 m end. | $\begin{aligned} & 16 \text { legs: } 5 \text { at } 200 \mathrm{ft}, 5 \text { at } 0.7 \mathrm{~h}, 4 \text { at } 0.4 \mathrm{~h}, 2 \\ & \text { at } 0.15 \mathrm{~h} \text {. } \end{aligned}$ |
| 14 | 28 | $\begin{gathered} 22 \\ \text { June } \end{gathered}$ | E | -0.22,9.42 | Few-scat Cu h | 700 m beg - 1200 m end; Eztop 1150 m beg, 2050 m end. | 18 legs: 11 at $200 \mathrm{ft}, 6$ at $0.7 \mathrm{~h}, 1$ at h, 1 at 0.4 h . |

*Prepared by Peggy LeMone, 12 July 2002, KA mission numbers added 29 March 2019

