**metbrief: 2014-02-10**  
*(next flight 2014-02-11 Tue)*

- dry air and NE trade-winds prevail over Guam  
- trade-wind disturbance (convective precip) south of ~10N has weakened compared to yesterday, but expected to strengthen again by midflight (10AM) Tue  
- outlook: shear line (w/ isolated showers) forming and approaching Guam Wed PM through Fri

<table>
<thead>
<tr>
<th></th>
<th>wind</th>
<th>cld cover (base)</th>
<th>precip</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tue</strong> takeoff (04AM)</td>
<td>5-10 knt ENE</td>
<td>few (2500 ft), scattered (2500 ft)</td>
<td>low prob</td>
</tr>
<tr>
<td>midfield (10AM)</td>
<td>convective precip S-SW of Guam (2-9N, 125-145E), cld tops ≤50 kft</td>
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<td>landing (04PM)</td>
<td>5-10 knt E</td>
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<td>5-10 knt E</td>
<td>scattered (2500 ft)</td>
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<tr>
<td>midfield (10AM)</td>
<td>convective precip S-SW of Guam (0-8N, 125-145E), cld tops ≤50 kft</td>
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<tr>
<td>landing (04PM)</td>
<td>5-10 knt ENE</td>
<td>scattered (2500 ft)</td>
<td>isolated</td>
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</table>
Guam in region of dry air, little or no showers
trade-wind disturbance ~8N has weakened
last night’s condition:

soundings on 2014-02-09, 12UTC
(02-09 Sun, 10PM)

- tropopause -84.5 degC (188.5 K) at 17.9 km (58.9 kft)
- dry atmosphere with some low-level clouds

Monday, February 10, 14
‘Tue take-off’ condition (GFS):
1000mb precip & winds on 2014-02-10, 18UTC (02-11 Tue, 04AM)

- Dry air over Guam
- Front approaching from NW, causes change in wind direction from ENE (4AM) to E (10AM)
‘Tue landing’ condition (GFS):

1000mb precip & winds on 2014-02-11, 06UTC
(02-11 Tue, 04PM)

- shear line approaching ⇒ increasing cloud cover and isolated showers Wed PM through Fri
‘Tue midflight’ condition (GFS):
high clouds & 150mb winds on 2014-02-11, 00UTC
(02-11 Tue, 10AM)

- convective precip (cld tops ≤50 kft) along southern leg of flight track, gradually moves away from Guam in SW direction
‘Tue midflight’ condition (GEOS5): tropopause T & altitude on 2014-02-11, 00UTC (02-11 Tue, 10AM)

- Cold tropopause Ts along southern and western legs of flight track