Determining Nodes Above Cracked Boll

From the uppermost 1st position cracked boll on the plant, count the mainstem nodes above it to the uppermost harvestable 1st position boll. Sample at least 40 plants across the field, then average.
Timing Harvest Aid Applications by Boll Maturity

Requires more heat units prior to ethephon application. Ethephon will probably open this boll but it likely will not “fluff.”

Fully formed seed leaves (cotyledons), tan seedcoat ring forming. Ready for ethephon application.

Fully Mature, blackened seed coat, should open with paraquat.
Theoretical Relative Maturity Difference As Affected by Boll Location (Out and Up)

1st position unopened boll
about 60 HU

UP
From a mature 1st position boll, it takes about 60 additional HU to mature a 1st position boll one mainstem node up the plant.

1st position cracked boll

2nd position boll
OUT
From any given mature boll on a fruiting branch, it takes about 120 HU to mature an additional position when moving out on a fruiting branch.

about 120 HU

Vegetative branch
Altus 30-Yr Normal (1971-2000) Cotton Heat Unit Accumulation

First freeze: Altus – November 4

Heat units (DD60s/day)

Date

1-Sep 1-Oct 1-Nov

Altus: http://climate.ok.gov/county_climate/Products/QuickFacts/jackson.pdf
Contribution to Lint Yield by Fruiting Position (Lb/Acre)

2009 - Lubbock
100% Open Bolls
FM 9180 B2F

<table>
<thead>
<tr>
<th>Boll Location</th>
<th>Lint Yield (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Position</td>
<td>1343 (81%)</td>
</tr>
<tr>
<td>2nd Position</td>
<td>188 (12%)</td>
</tr>
<tr>
<td>Vegetative</td>
<td>121 (7%)</td>
</tr>
<tr>
<td>Total yield</td>
<td>1652</td>
</tr>
</tbody>
</table>

Source: Wanjura – USDA-ARS Lubbock