



Downforce Study

We compared automatic downforce control using DeltaForce to two common fixed down pressure settings.

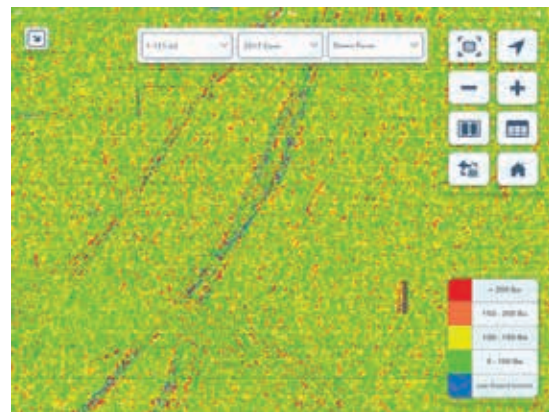
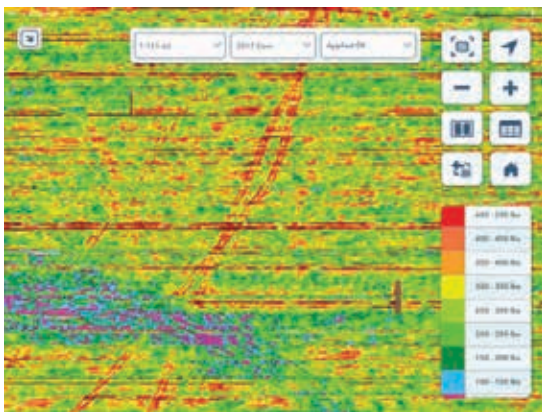
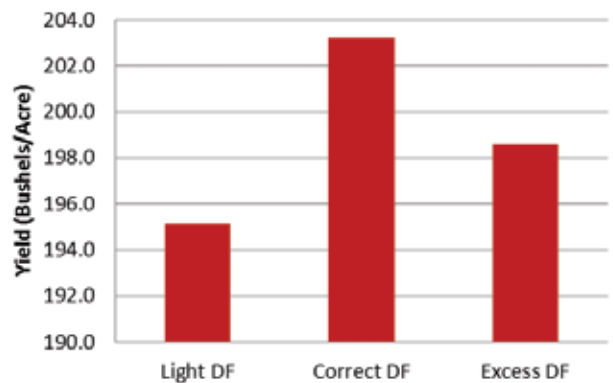
Results: Across seven locations*, automatic downforce control improved yield by six bushels per acre vs. heavy and by twenty bushels per acre for light.

We noted the following additional insights in 2016:

1. Additional downforce is required as seeding depth increases.
2. Different tillage systems require different amounts of row unit downforce.
3. Central fill planters require more downforce on the wings to maintain adequate gauge wheel to ground contact.

Downforce applied (*bottom left*) to achieve gauge wheel weight (*bottom right*). It is evident that individual row units must be adjusted independently from one another in order to ensure uniform depth control while avoiding compaction in the row. Also note system response to tillage wheel traffic seen at angle to planter pass.

2017 Downforce Results



Equipment Solution: White Planters™ VE Series planters ordered with the DeltaForce down pressure system.

Payback: 733 acres of corn**

* Summary Data from six crop tour sites: New Hampton, IA; Gridley, IL; Judson, MN; Winthrop, MN; Galva, IL; Aberdeen, SD; New Ulm, MN

**Assumes five bushels per acre yield advantage at \$3.5/bushel – option cost on a White Planters 9812VE planter

