**Indiana Central Wayne County Vertical Accuracy Re-assessment for Vegetated Vertical Accuracy**

**NGTOC – U.S. Geological Survey – 6/5/2019**

* USGS specifications require that the VVA be 29.4 cm or better at 95% confidence level.

-Reported

-VVA at the 95% confidence level is 38.23 cm.

-NVA at the 95% confidence level is 13.9 cm.

-USGS tested

-VVA at the 95% confidence level is 35.4 cm.

-NVA at the 95% confidence level is 18.2 cm.

* USGS specifications require 20 VVA checkpoints for this area of 446 square miles. 60 VVA checkpoints were delivered and processed. 58 VVA checkpoints were reported to have been checked from the vendor’s end (via xml metadata). 60 VVA checkpoints were checked in USGS original vertical accuracy check. After points were removed due to high delta z values, 51 VVA checkpoints were checked.

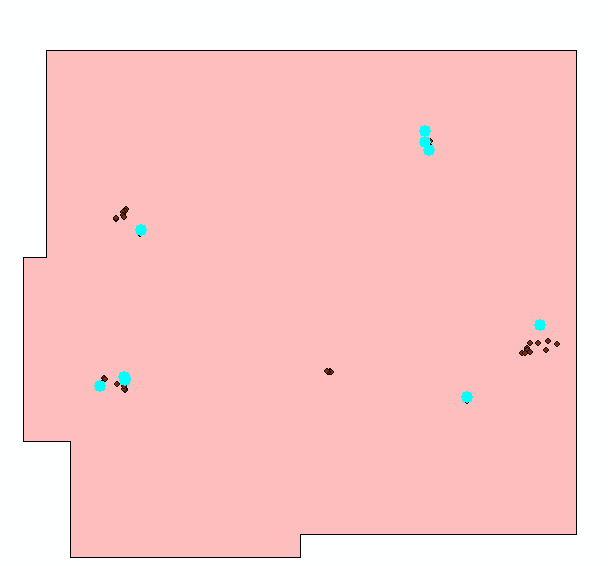
Results from running VA after removing the above points:

-VVA at the 95% confidence level is 22.7076 cm with 51 VVA points checked.

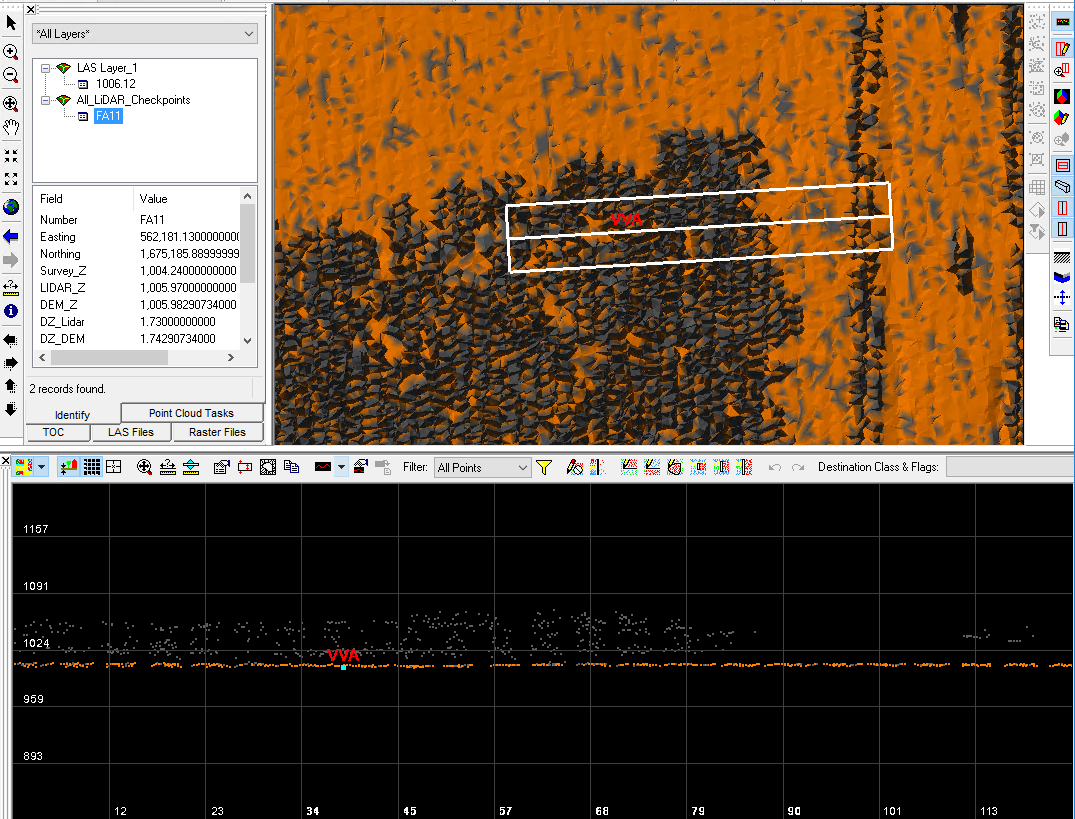
-NVA at the 95% confidence level is 16.3629 cm with 39 NVA points checked.

**The following check points were evaluated in the point cloud because of high z difference values (ft):**

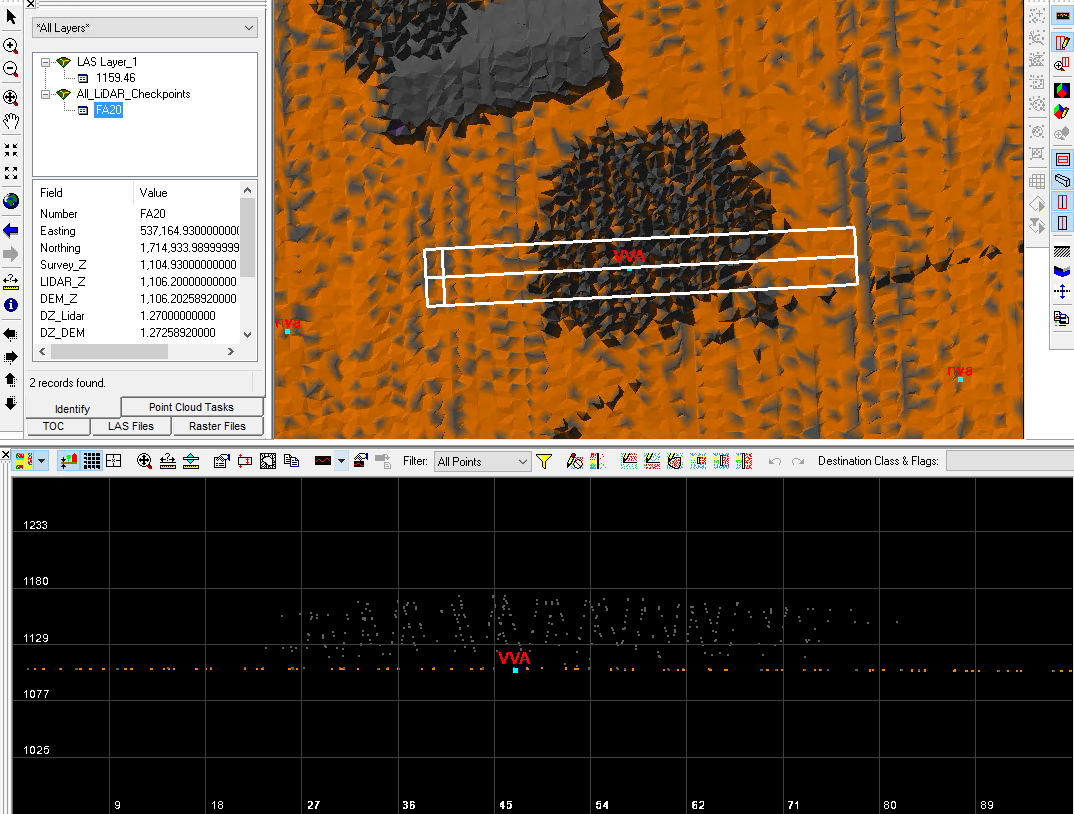
|  |  |  |
| --- | --- | --- |
| **Checkpoint ID** | **Landcover Type** | **Z difference (US Feet)** |
| FA11 | VVA | 1.77001 |
| FA20 | VVA | 1.179985 |
| FA18 | VVA | 1.159985 |
| BR06 | VVA | 1.14998 |
| BR13 | VVA | 1.14999 |
| BR11 | VVA | .989976 |
| BR03 | VVA | .939956 |
| FA04 | VVA | .860059 |
| OP08 | NVA | .840012 |
| FA08 | VVA | -1.659978 |



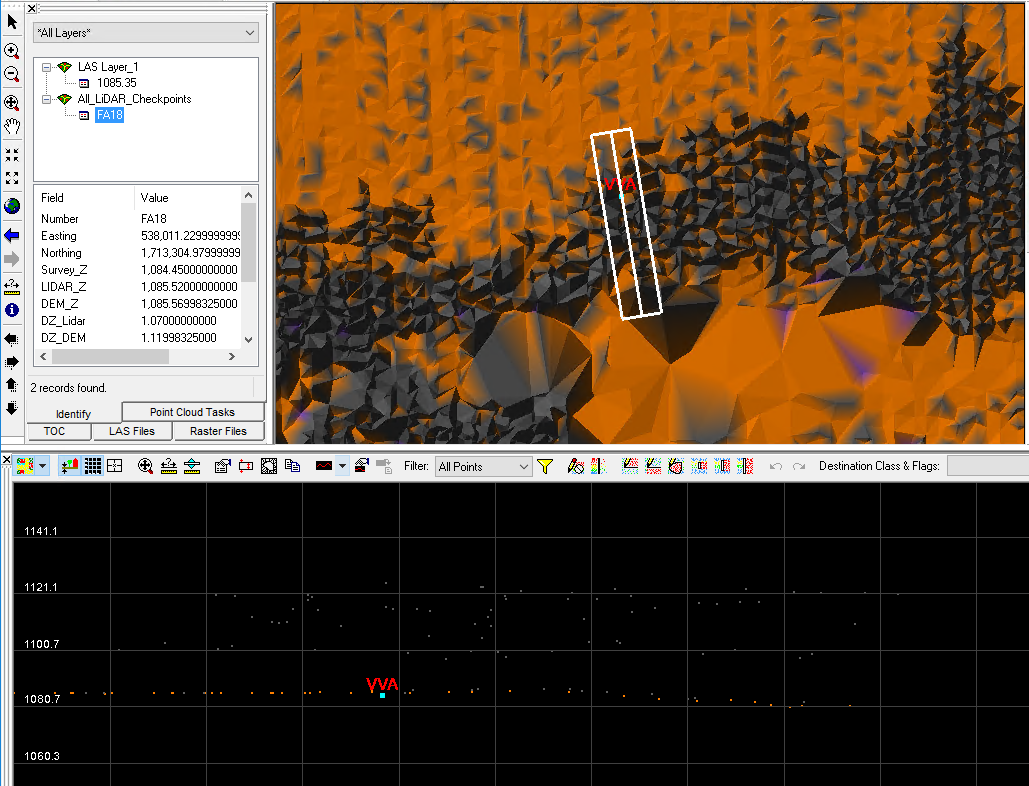
**FA11:** ʥ = 1.77001 feet



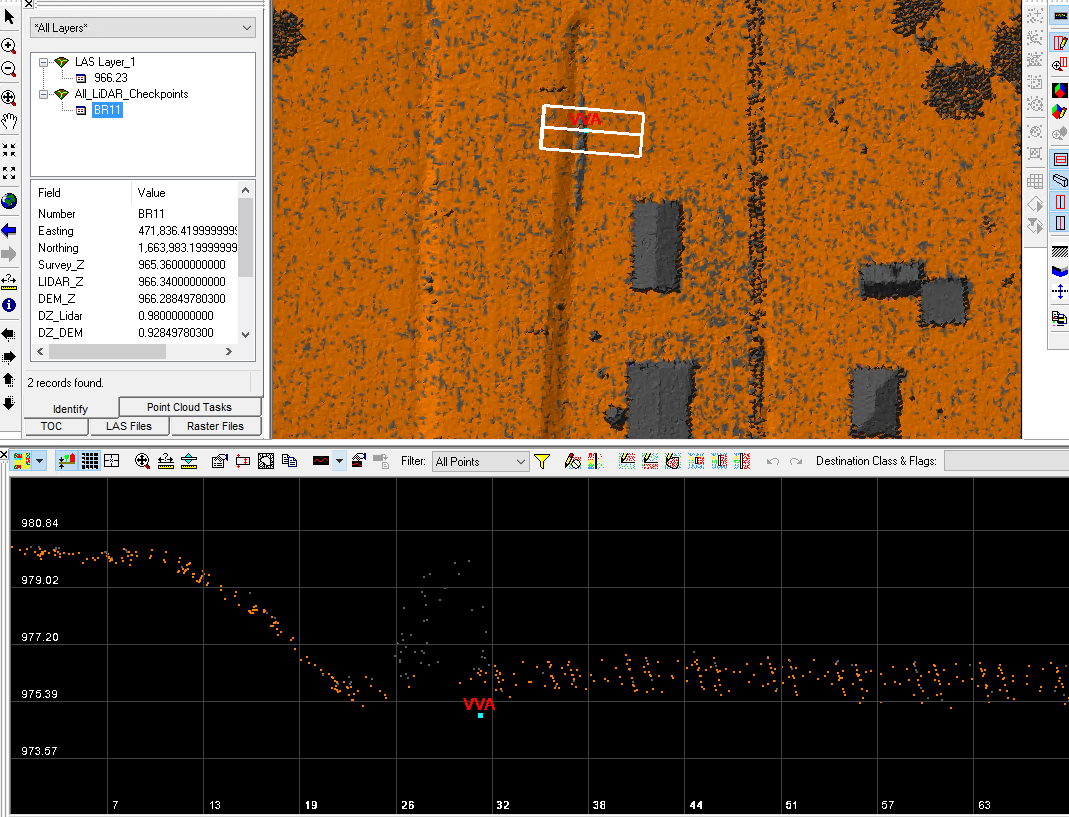
**FA20:** ʥ = 1.179985 feet



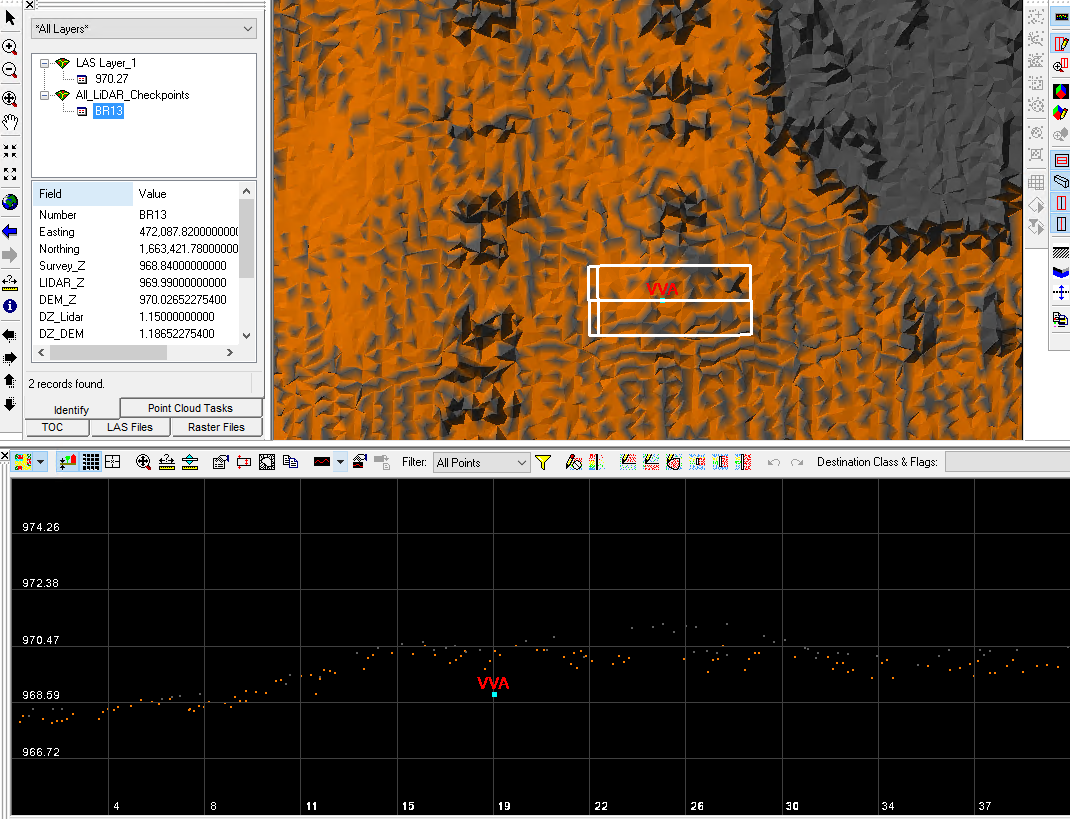
**FA18:** ʥ = 1.159985 feet



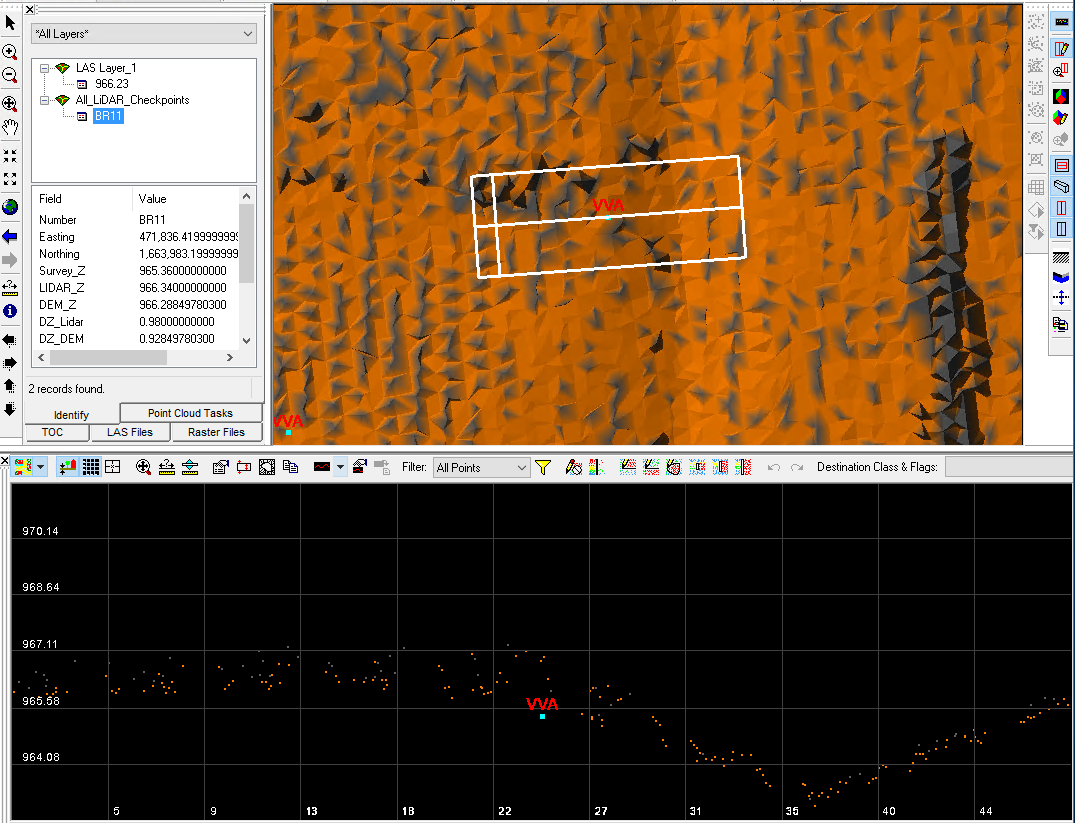
**BR06**: ʥ = 1.14998 feet



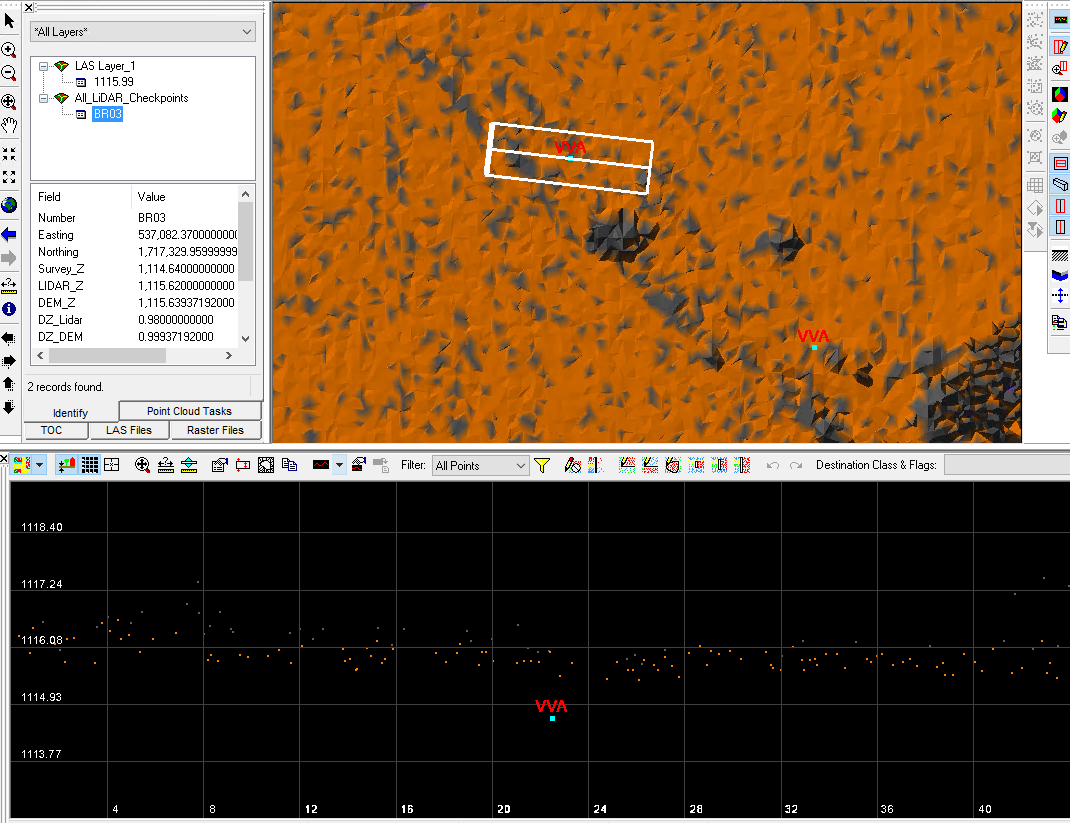
**BR13**: ʥ = 1.14999 feet



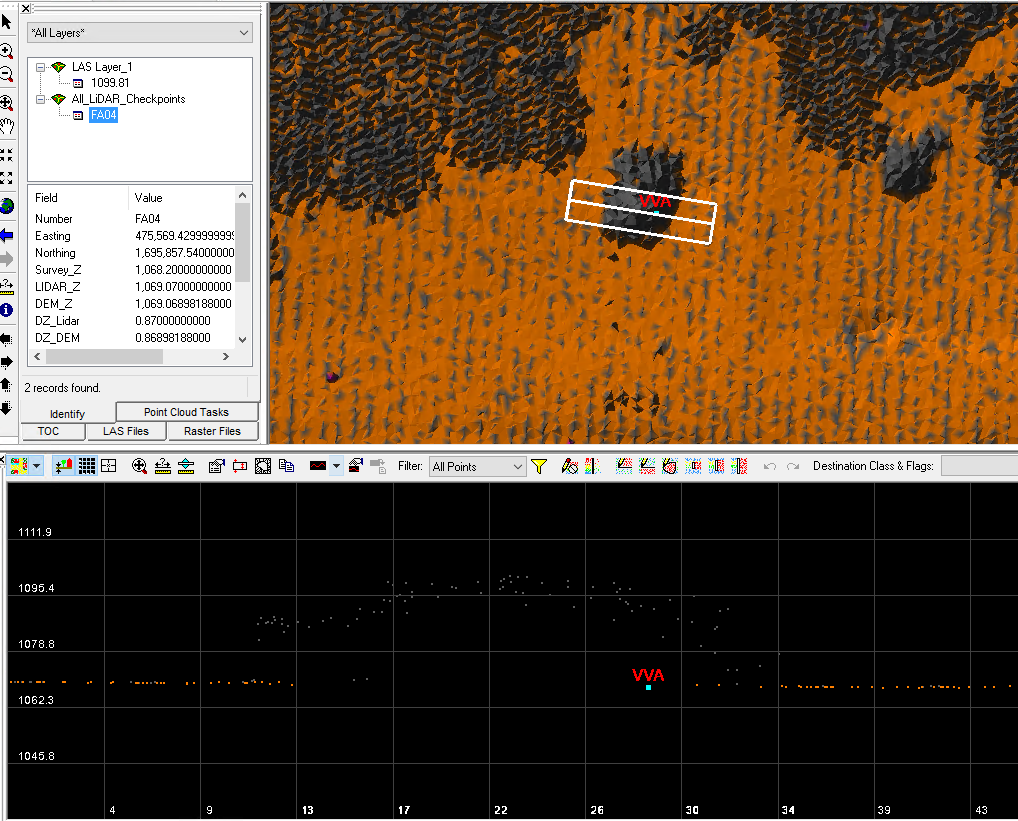
**BR11**: ʥ = .989976 feet



**BR03**: ʥ = .939956 feet



**FA04**: ʥ = .860059 feet



**OP08**: ʥ = .840012 feet



**FA08**: ʥ = -1.659978 feet

