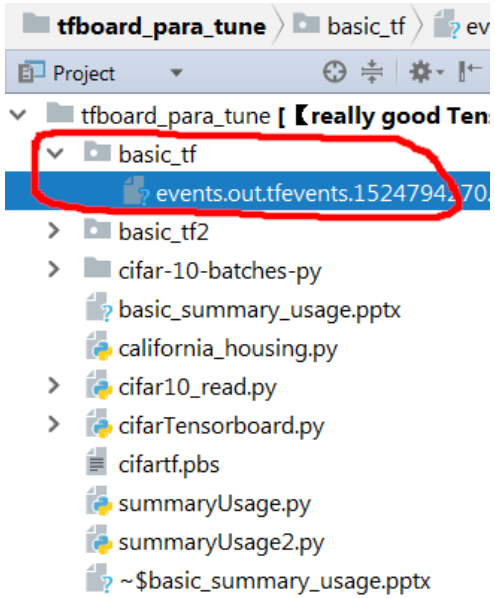
summaryUsage.py

```
import tensorflow as tf

x = tf.Variable(1.0)
xnew = tf.assign(x,x+0.2)

x_summary = tf.summary.scalar('x_trace',xnew)
writer= tf.summary.FileWriter('basic_tf',graph=tf.get_default_graph())

with tf.Session() as sess:
    sess.run(tf.global_variables_initializer())
    for i in range(20):
        _,x_smy = sess.run([xnew,x_summary])
        writer.add_summary(x_smy,global_step=i)

writer.close()
```

```
(tensorflow) J:\code\alltype_code\pythonCode\tfboard_para_tune>python summaryUsage.py

(tensorflow) J:\code\alltype_code\pythonCode\tfboard_para_tune>tensorboard --logdir=basic_tf
TensorBoard 1.7.0 at http://PC201608291710:6006 (Press CTRL+C to quit)
```



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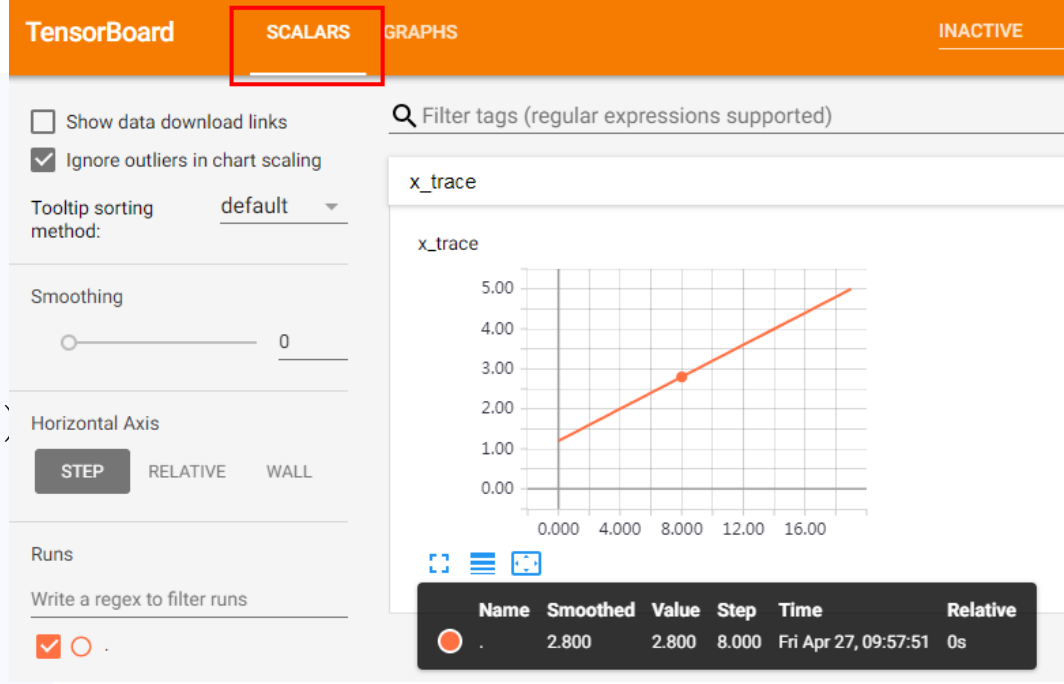

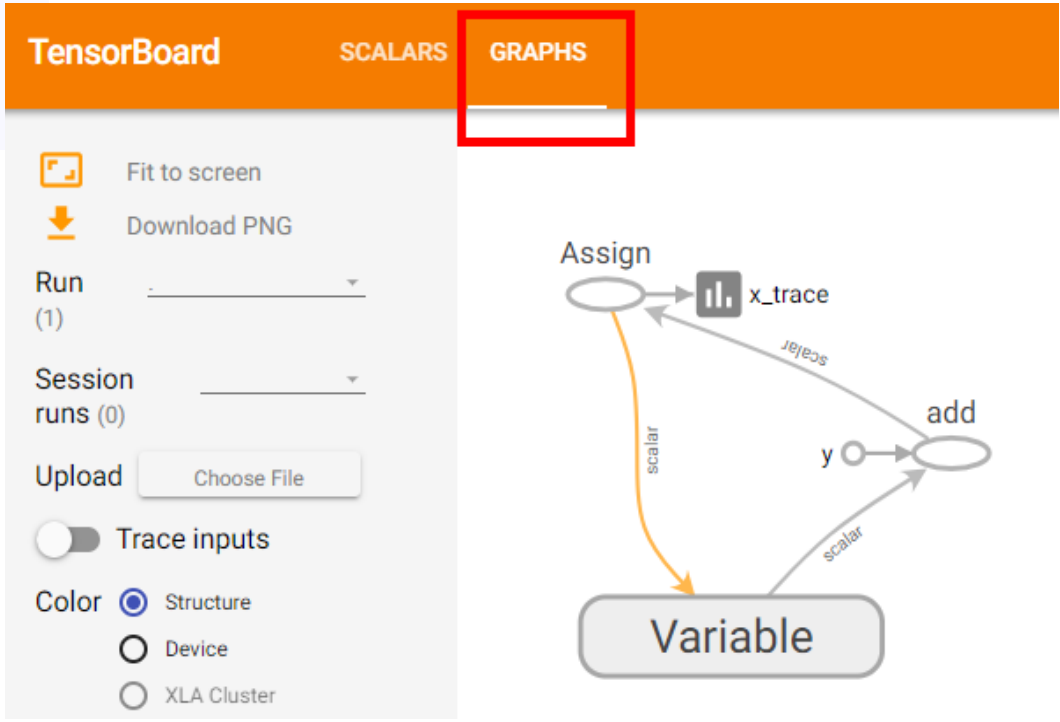

summaryUsage2.py

```
import tensorflow as tf
x = tf.Variable(1.0)
xnew = tf.assign(x,x+0.2)
x_summary = tf.summary.scalar('x_trace',xnew)

y = tf.Variable(tf.ones([28,28]),name='2d_value')
ynew = tf.assign(y,tf.add(y,tf.random_normal([28,28])))
y_summary = tf.summary.histogram('2d_value',ynew)

merged_summary = tf.summary.merge_all()
writer=
tf.summary.FileWriter('basic_tf2',graph=tf.get_default_graph())
with tf.Session() as sess:
    sess.run(tf.global_variables_initializer())
    for i in range(20):
        _,merged_smy = sess.run([xnew,merged_summary])
        writer.add_summary(merged_smy,global_step=i)
writer.close()
```

```
(tensorflow) J:\code\alltype_code\pythonCode\tfboard_para_tune>python summaryUsage2.py

(tensorflow) J:\code\alltype_code\pythonCode\tfboard_para_tune>tensorboard --logdir=basic_tf2
TensorBoard 1.7.0 at http://PC201608291710:6006 (Press CTRL+C to quit)
```

summaryUsage2.py

```
import tensorflow as tf
x = tf.Variable(1.0)
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        writer.add_summary(merged_smy,global_step=i)
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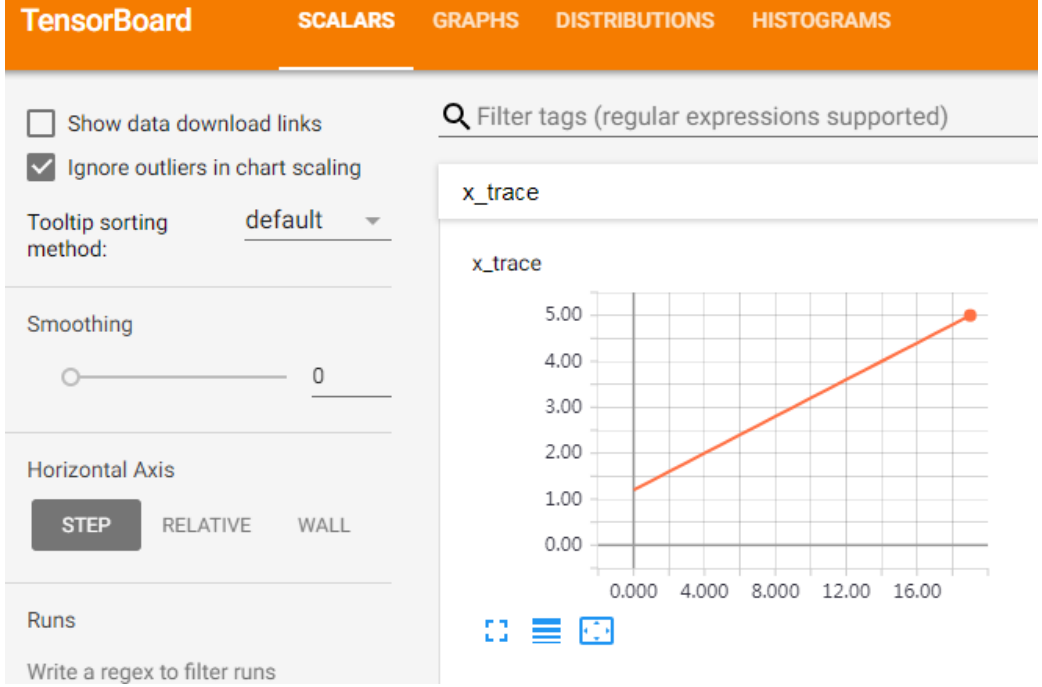

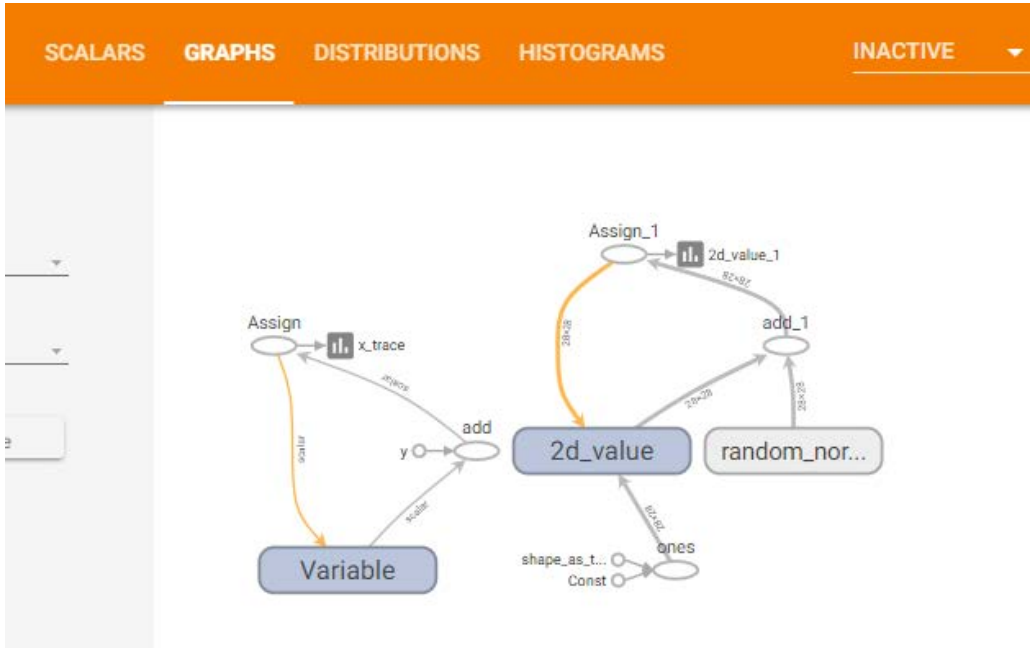

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```

从从上到下的折现分别表示权重分布的不同分位数：
[maximum, 93%, 84%, 69%, 50%, 31%, 16%, 7%, minimum]