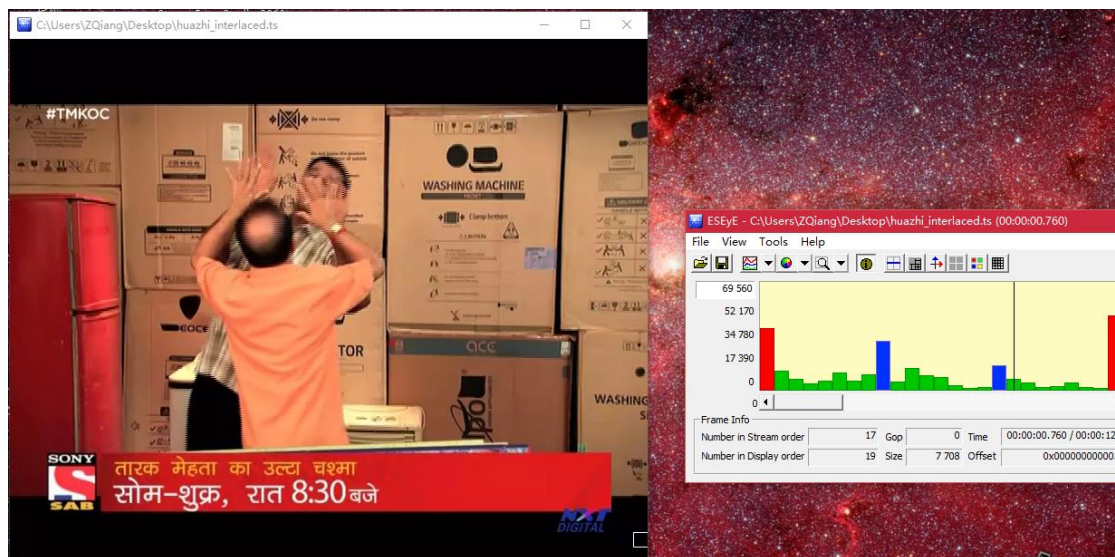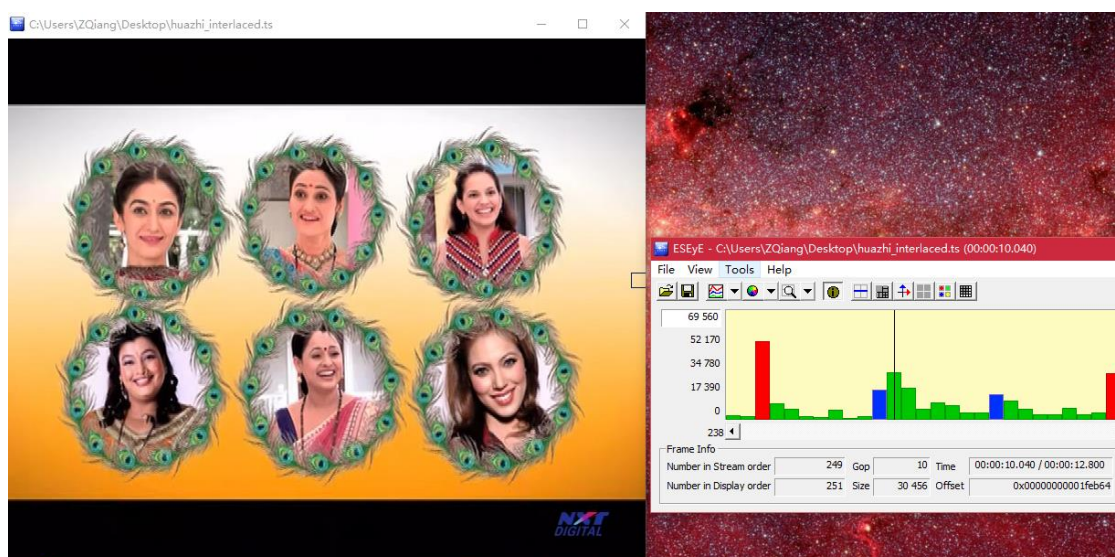## VK 项目视频图像横条纹问题分析

附在文档最后面的内容是在 ST 237 平台上加打印后得到的信息，我截取了一个码流循环的内容，打印信息为解码后的帧信息(I(黄色标注)，B，P 帧)，后面 0，2 数字(0 代表顶场，1 代表底场，2 代表整个帧)。

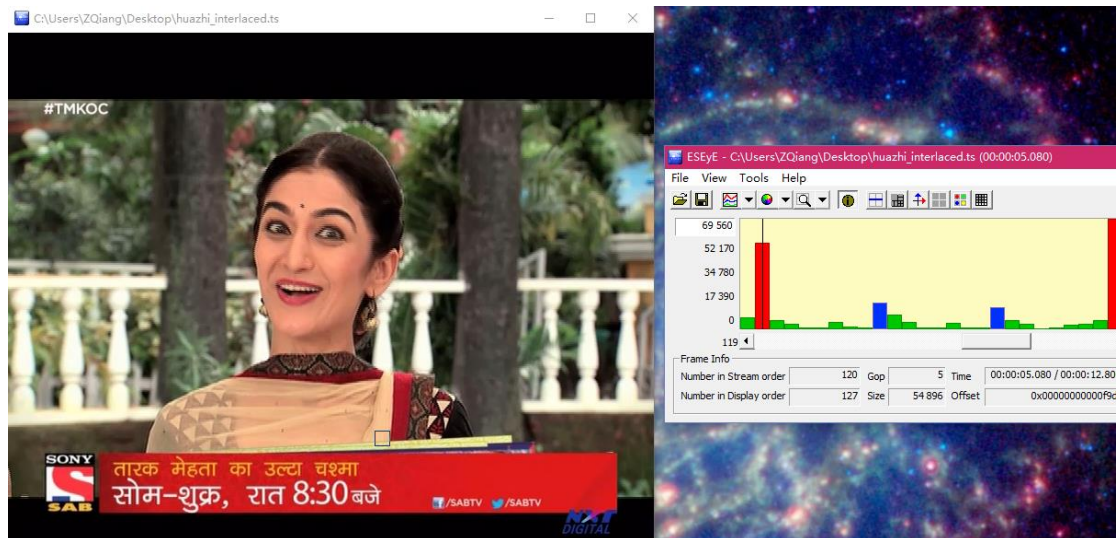由打印信息结合图像可以看出:

1. 第一个 I 帧间隔的后 7 帧解码后为只有顶场的情况，如下图和打印红色标注。

第 11 个 I 帧间隔的前 17 帧解码后也只有顶场的情况，如下图和打印红色标注。

其余的 I 帧间隔的内容均为正常帧。

此两个发现的类似横条纹现象原因，应该和 MSTAR 描述的一致，即视频源在编码或转

码过程中就出现了问题，初步怀疑和编码器的质量有关。

2. 如下图,我们也看到即使解码后正常帧->第六个 I 帧间隔,同样也会出现横条纹的情况。也似乎可以从侧面佐证编码器应该有问题。

3. 另,横条纹现象不仅表现在机顶盒上, 在所有 PC 端的播放器上均可以看到。

4. 至于不同的机顶盒平台显示效果不太一致, 这个就看芯片厂商的纠错能力了。据我所知, 博通和 ST 都曾经花了大量的精力在机顶盒端的图像显示效果上, 以尽量避免这种横条纹, 图象锯齿, 颜色遗漏等现象。

ST 237 平台上的打印信息如下：

[09:03:02:902]here is img info -> I: 2　　　 -> stream beginning
[09:03:03:197]here is img info -> B: 2
[09:03:03:332]here is img info -> P: 2
[09:03:03:381]here is img info -> B: 2
[09:03:03:448]here is img info -> P: 2
[09:03:03:481]here is img info -> B: 2
[09:03:03:514]here is img info -> P: 2
[09:03:03:564]here is img info -> B: 2
[09:03:03:598]here is img info -> P: 2
[09:03:03:648]here is img info -> B: 2
[09:03:03:686]here is img info -> P: 2
[09:03:03:731]here is img info -> B: 2
[09:03:03:781]here is img info -> P: 2
[09:03:03:819]here is img info -> B: 2
[09:03:03:882]here is img info -> P: 2
[09:03:03:919]here is img info -> B: 2
[09:03:03:965]here is img info -> P: 2
[09:03:04:015]here is img info -> B: 0
[09:03:04:053]here is img info -> P: 0
[09:03:04:115]here is img info -> B: 0
[09:03:04:148]here is img info -> P: 0
[09:03:04:186]here is img info -> B: 0
[09:03:04:248]here is img info -> P: 0
[09:03:04:282]here is img info -> B: 0
[09:03:04:332]here is img info -> I: 2
[09:03:04:369]here is img info -> B: 2
[09:03:04:415]here is img info -> P: 2
[09:03:04:482]here is img info -> B: 2
[09:03:04:516]here is img info -> P: 2
[09:03:04:565]here is img info -> B: 2
[09:03:04:603]here is img info -> P: 2
[09:03:04:649]here is img info -> B: 2
[09:03:04:717]here is img info -> P: 2
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[09:03:04:799]here is img info -> P: 2
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[09:03:04:972]here is img info -> P: 2
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[09:03:05:049]here is img info -> P: 2
[09:03:05:082]here is img info -> B: 2
[09:03:05:137]here is img info -> P: 2

[09:03:05:149]here is img info -> B: 2
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[09:03:05:216]here is img info -> B: 2
[09:03:05:232]here is img info -> P: 2
[09:03:05:287]here is img info -> B: 2
[09:03:05:299]here is img info -> I: 2
[09:03:05:354]here is img info -> B: 2
[09:03:05:366]here is img info -> P: 2
[09:03:05:383]here is img info -> B: 2
[09:03:05:416]here is img info -> P: 2
[09:03:05:449]here is img info -> B: 2
[09:03:05:504]here is img info -> P: 2
[09:03:05:516]here is img info -> B: 2
[09:03:05:533]here is img info -> P: 2
[09:03:05:566]here is img info -> B: 2
[09:03:05:600]here is img info -> P: 2
[09:03:05:654]here is img info -> B: 2
[09:03:05:666]here is img info -> P: 2
[09:03:05:707]here is img info -> B: 2
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[09:03:06:067]here is img info -> P: 2
[09:03:06:100]here is img info -> B: 2
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[09:03:06:350]here is img info -> B: 2
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[09:03:06:467]here is img info -> P: 2
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[09:03:06:584]here is img info -> B: 2
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[09:03:06:984]here is img info -> B: 2
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[09:03:15:442]here is img info -> B: 2
[09:03:15:492]here is img info -> P: 2
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[09:03:15:726]here is img info -> P: 2
[09:03:15:775]here is img info -> P: 2
[09:03:15:809]here is img info -> I: 2   -> stream ending