

Question 1:

Q1A

'Q1A_ReplayDescribed_ID10.jpg'

- (i) **the investigation method used to**
- b) extract and examine the frame**

run supplied player, open video file, when video begins playing, press pause, select camera 1, playback video to first frame, capture first frame snapshot.

Q1B

Qn.1B, if you used another method:

'Q1B_OtherMethod_ID10.jpeg'

- (iii) **all steps executed**

Install and run supplied player, open video file, when video begins playing, press pause, select export video, choose time from 4:43:30 to 4:43:31, export format - avi, with VirtualDub export first frame snapshot from exported before avi.

Q1C

Frame Size of source file recording used in Qn.1A			Frame Size of source file recording used in Qn.1B		
1006	760	pixels	720	288	pixels

What are your conclusions about the raw, encoded quality of the provided video frame/sequence in Q1A and Q1B?

Low qouality

Use any space you need

Question 2:

Qn.2A

"Q2A_SuperRes_ID10.jpg"

For this examination I used Amped Five software. Steps - loaded image sequence (249 images), applied super-resolution, applied denoise averaging filter, applied unsharp masking filter.

- 1.**
- 1. Super-resolution, zoom 8, iterations 10;**
- 2. Averaging filter, size 5;**
- 3. Unsharp masking, strength 0,13, size 99.**

Yes, I did, selection coordinates are – x 9, y 14, w 24, h 7.

2. Did you select any specific frames or image? If so, please provide details of range of frames or specific frames you used.

No

Qn.2B

“Q2B_SuperRes_ID10.jpg”

run supplied player, open video file, when video begins playing, press pause, convert video to avi. Converted video was opened with AmpedFive, applied local stabilization, cropped selected areas, applied super-resolution, applied denoise averaging filter, applied unsharp masking filter.

Selected plate 1

closest to the camera

- 1. Local stabilization**
- 2. Super-resolution, zoom 8, iterations 10;**
- 3. Averaging filter, size 5;**
- 4. Unsharp masking, strength 0,13, size 99.**

Yes, I did, selection coordinates are – x 172, y 92, w 33, h 88.

Qn.2C

Q2C_SuperRes_ID10.jpg

run supplied player, open video file, when video begins playing, press pause, convert video to avi. Converted video was opened with AmpedFive, applied local stabilization, cropped selected areas, applied levels, applied super-resolution, applied denoise averaging filter.

Selected no. plate: 1

closest to the camera

AMPED FIVE

- Local stabilization;
- Crop;
- Super-resolution, zoom 8, iterations 10;
- Levels, H208, M129, S51;
- Averaging filter, size 5.

Yes, I did, selection coordinates are - x 172, y 92, w 33, h 88.

Did you select any specific frames or image? If so, please provide details of range of frames or specific frames you used.

No

Question 3:

AMPED FIVE:

Applied filters:

Motion deblurring (Amped5):
size15

Angle70.
noise 0,1

**Super resolution, zoom 6;
Deblocking strength 6;
Levels;
Unsharp masking, strength 1, size 99.**

125 cm chart: 'Q3_125cm_ID10.jpg'

**75 cm, 4th line:
'Q3_75cm_Line4_ID10'**

**75 cm, 5th line:
Q3_75cm_Line5_ID10'**

Question 4:

Qn.4A:

Please specify (i) all software tools or processing steps, (ii) all enhancement filters used (in order) and (iii) all specific parameter settings. The information you provide should have sufficient detail so that anyone could independently reproduce your results.

If you wish to provide results for different regions of interest in the image, please specify their coordinates and/or indicate the region in a small thumbnail, and use the filenames: "Q4A_RegionNUMBER_ID10.jpg".

**Amped Five
Applied filters:
Crop, x 0,y 361, w 584, h 938;
Correct perspective;
Motion deblurring, angle 0, size 42;
Super resolution, zoom 8;
Median filter, size 3, mode vertical.**

**Text: 19:22 Epsom
 19:23 East Grinstead
 19:24 Crystal Palace
 19:27 Brighton
 19:32 Brighton**

**Qn.4B:
"Q4B_RegionNUMBER_ID10.jpg".**

Amped Five

Applied filters:
Crop, x0,y361, w584, h 938;
Correct perspective;
Super resolution, zoom 5;
Median filter, size 3, mode vertical.
Levels;
Visual examination method.

Text: **22:50 *ing**
 22:52 *Bridge
 23:06 *som
 23:36 *ton