- 1. Start with a new section: The MediColbox: Describe the box, dimensions, materials, locks, construction and all relevant information regarding the stress or the forces that can destroy the box.
- 2. Don't describe this paragraph with "can". You must eliminate the word "can" and describe what the box has? The box has an alarm? Describe the box with the minimum level of protection let say model 1 (security level 1)
- 3. You can use this paragraph to describe another box: let say model 2 (security level 2). Remark that the present study is made with model 1
- 4. This paragraph can be related to the 2 different models also
- 5. You repeat again and again tamper-proof locks. I recommended make a graph. The physical model with tamper-proof locks, bolts, and... is model 1. That is it! Model 2 has an extra hardware: locks..... Then you can put video cameras, IMU, and GPS tracking in both type of models. Here you should define your system: Model 1 with GPS! In the section III METHODOLOGY after/or in the TABLE II
- 6. A. Phenomenon of Interest The phenomenon of interest in this study is intrusion attempts on the MediColBox. The various aspects of intrusion, including the methods employed by intruders, their motivations behind the attempts, and the potential consequences of successful intrusions, will be simulated? investigated. By understanding these aspects, the project aims to enhance the security and protection of the MediColBox and the medications it contains.
- 7. You must have a graph or figure. The IMU inside The MediColbox. Where it will be located is not explained! You must explain that the system: Metal box and IMU will be permanent connected to 230 V grid.
- 8. Data Collection: Describe what data will be collected: Accelerometer x. y, z, Gyroscope x, y, z. You should include what means this data values...
- 9. What algorithm are you writing? Describe the box at rest! How will be the data in this situation? I understand that you want to use the data measurements to infer that the box is not at rest thus maybe it is an intrusion and according your simulation you can have an alarm or an inspection
- 10. Describe the Striking, in what direction was hit the box, or the IMU was hit? Then what was the measure result. How long the disturbance takes? Why 2 negatives values and one positive. Why 60m/s^2 is the indication that can be used to considered an intrusion? This must be explained in the comment 1. One hit is enough to considered it was an intrusion? You wrote a safety factor.... The Fourier analysis does not seem any relevance or I do not understand what do you want to tell. The data represent one single hit, what means the frequency here
- 11. Describe the falling, in what direction was fall the box, from what height?, or the IMU was fall? Then what was the measure result. How long the disturbance takes? Why 2 negatives values and one positive. Why 60m/s^2 is the indication that can be used again? It does not sounds good that the box drops from 1 meter and the metallic box has the same acceleration that can considered that after falling you have an intrusion. Is it the box destroyed after 1 meter fall. Maybe you should considered this as an "unwanted event" what about the "tamper-proof locks, bolts" and the metal structure??? If you are going to write on Kalman filter you should explain that it looks that you use to calculate Pose in Fig.10 but this is not clear explained. Again the Fourier analysis does not seem any relevance or I do not understand what do you want to tell. The data represent one single drop, what means the frequency here?

- 12. Describe the sawing it was manual and you do not mention it! The Fourier analysis is incomplete or I do not understand what do you want to tell. The data represent a repetitive activity in one direction forward and back, The frequency here means that the back and forward movement was near to 0.1 Heartz?
- 13. Describe the shaking it was manual? Or with the machine you do not mention it! The Fourier analysis is incomplete or I do not understand what do you want to tell. The data represent nearly a repetitive activity. The frequency here shows 3 peaks at frequencies near to 0.1 Heartz, near to 1.8 Heartz and near 8.3 Heartz What this means?
- 14. Data storage? Remember the recommendation of the external sensor regarding data. 99.9% of the time you are not going to detect any disturbances. This is not explain (see my comment 9). The external sensor recommend to save only relevant data: disturbances and possible intrusions
- 15. Discussion and Findings. Here you should write on the different possible intrusion that can be detected by the system. If the box is stolen can be detected? The answer is yes how? With an acceleration differ to zero for more than 5 minutes for example. Vandalism? How.... Open? How?