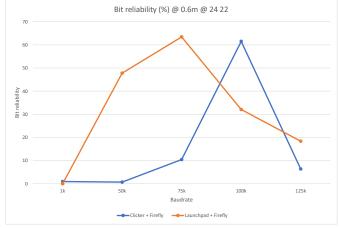
Baudrate

 1k
 5k
 75k
 100k
 125k

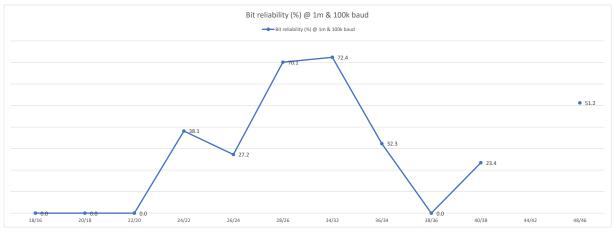
 Clicker+Firefly
 0,975433526
 0,732715431
 10,466646463
 61,48359486
 6,394573922

 Launchpad+Firefly
 47,77677134
 63,42696329
 32,07809478
 18,40820313



After experimentation about which baudrates at a specific distance (i.e. 60cm from tag to launchpad), we can see that the increasing baudrates are yielding a lower bit-probability once we use a baudrate higher than "75k. Notice that the different setup yield different results. The Clicker + Firefly (CF) yields a better restult for the bit probability once we reach higher baudrates. This might be the case due to the clicker being attached at a certain distance at all times from the tag. However, once we use the Launchpad + Firefly (LF), we notice that this is not the case anymore when compared to the CF. The LF will

Dividers 18/16 20/18 22/20 24/22 26/24 28/26 34/32 40/38 44/42 48/46 0 38,1423848 27,2392738 70,131208 72,4194826 32,2952449 -51,2165892 Bit reliability (%) @ 1m & 100k baud 23,4071311 0



Prior to the field testig session, we needed to decide which clock dividers to use (test with). To do this, we decided to test out a bunch of variations using 100k baudrate. Note that the graph above displays the results for the CF and not the LF. This is due to that we were not able to get the lauchpad working before the first session. Considering the reuslts for the bit reliability for different dividers at 100k baudrate, we can see that dividers around 26-34 yield a better bit reliability when compared to higher/lower dividers. This might be the case due to that the center frequency is placed not too far and not too close to the carrier frequency. Which is desired because we want dont want the receiver to mix receiving signals with the carrier frequency. In short, the bandwidth at the specified dividers gives the reliability that is desired in the sense of the right direction for the progress of the project. But since we are focusing mostly on the distance metric, we will have to test with the LF setup to see how it fares with different dividers and if it yields a similar result.