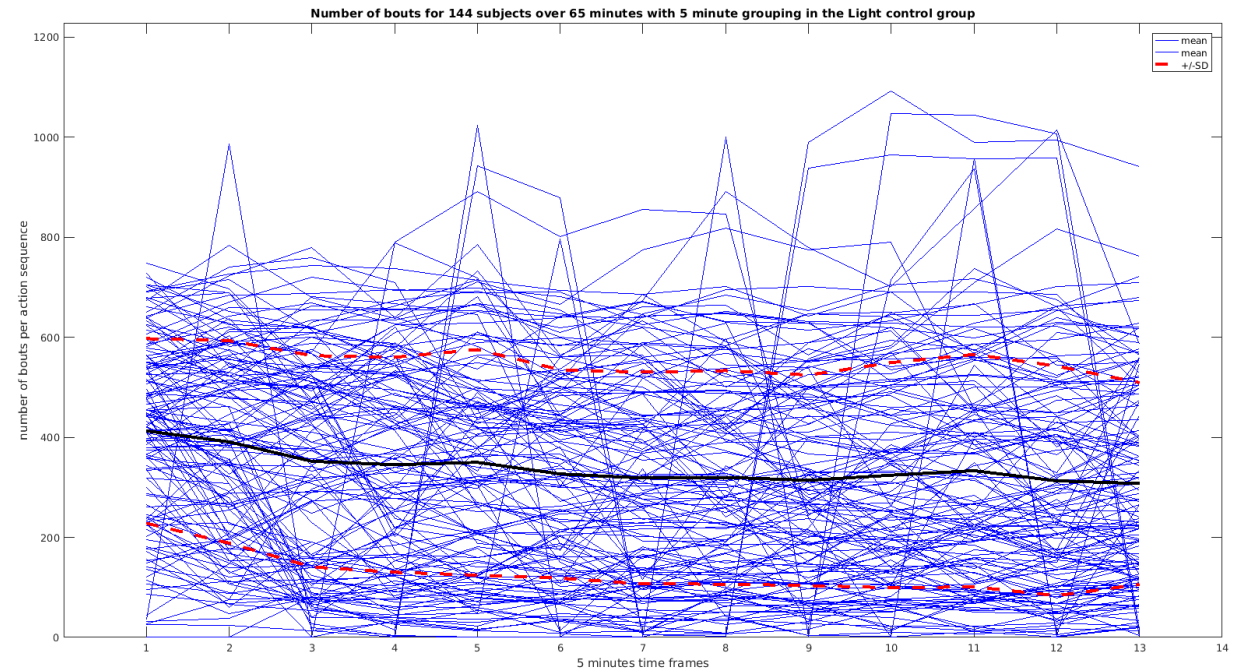
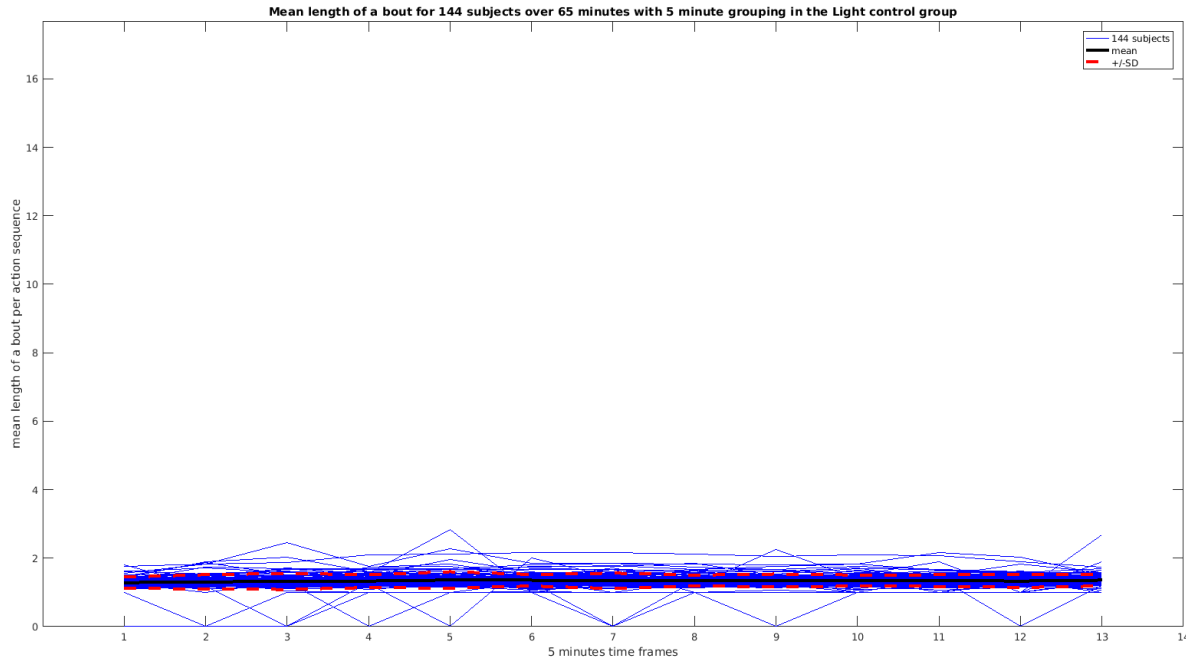
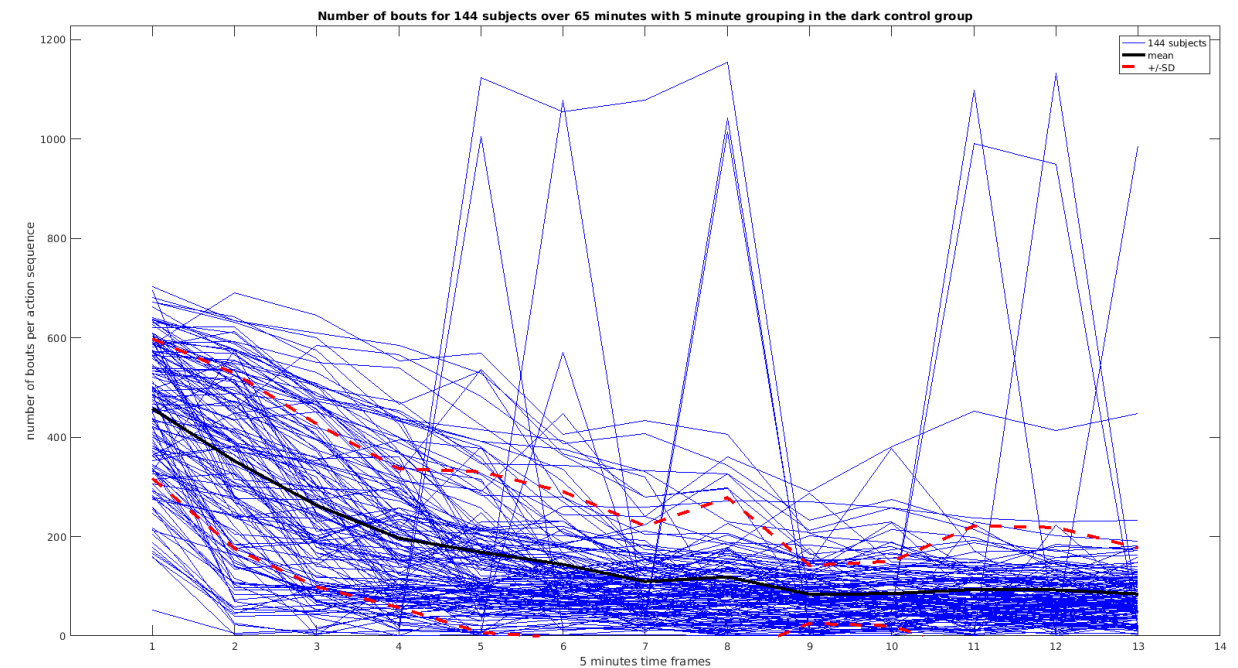
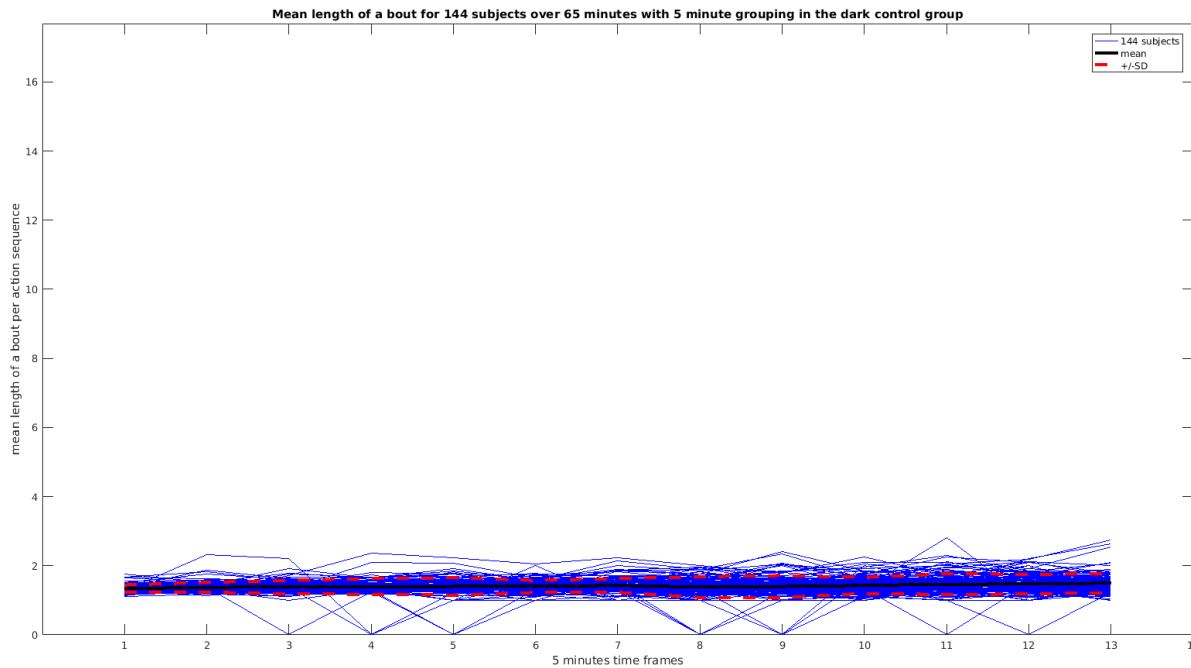


- Looking at the data from the control groups:
 - **Action sequence length**
 - **Bout frequency** and **bout length** per action sequence
 - **Turn proportion**
 - **Simple motifs**

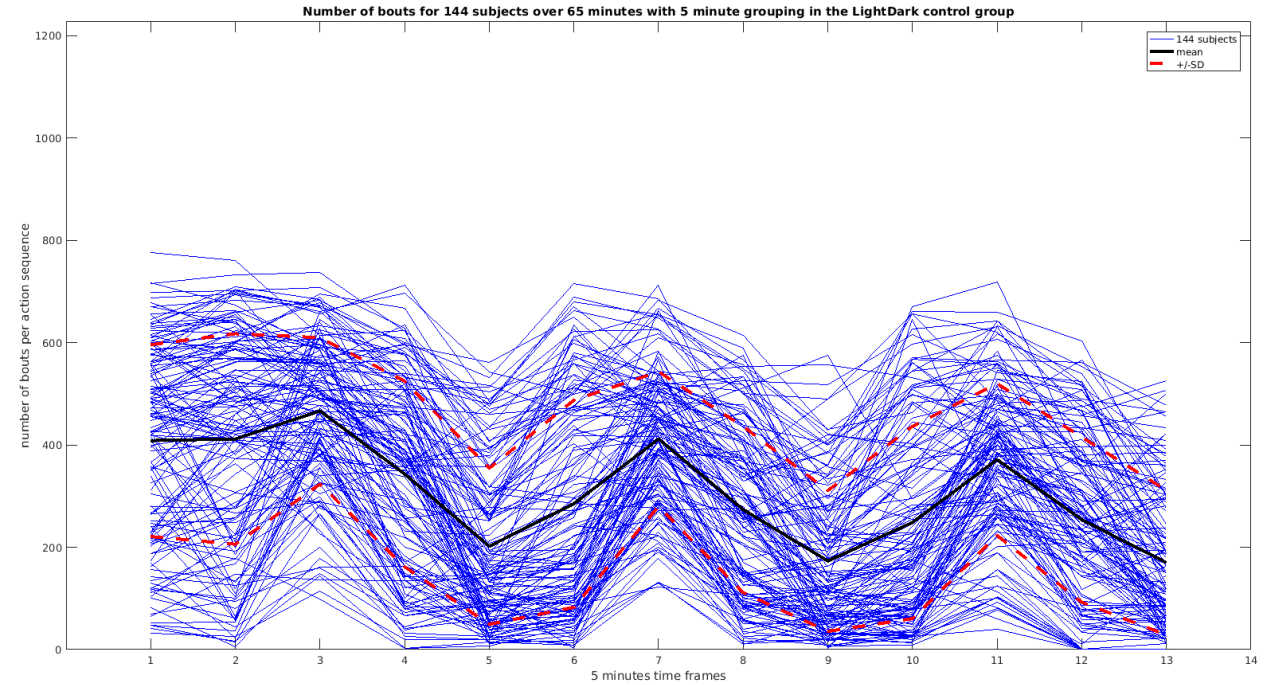
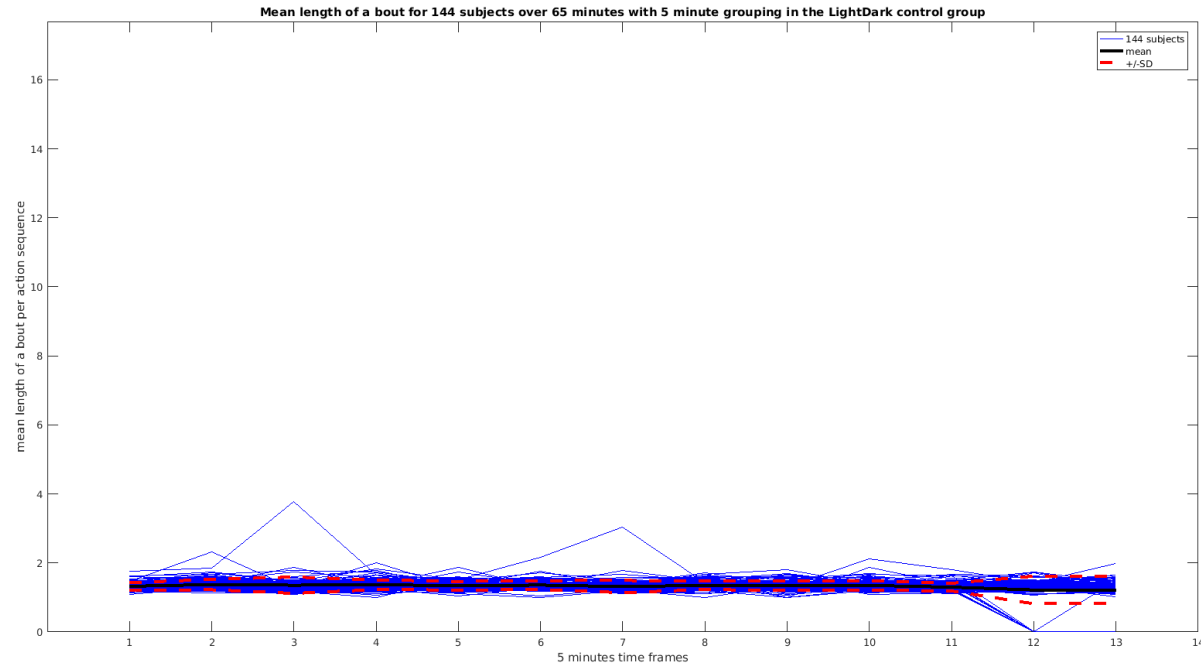
- **Action sequence** length per 5 minute time frame is influenced by the **bout lengths** and **frequency**.
- These characteristics have already been explored:
 - **Light** will have constant mean bout length, SD of bout length and bout frequency:



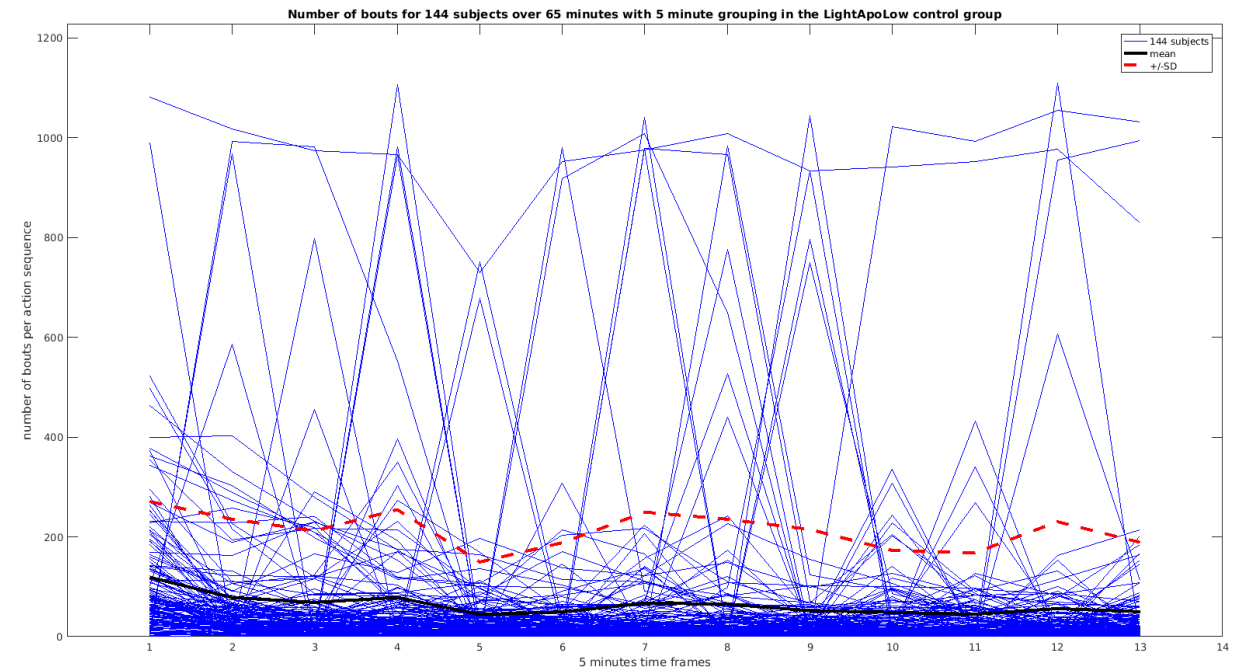
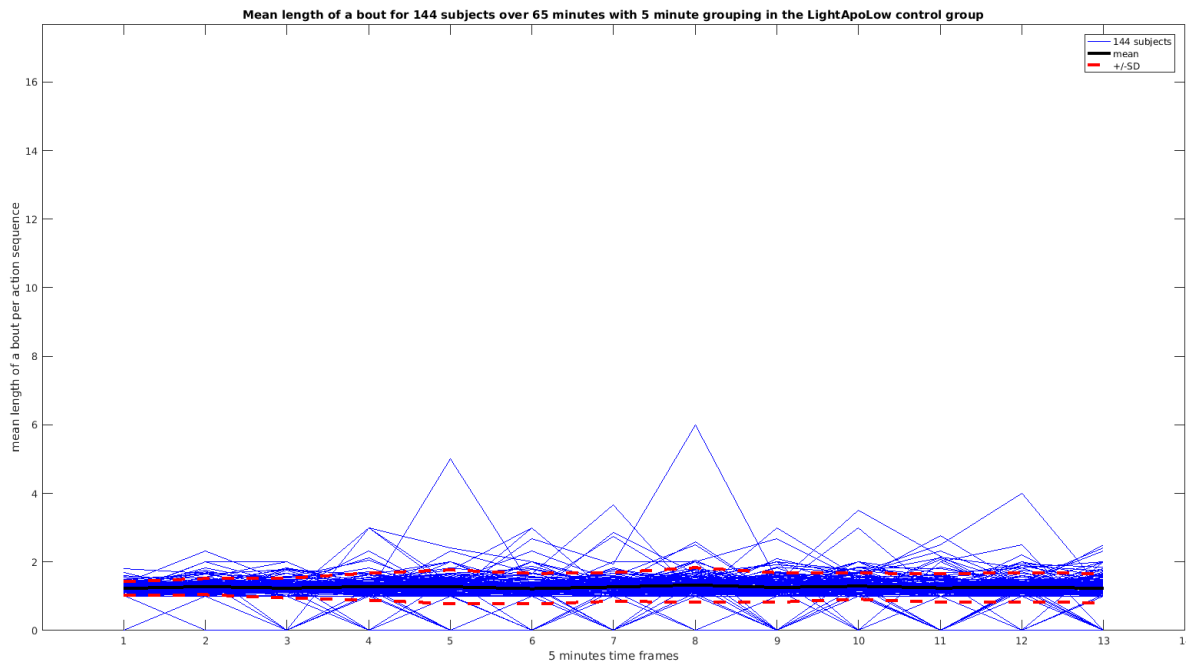
- In **Dark** the number of bouts will decrease, while the mean length of bout will stay the same, but the variation between the subjects increases slightly in the last time frames:



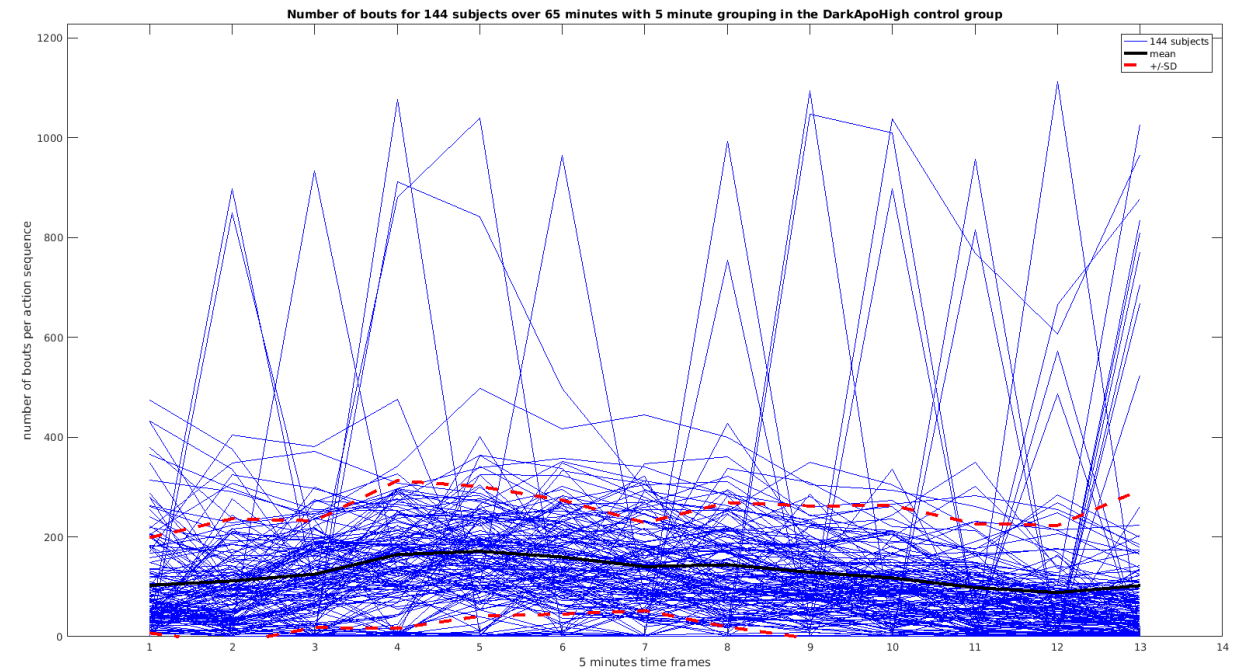
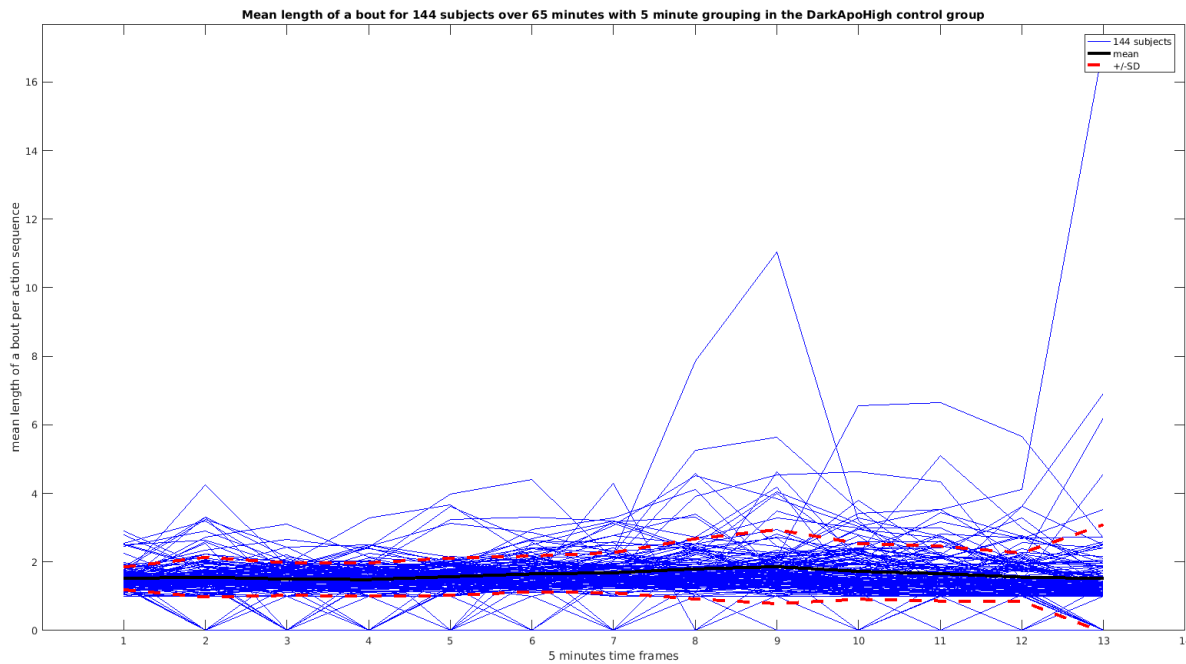
- **LightDark** shows the alternations in the number of bouts, while mean length of bout and SD stay the same:



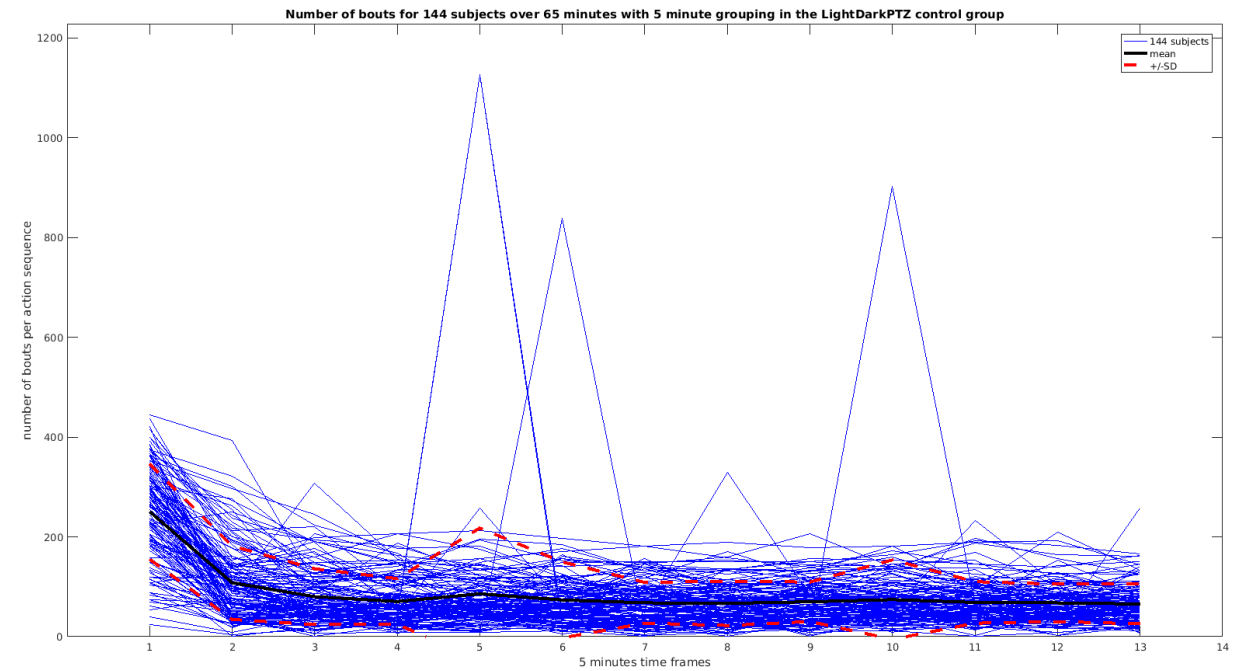
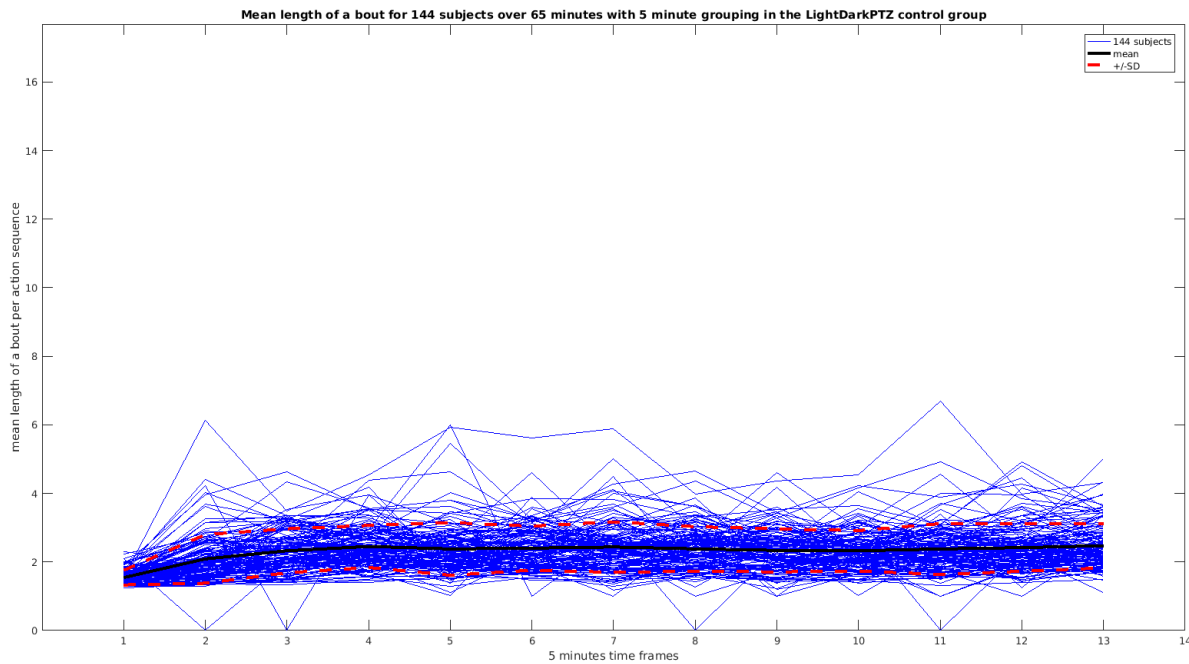
- **(Dark)ApoLow** will have immediately decreased number of bouts, that stay low all through the experiment. Mean length of bout seems to be the same with slightly increased SD between the subjects:



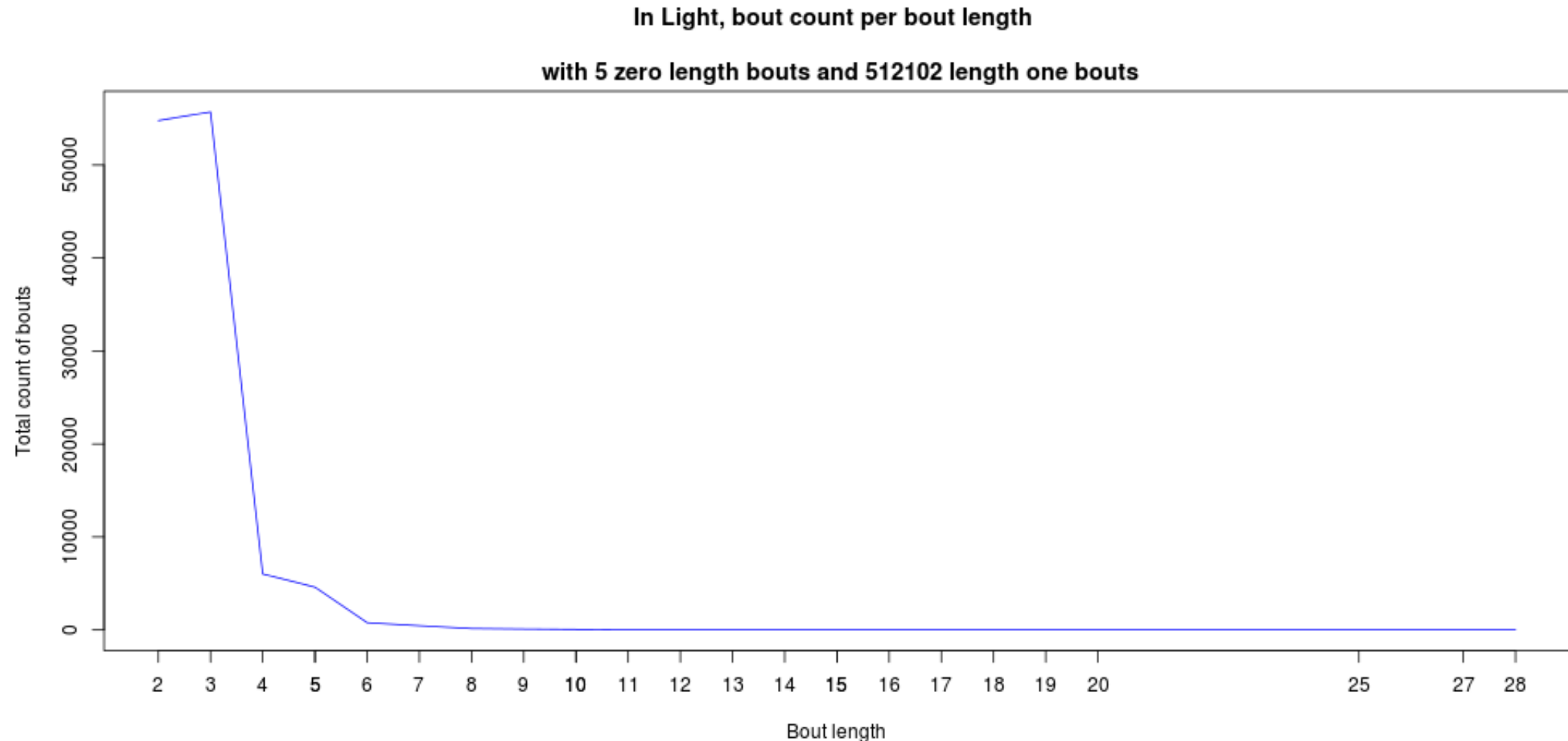
- **(Dark)ApoHigh** has an overall decreased number of bouts, which show the U shape response. Mean length of bout has increased variation between the subjects:



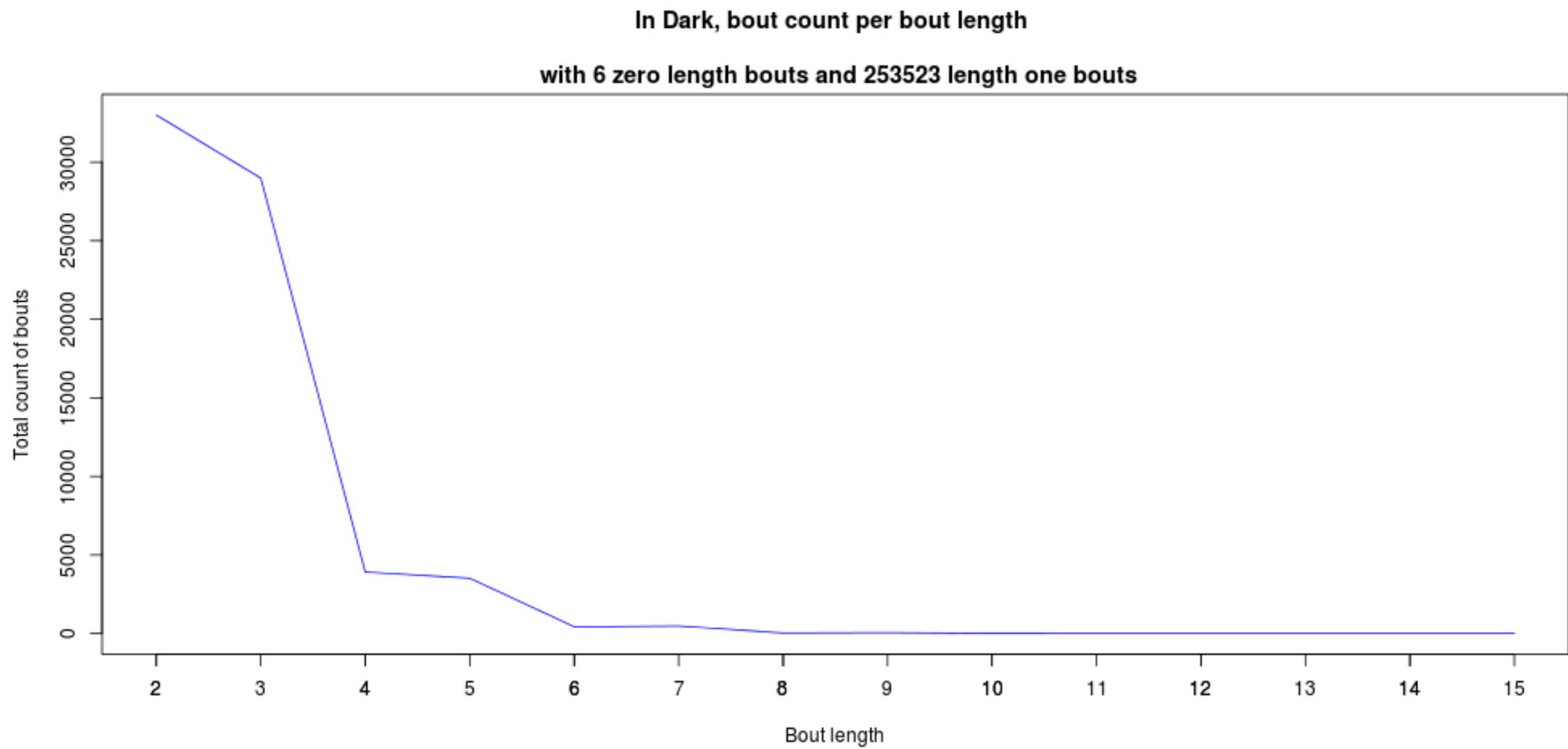
- In **(Dark)PTZ** the number of bouts decreases substantially. Mean length of bout increases and so does the variation between the subjects:



- With averaging over the action sequence a lot of information is lost, since the SD of bout length is always relatively high.
- The number of short or long bouts differs between the controls:
 - Light:

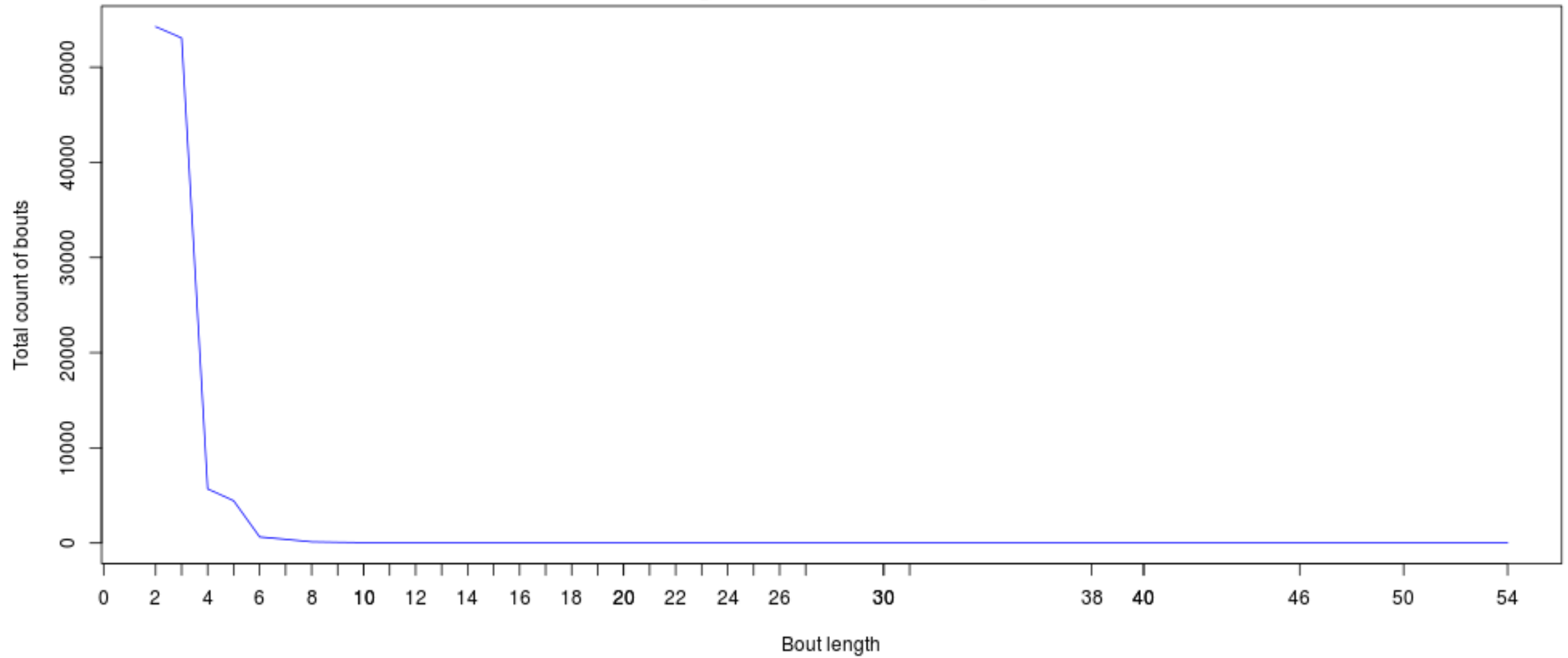


- Dark:



- LightDark:

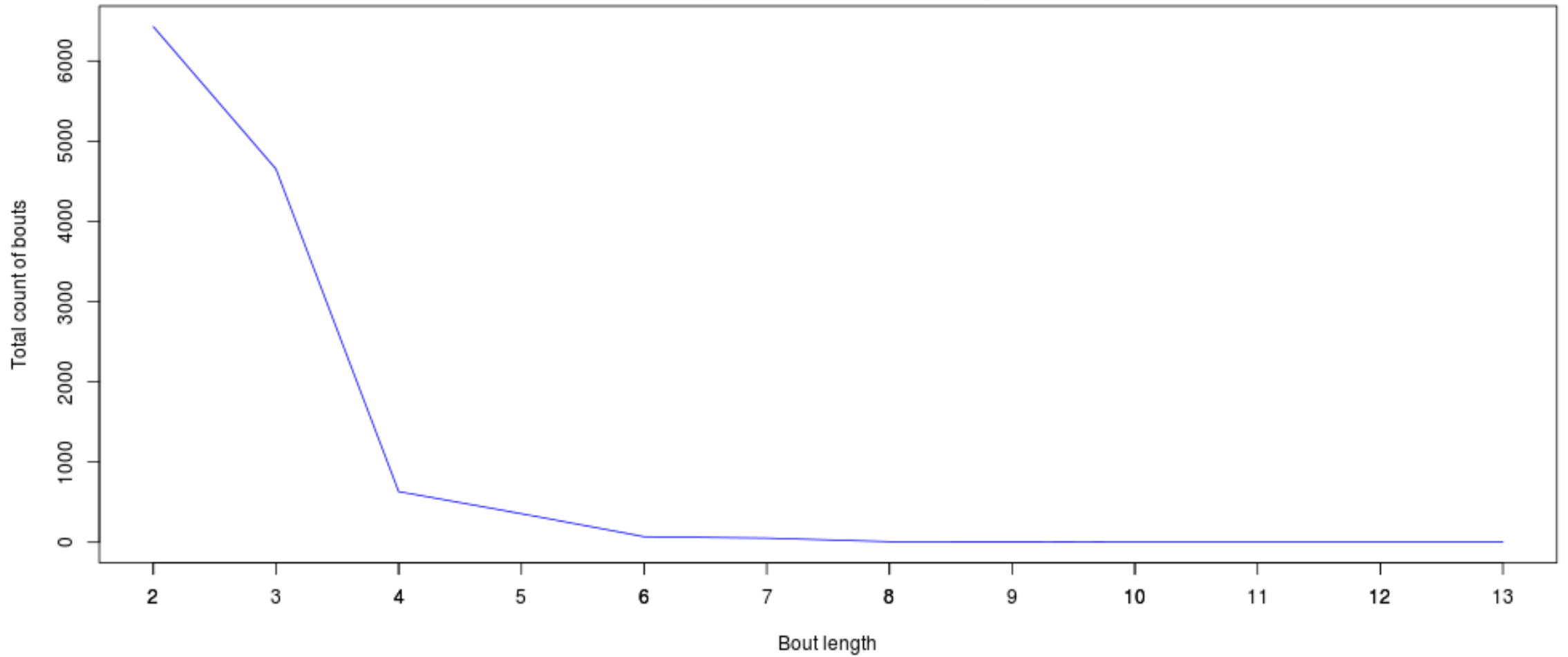
In LightDark, bout count per bout length
with 0 zero length bouts and 465970 length one bouts



- (Dark)ApoLow:

In DarkApoLow, bout count per bout length

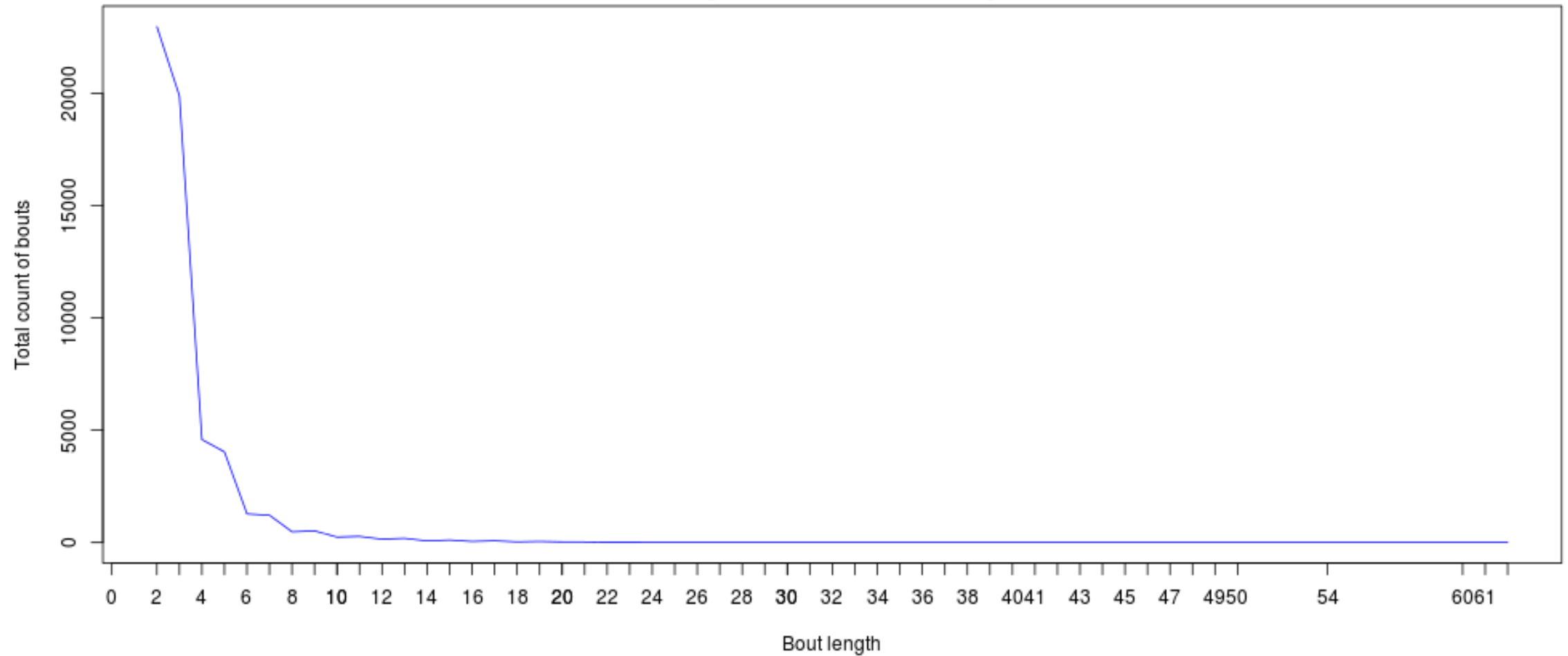
with 51 zero length bouts and 106234 length one bouts



- (Dark)ApoHigh:

In DarkApoHigh, bout count per bout length

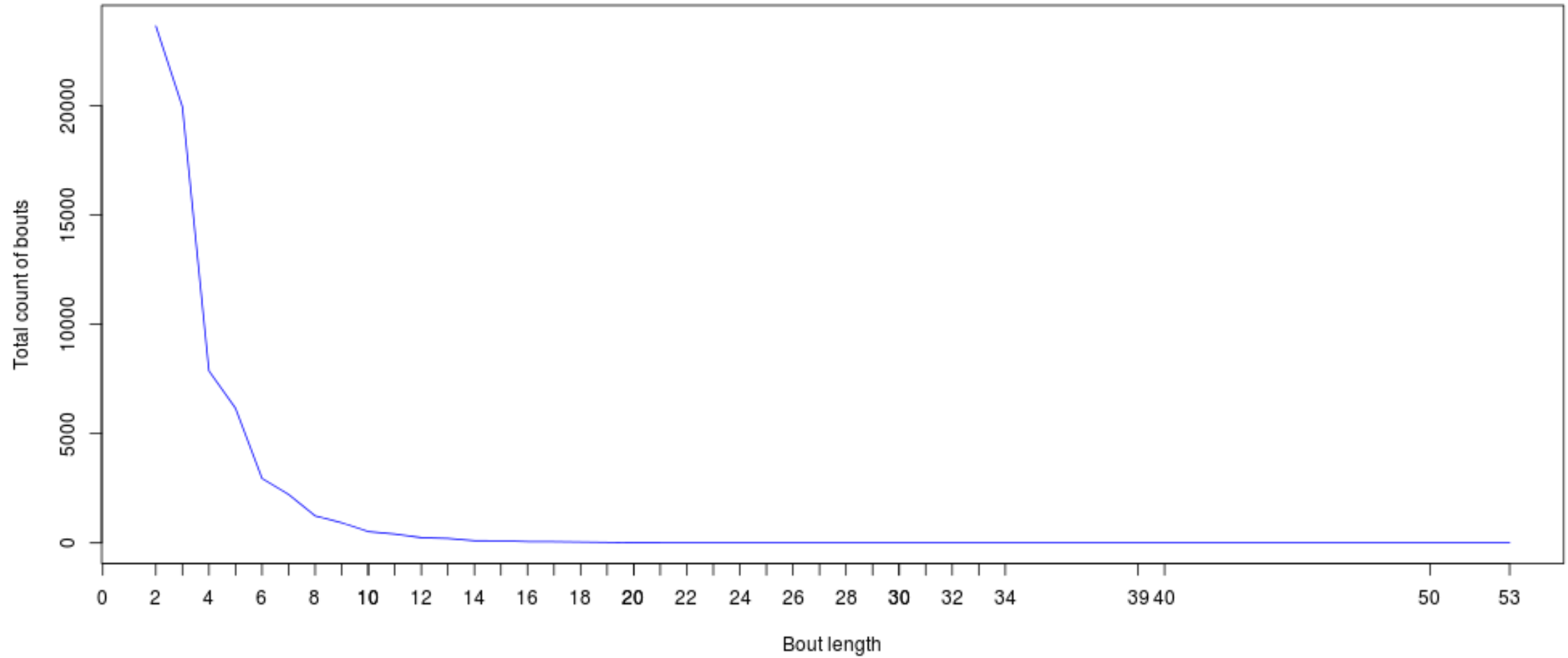
with 14 zero length bouts and 181741 length one bouts



- (Dark)PTZ:

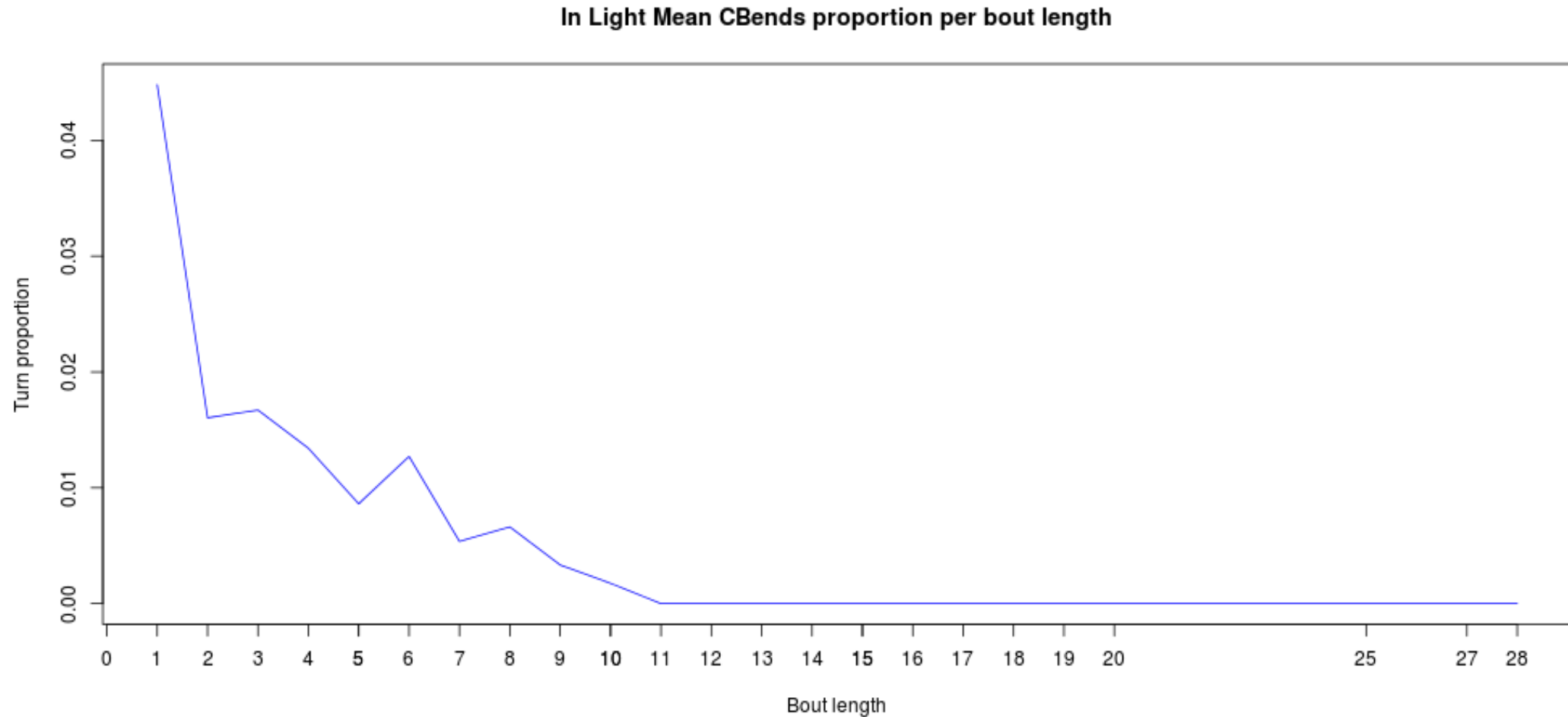
In DarkPTZ, bout count per bout length

with 2 zero length bouts and 98604 length one bouts

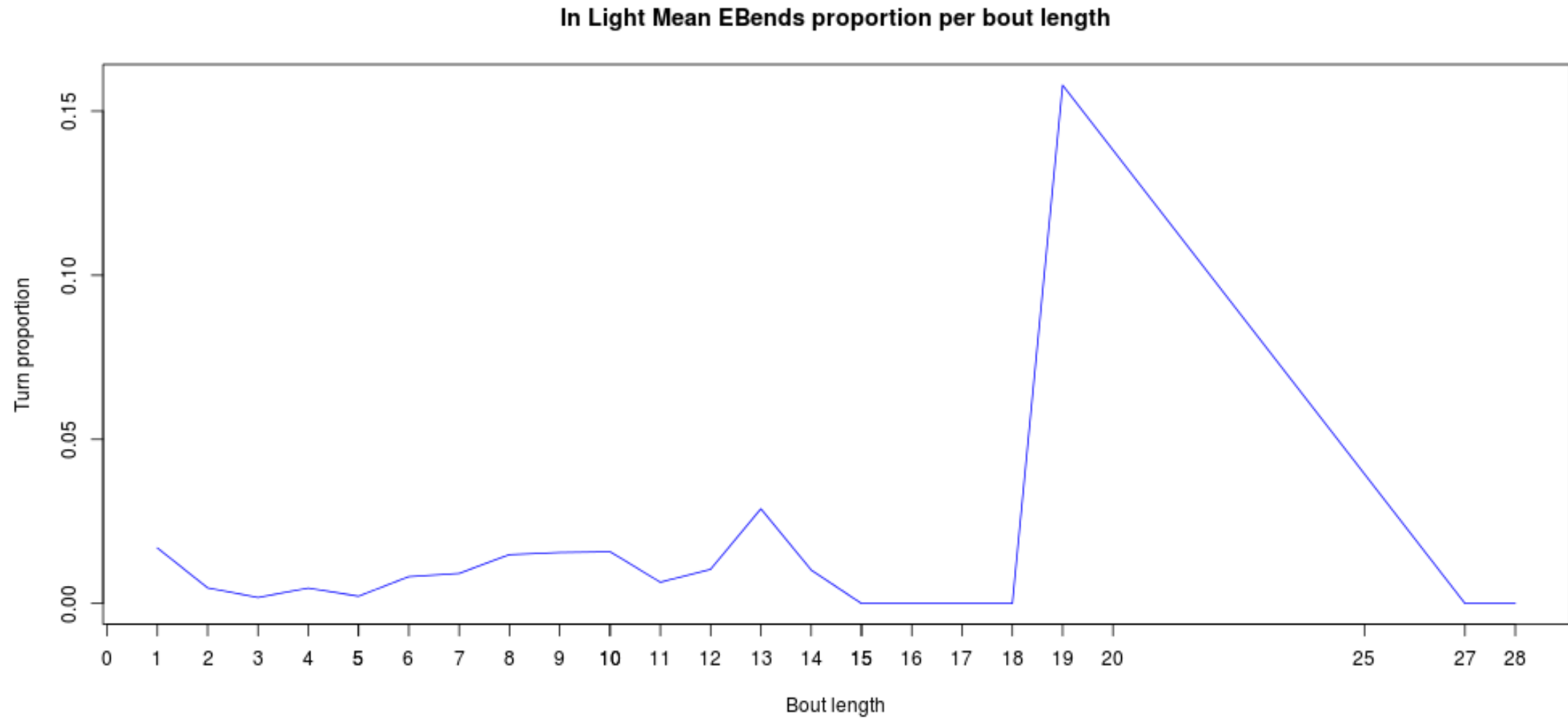


Turn proportion per action sequence is influenced by bout length and frequency.

Light:

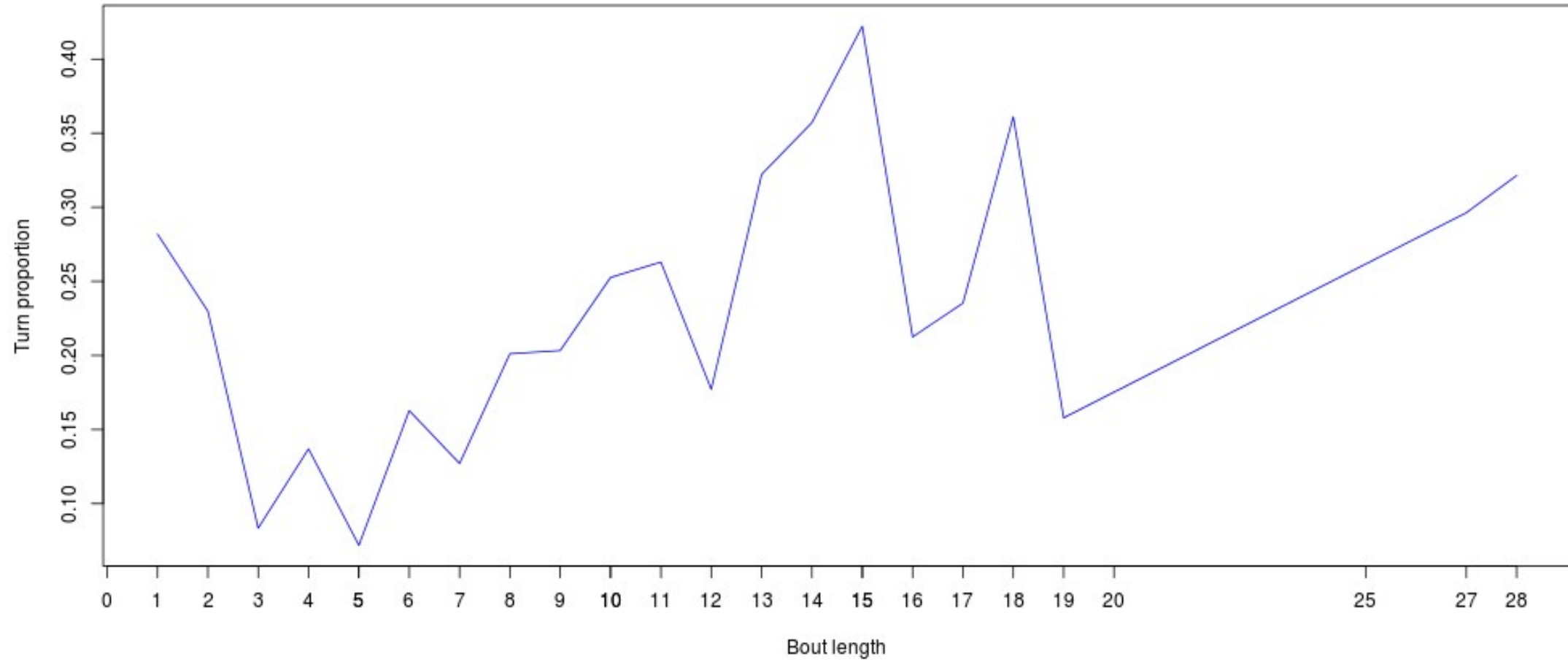


- Light:

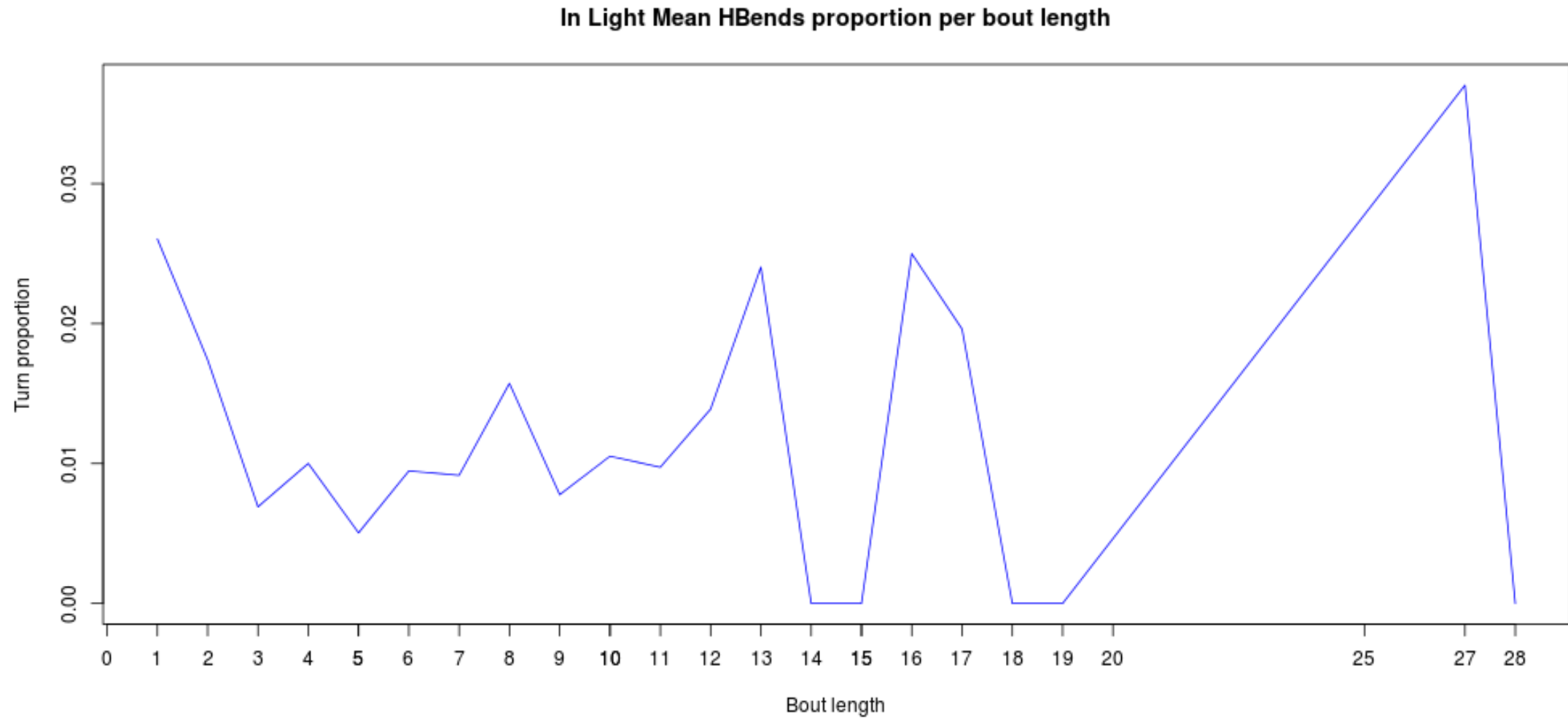


- Light:

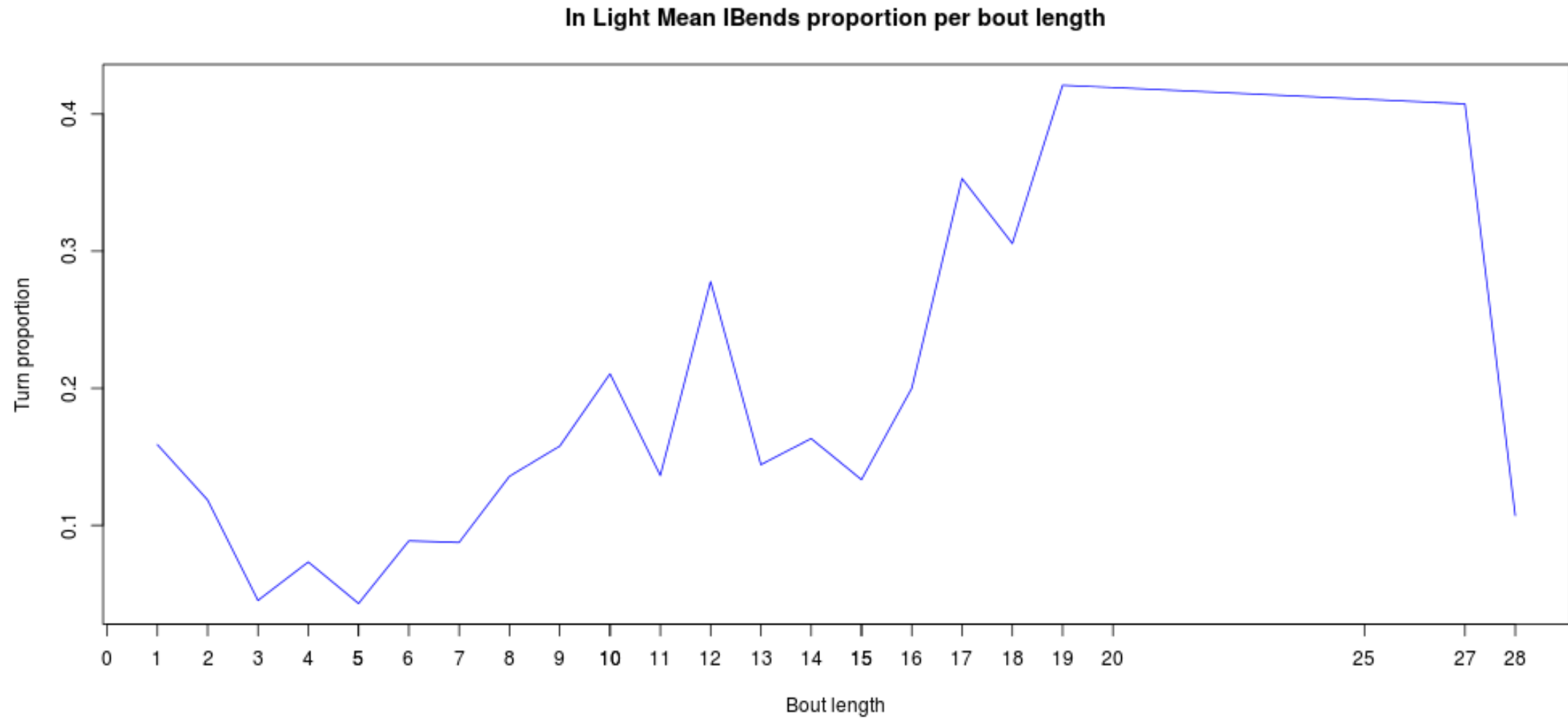
In Light Mean GBends proportion per bout length



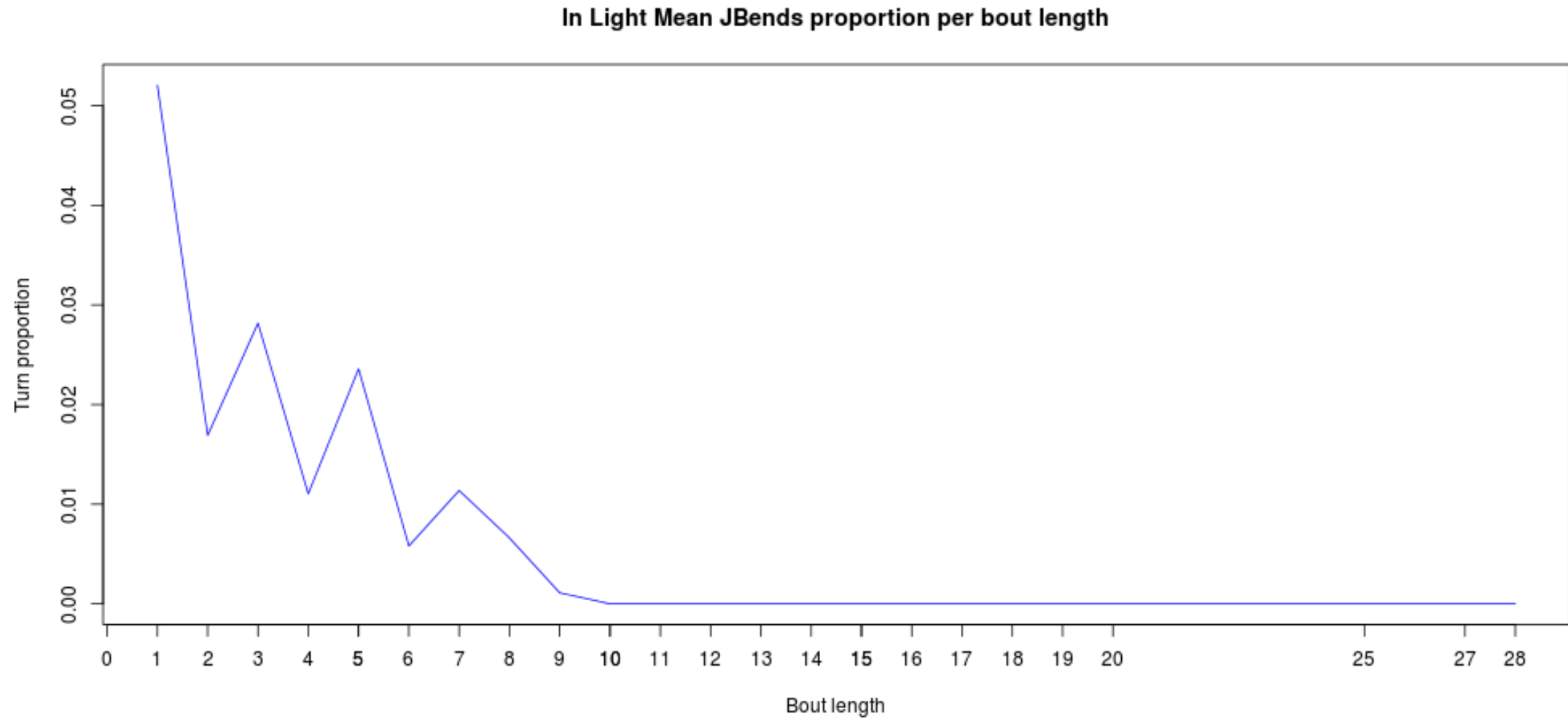
- Light:



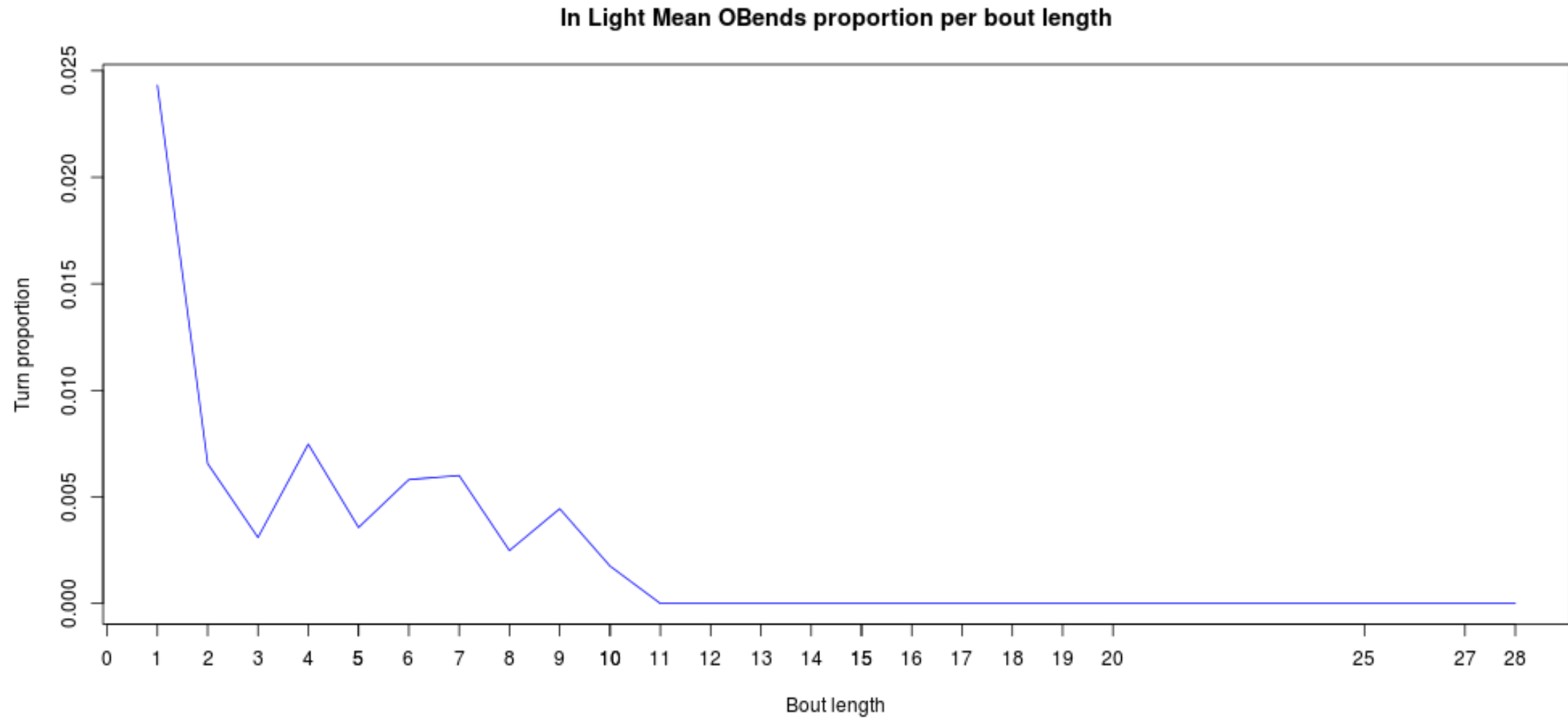
- Light:



- Light:

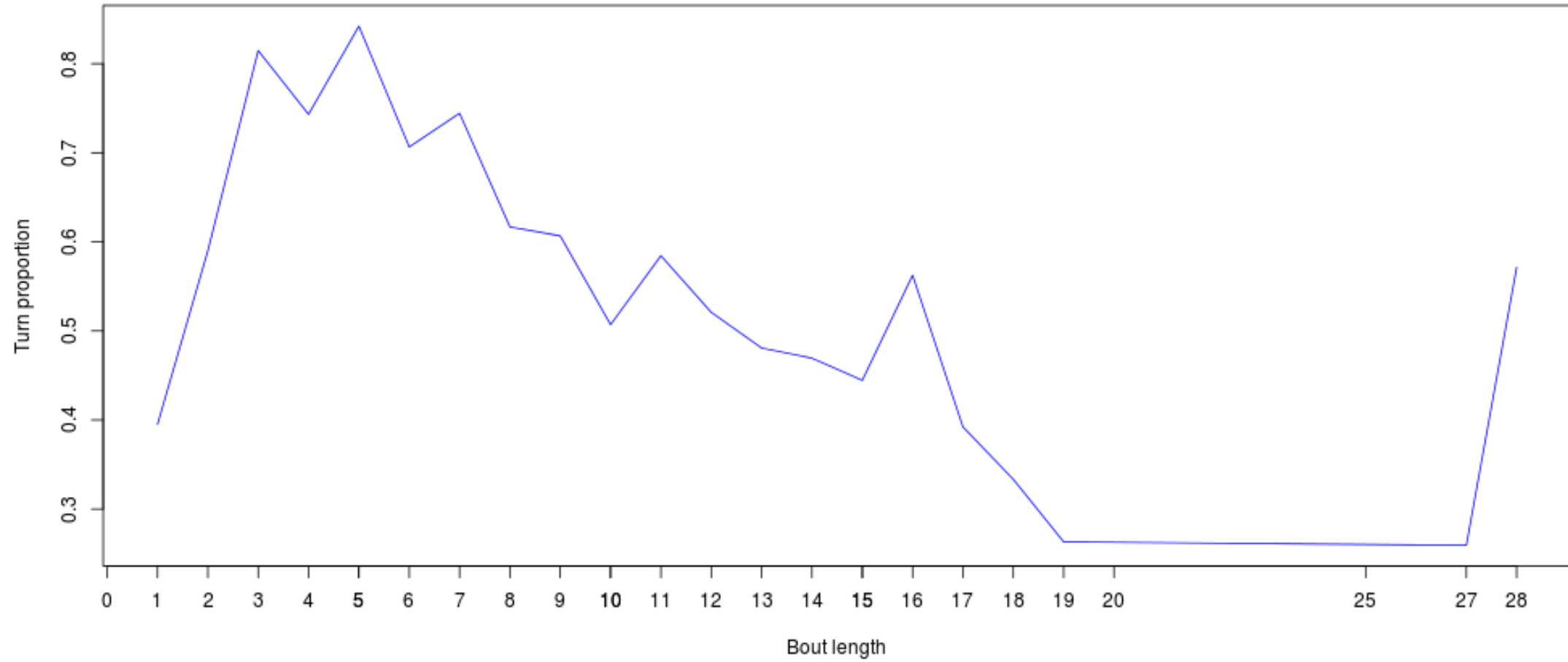


- Light:

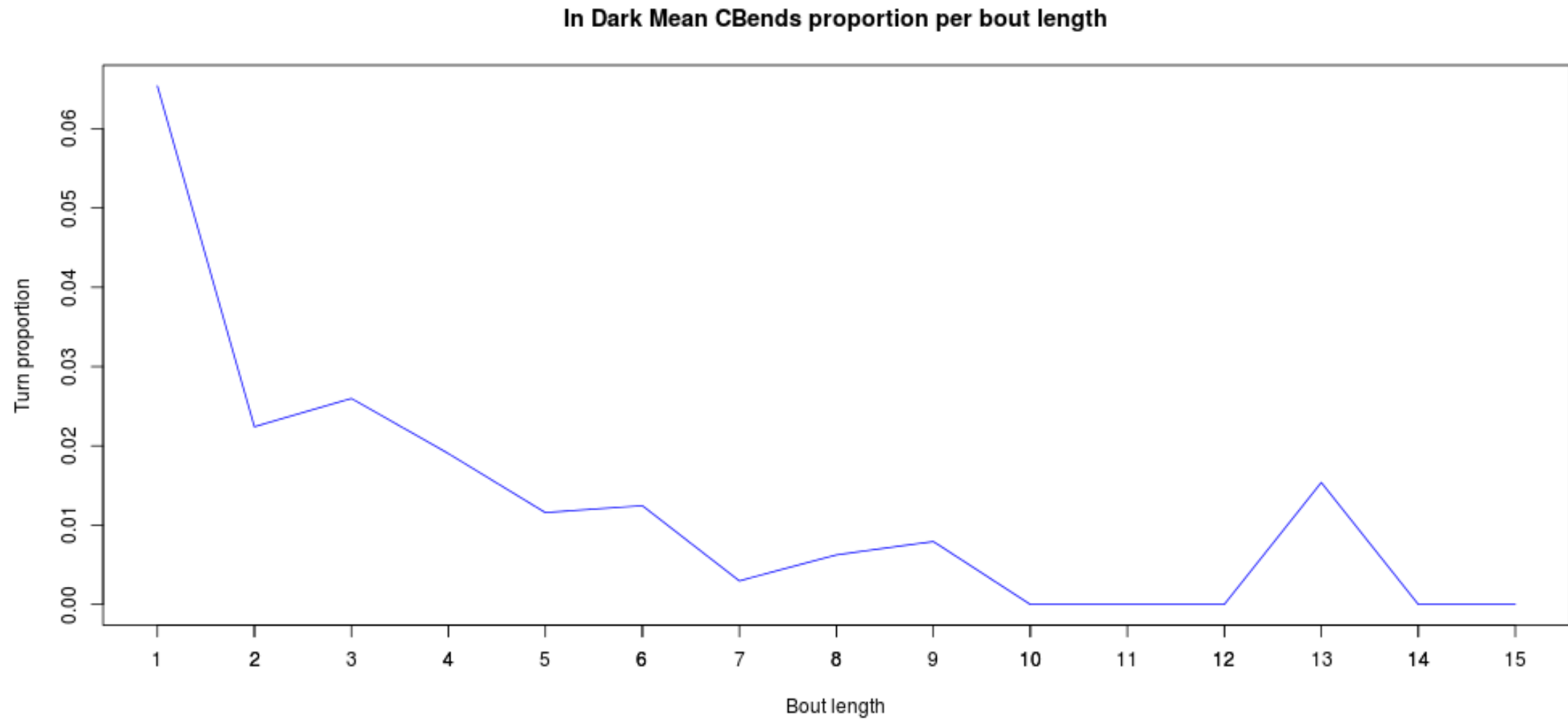


- Light:

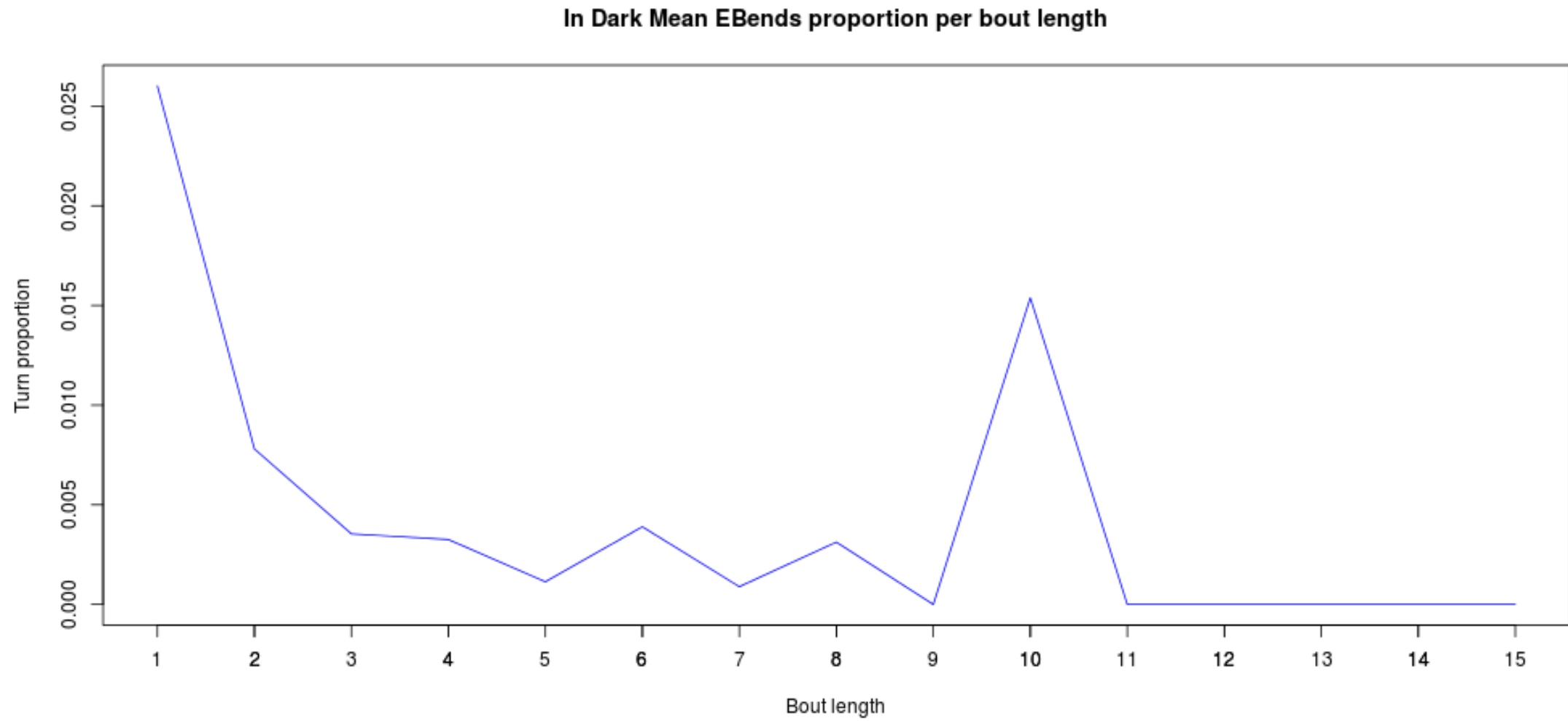
In Light Mean Scoots proportion per bout length



- Dark:

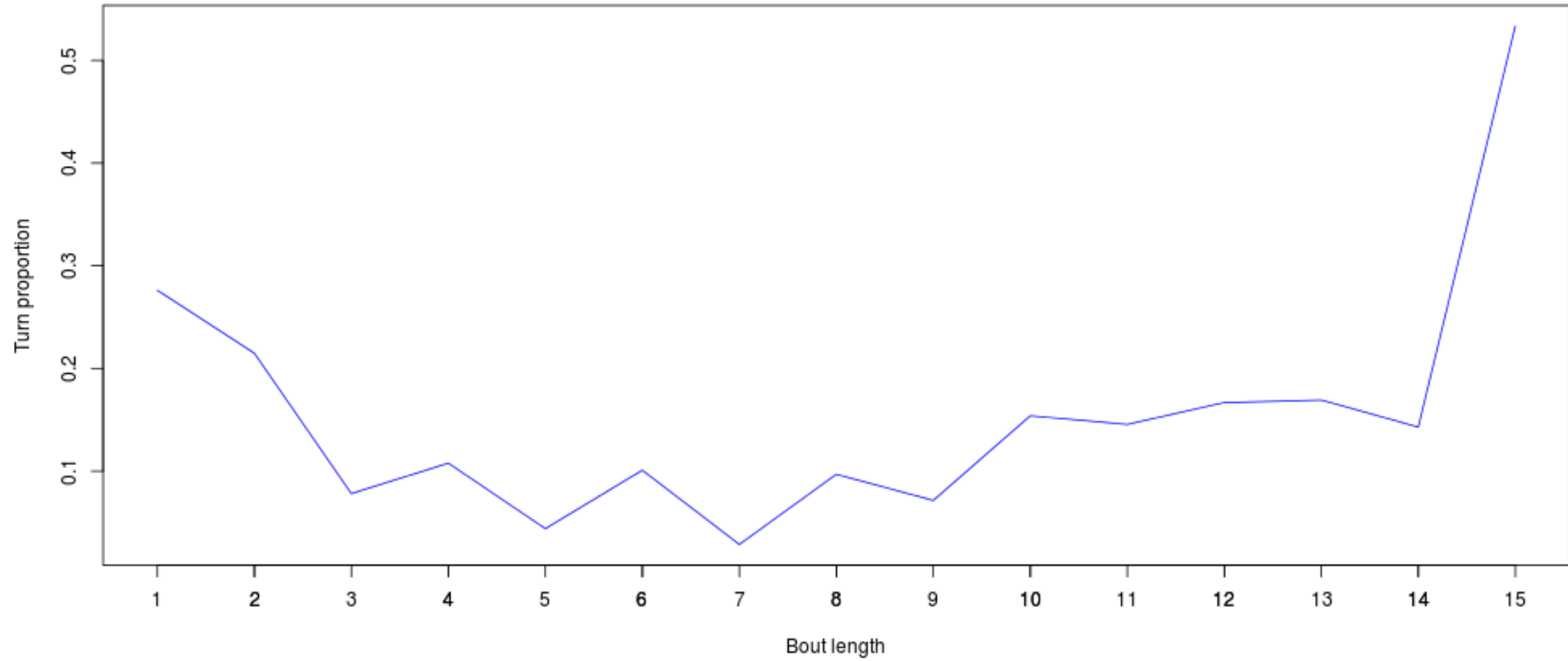


- Dark:

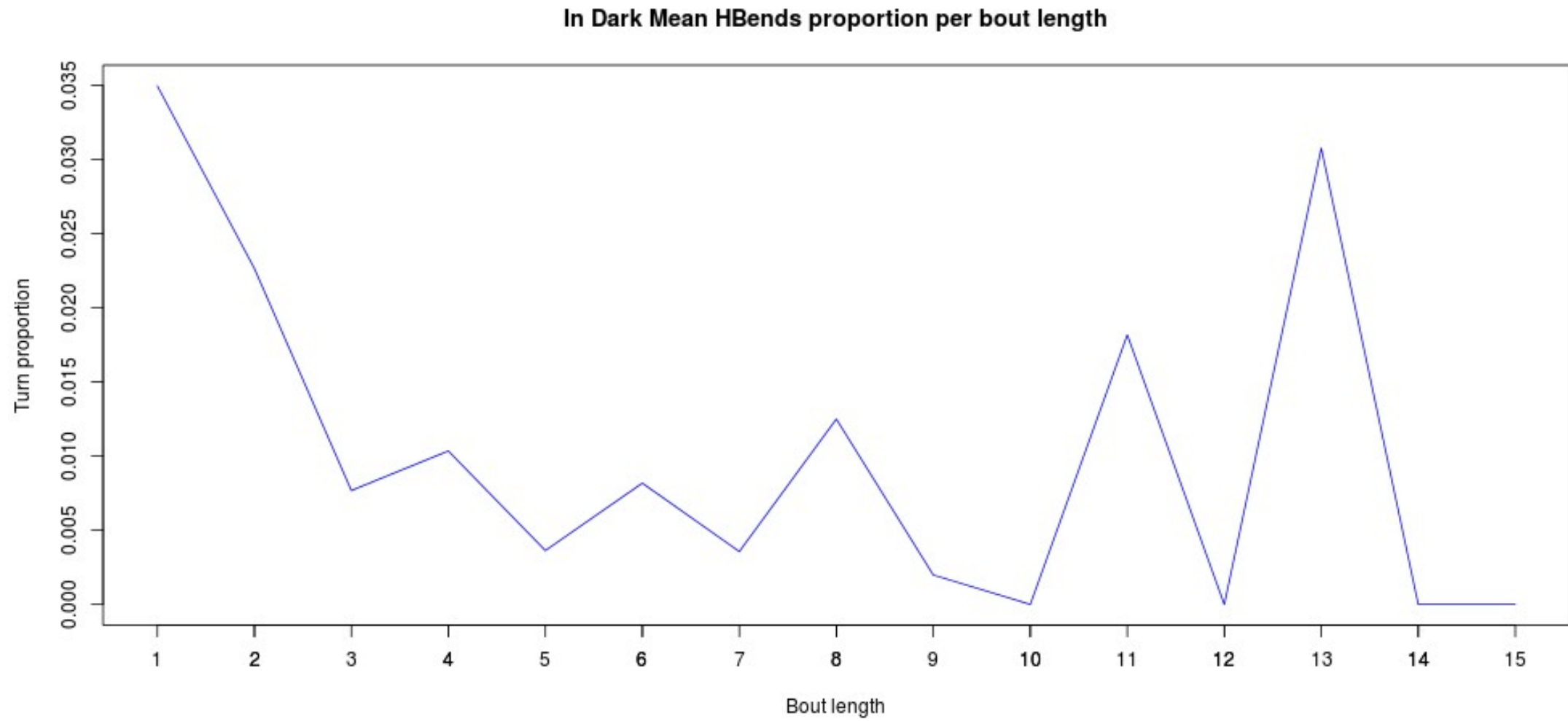


- Dark:

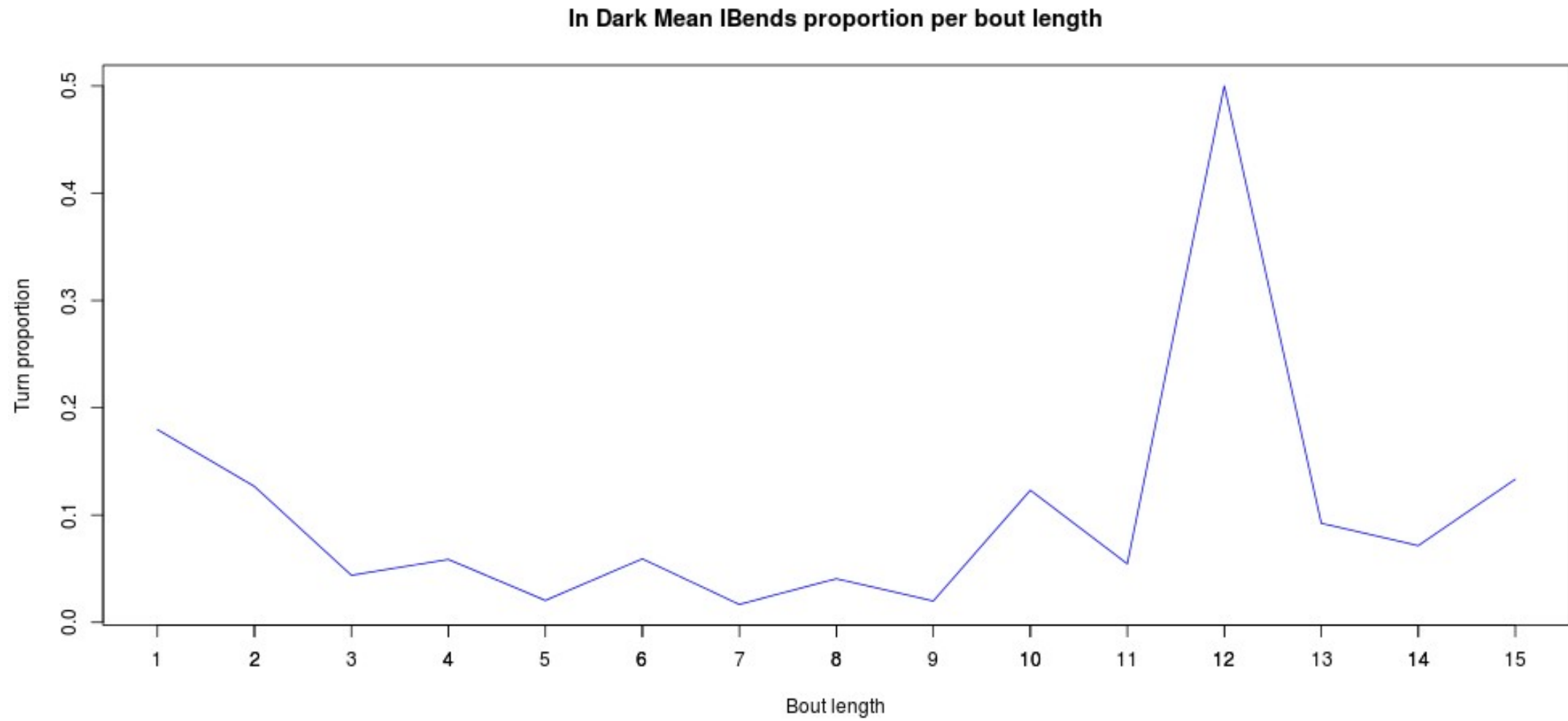
In Dark Mean GBends proportion per bout length



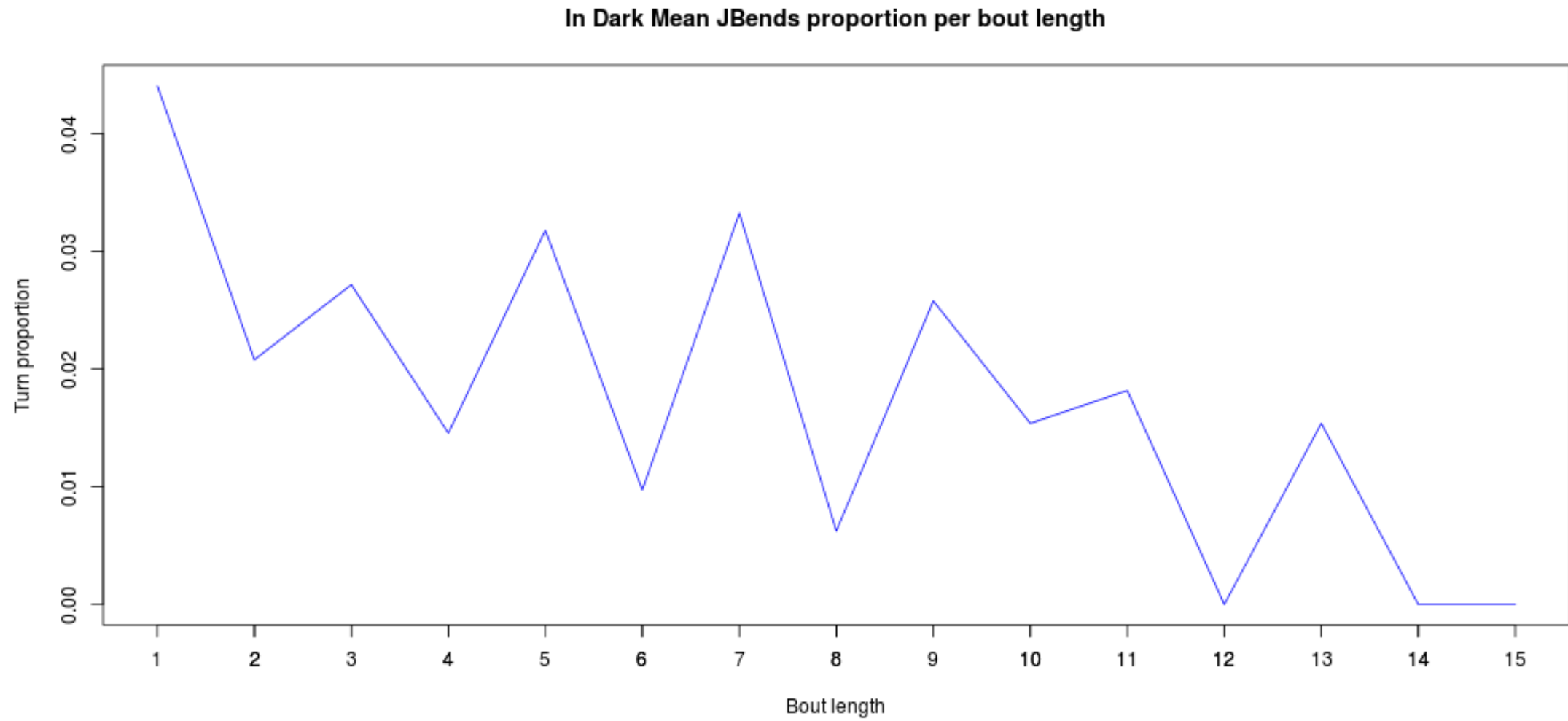
- Dark:



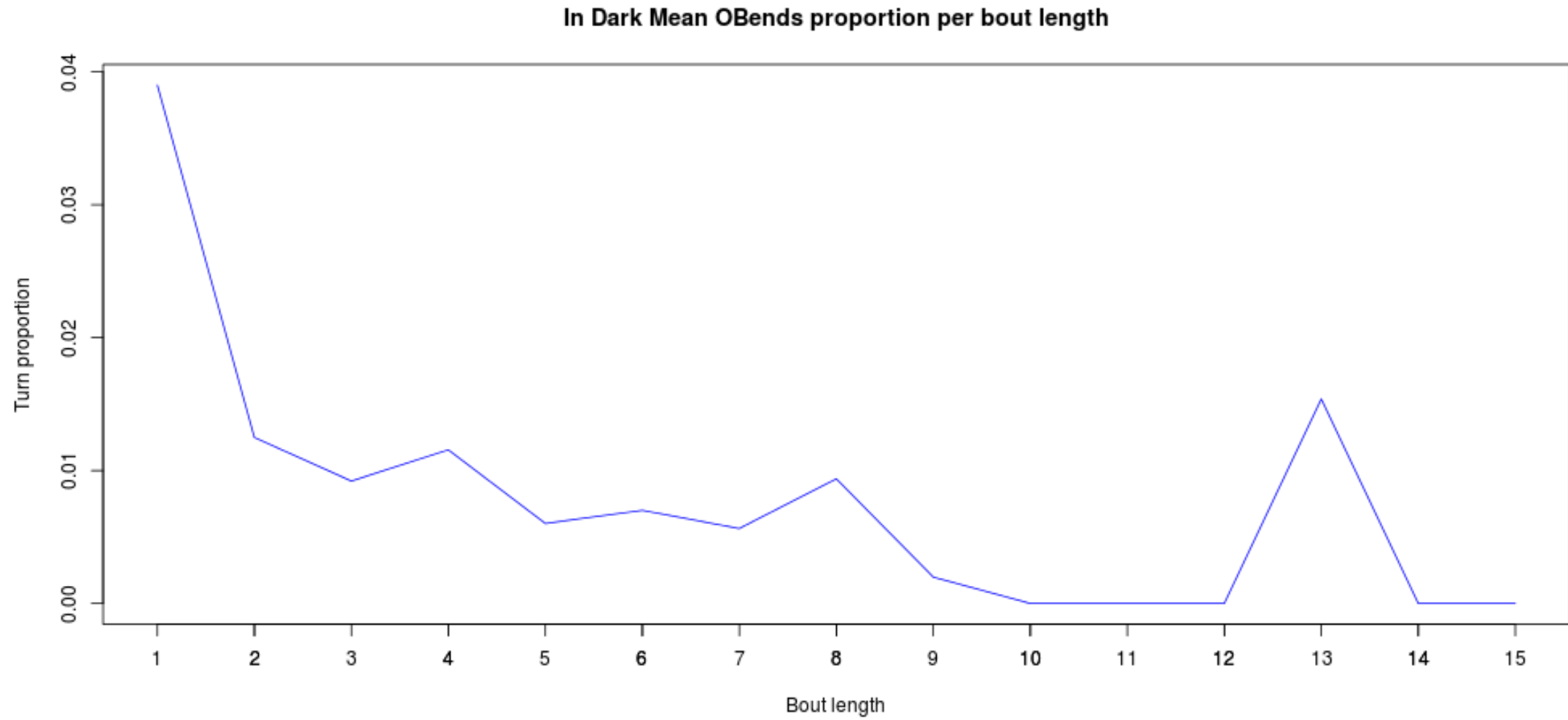
- Dark:



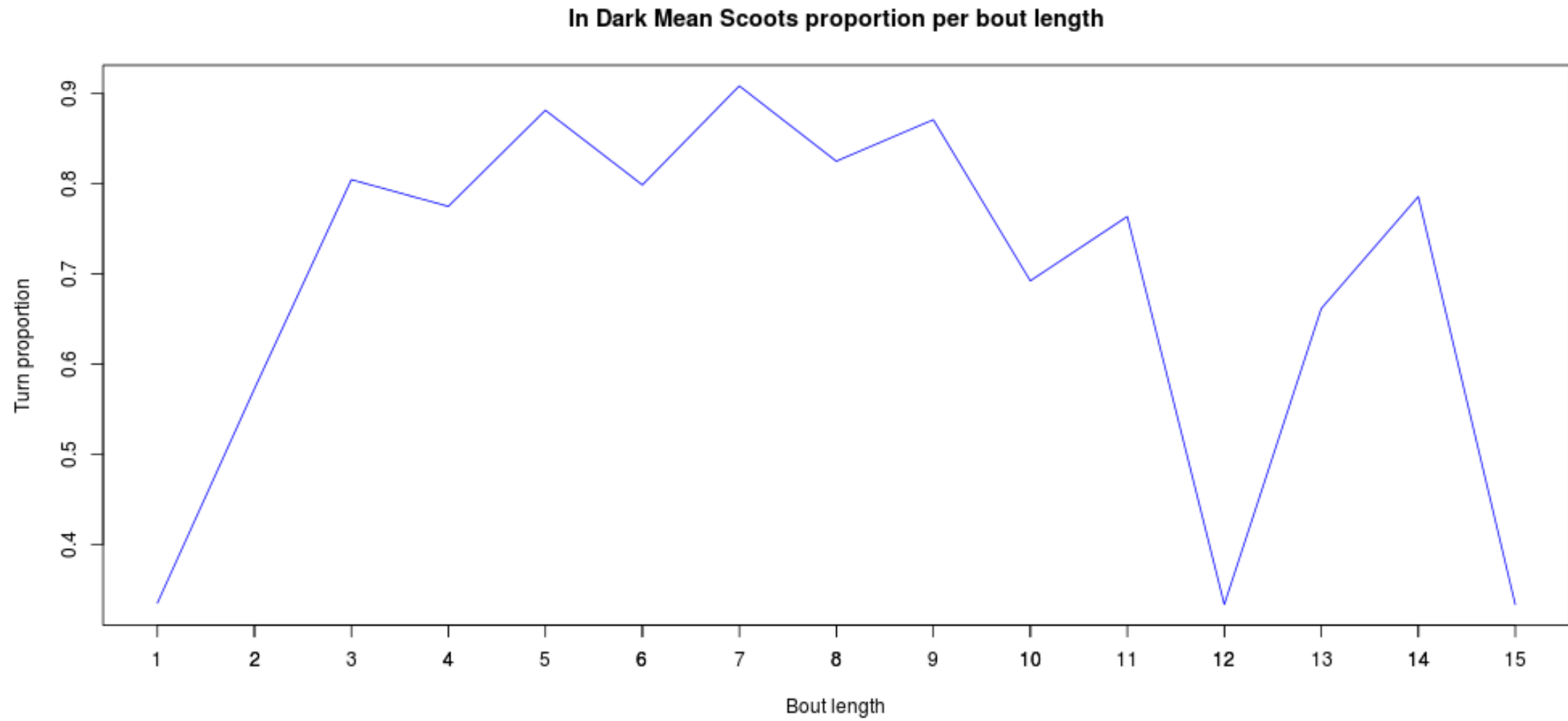
- Dark:



- Dark:

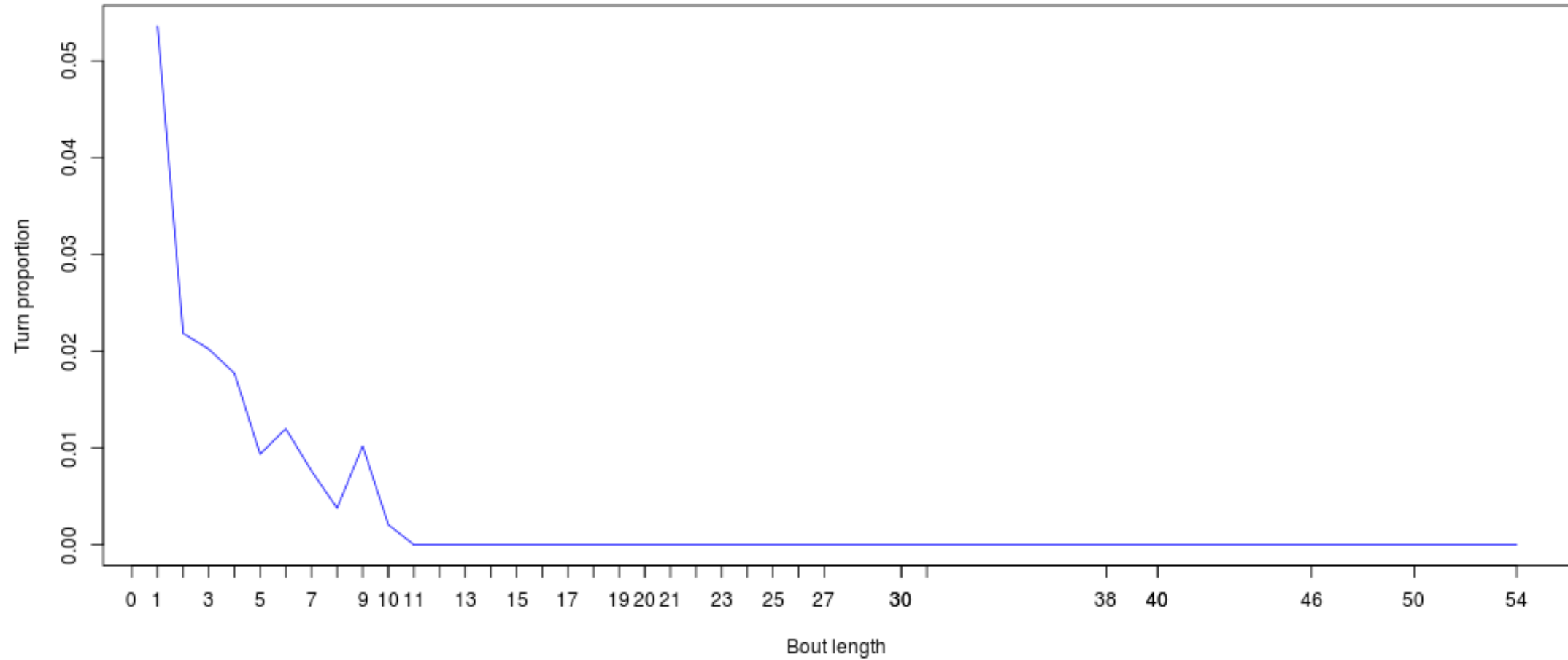


- Dark:



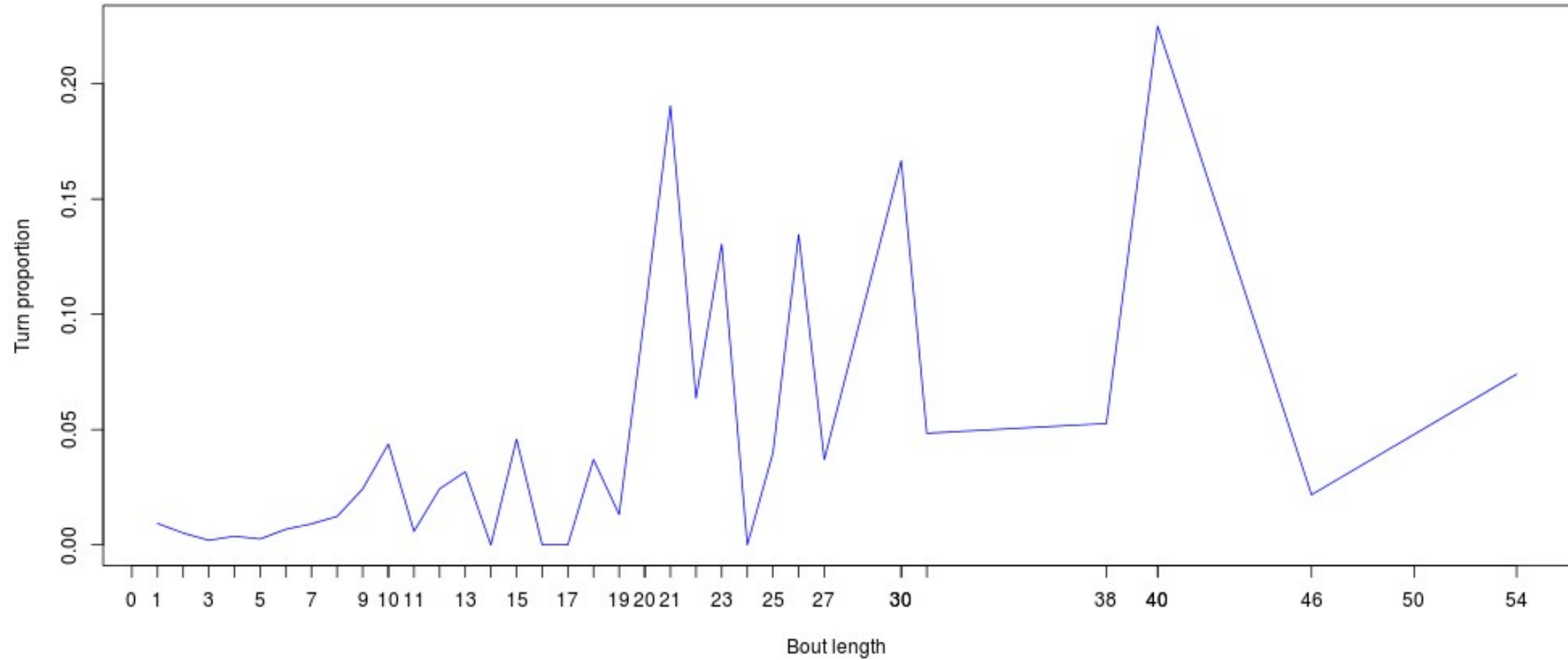
- LightDark:

In LightDark Mean CBends proportion per bout length

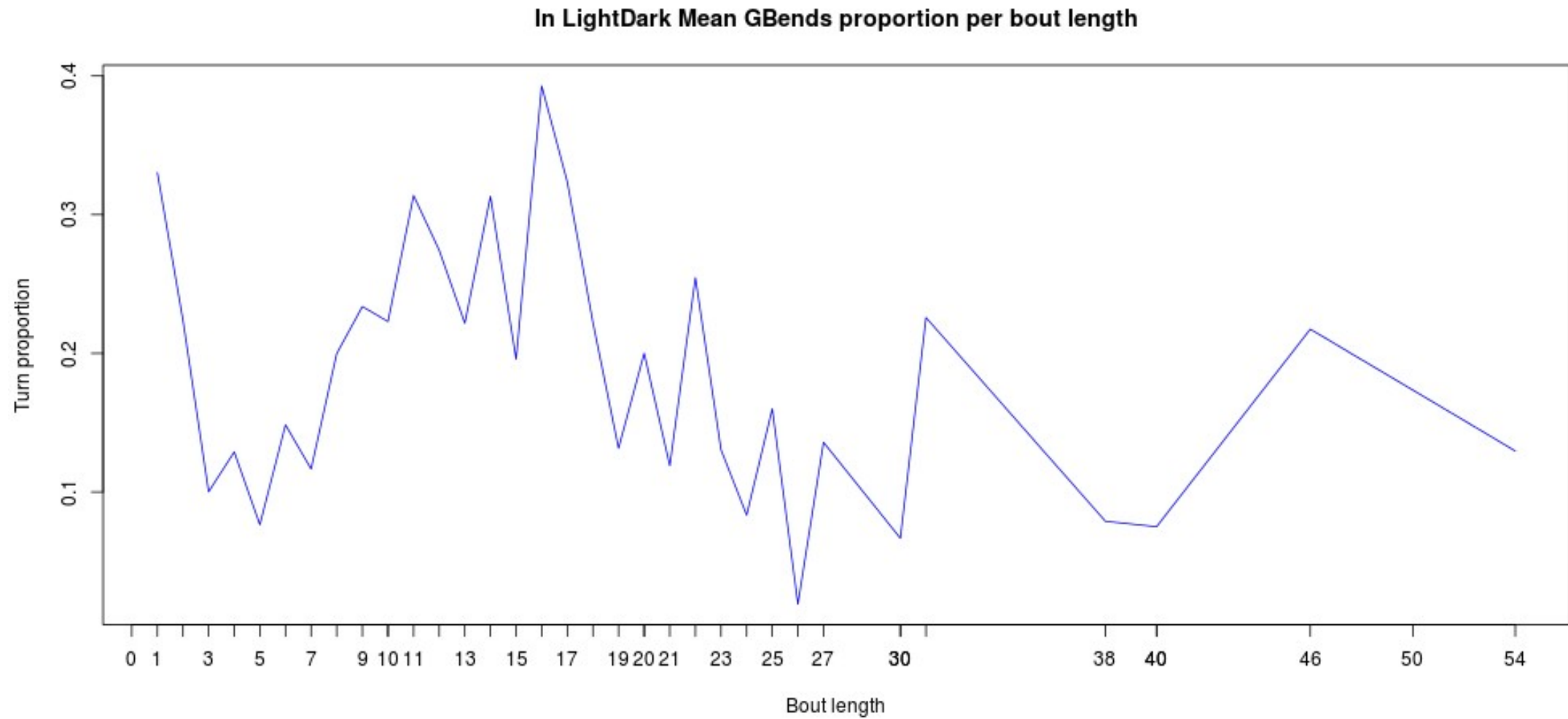


- LightDark:

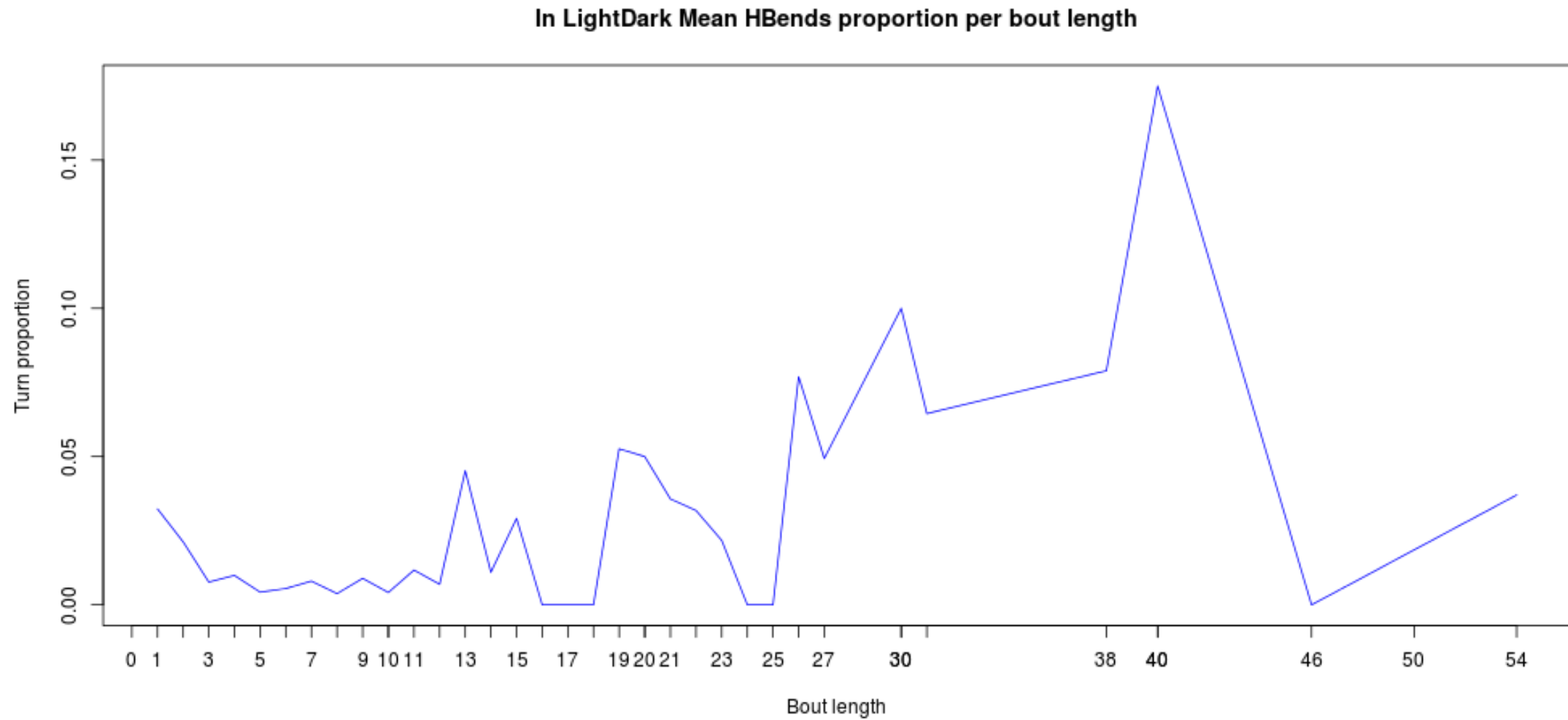
In LightDark Mean EBends proportion per bout length



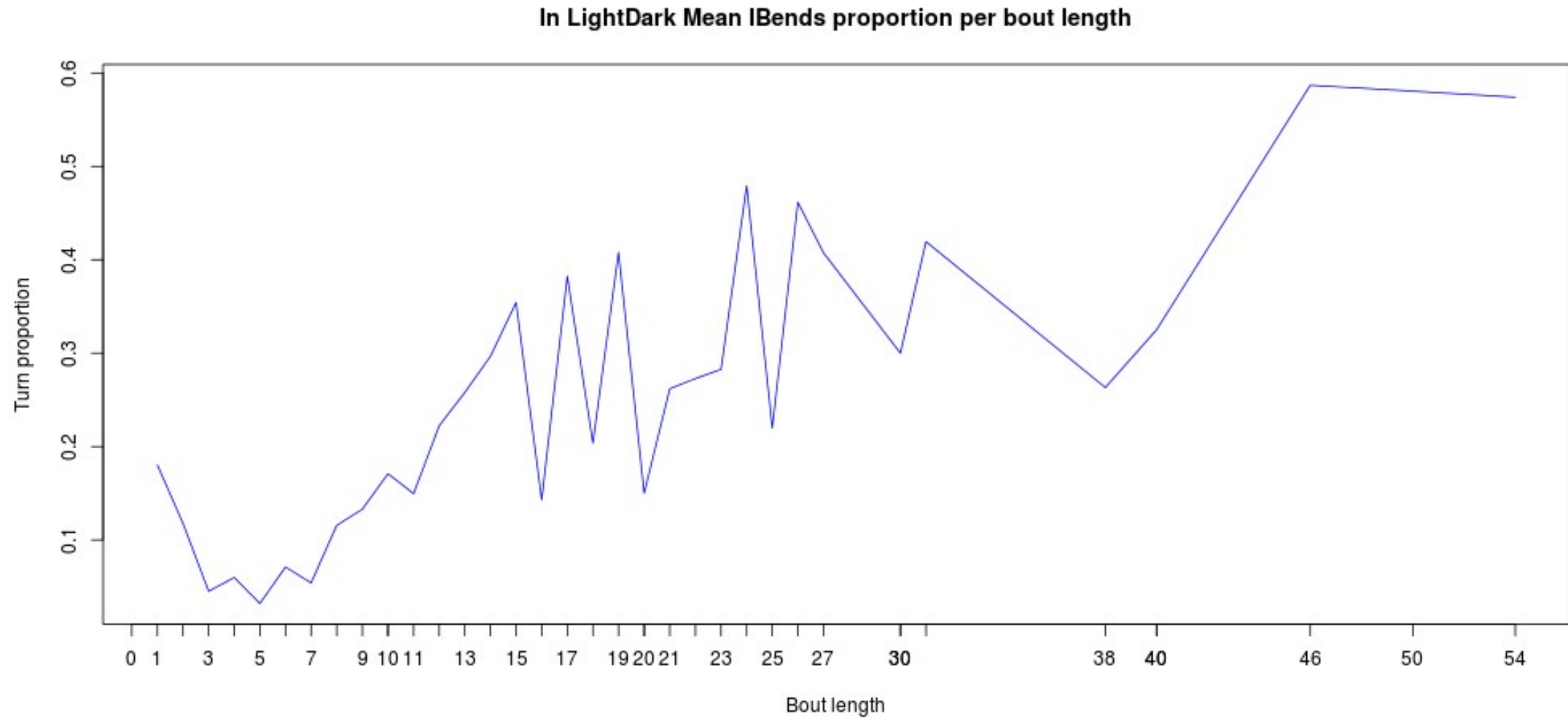
- LightDark:



- LightDark:

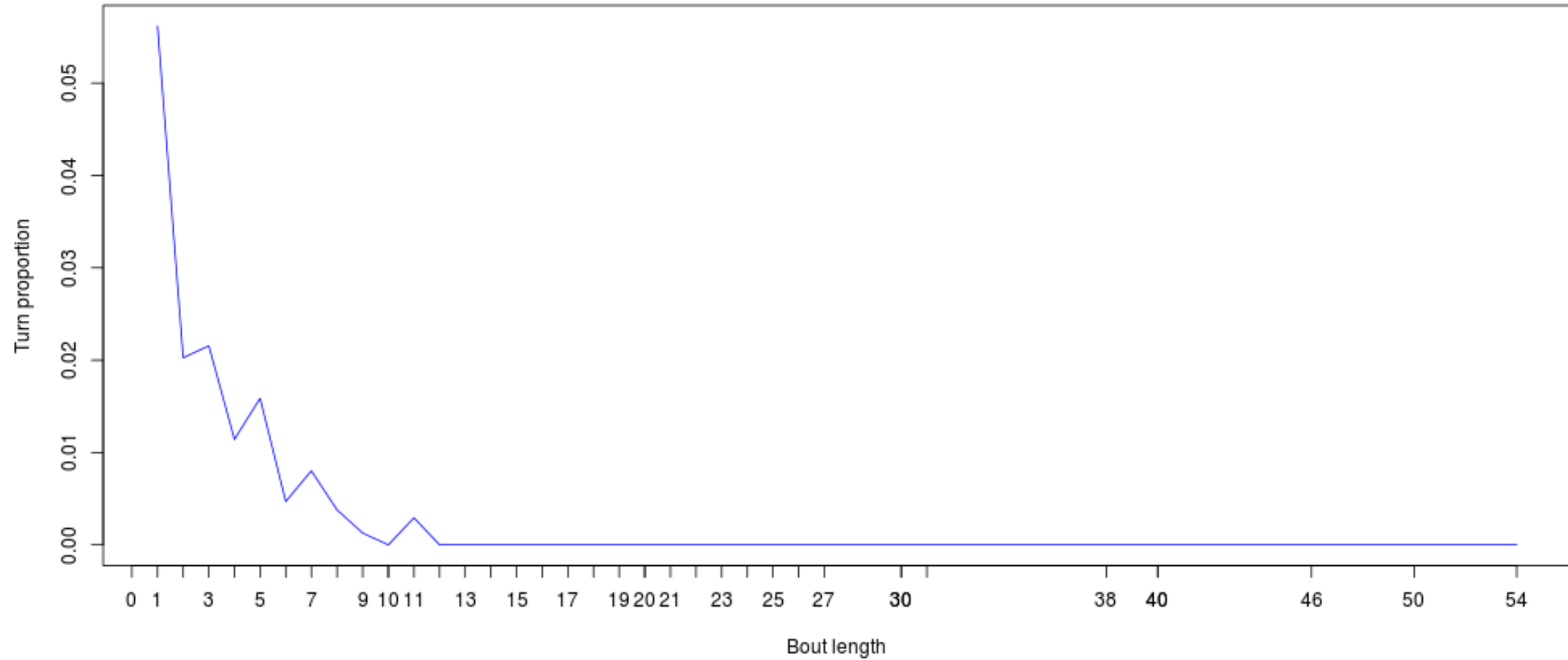


- LightDark:



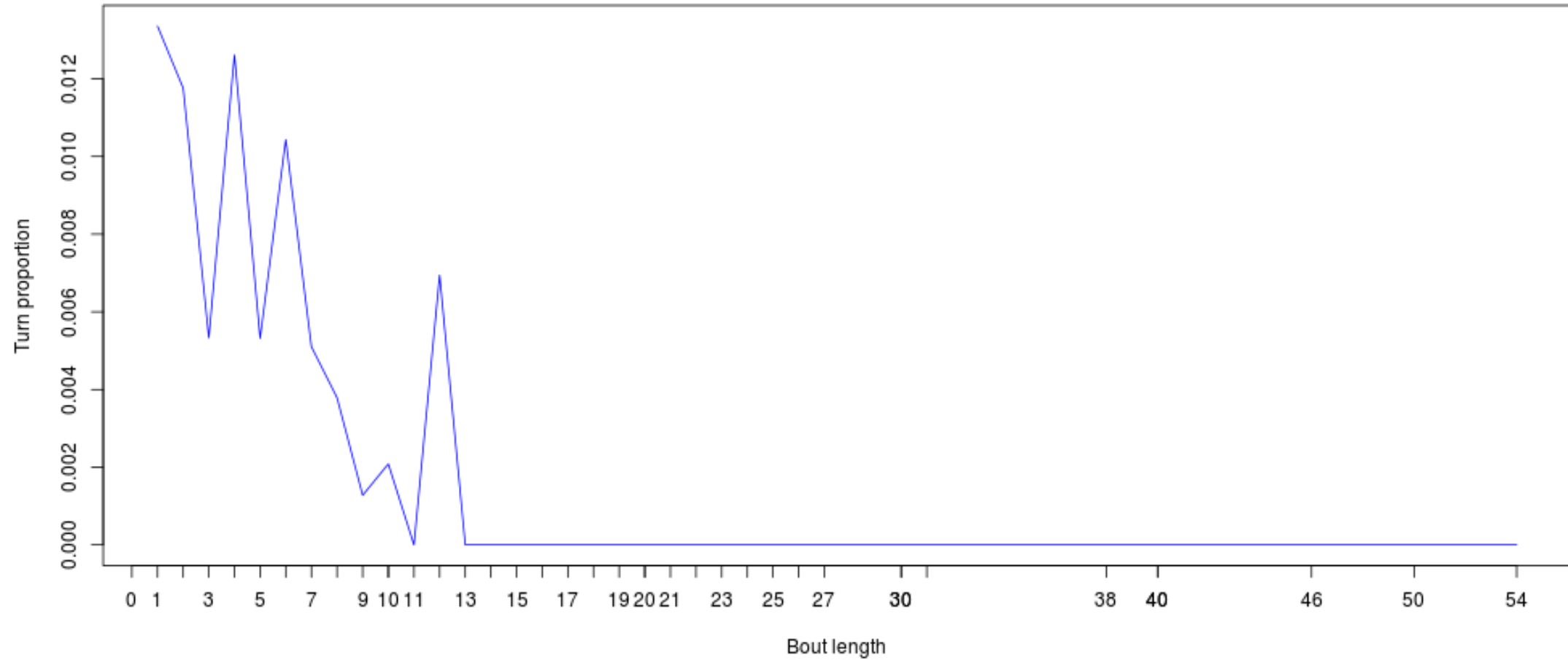
- LightDark:

In LightDark Mean JBends proportion per bout length



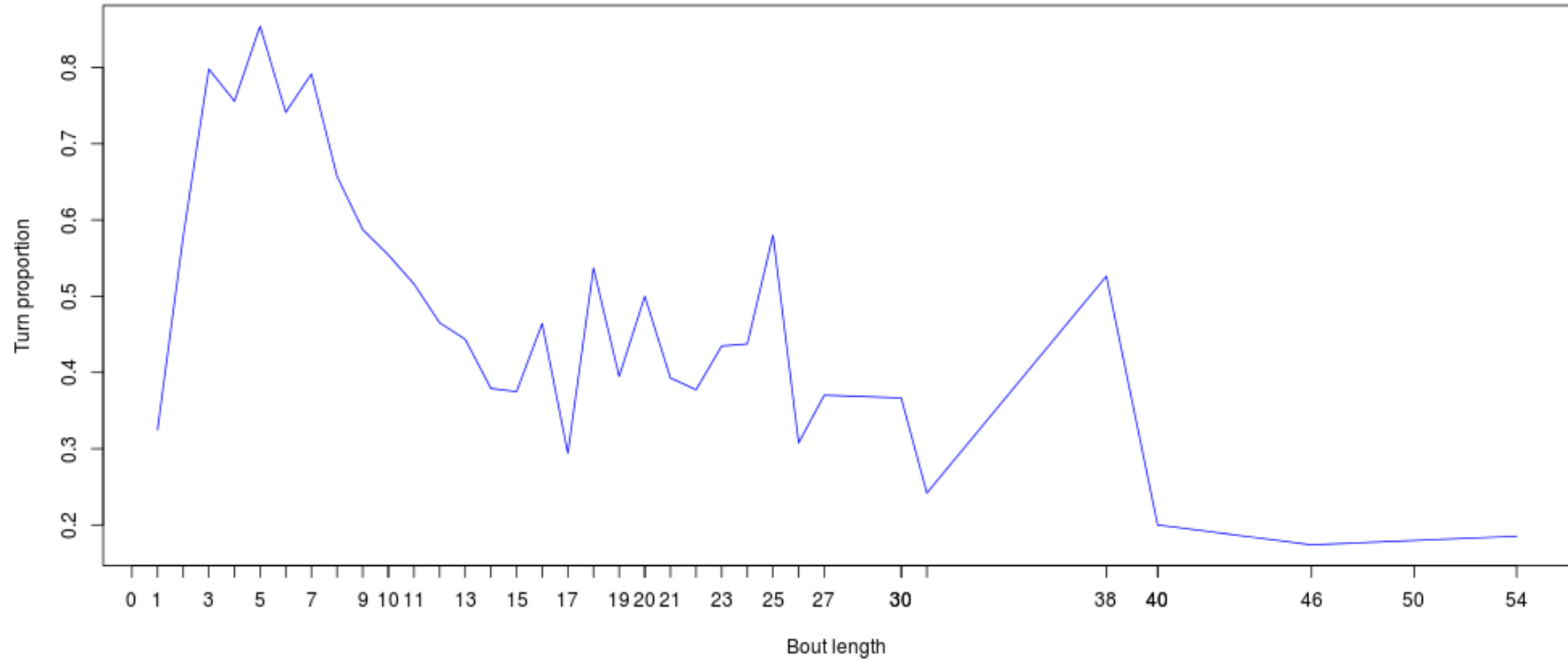
- LightDark:

In LightDark Mean OBends proportion per bout length

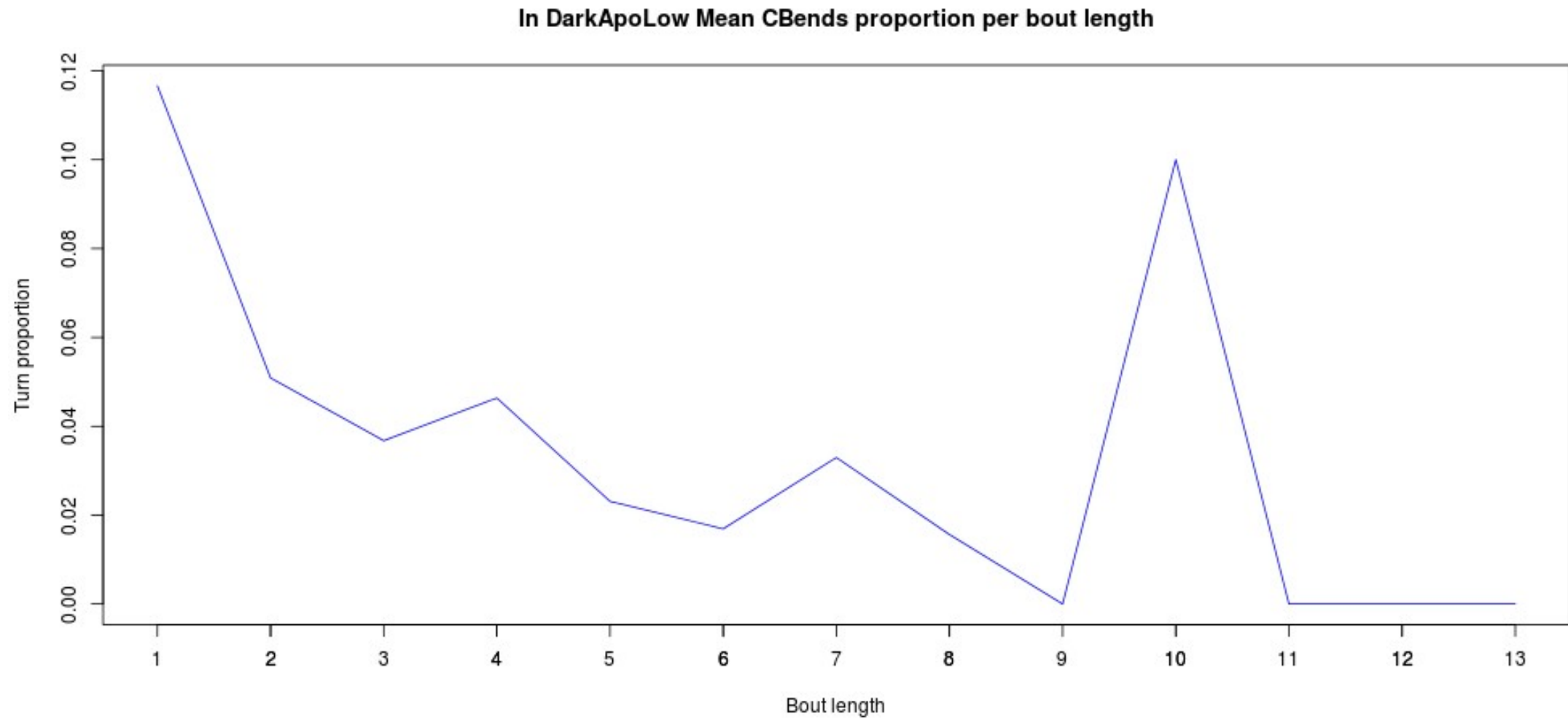


- LightDark:

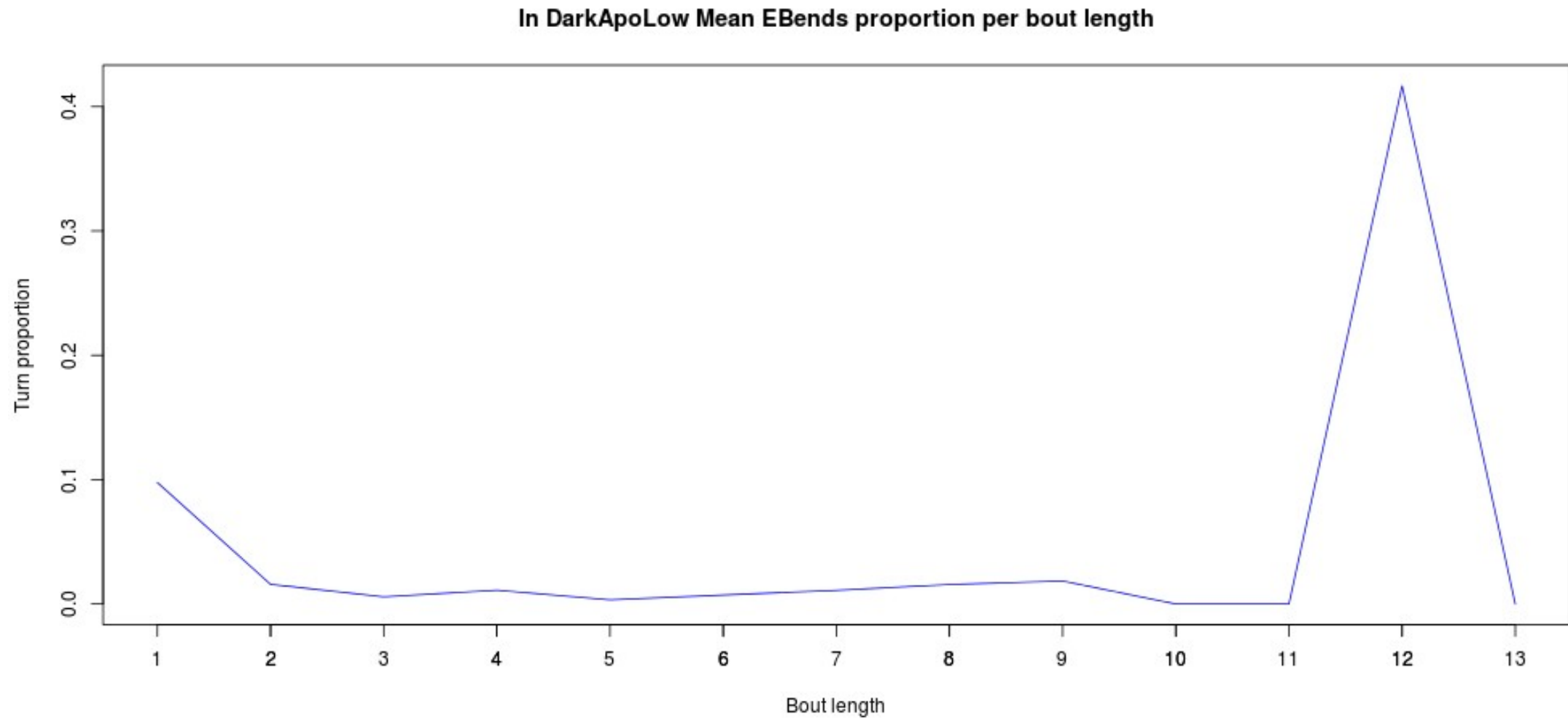
In LightDark Mean Scoots proportion per bout length



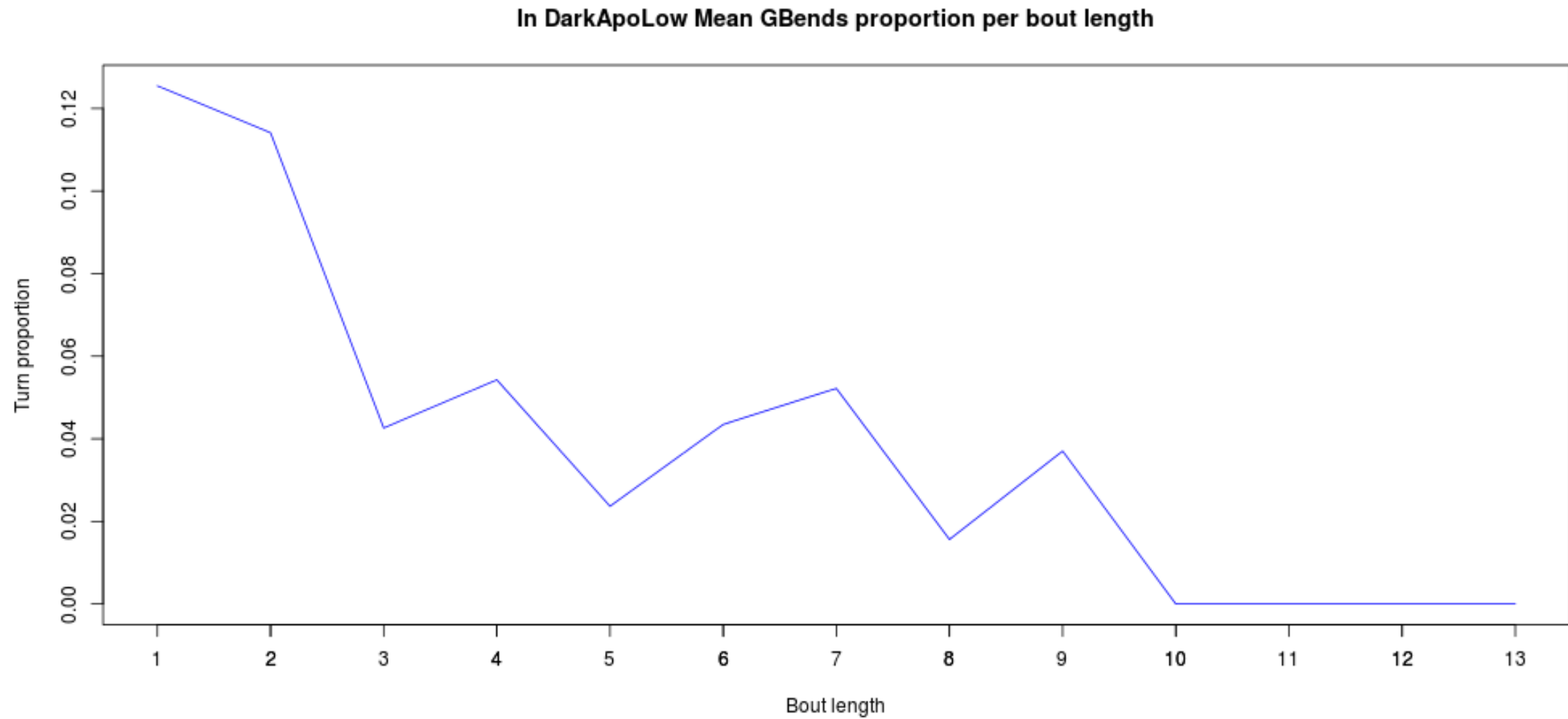
- (Dark)ApoLow:



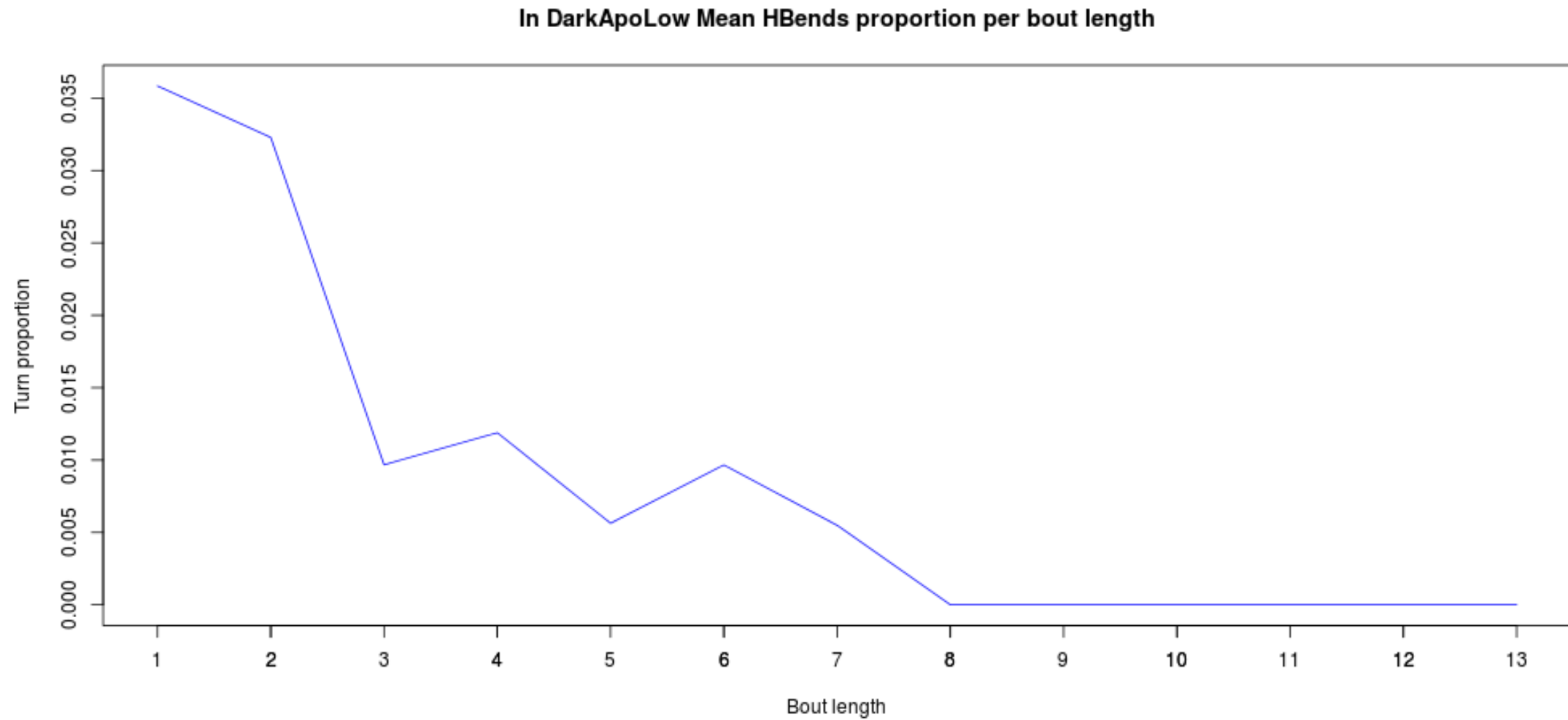
- (Dark)ApoLow:



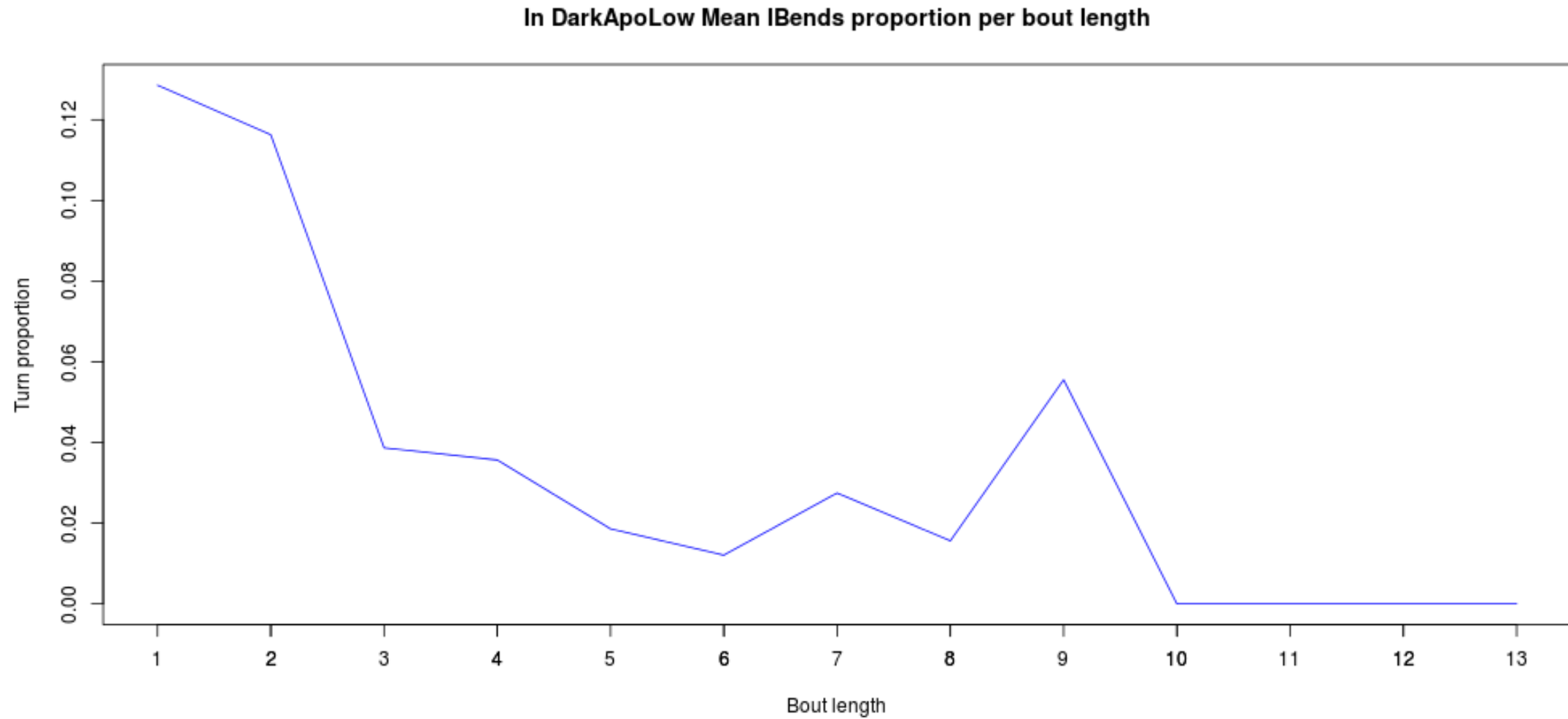
- (Dark)ApoLow:



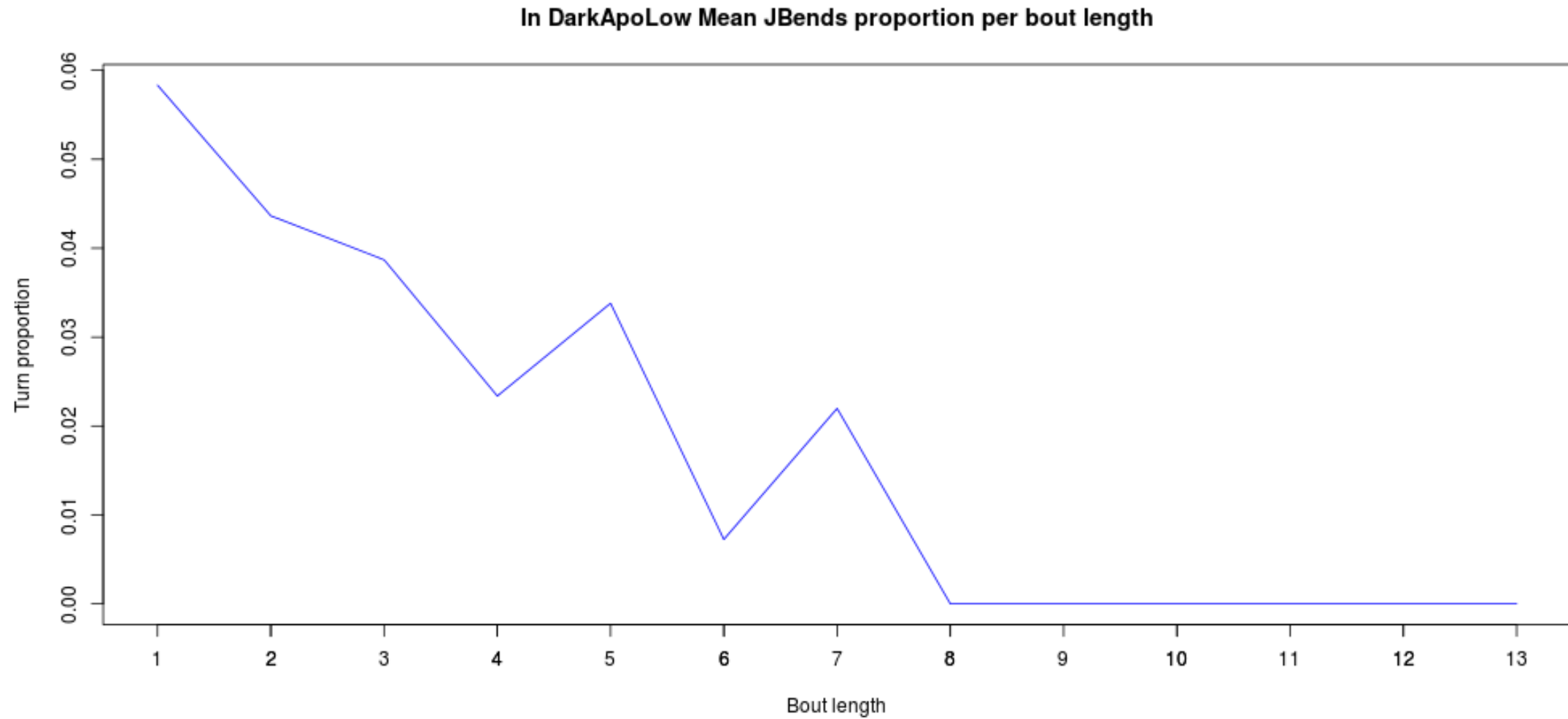
- (Dark)ApoLow:



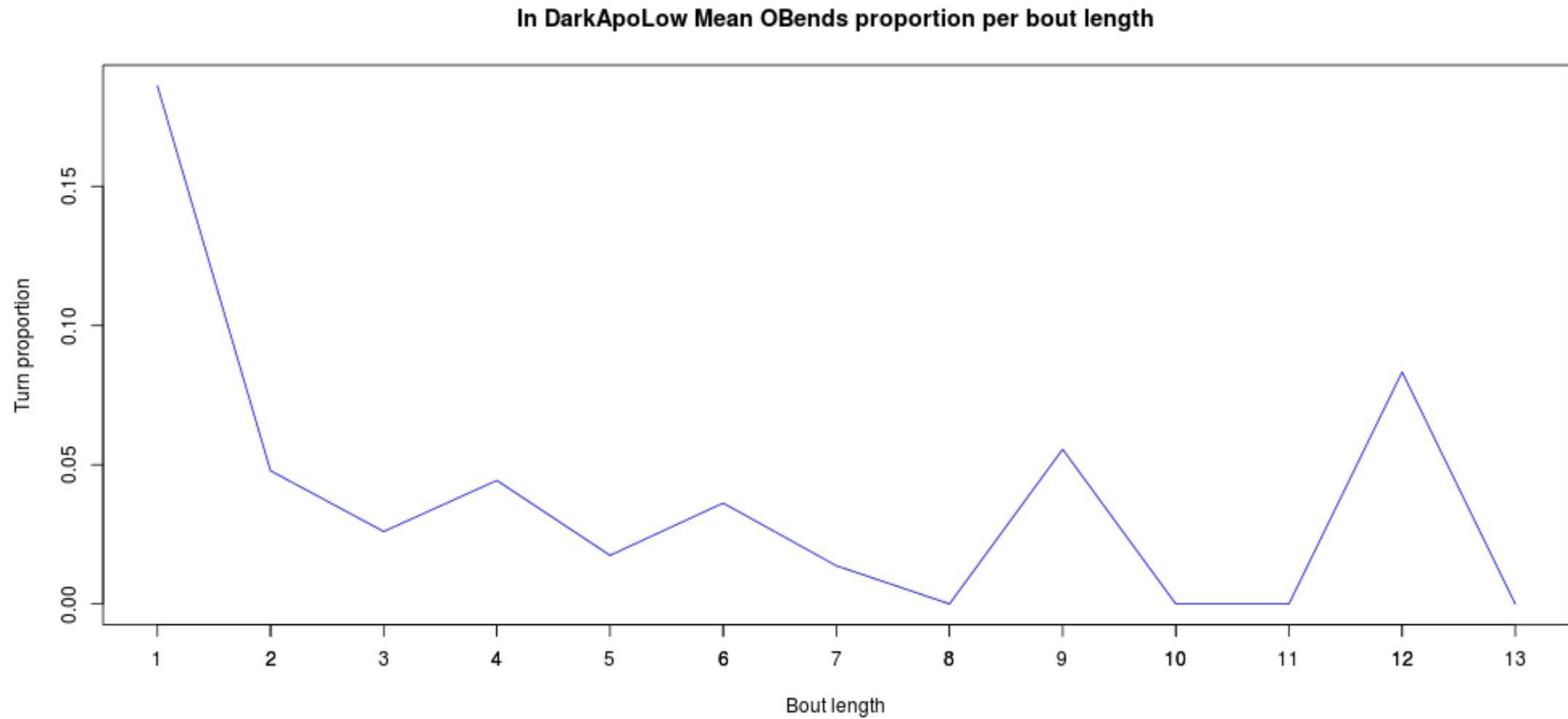
- (Dark)ApoLow:



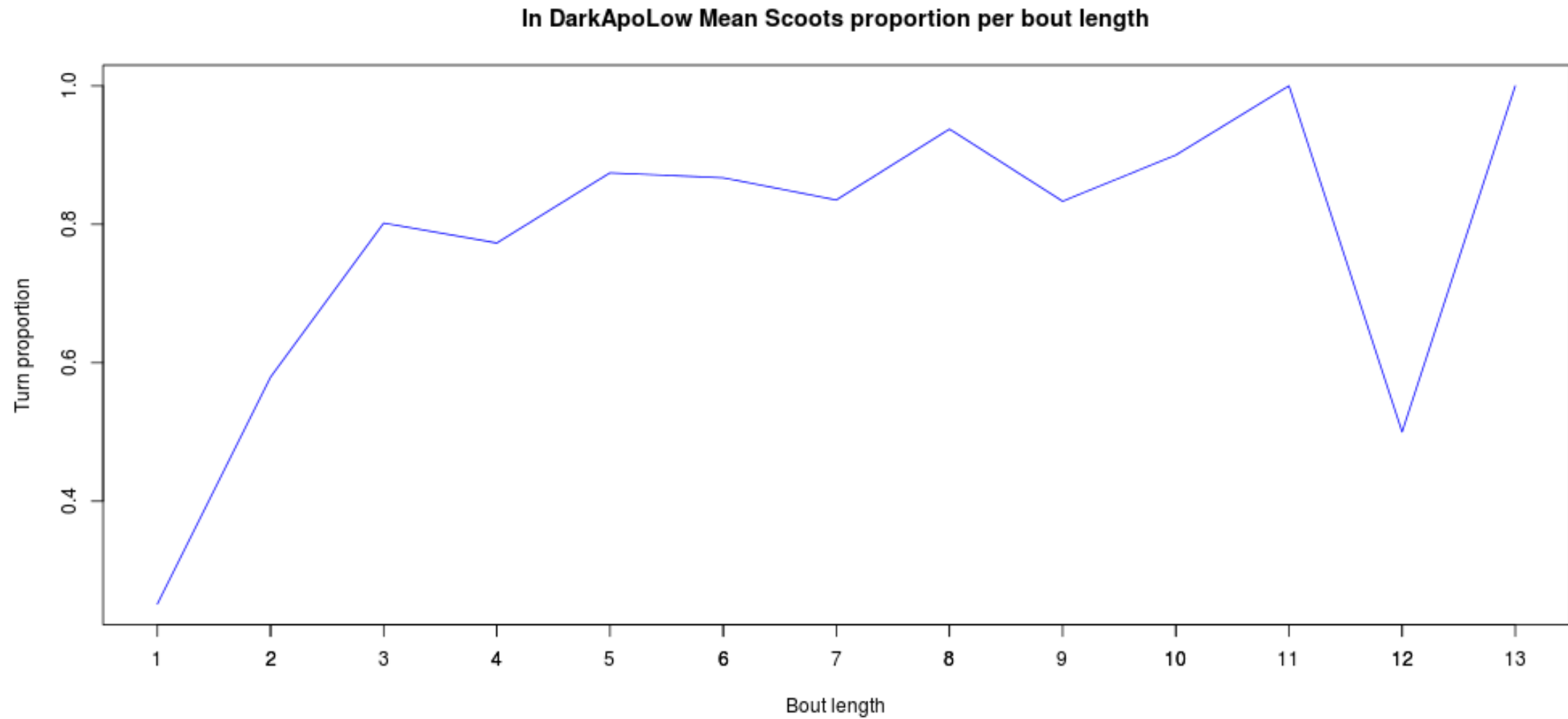
- (Dark)ApoLow:



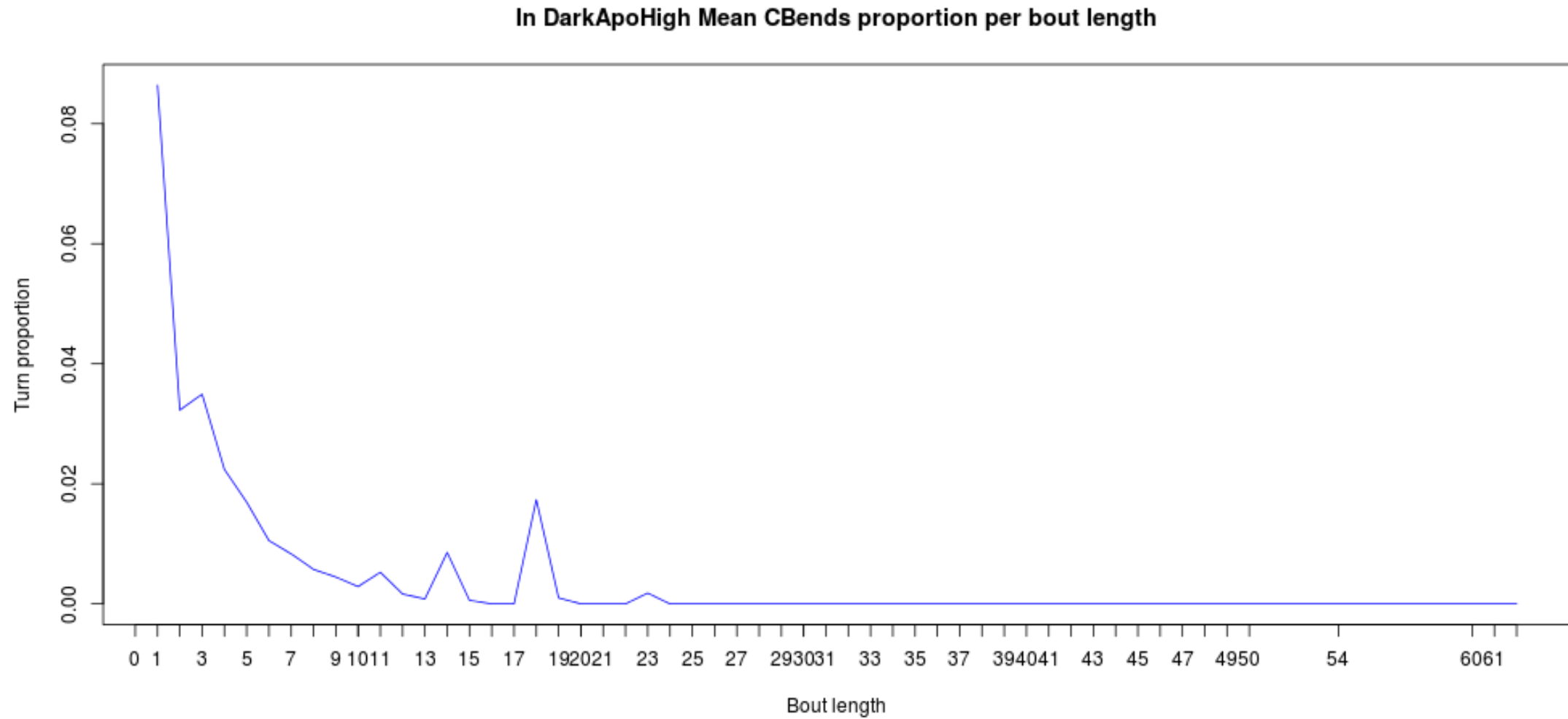
- (Dark)ApoLow:



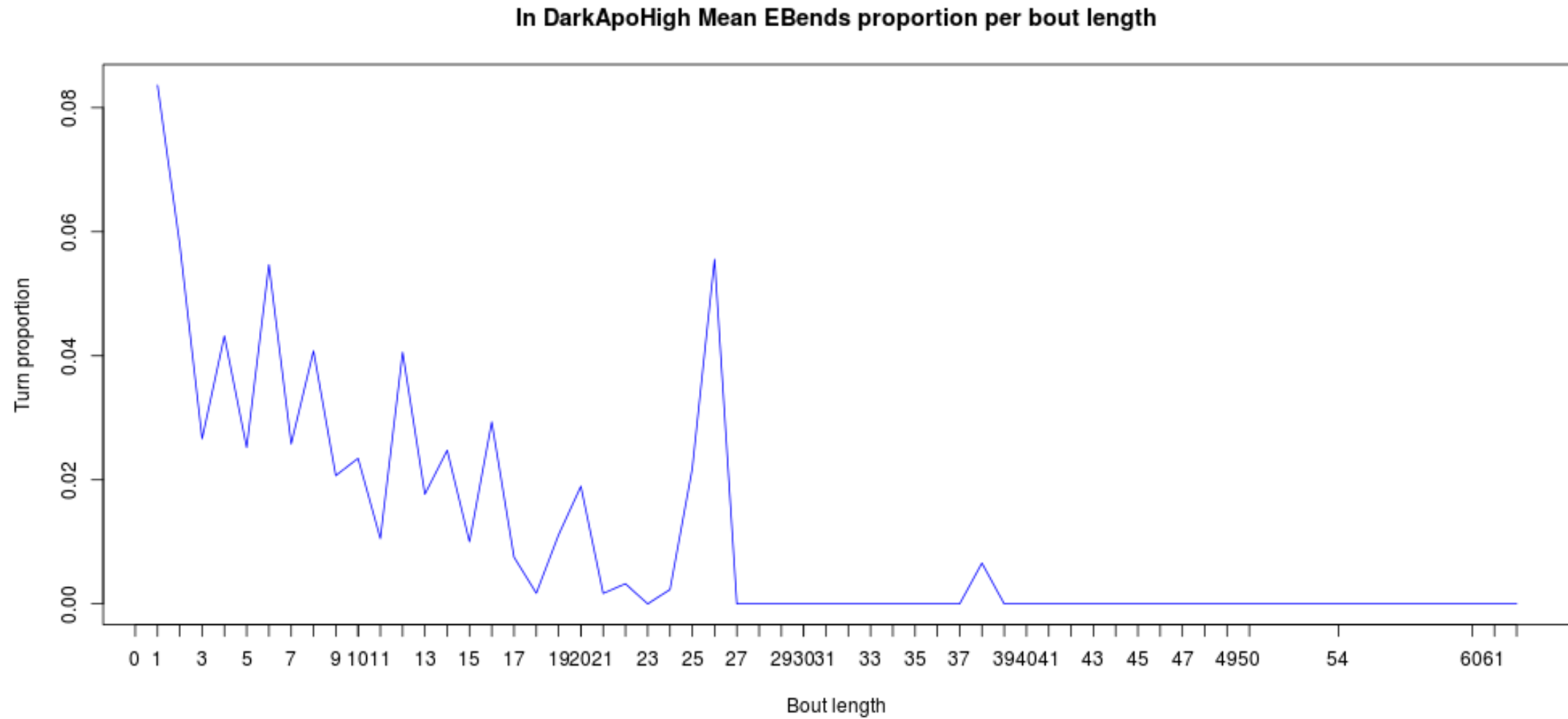
- (Dark)ApoLow:



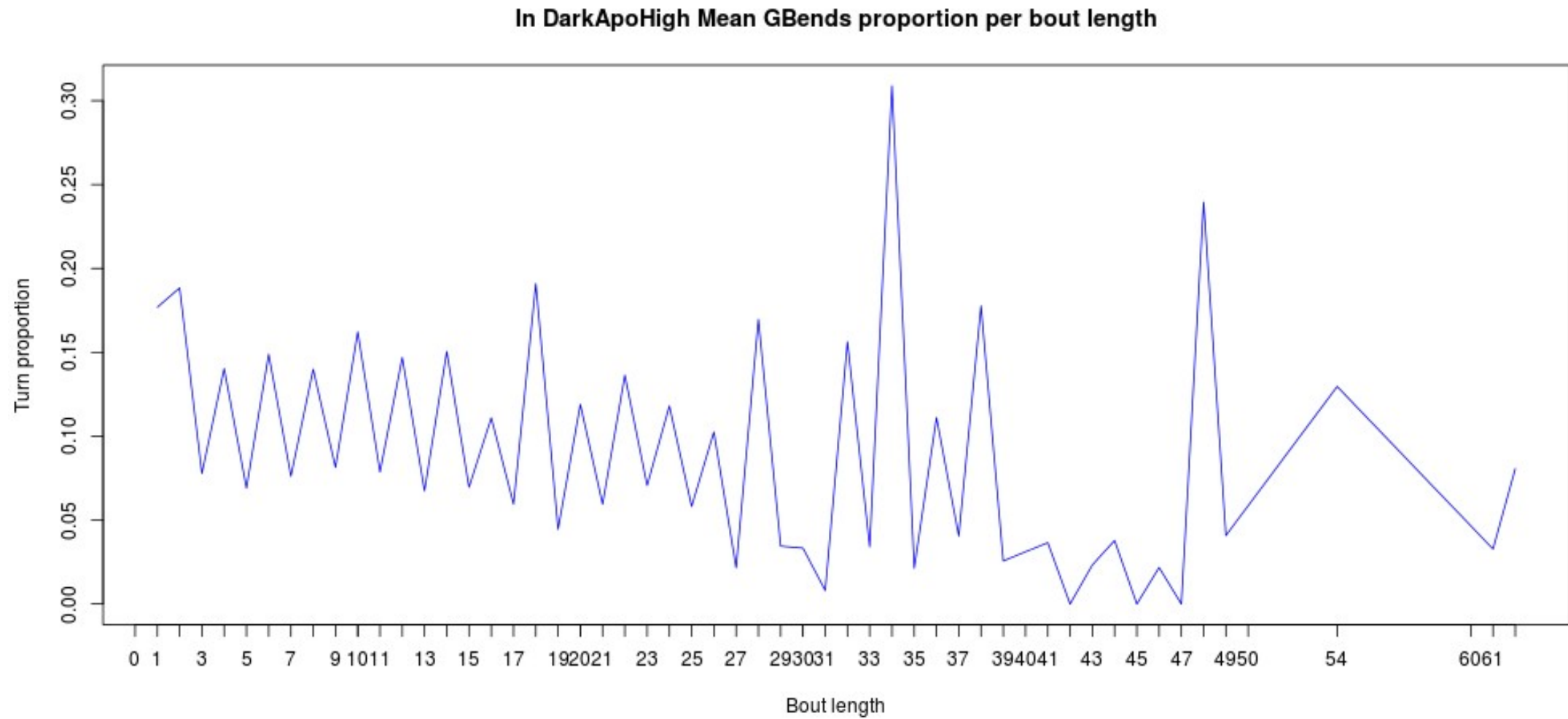
- (Dark)ApoHigh:



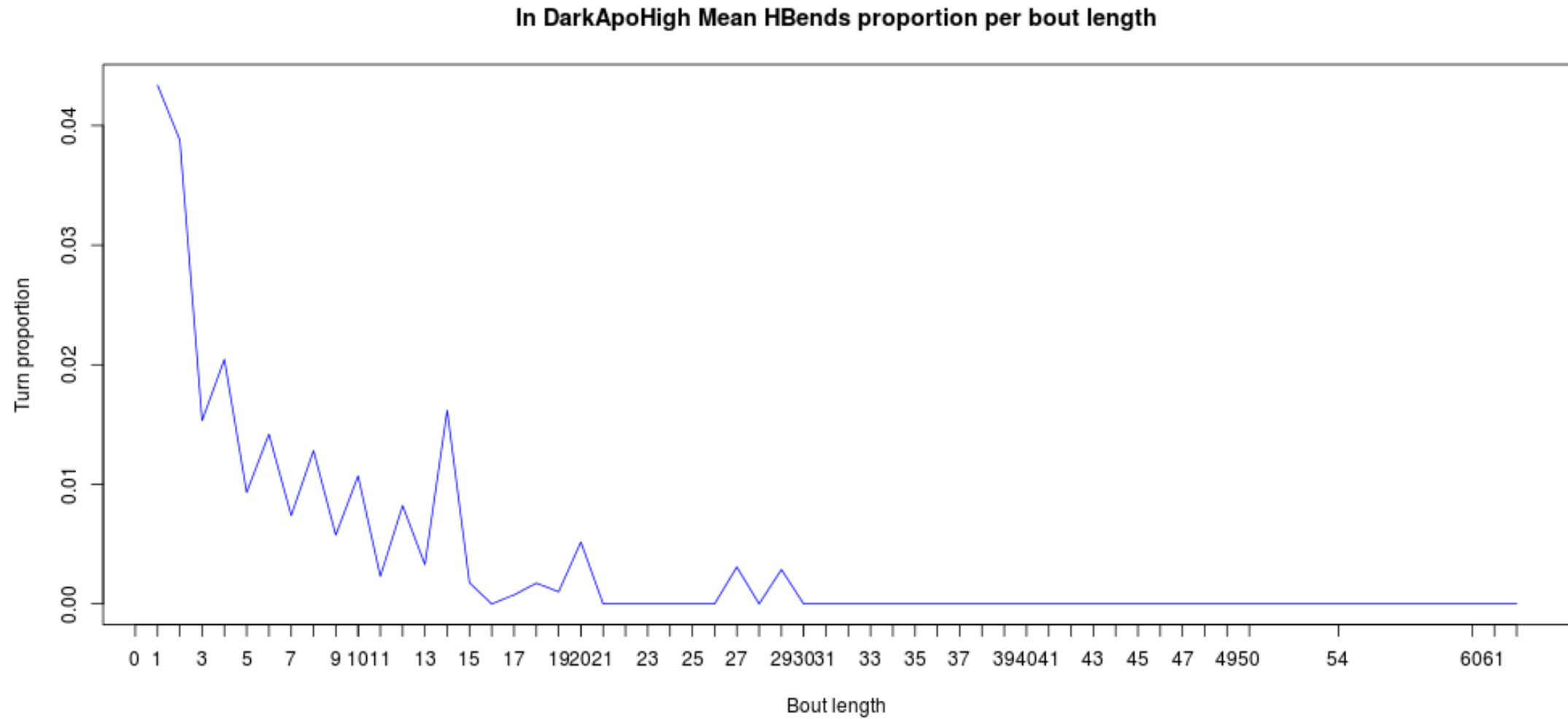
- (Dark)ApoHigh:



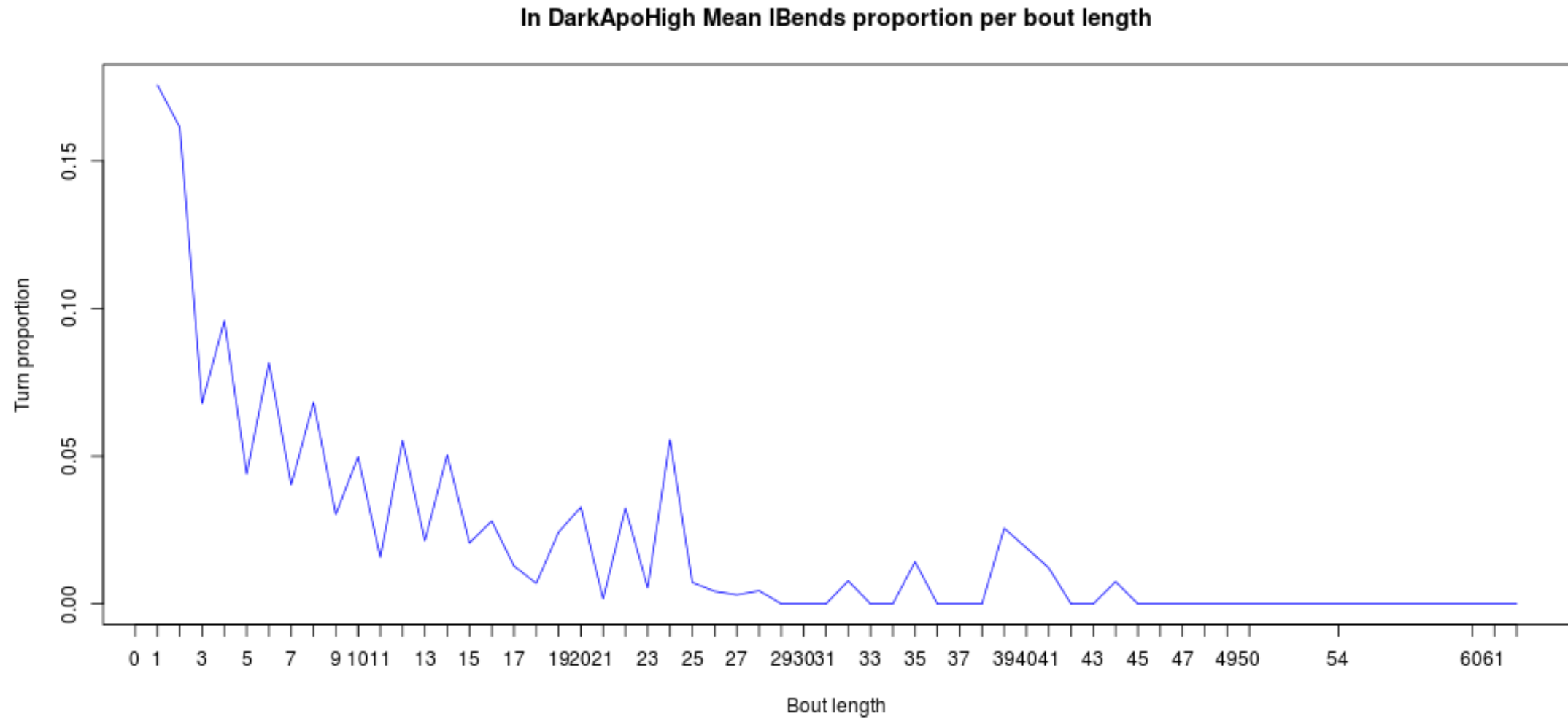
- (Dark)ApoHigh:



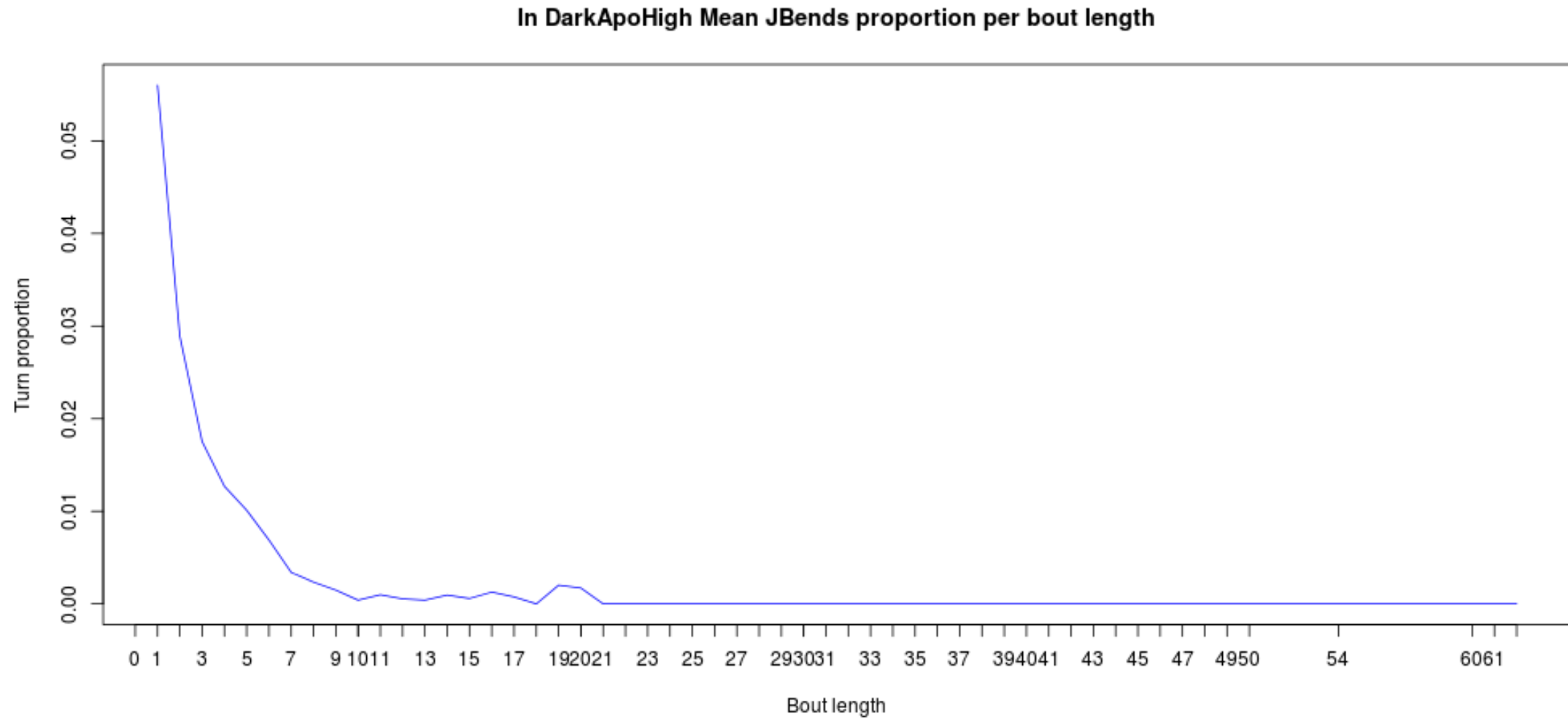
- (Dark)ApoHigh:



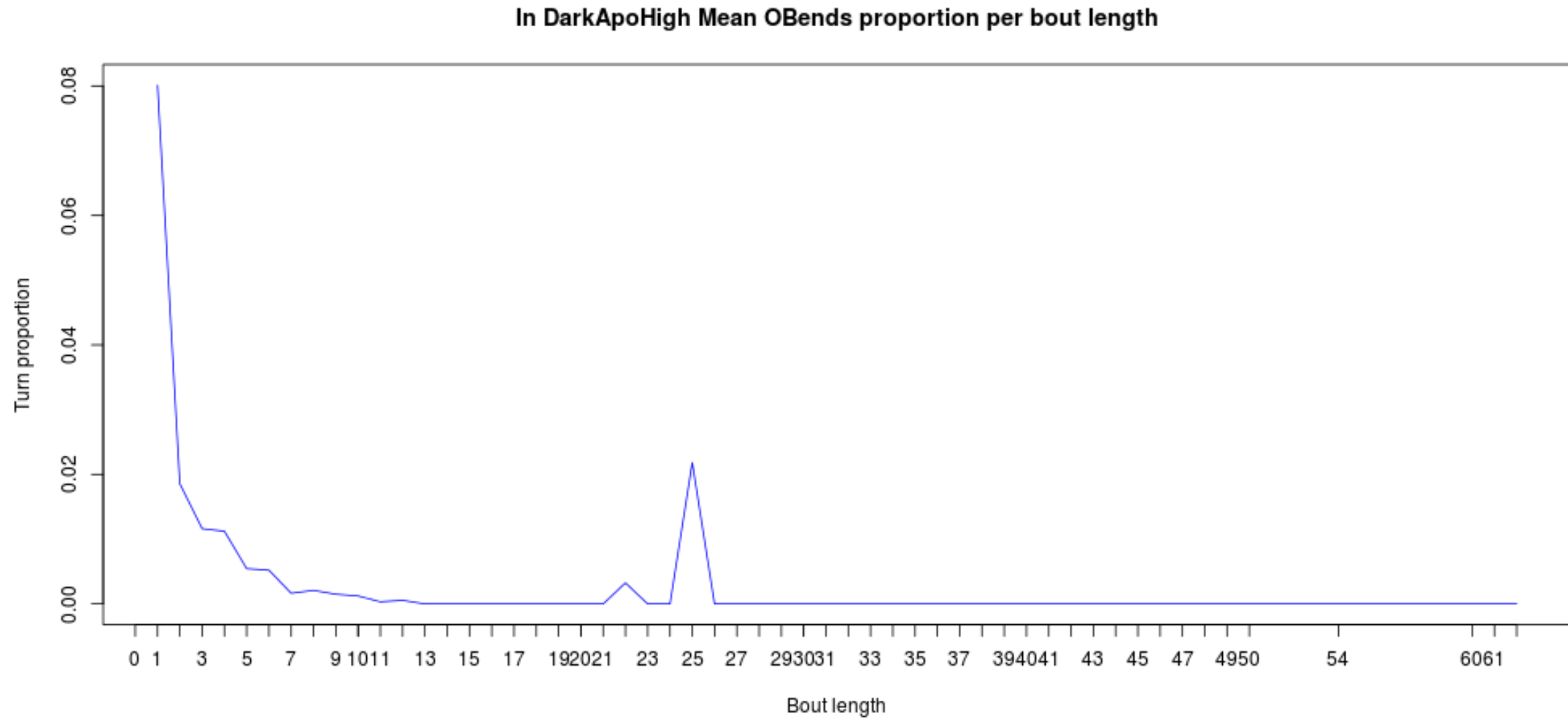
- (Dark)ApoHigh:



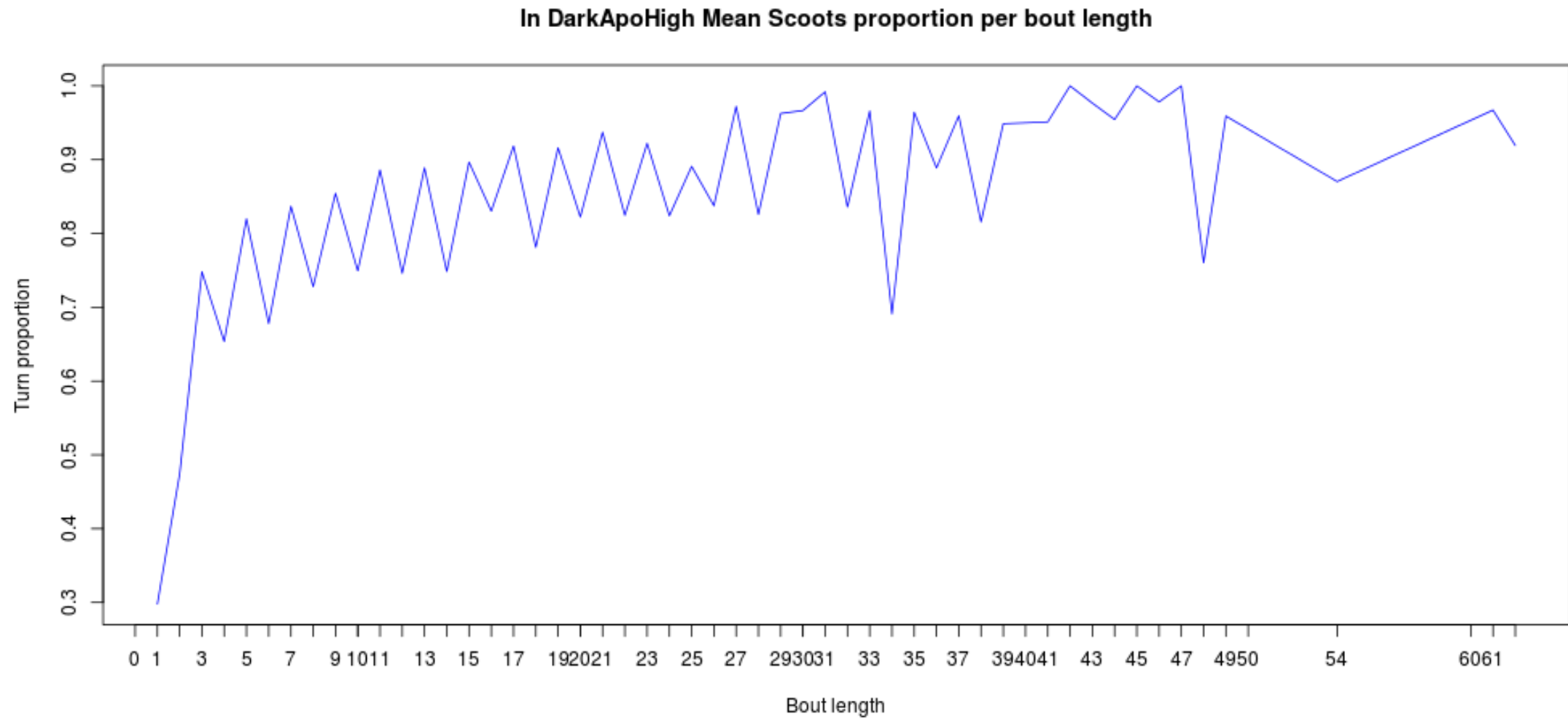
- (Dark)ApoHigh:



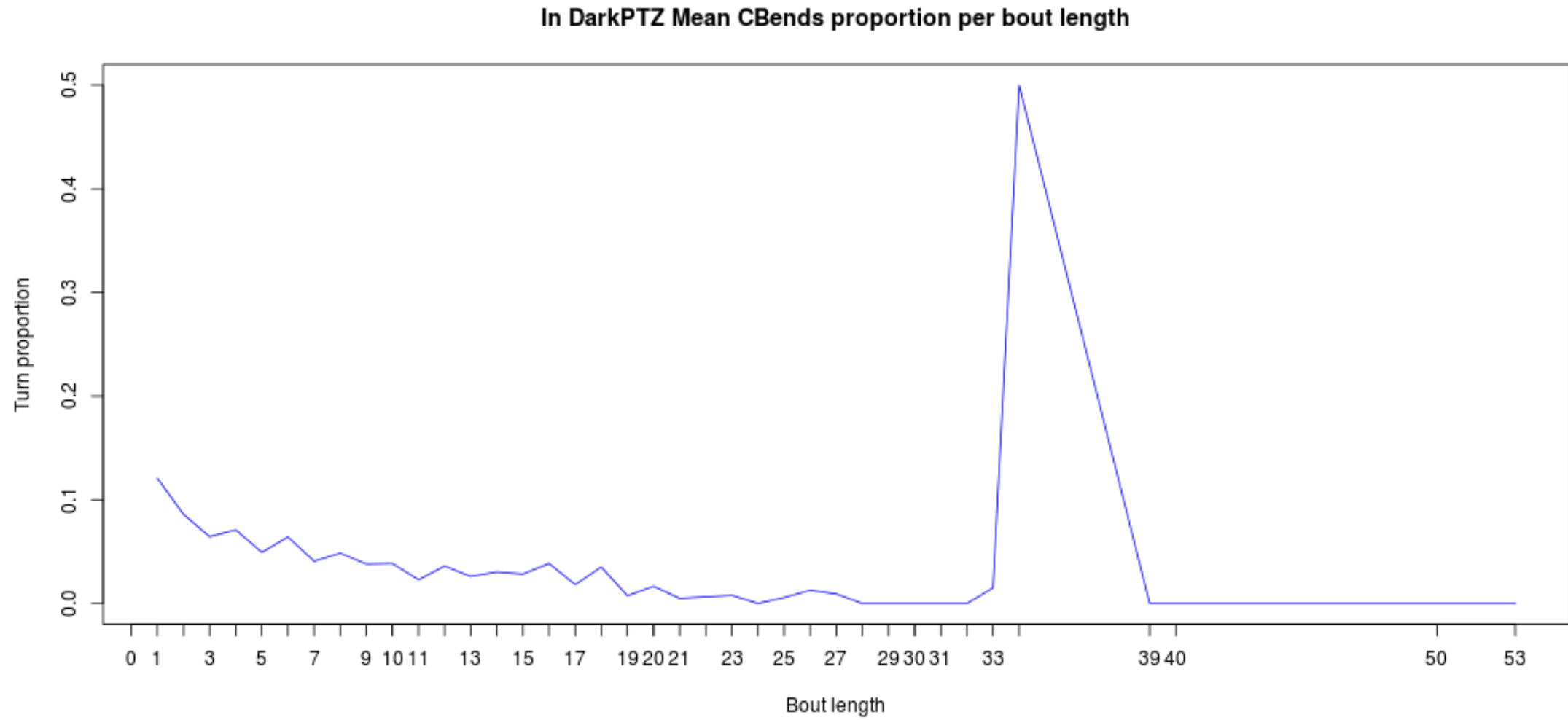
- (Dark)ApoHigh:



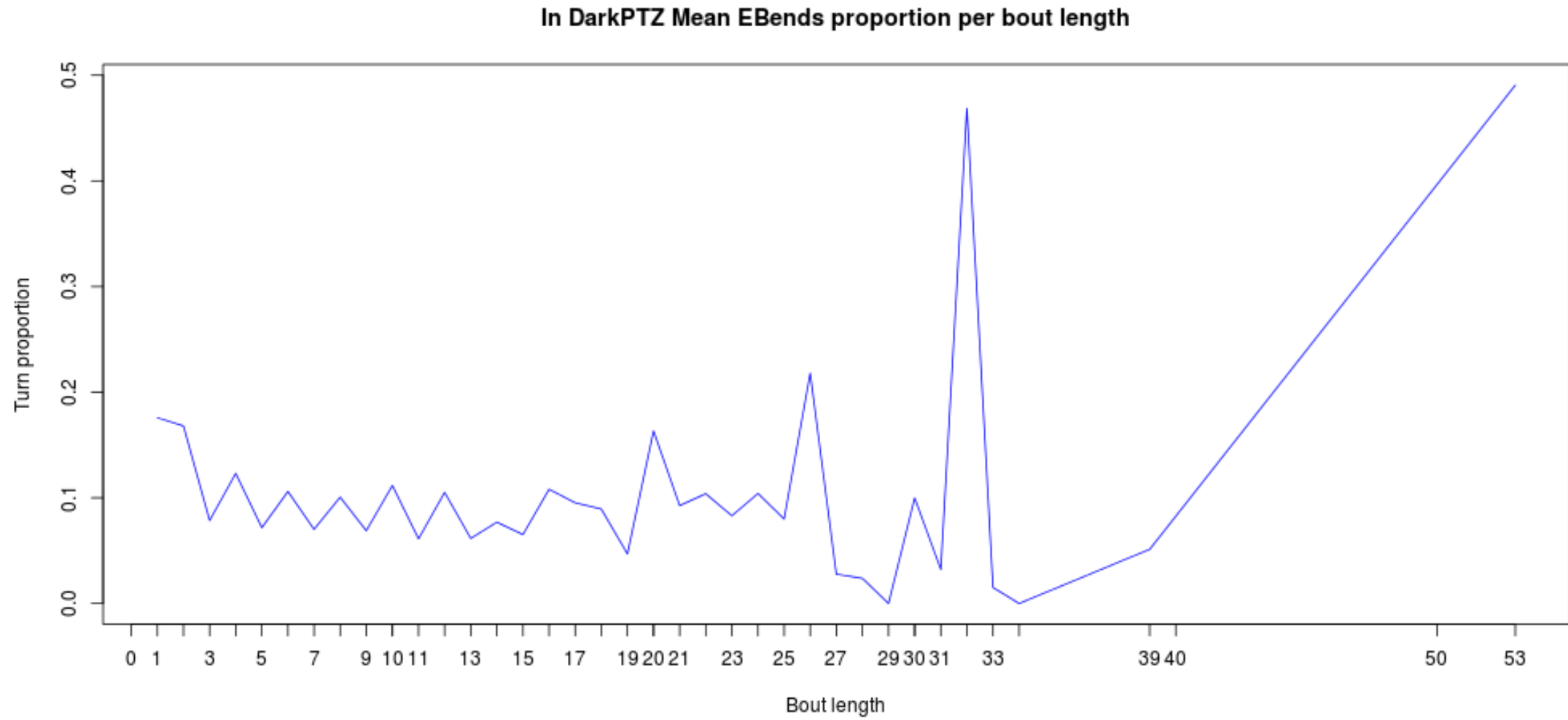
- (Dark)ApoHigh:



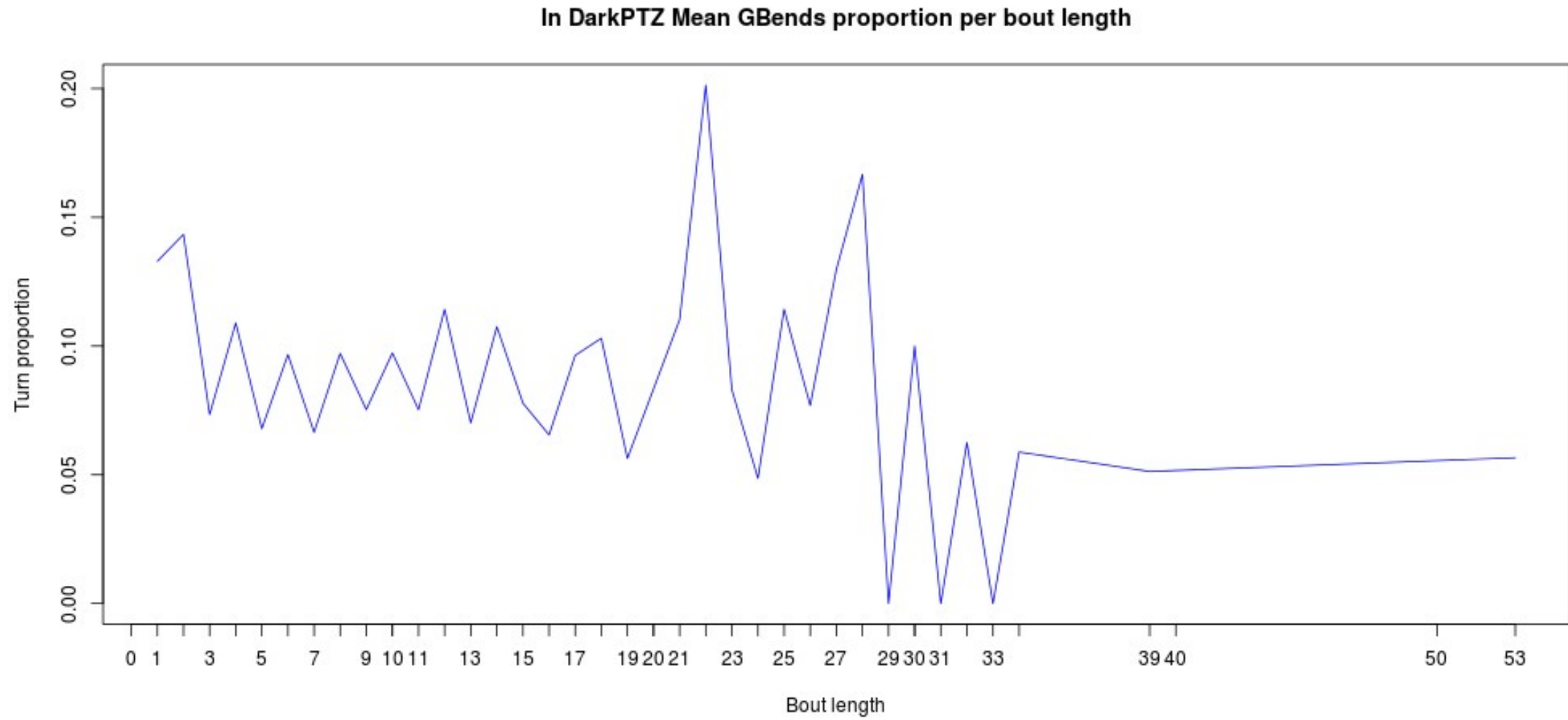
- (Dark)PTZ:



- (Dark)PTZ:

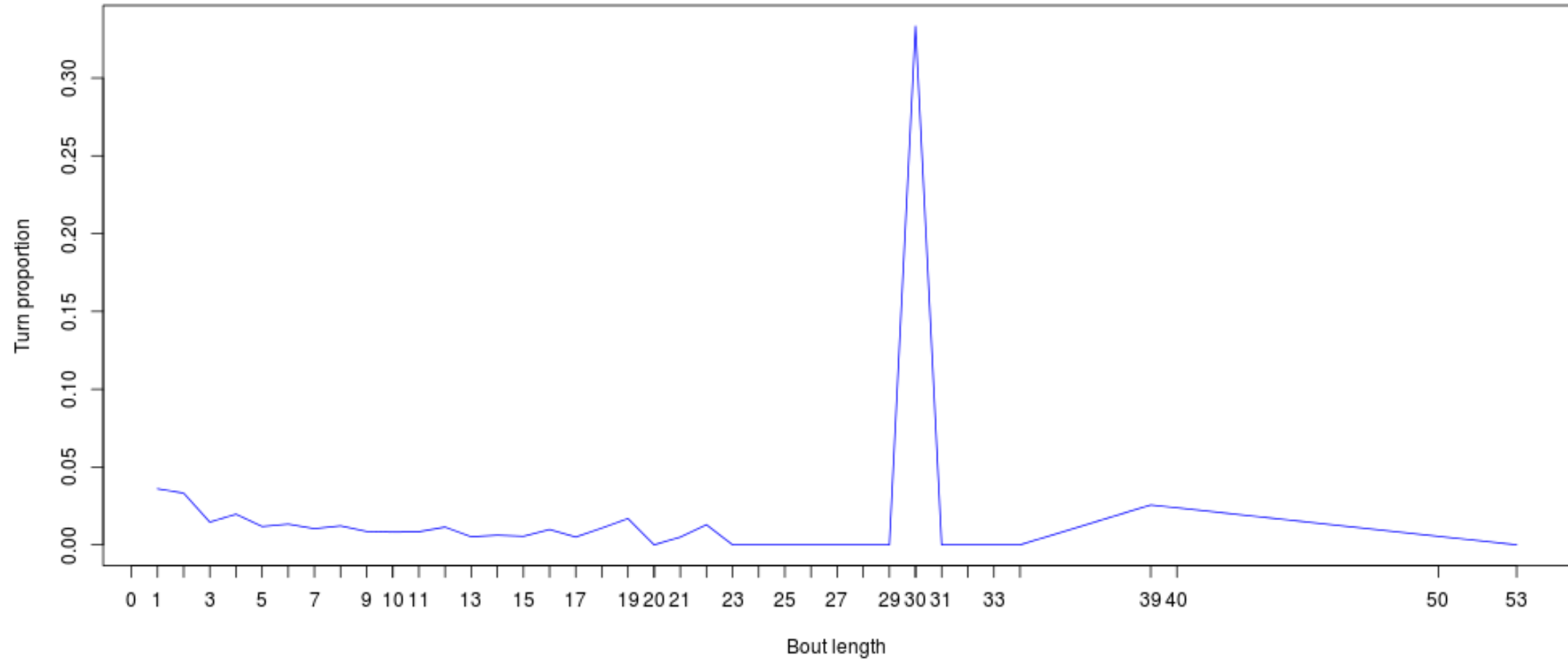


- (Dark)PTZ:

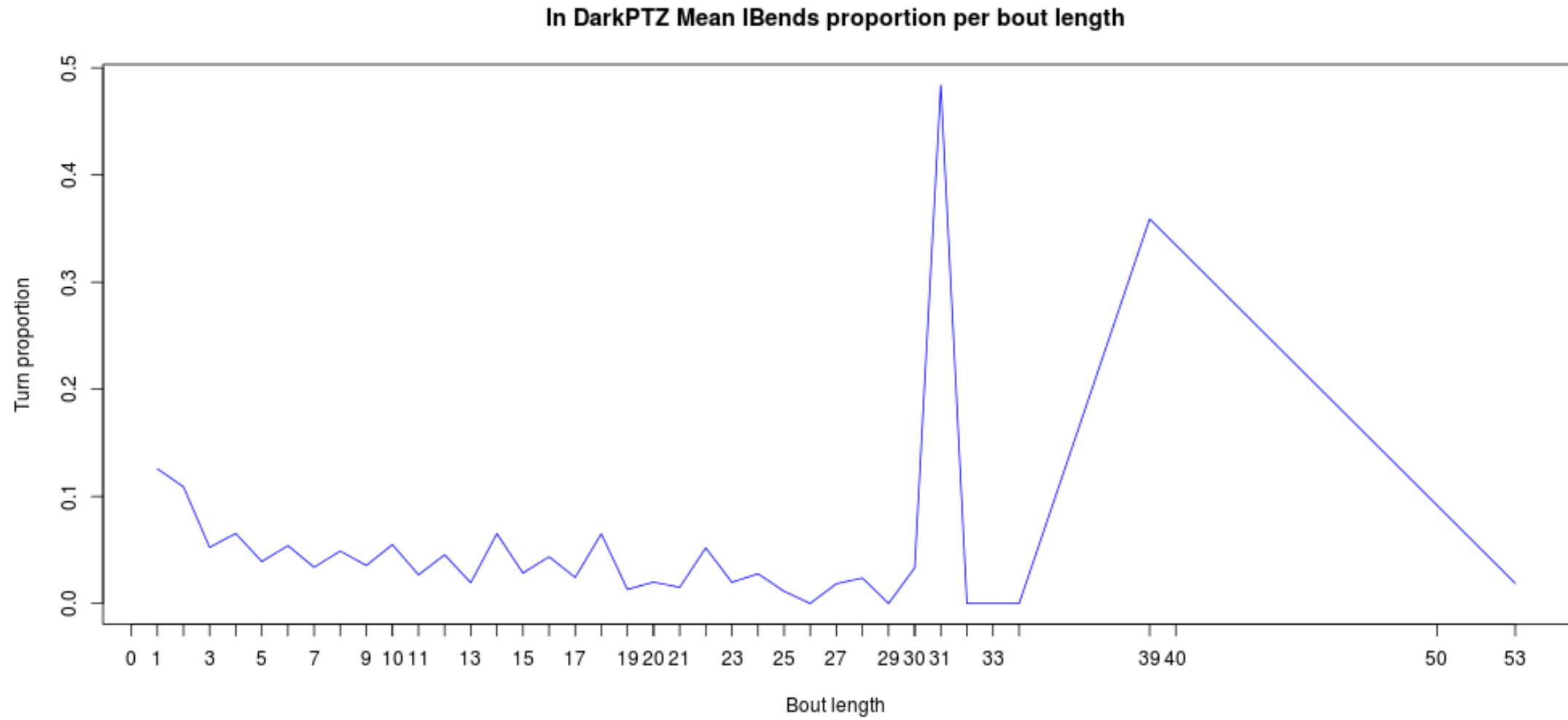


- (Dark)PTZ:

In DarkPTZ Mean HBends proportion per bout length

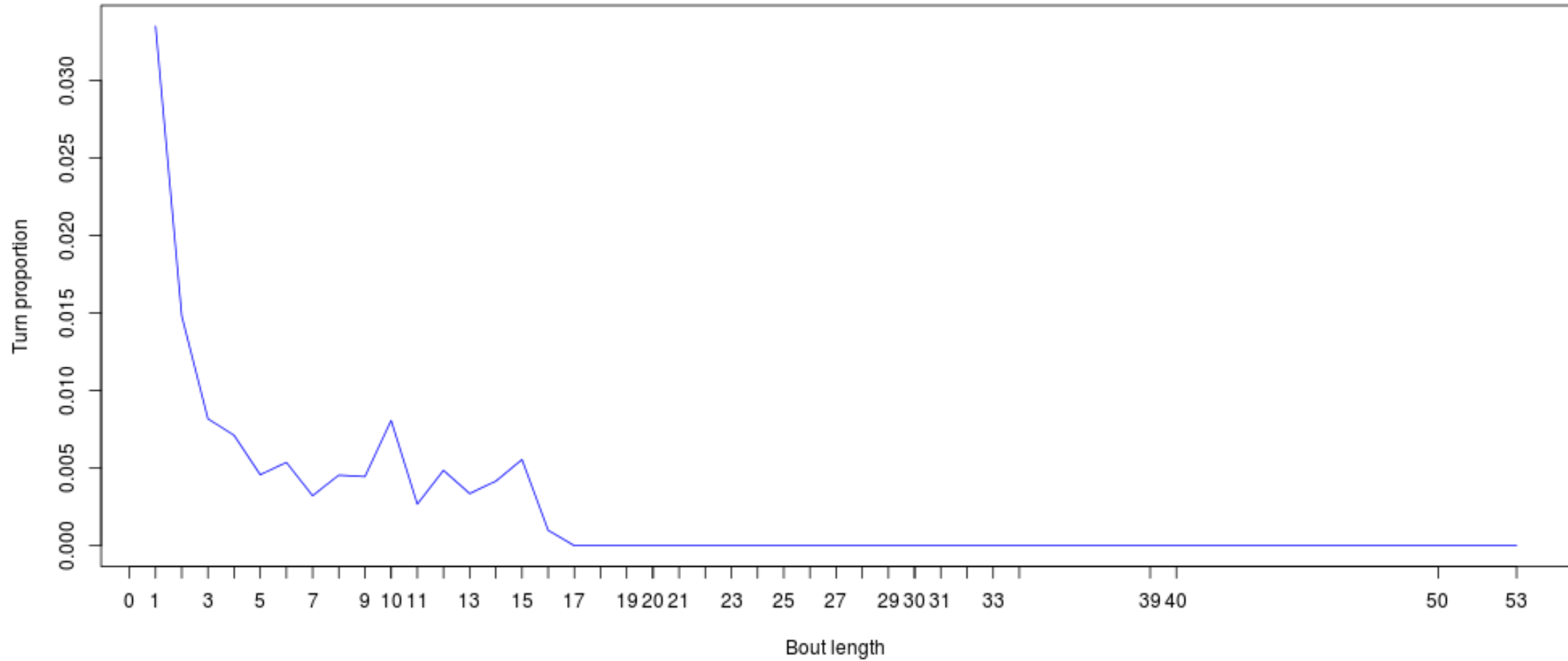


- (Dark)PTZ:

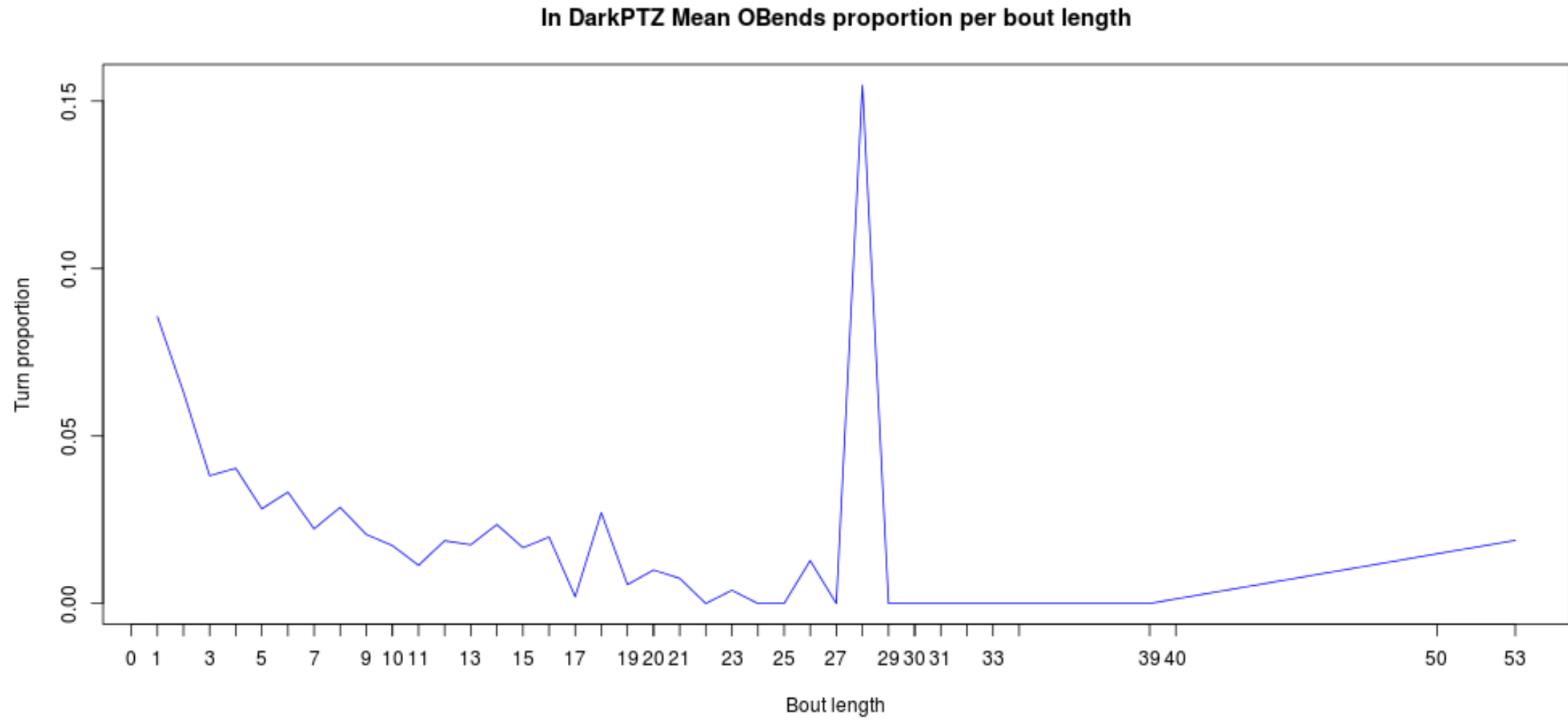


- (Dark)PTZ:

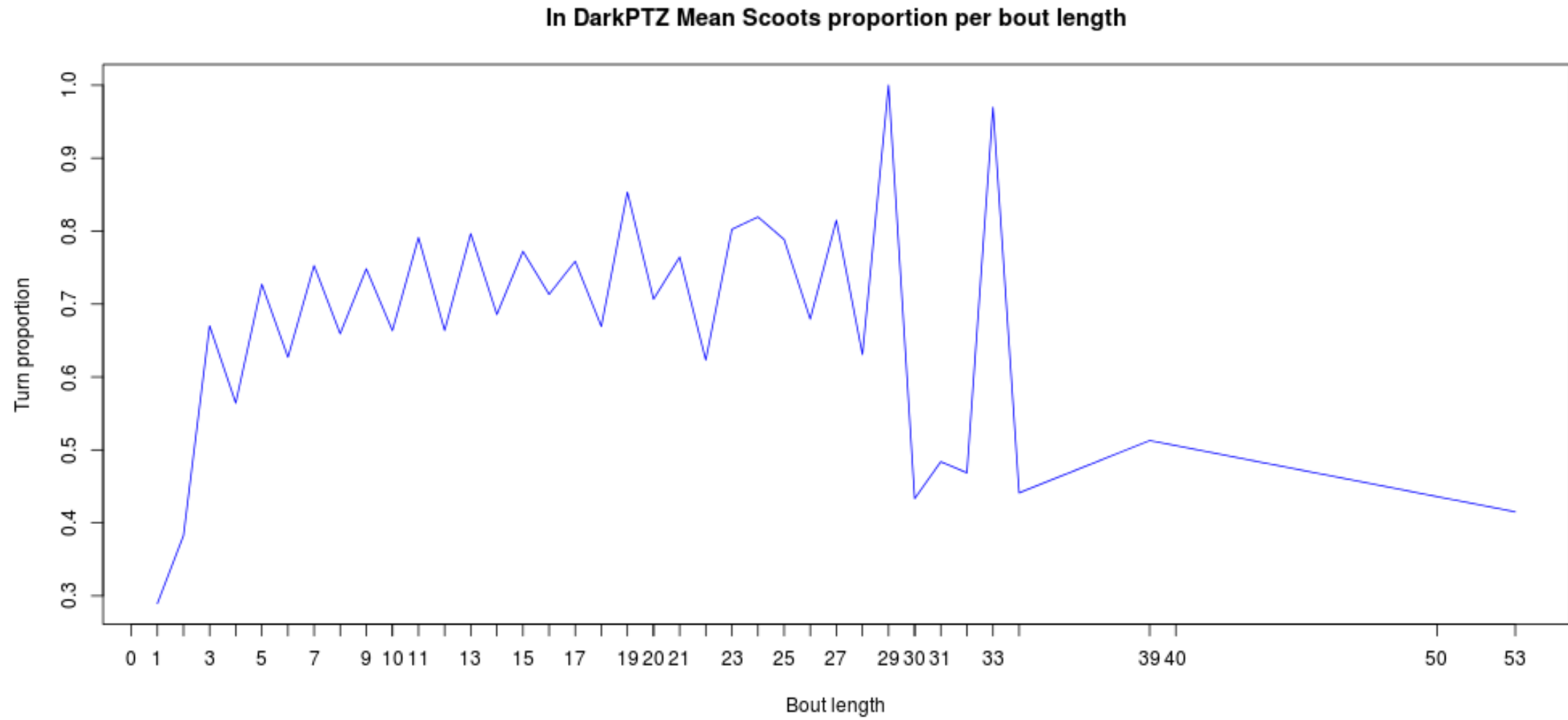
In DarkPTZ Mean JBends proportion per bout length



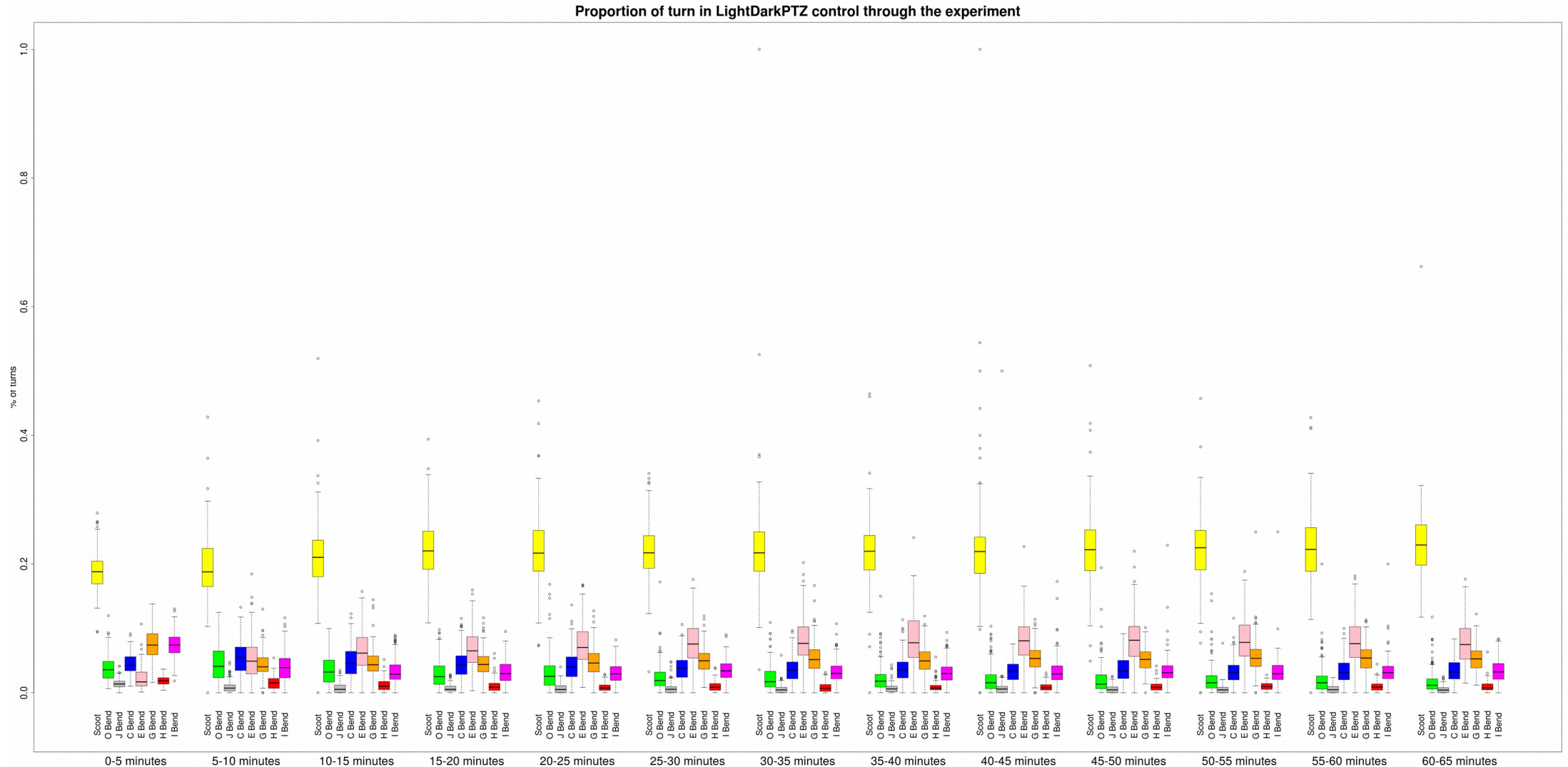
- (Dark)PTZ:



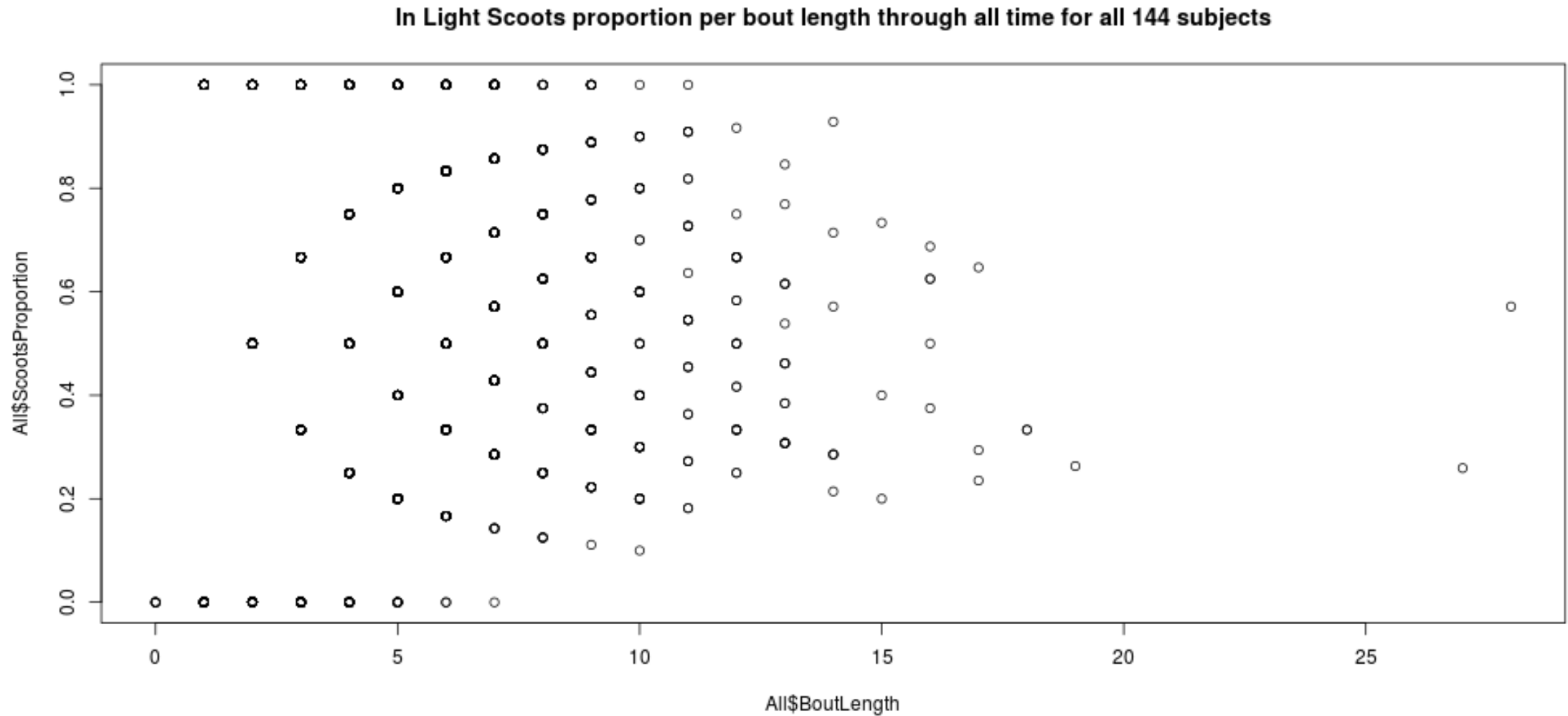
- (Dark)PTZ:



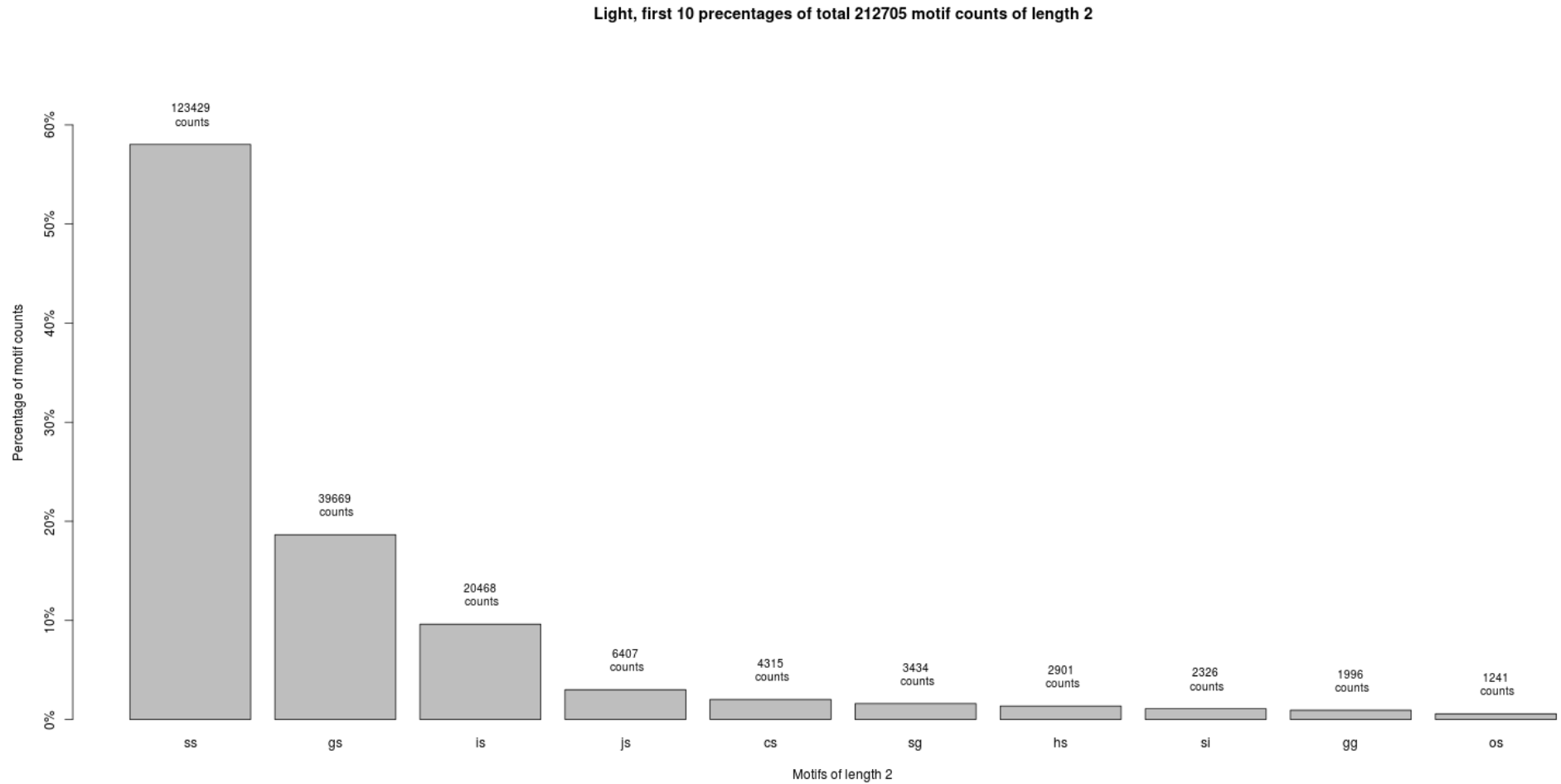
- Hard to say how does the experiment condition itself (adjusted for the bout length and frequency changes) influences the turn occurrences, for example:



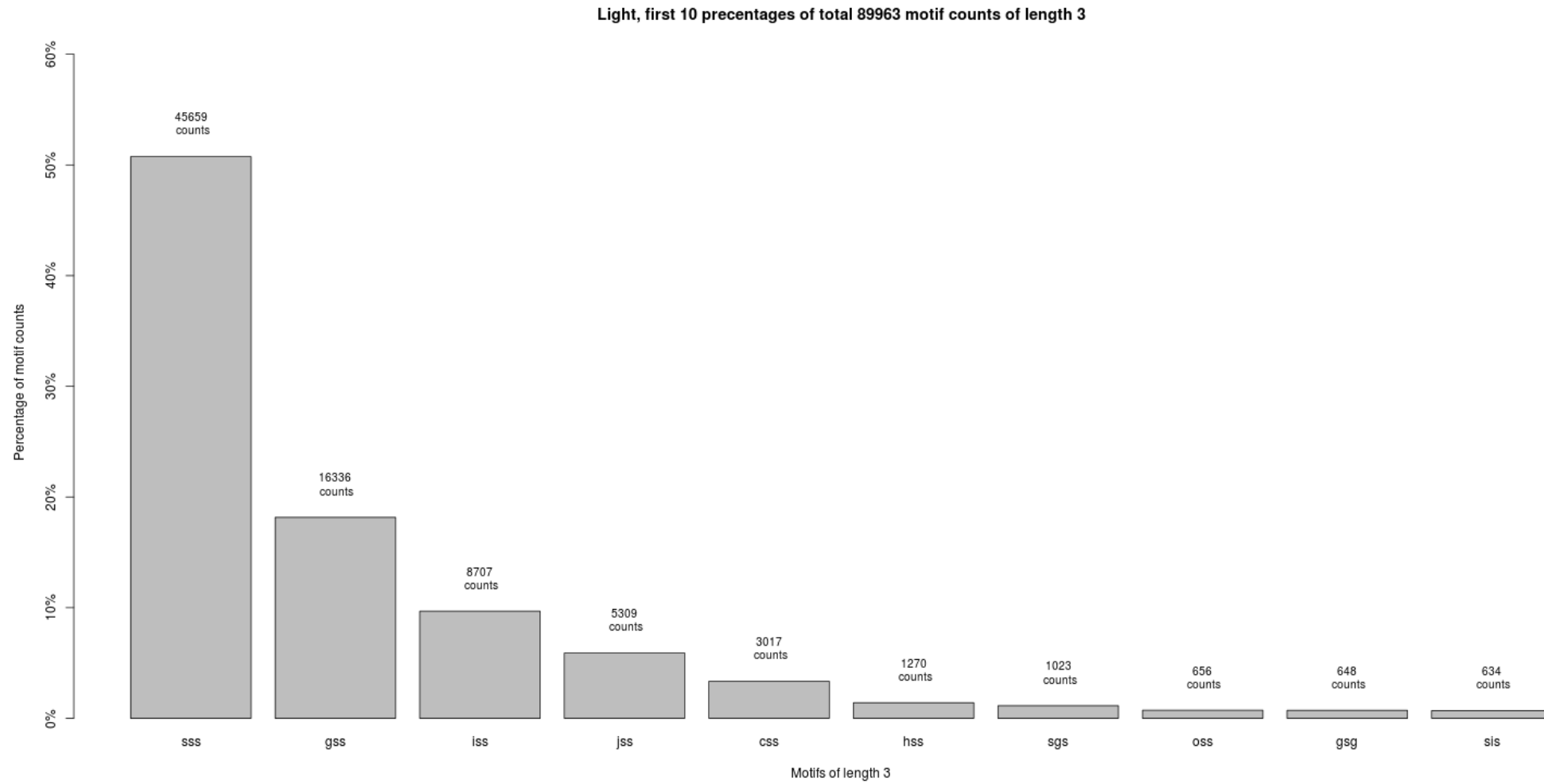
- With averaging over the subjects, action sequences or bouts, a lot of information is lost, but otherwise the data is messy, example:



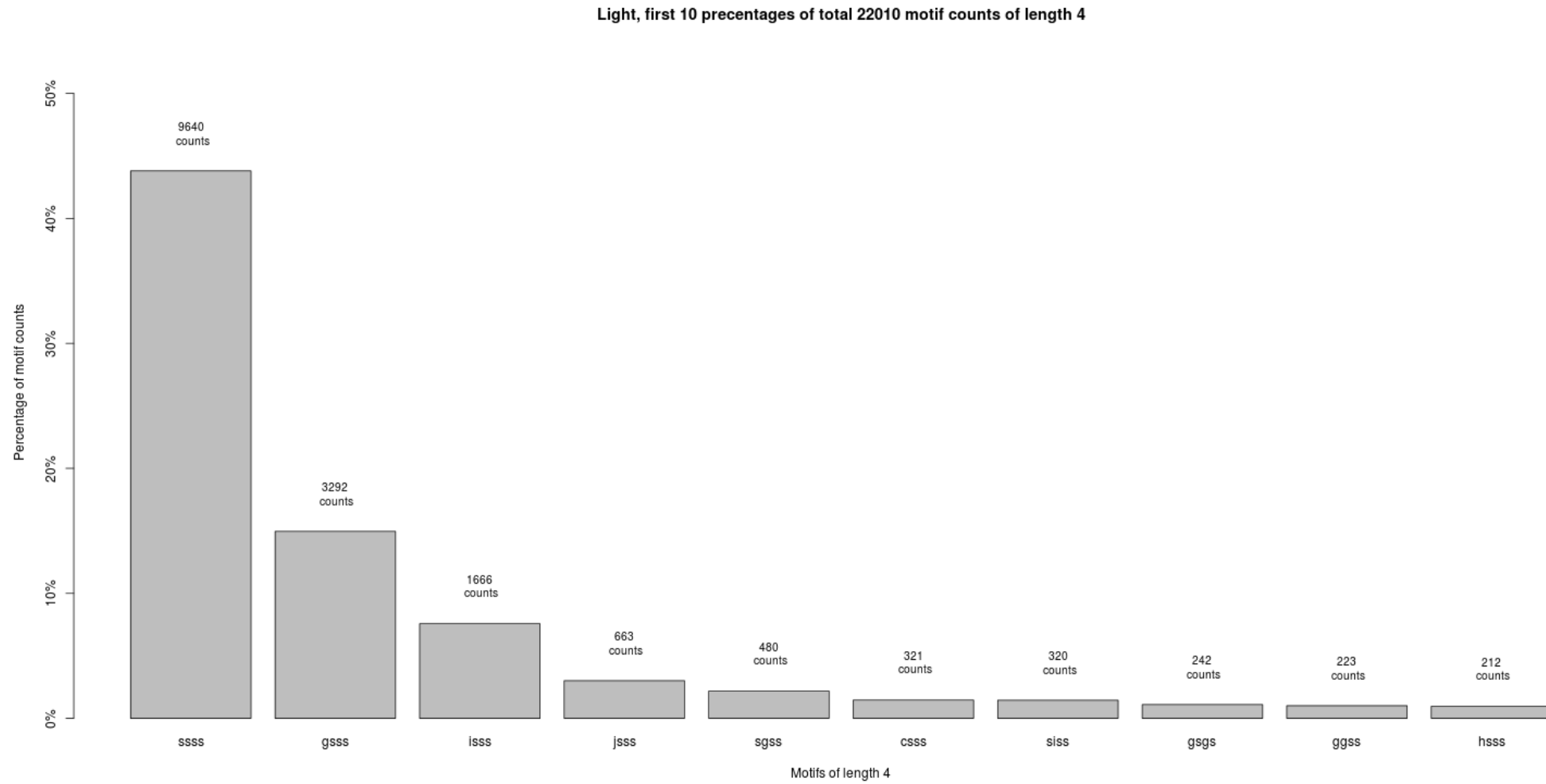
- Simple motif search for motif lengths 2:10, confirmed the large proportion of Scoots:
- Light:



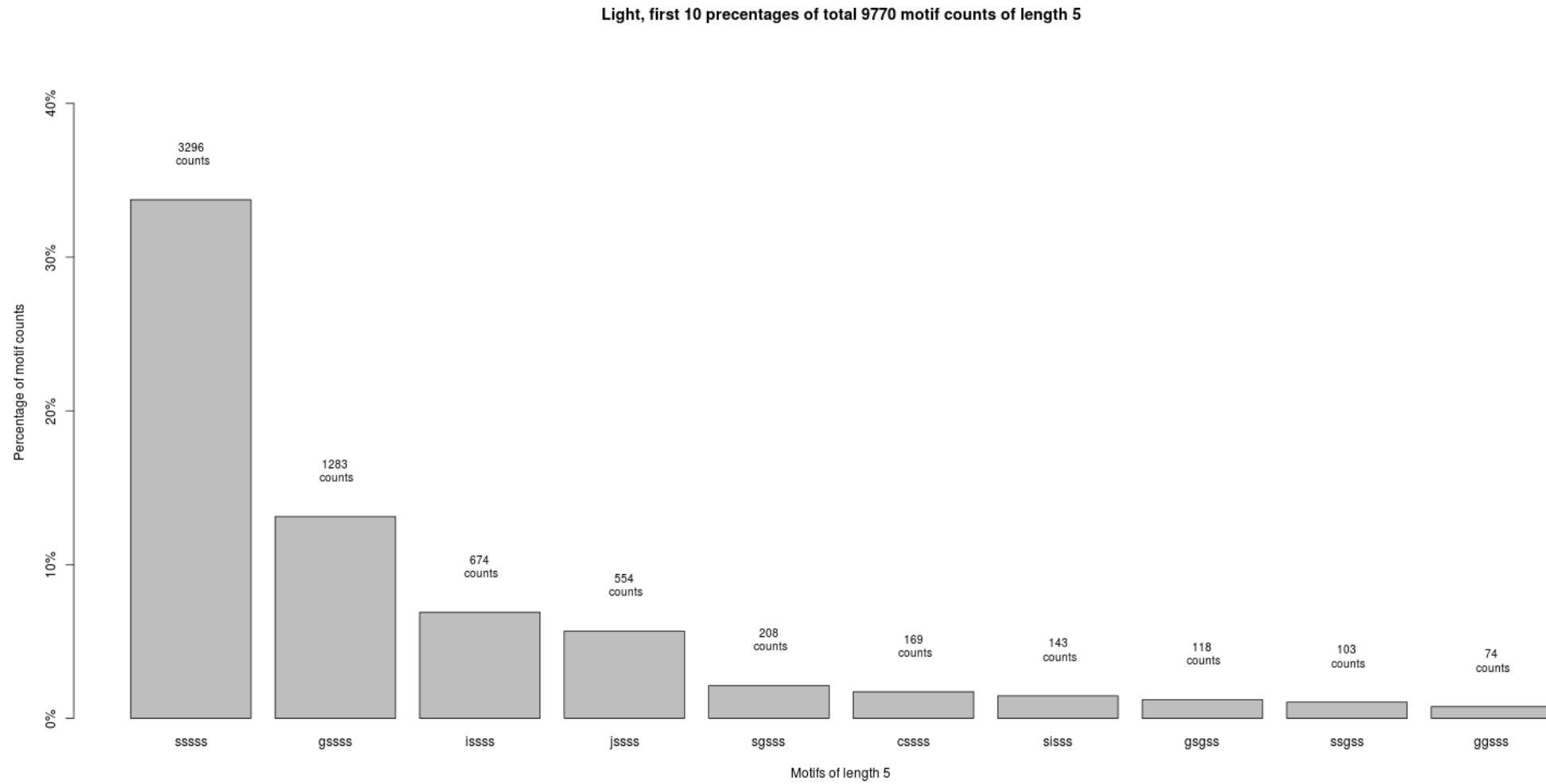
- Light:



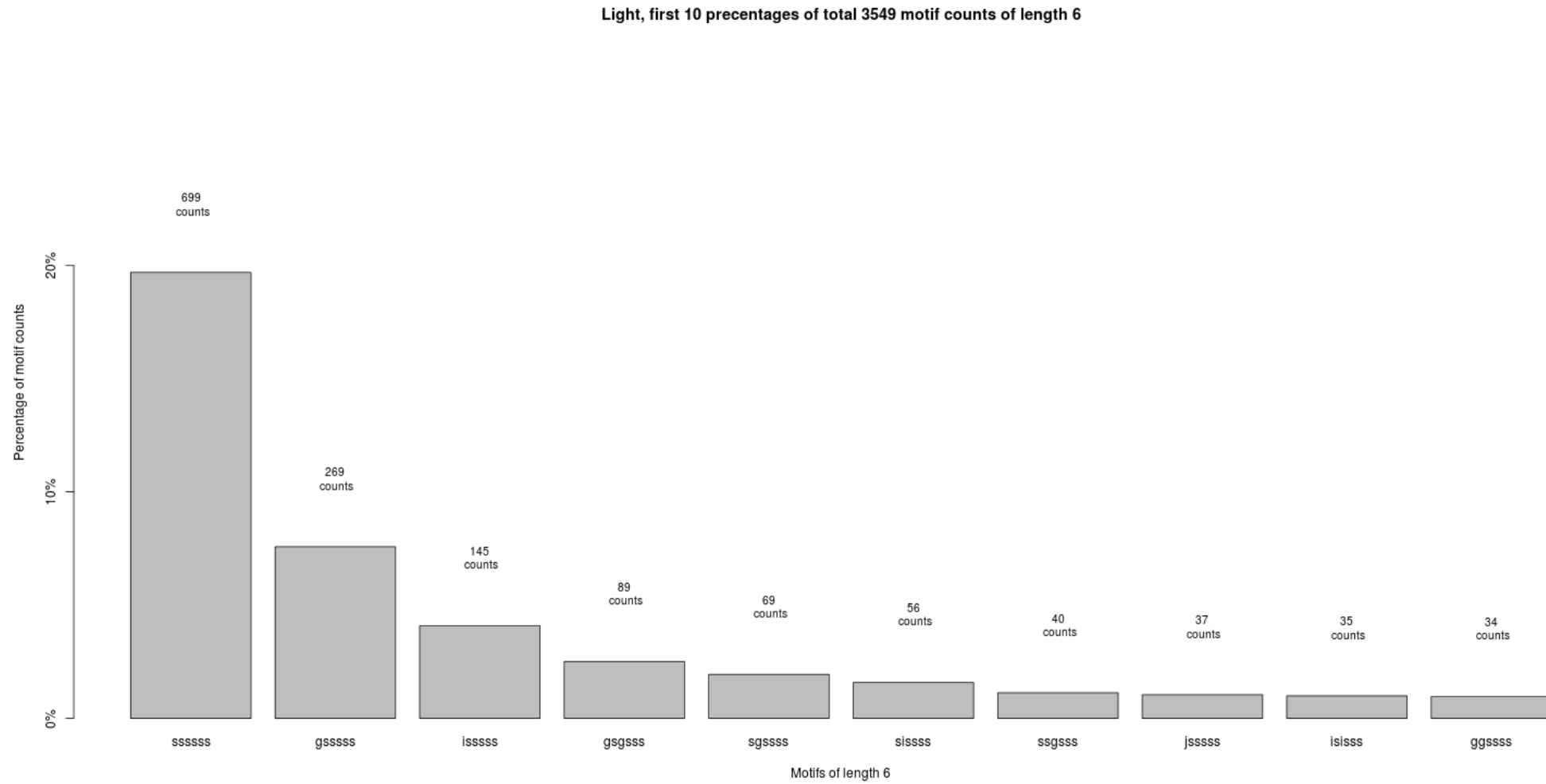
- Light:



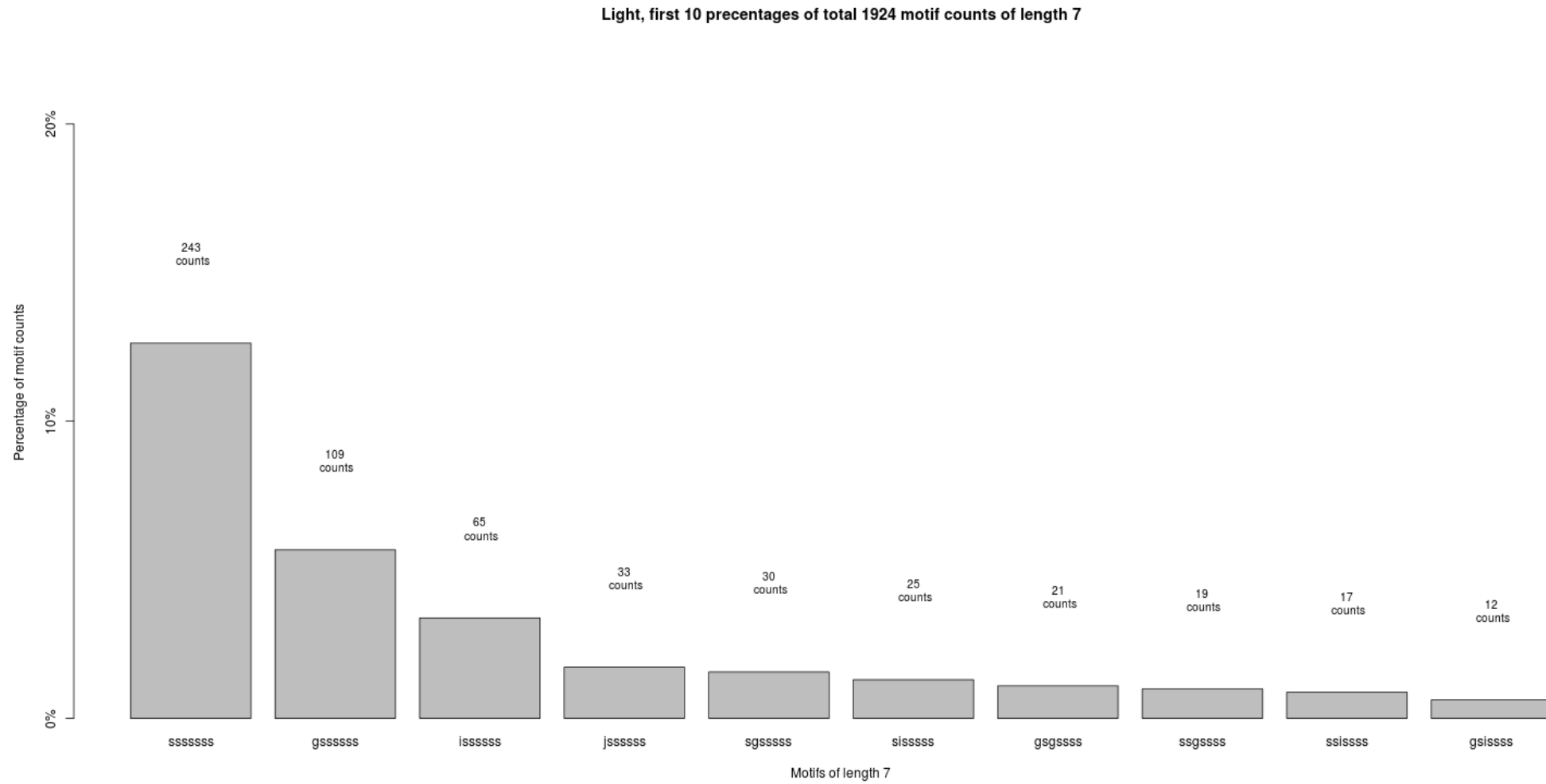
- Light:



- Light:

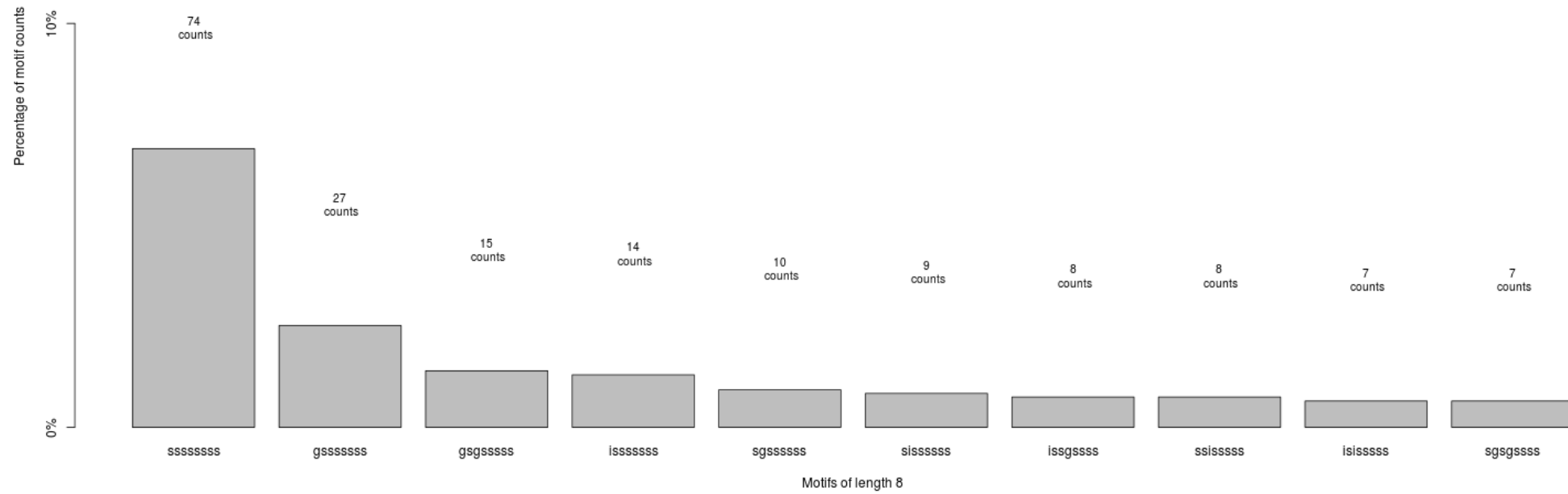


- Light:

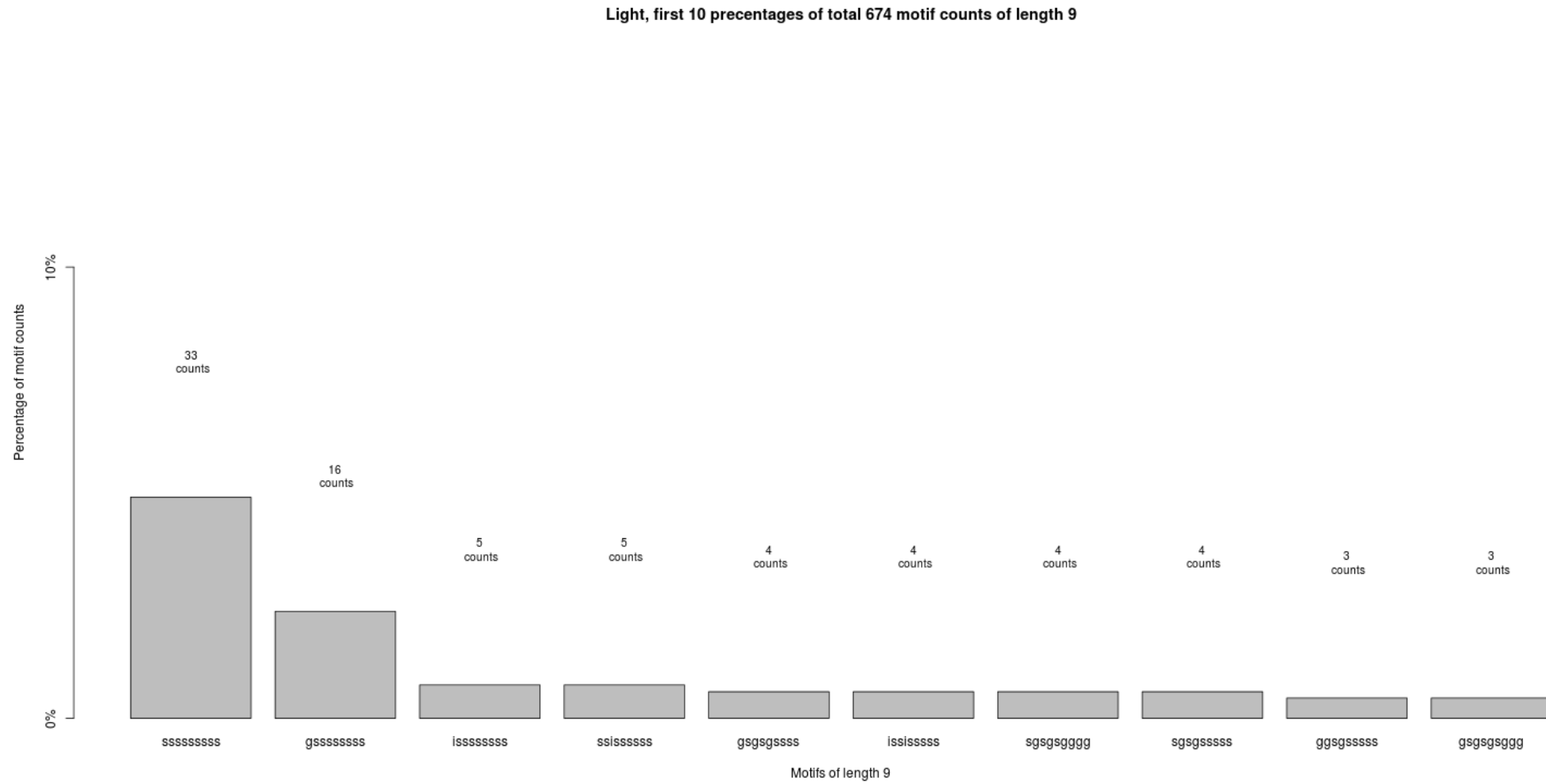


- Light:

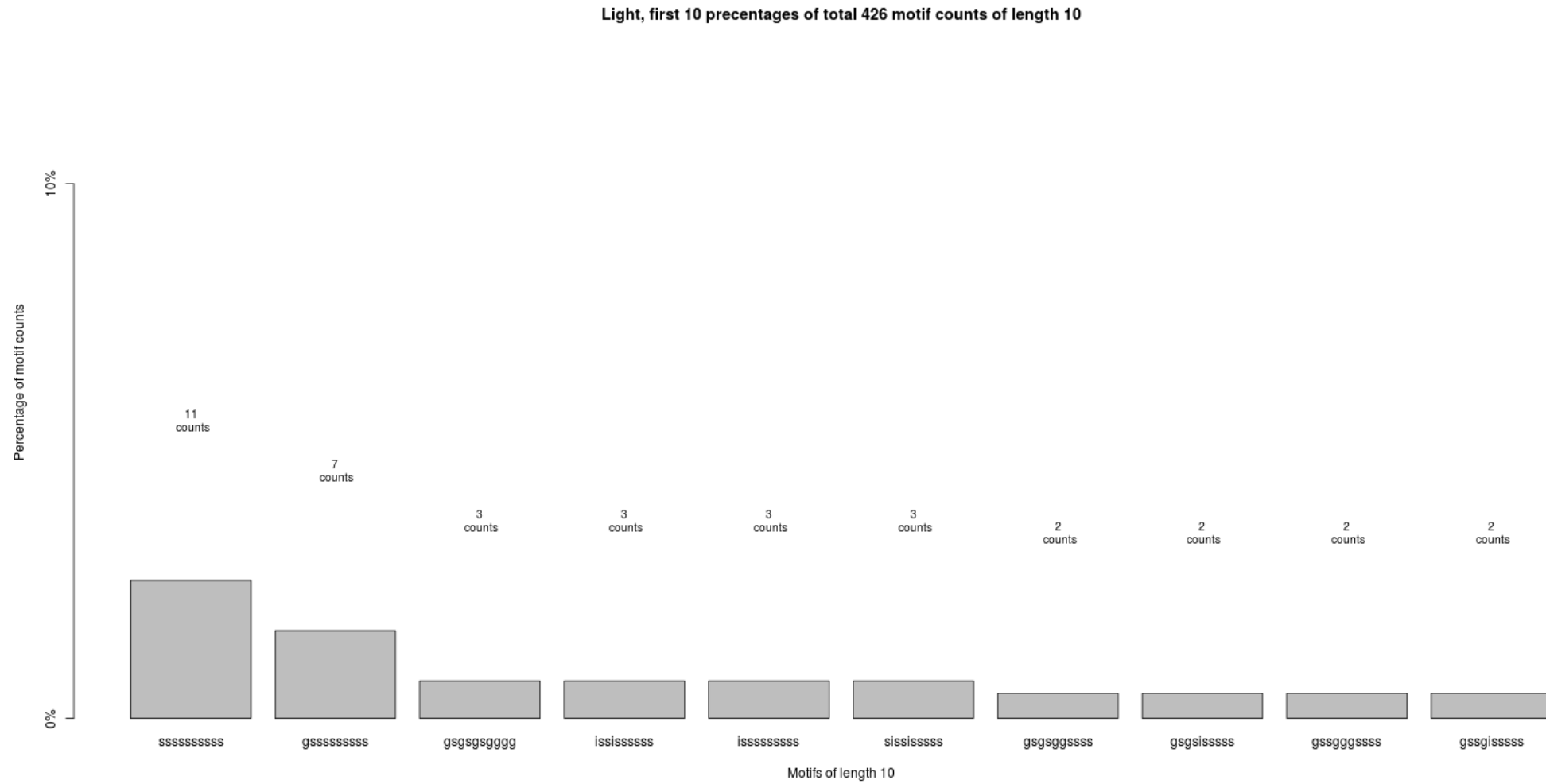
Light, first 10 percentages of total 1073 motif counts of length 8



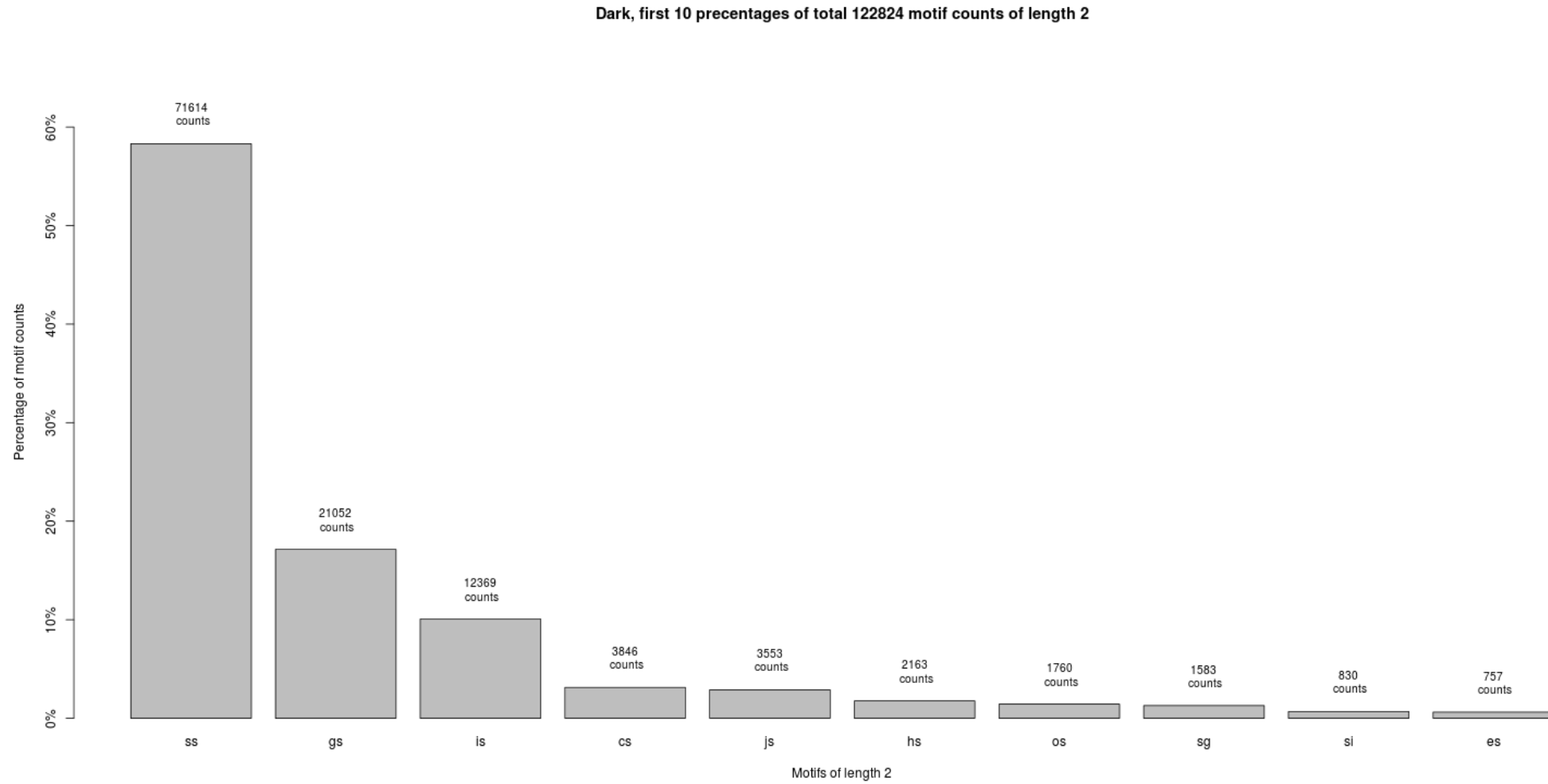
- Light:



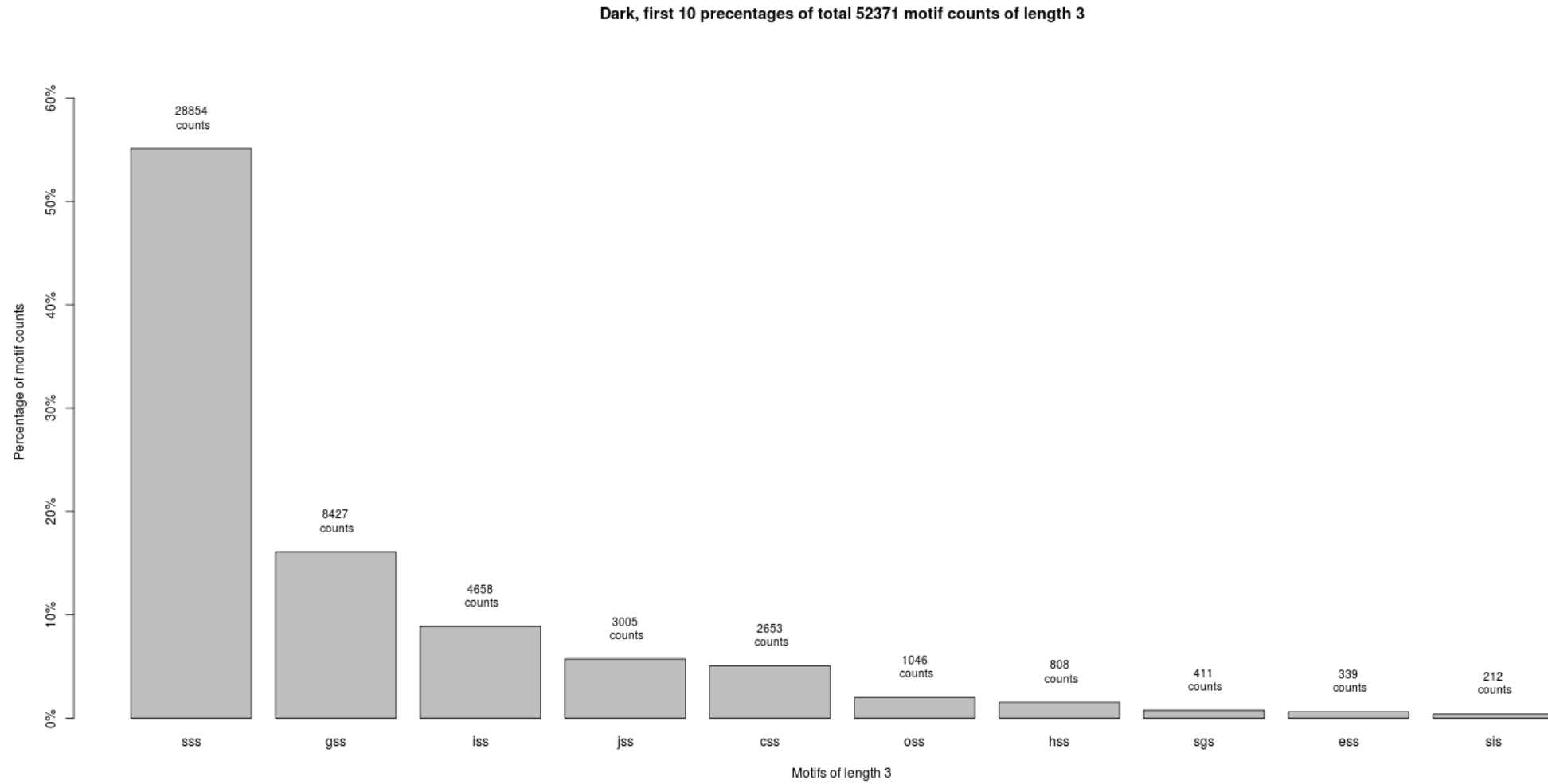
- Light:



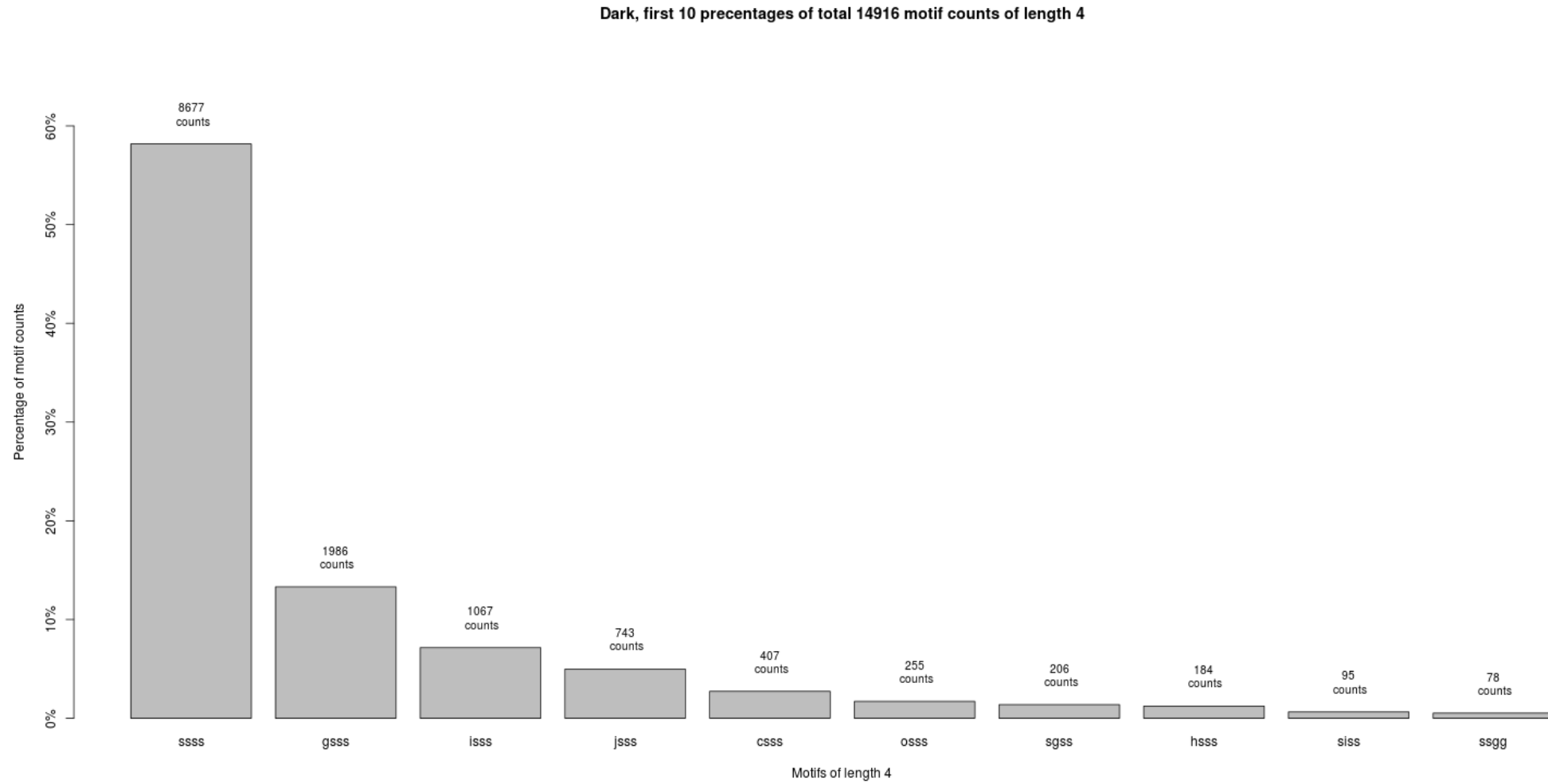
- Dark:



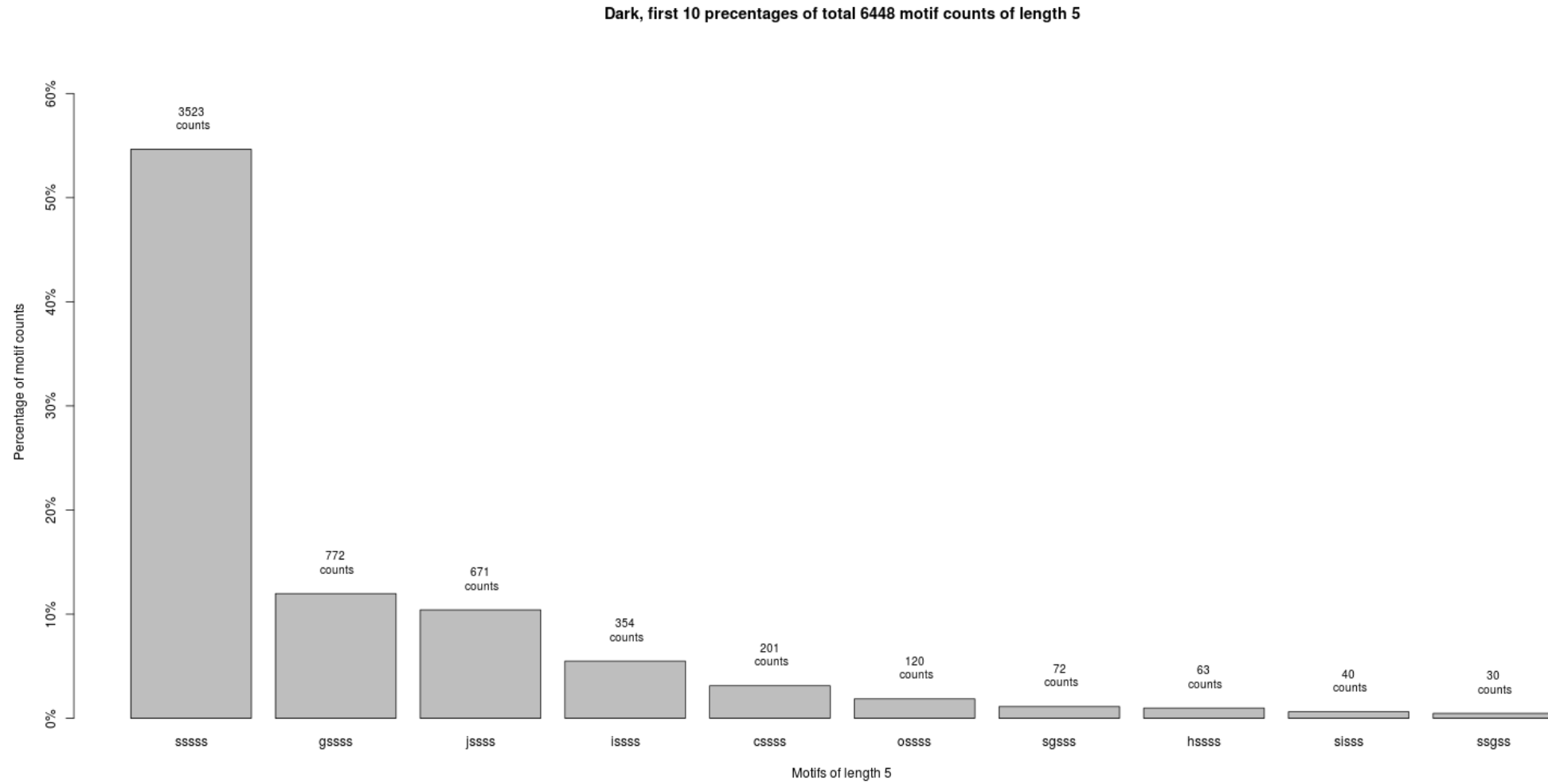
- Dark:



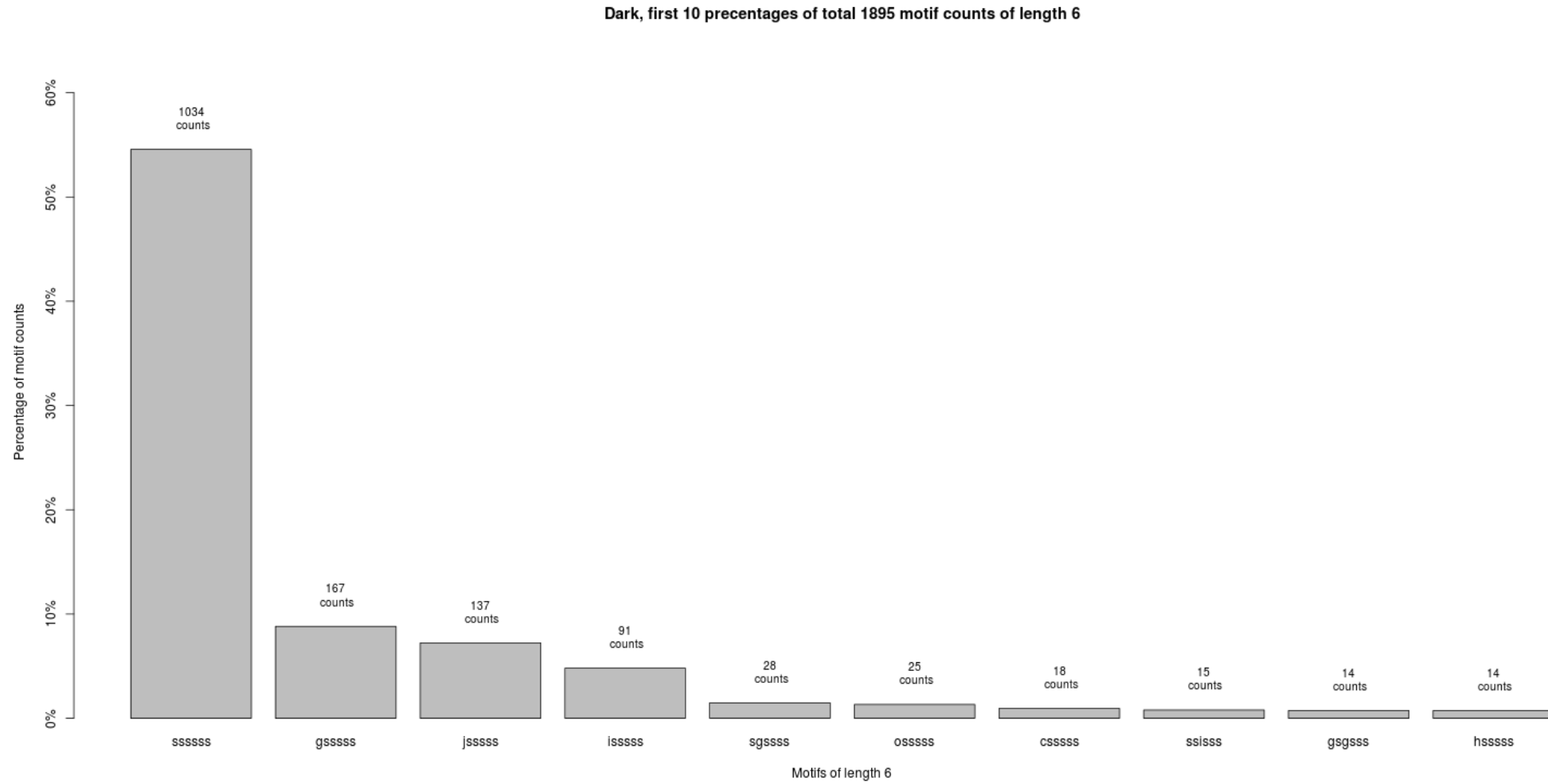
- Dark:



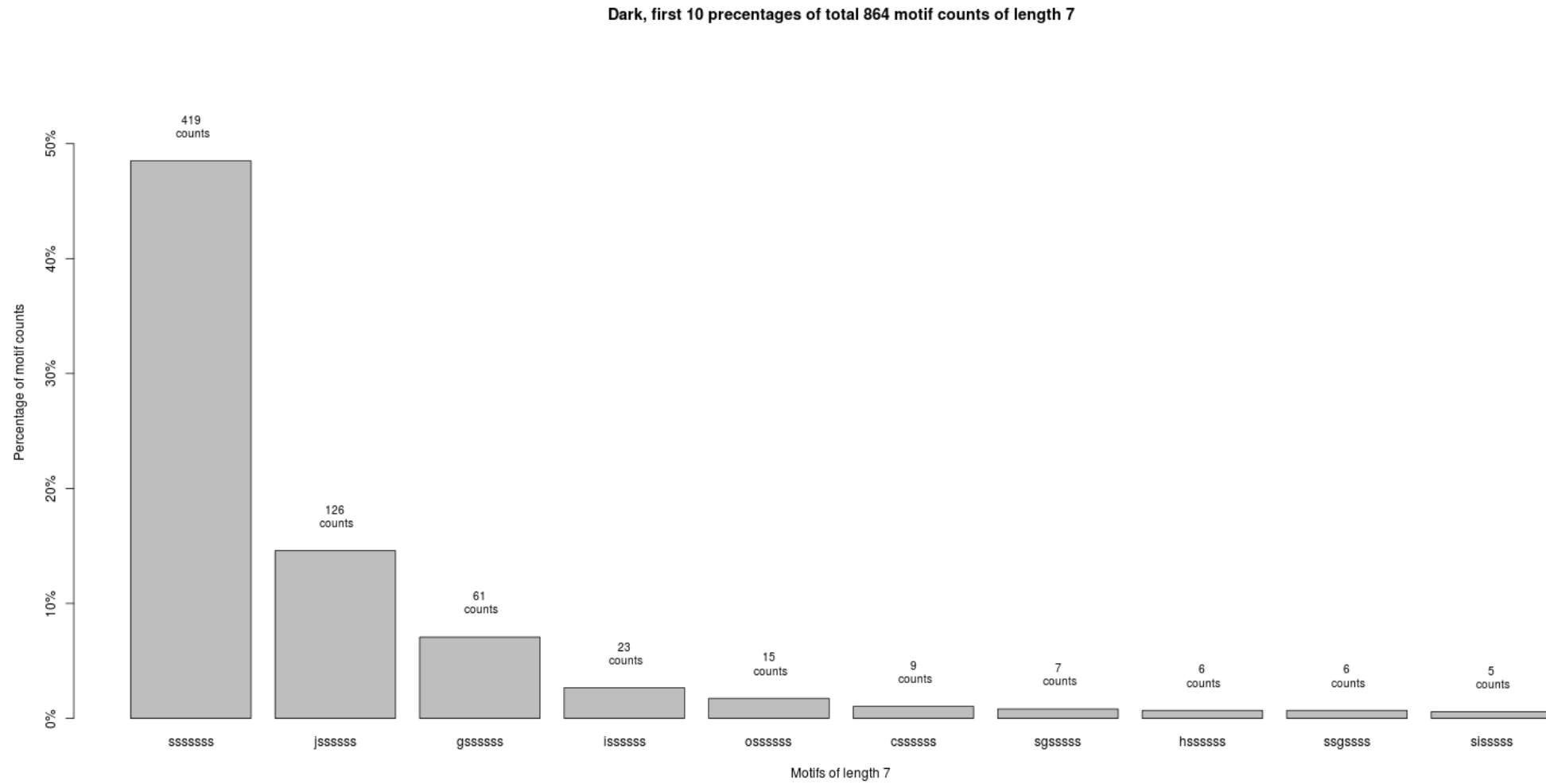
- Dark:



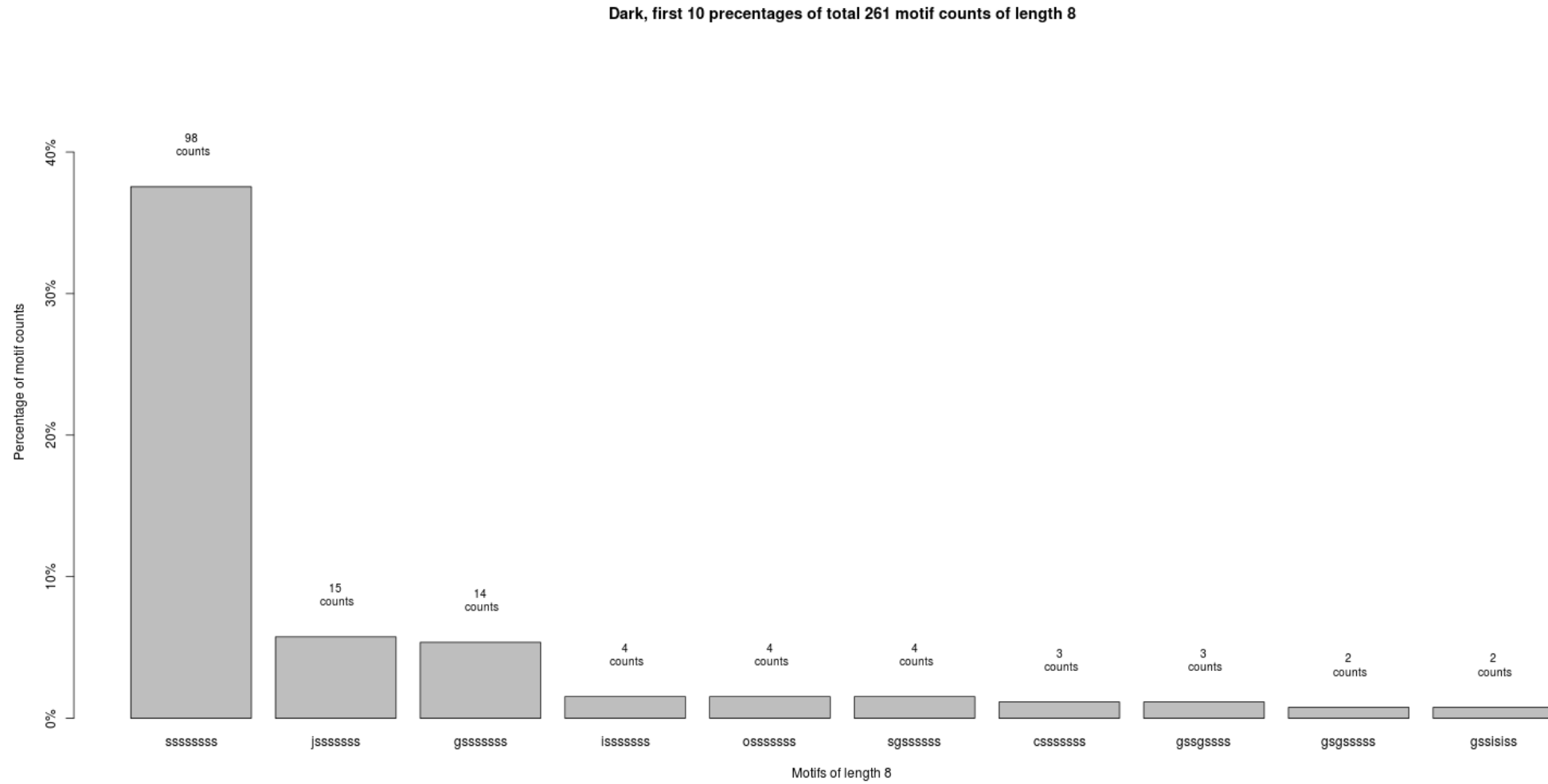
- Dark:



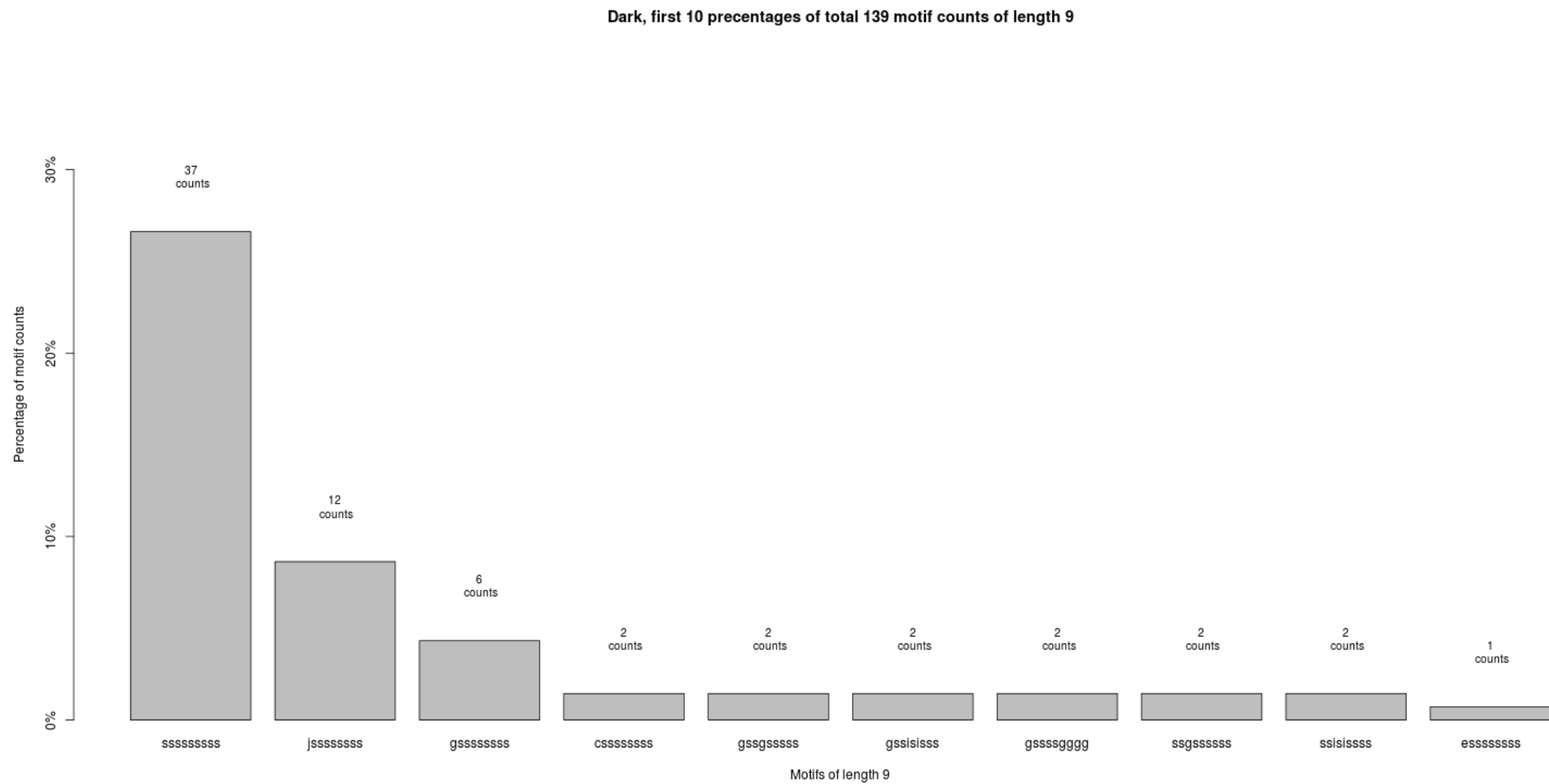
- Dark:



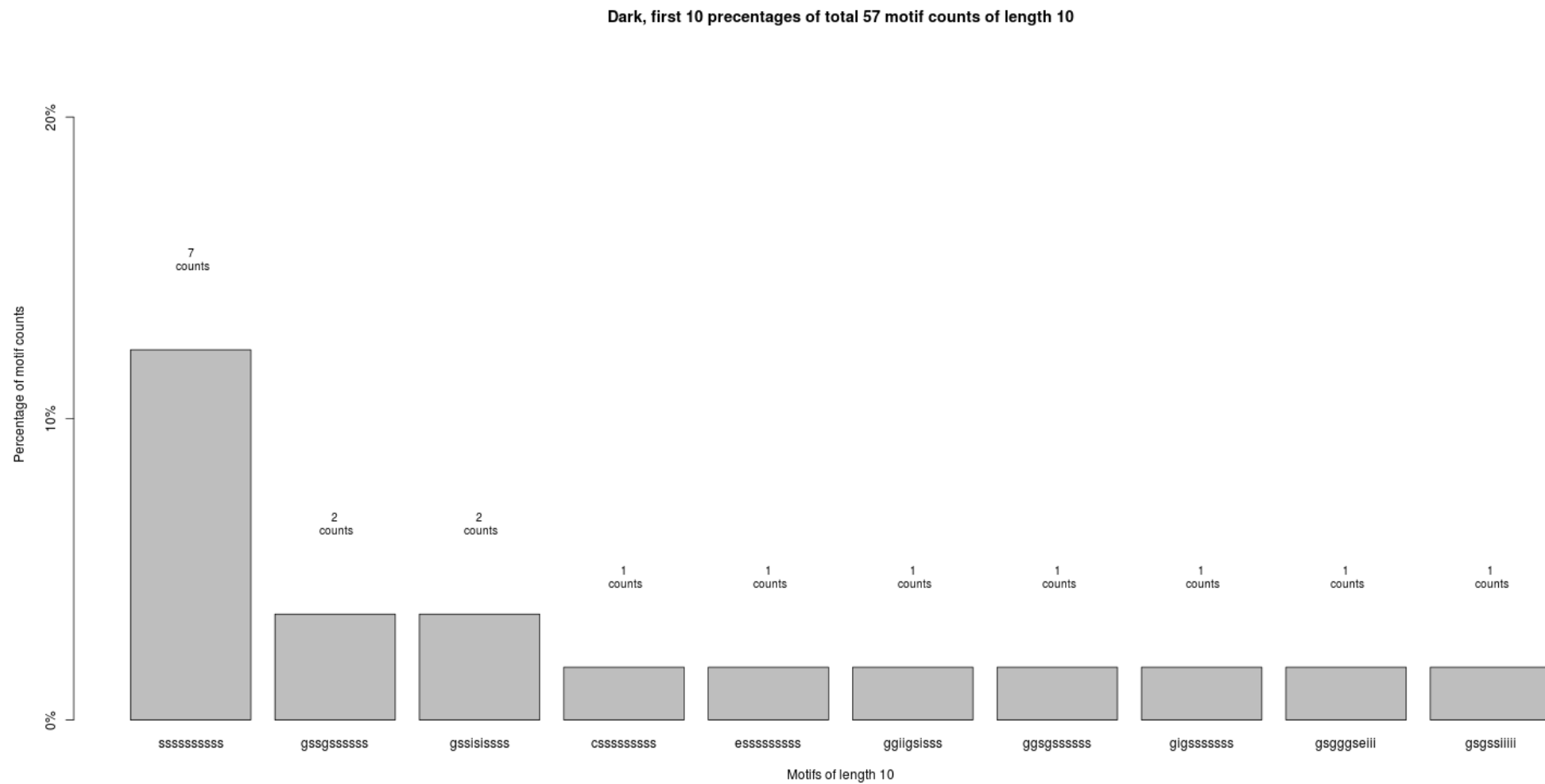
- Dark:



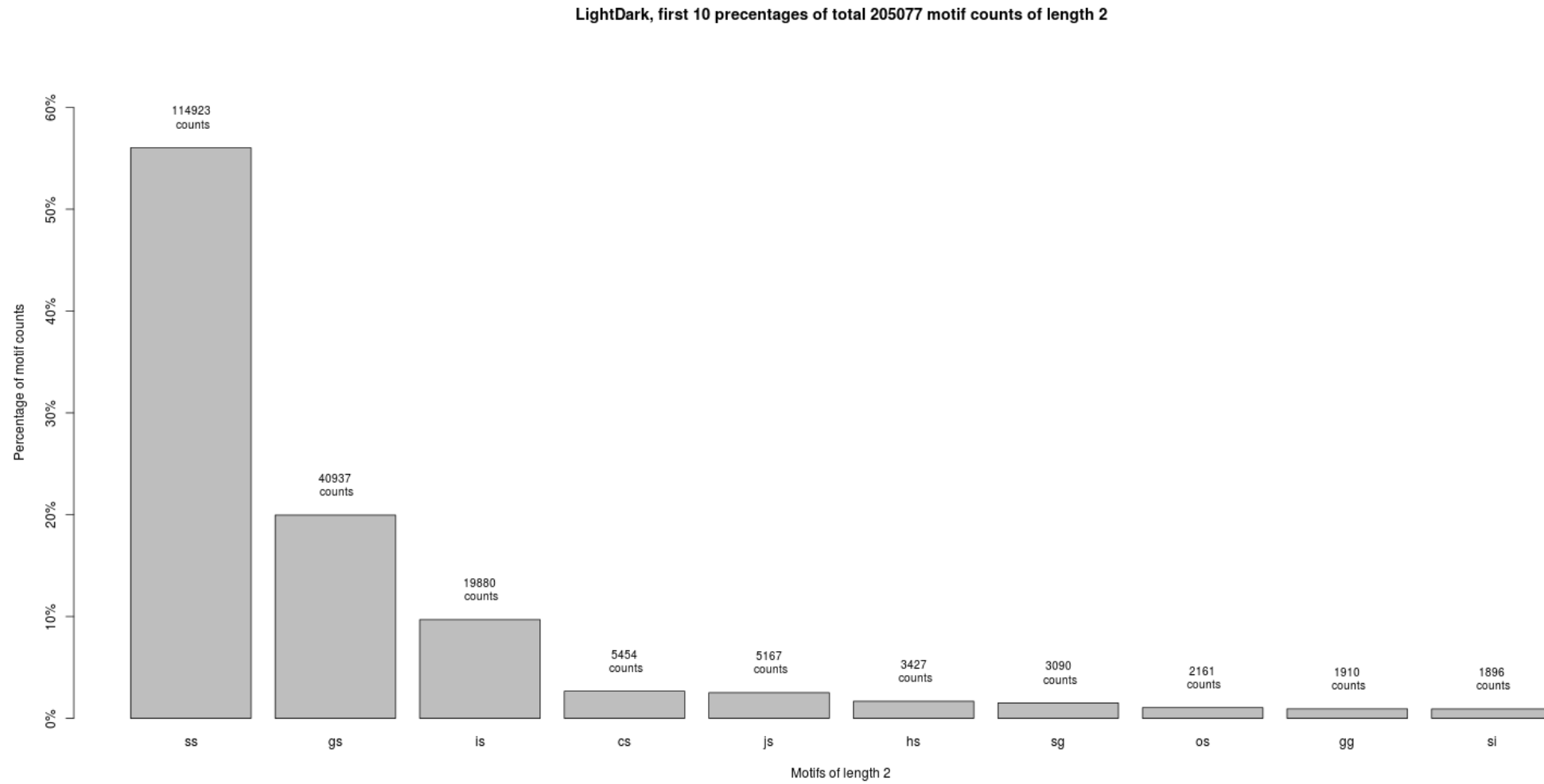
- Dark:



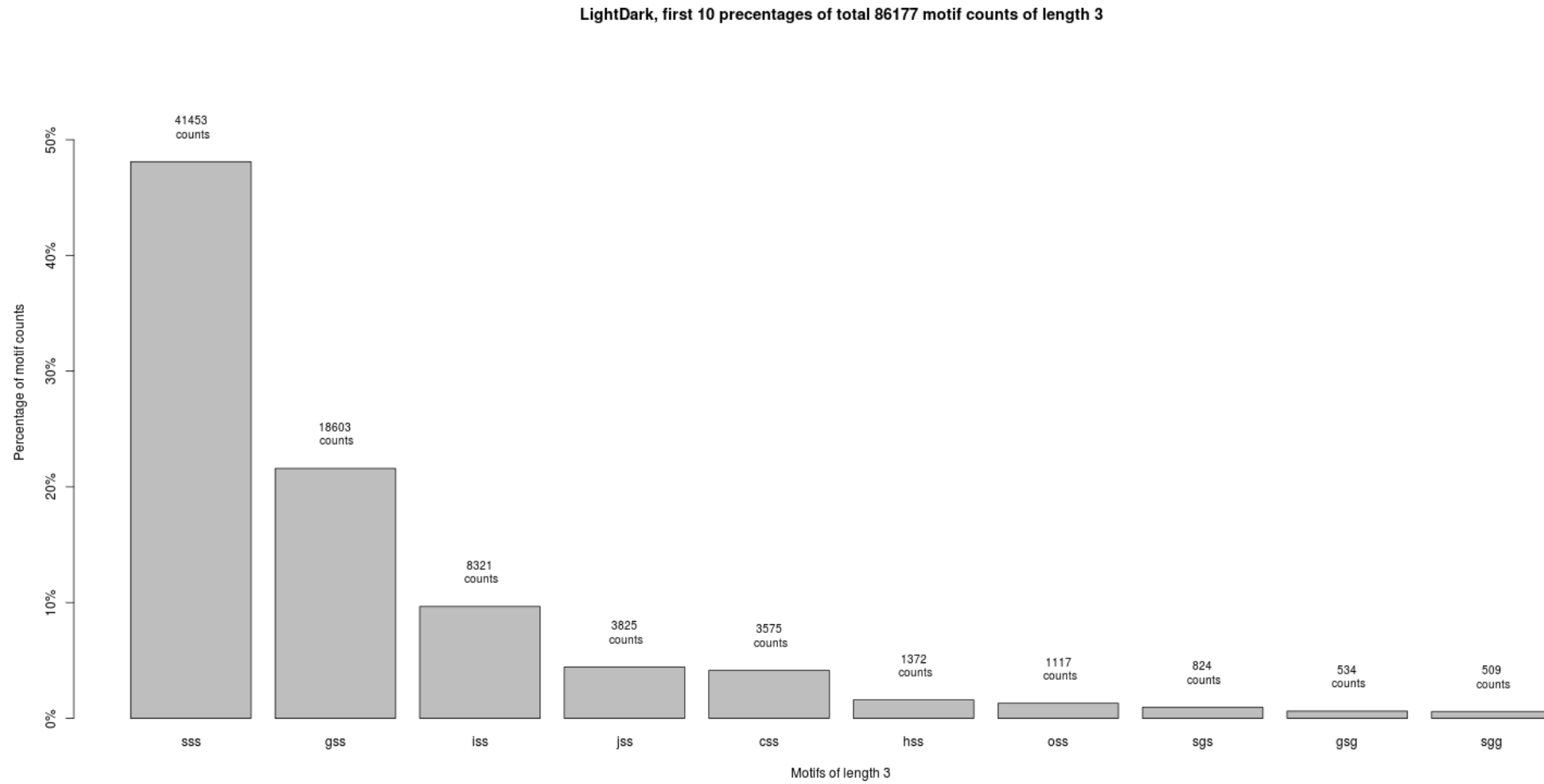
- Dark:



- LightDark:

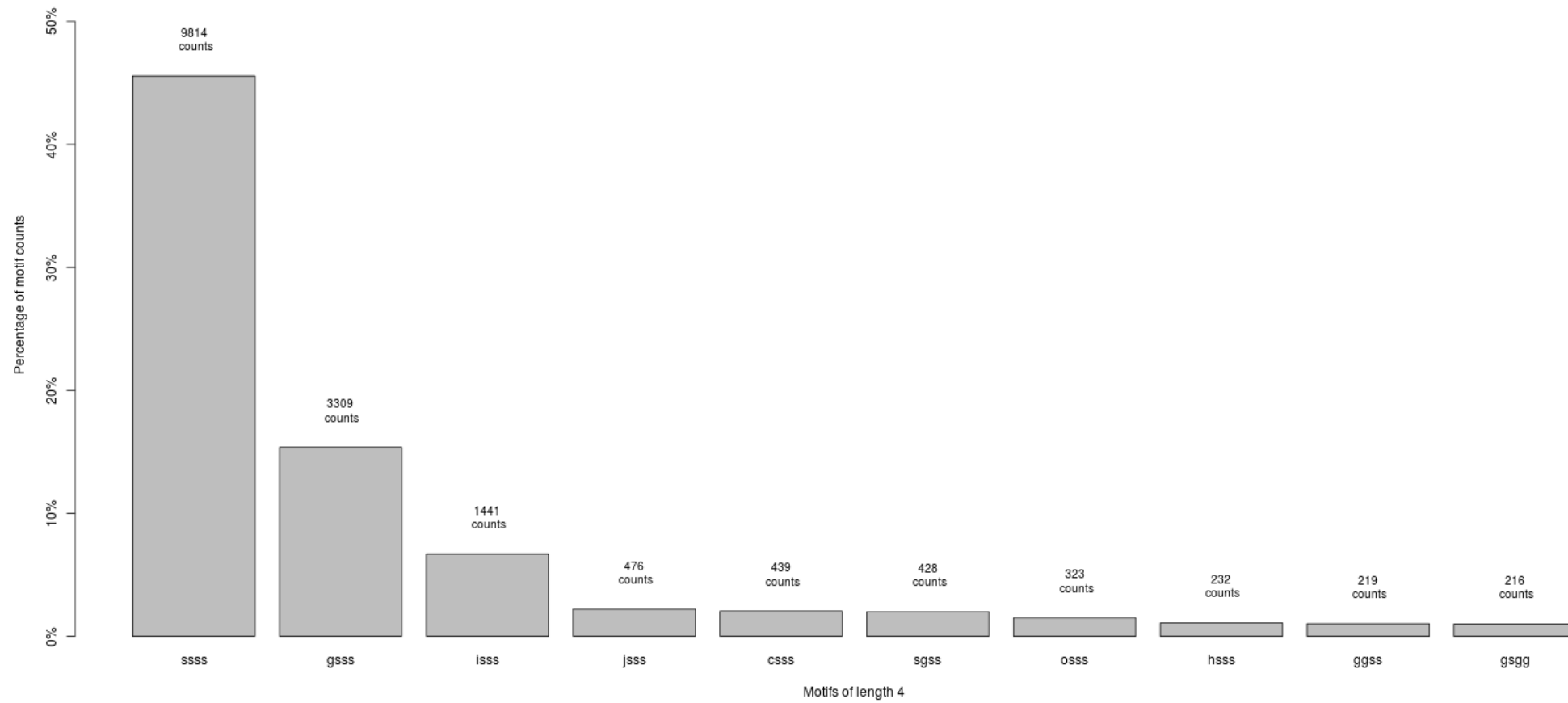


- LightDark:

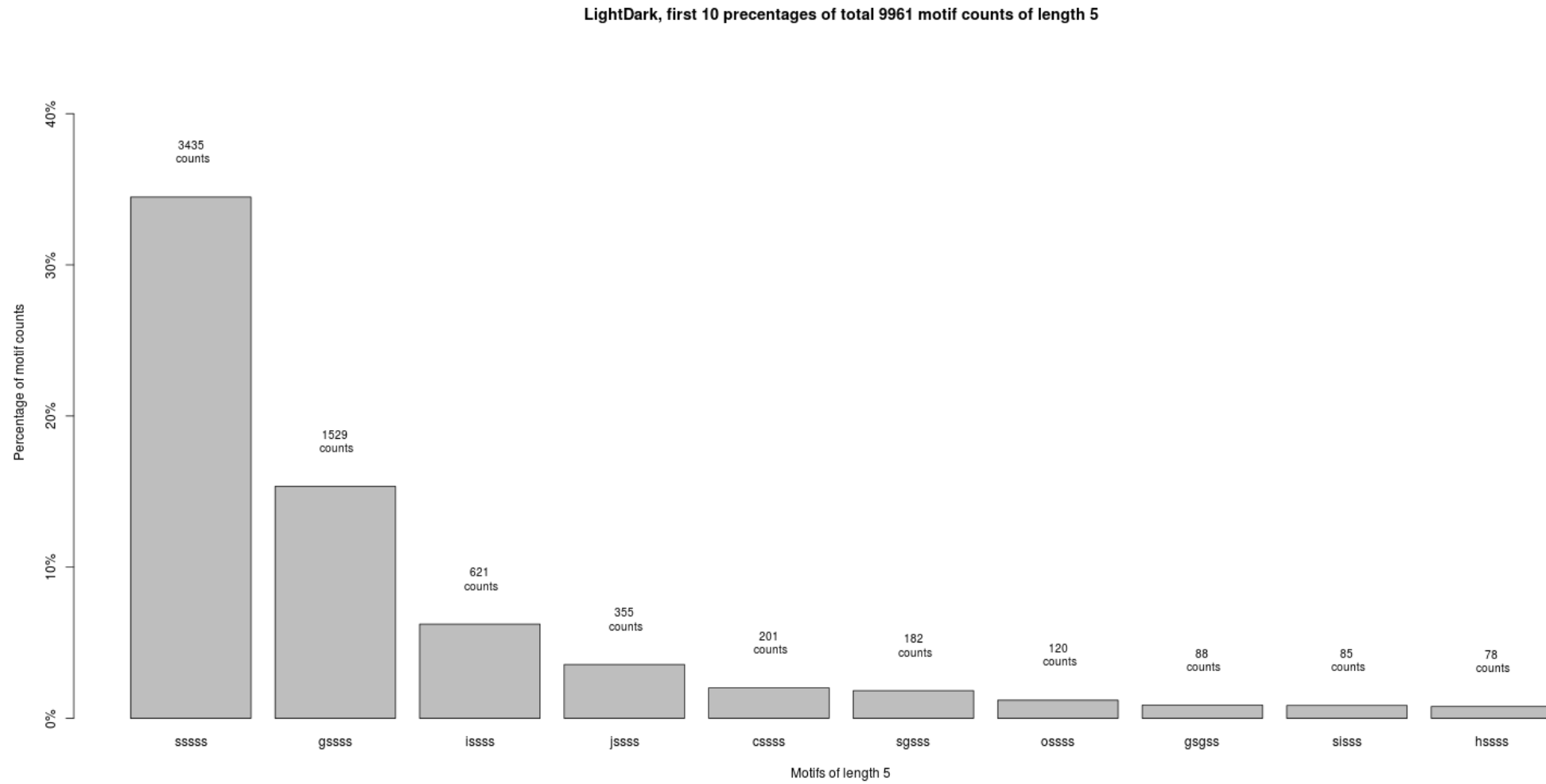


- LightDark:

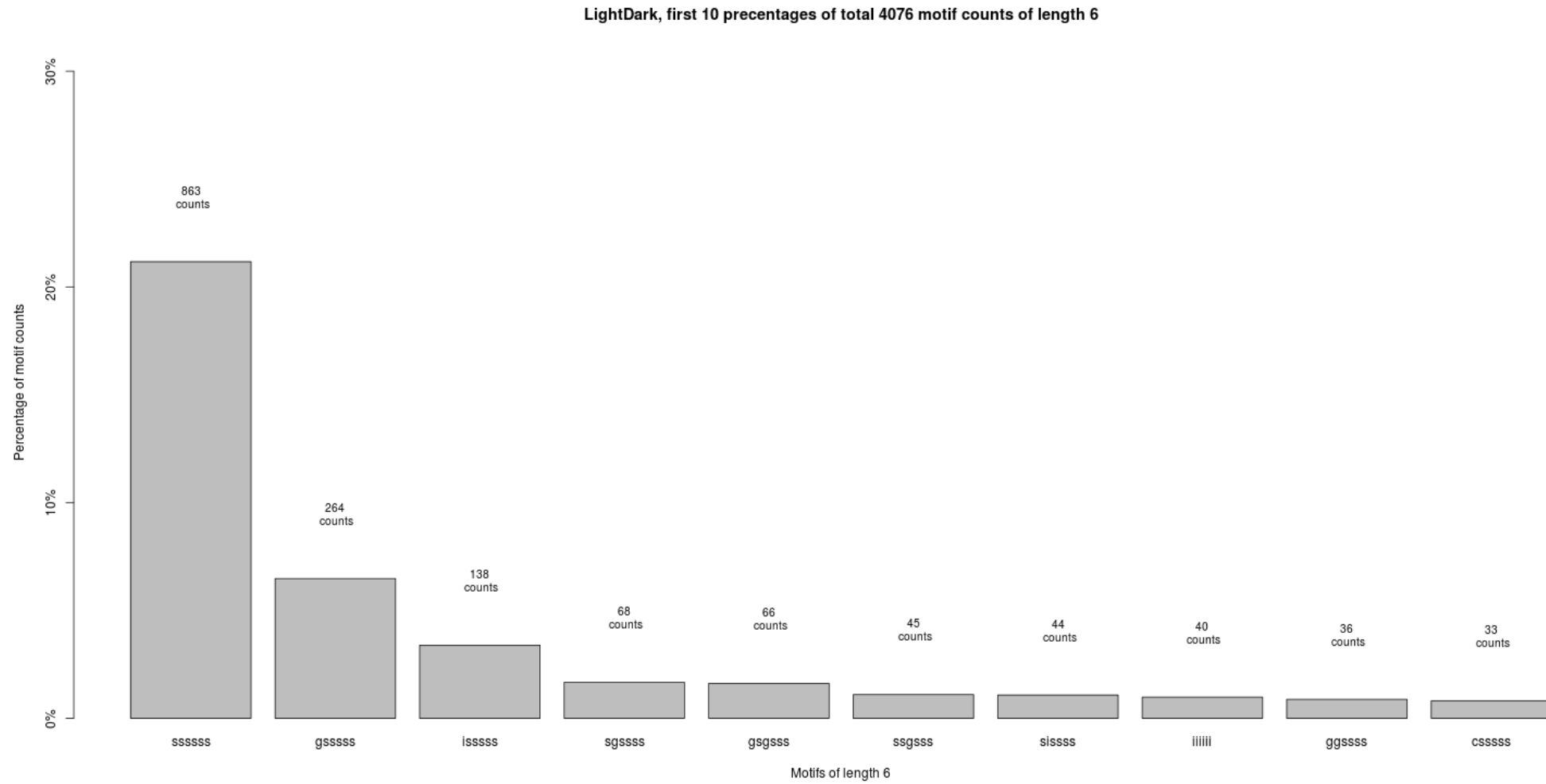
LightDark, first 10 precentages of total 21534 motif counts of length 4



- LightDark:

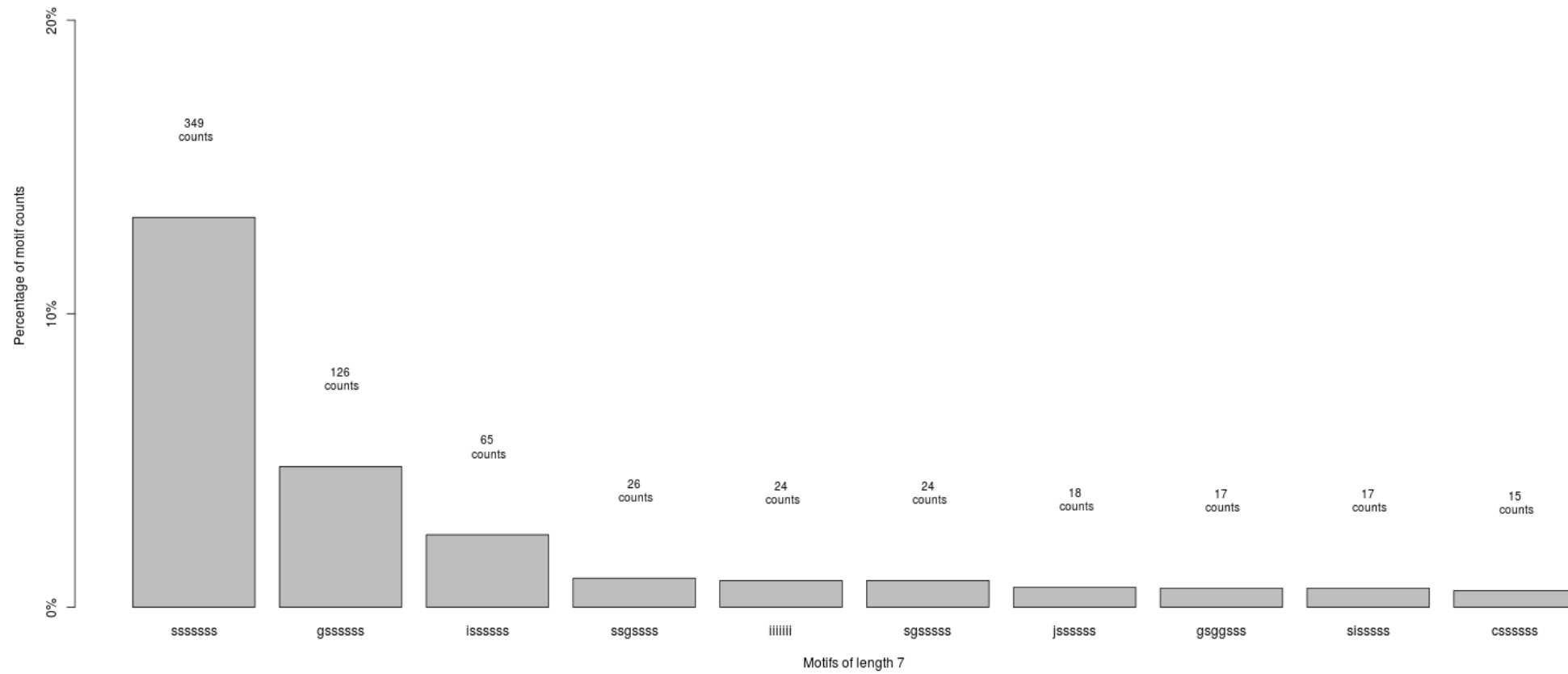


- LightDark:



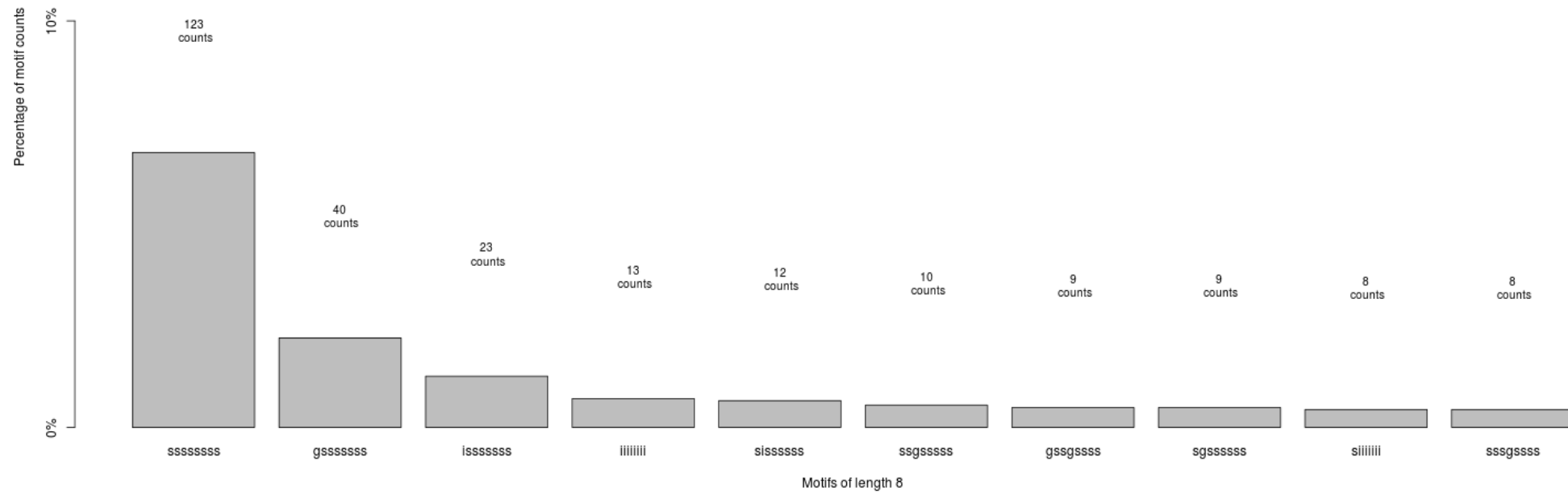
- LightDark:

LightDark, first 10 precentages of total 2628 motif counts of length 7



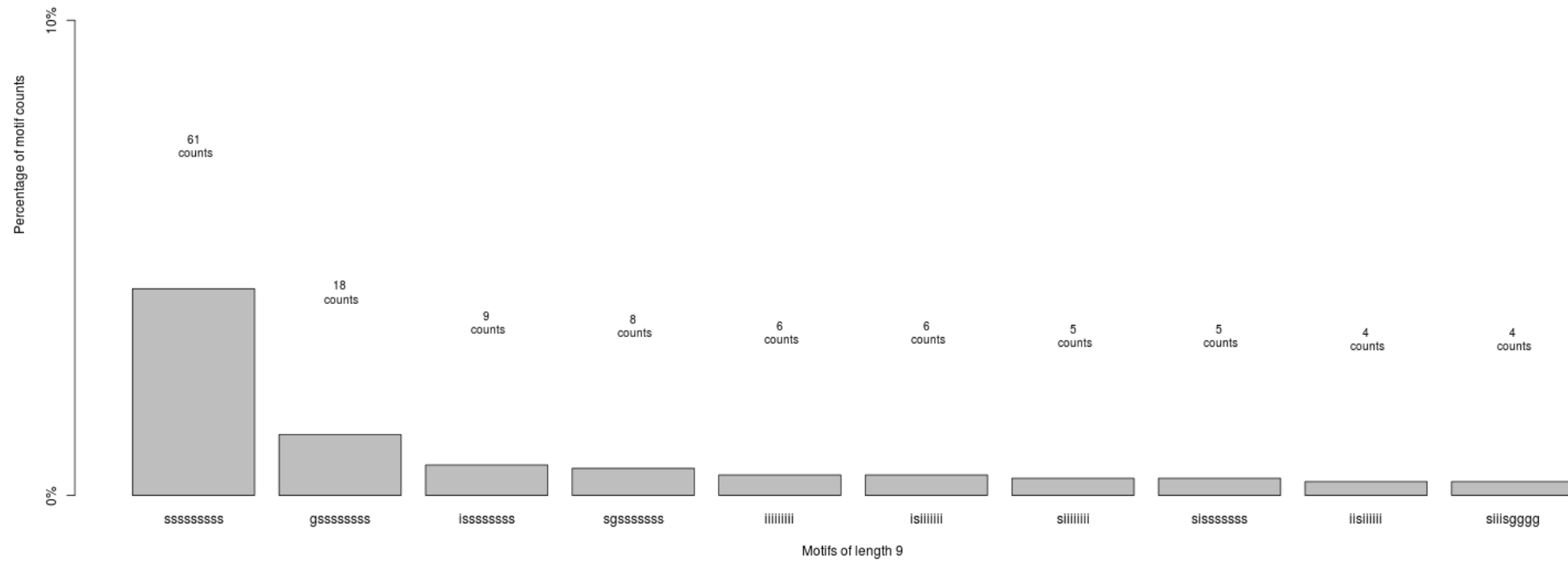
- LightDark:

LightDark, first 10 percentages of total 1819 motif counts of length 8



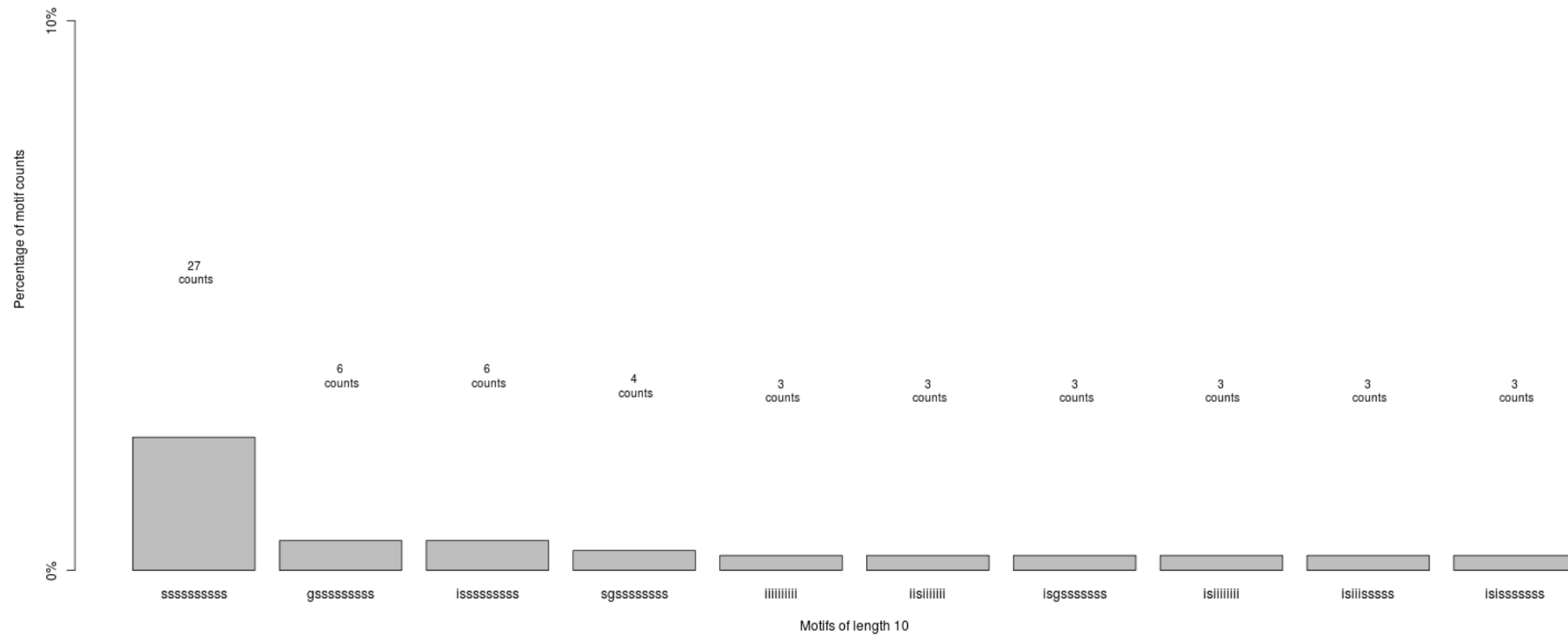
- LightDark:

LightDark, first 10 percentages of total 1402 motif counts of length 9

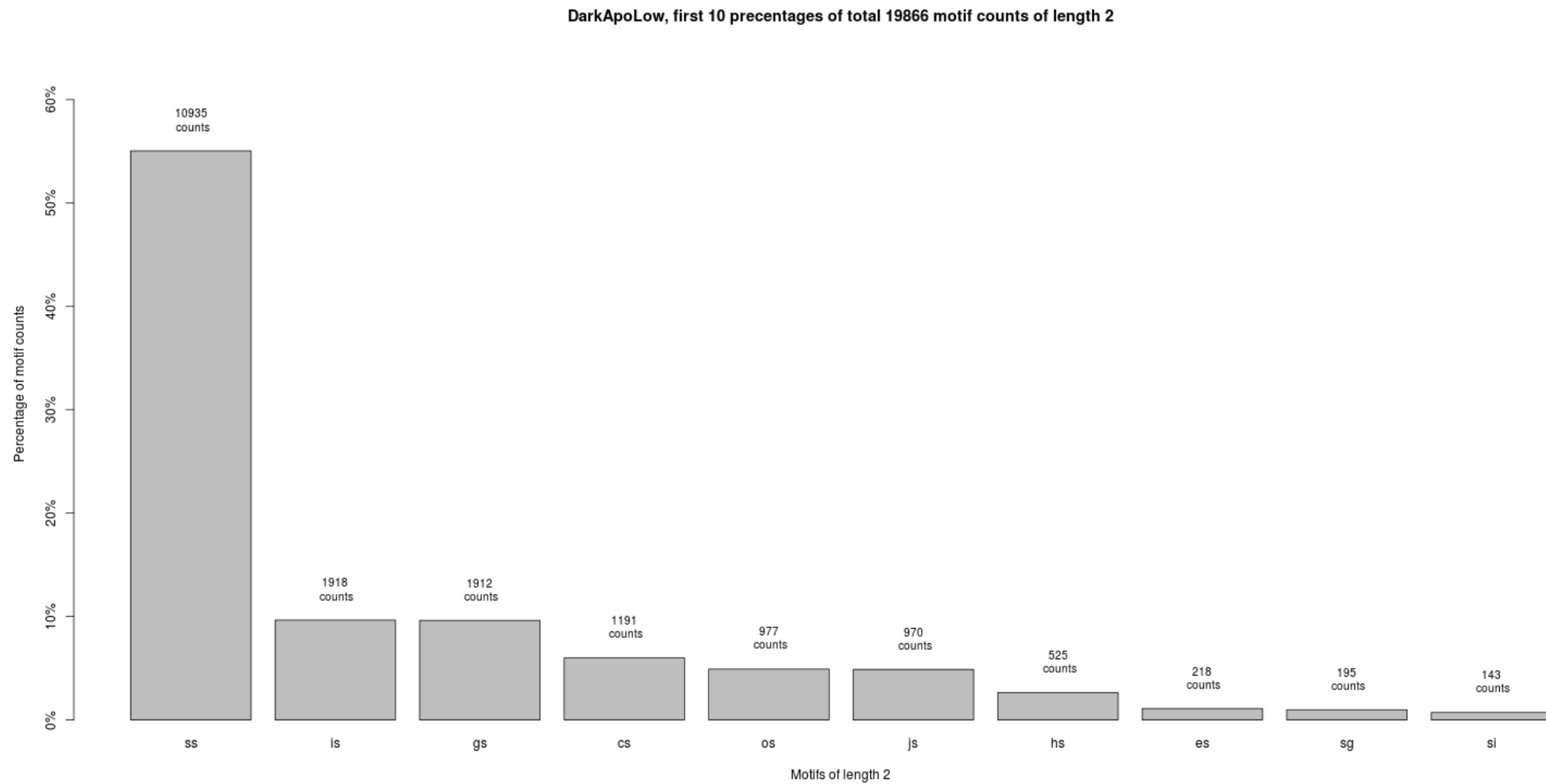


- LightDark:

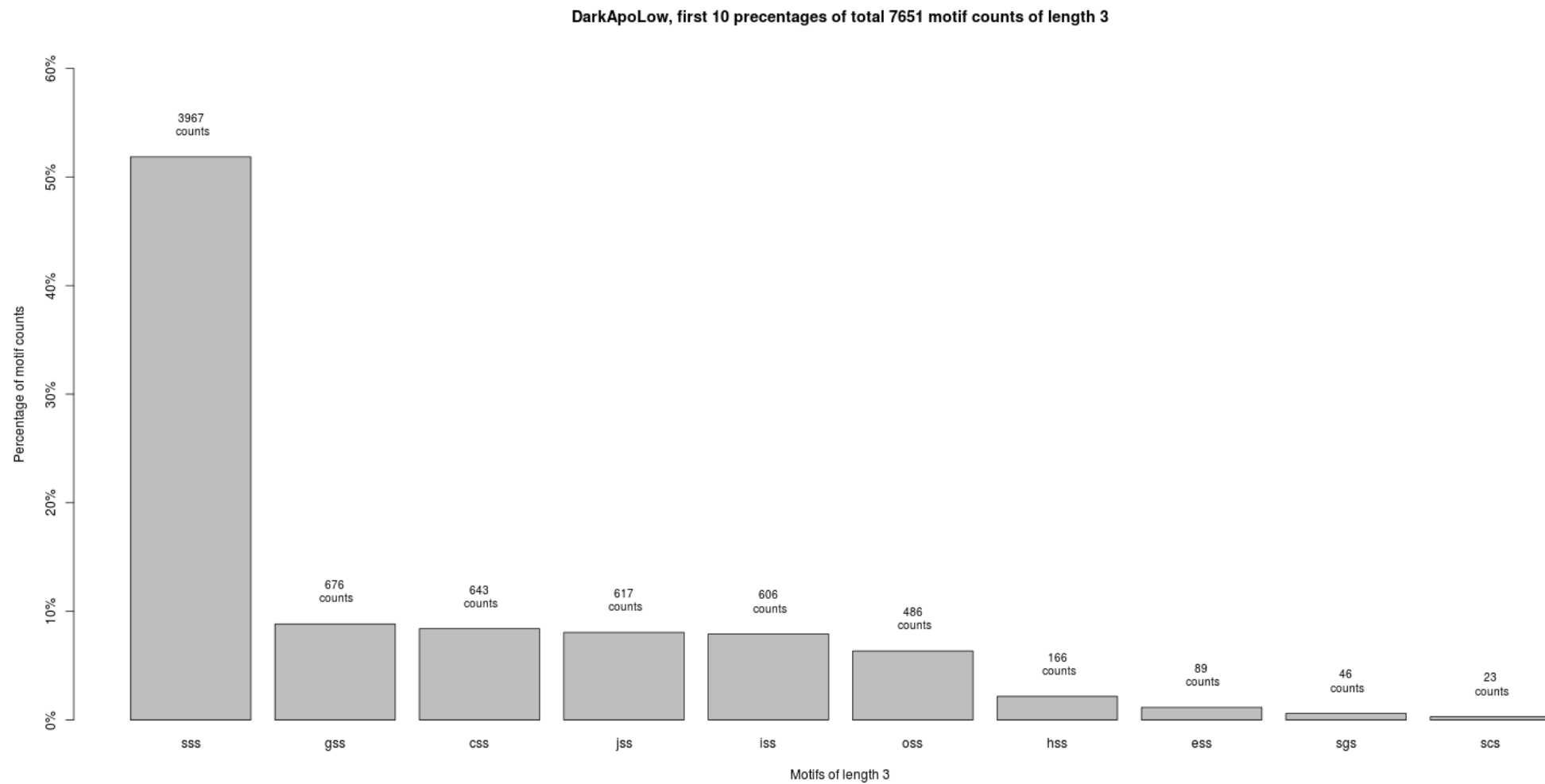
LightDark, first 10 percentages of total 1117 motif counts of length 10



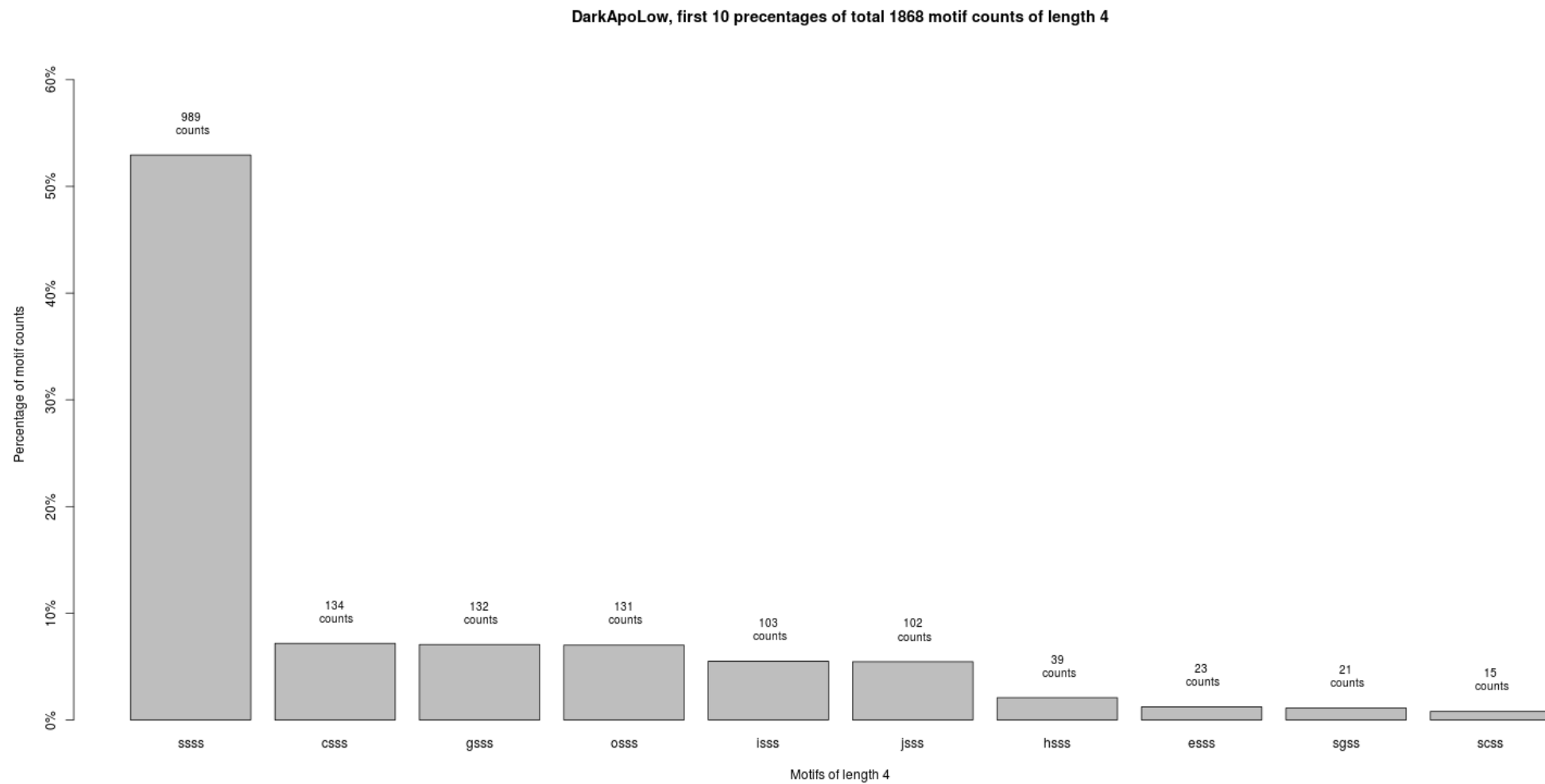
- (Dark)ApoLow:



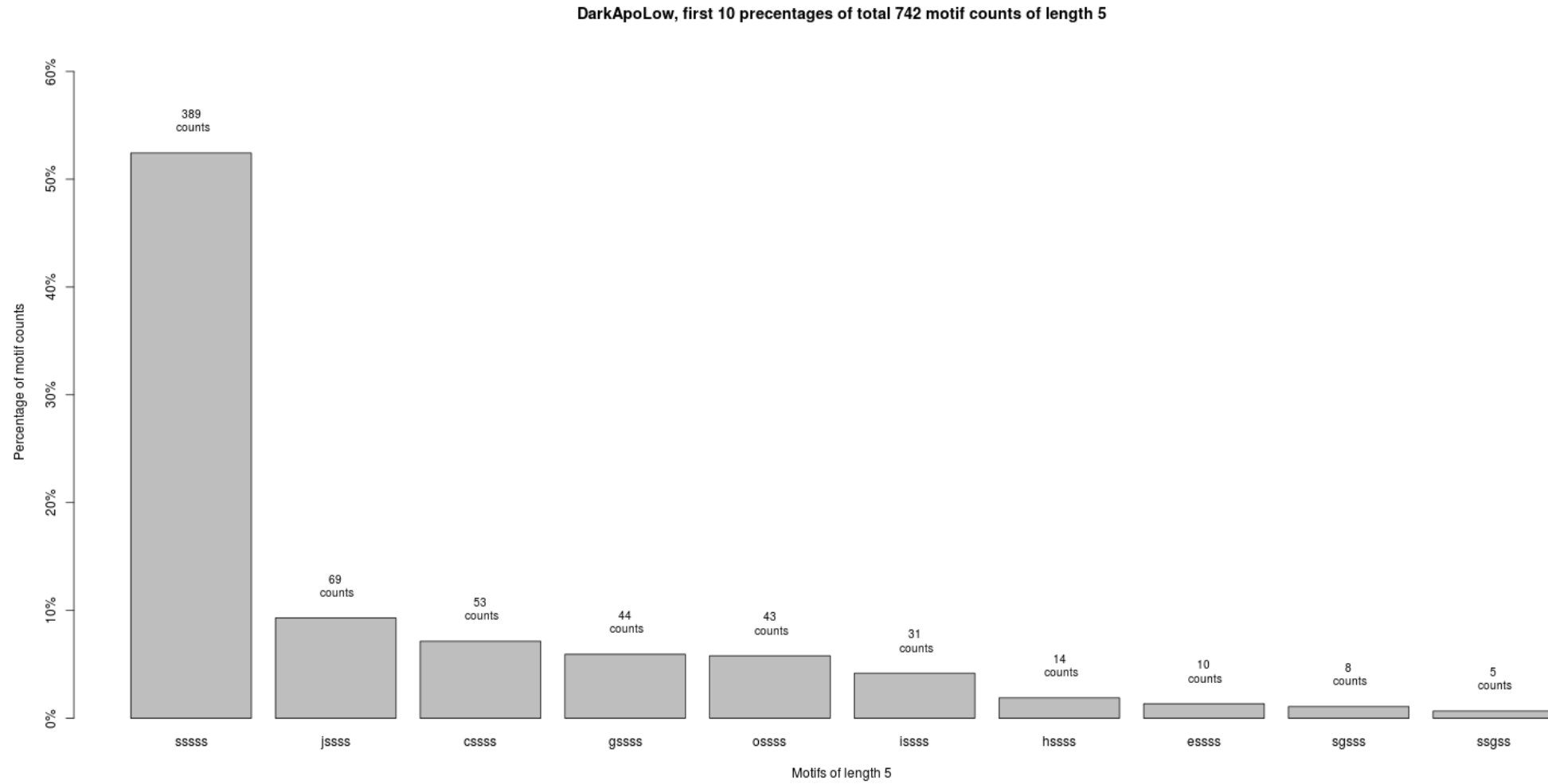
- (Dark)ApoLow:



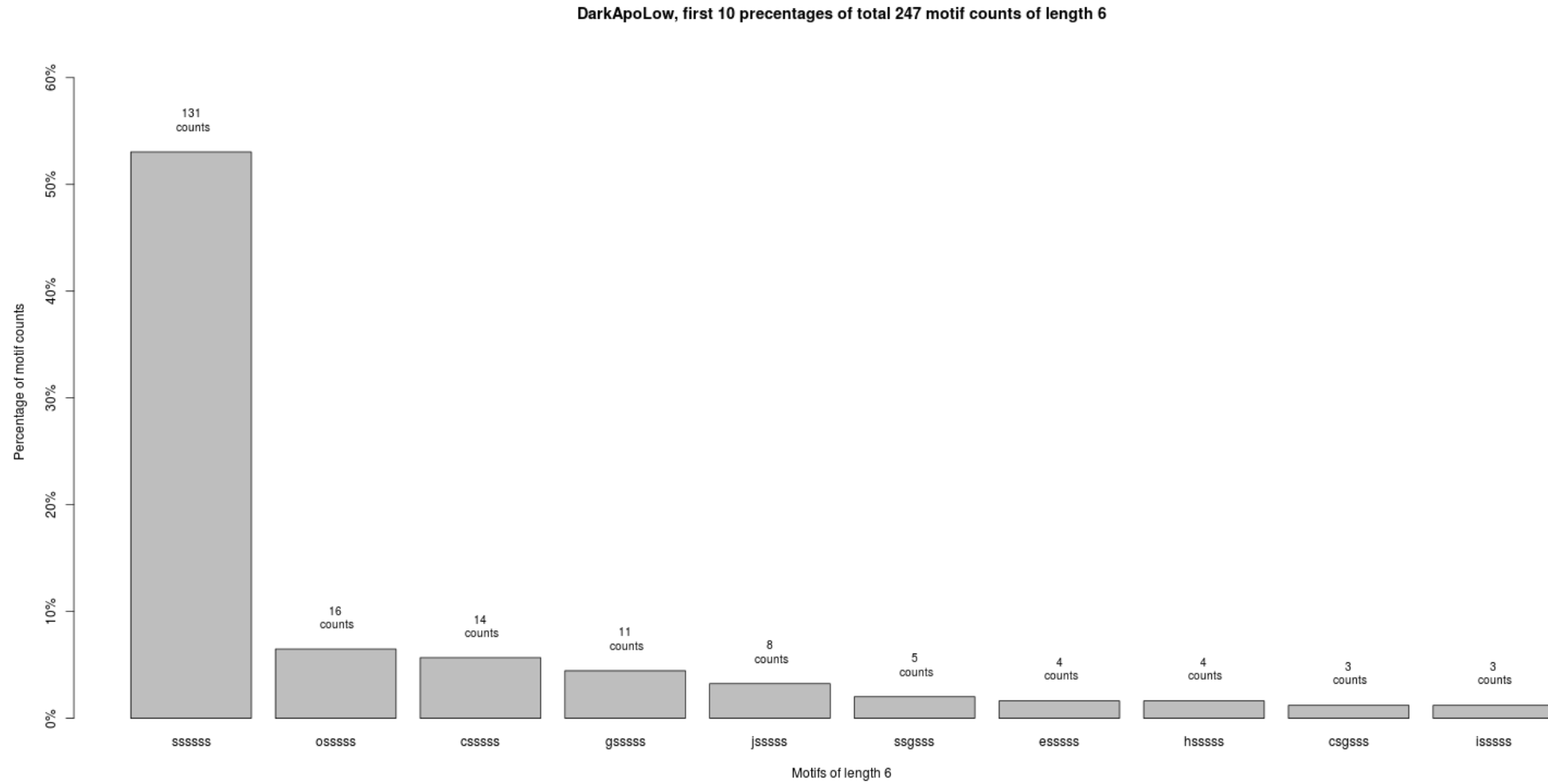
- (Dark)ApoLow:



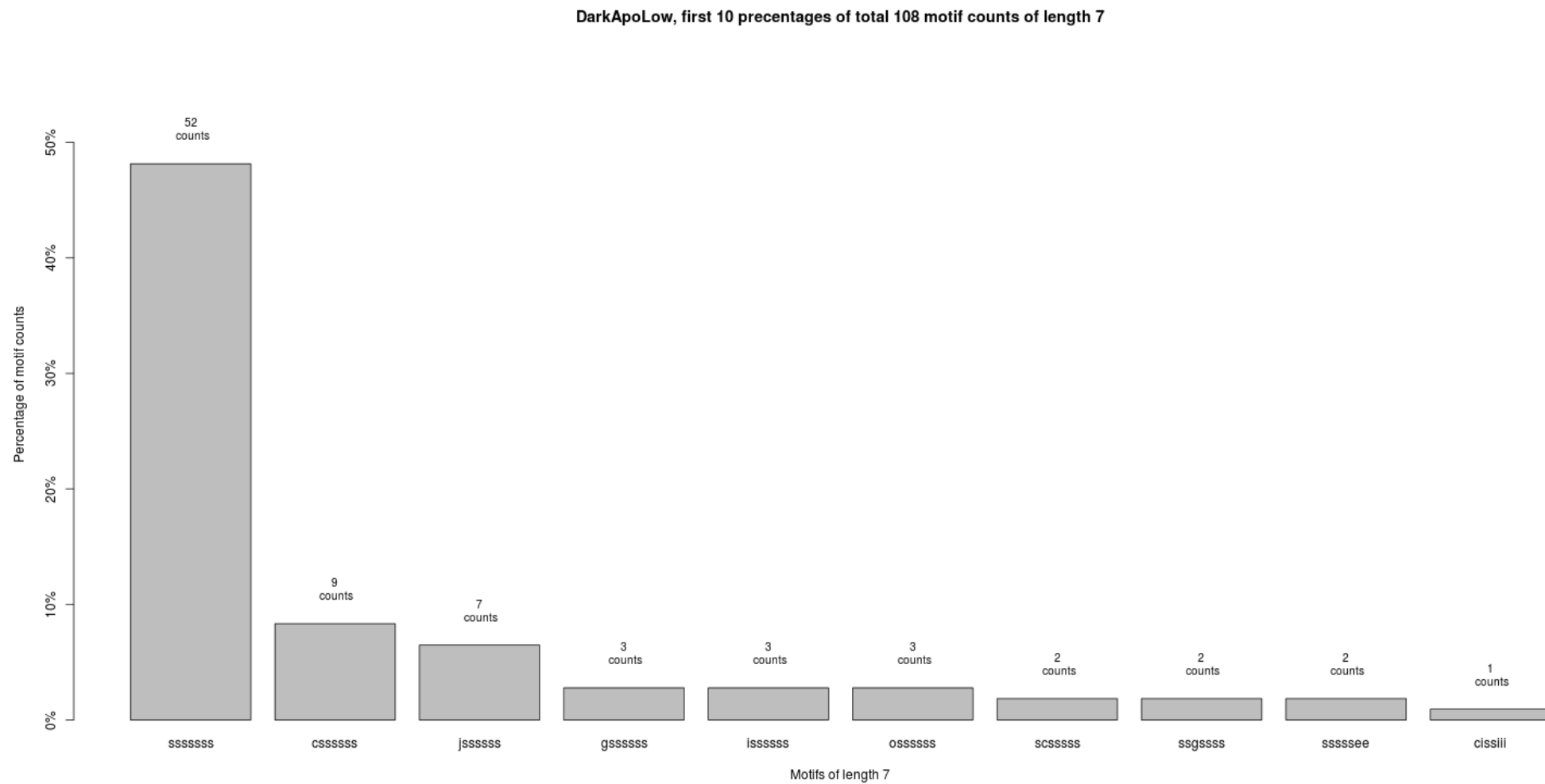
- (Dark)ApoLow:



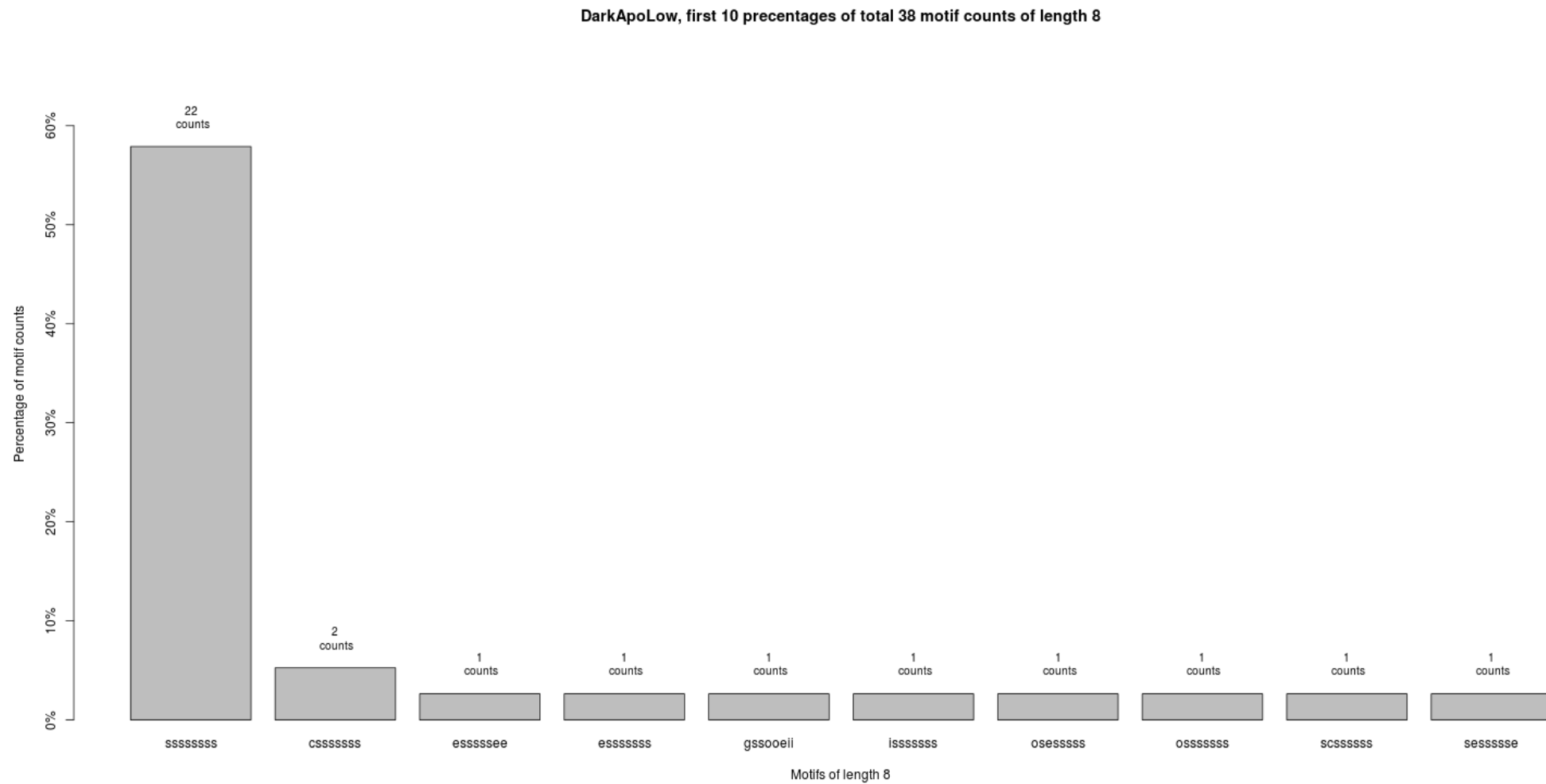
- (Dark)ApoLow:



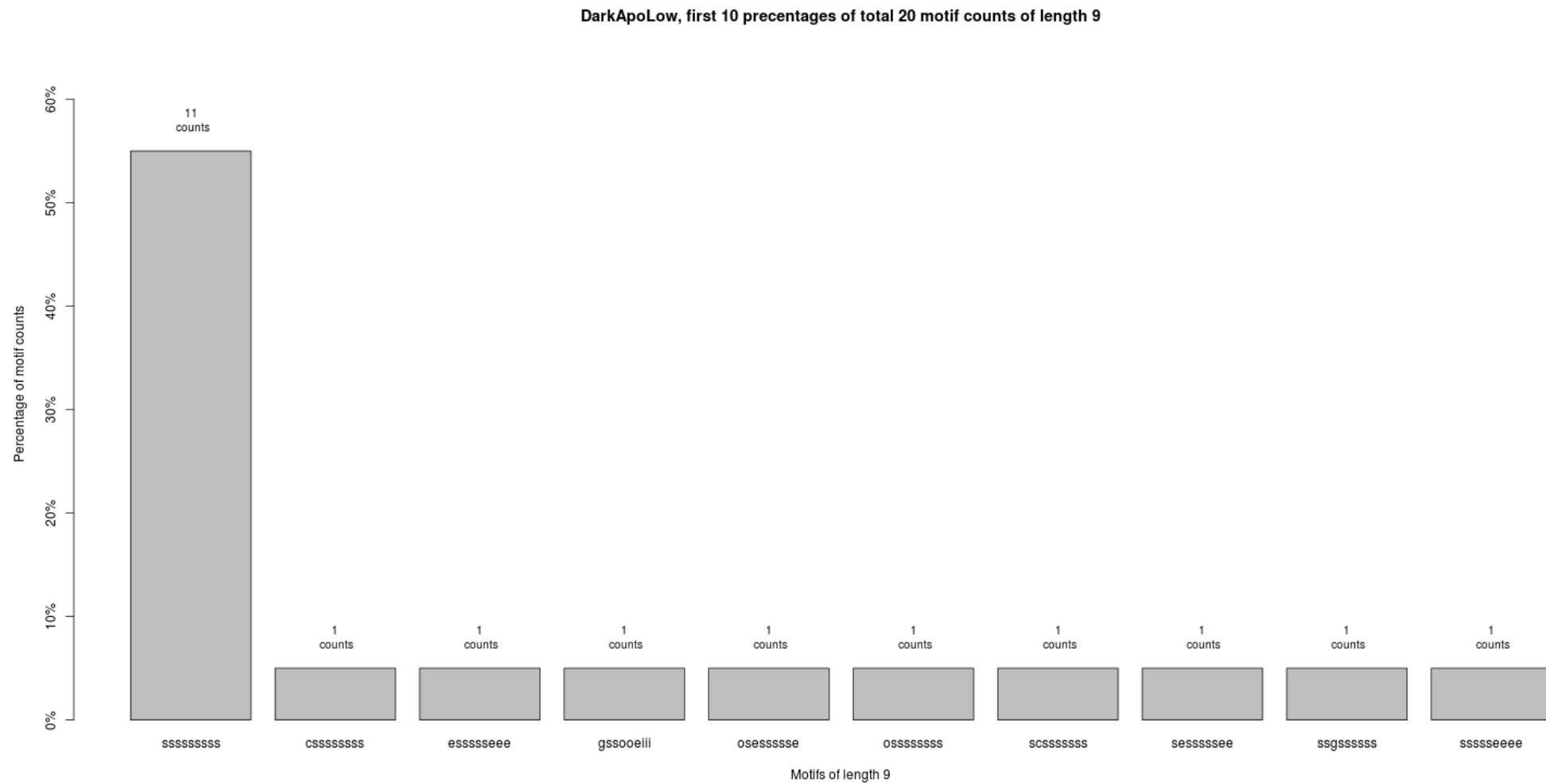
- (Dark)ApoLow:



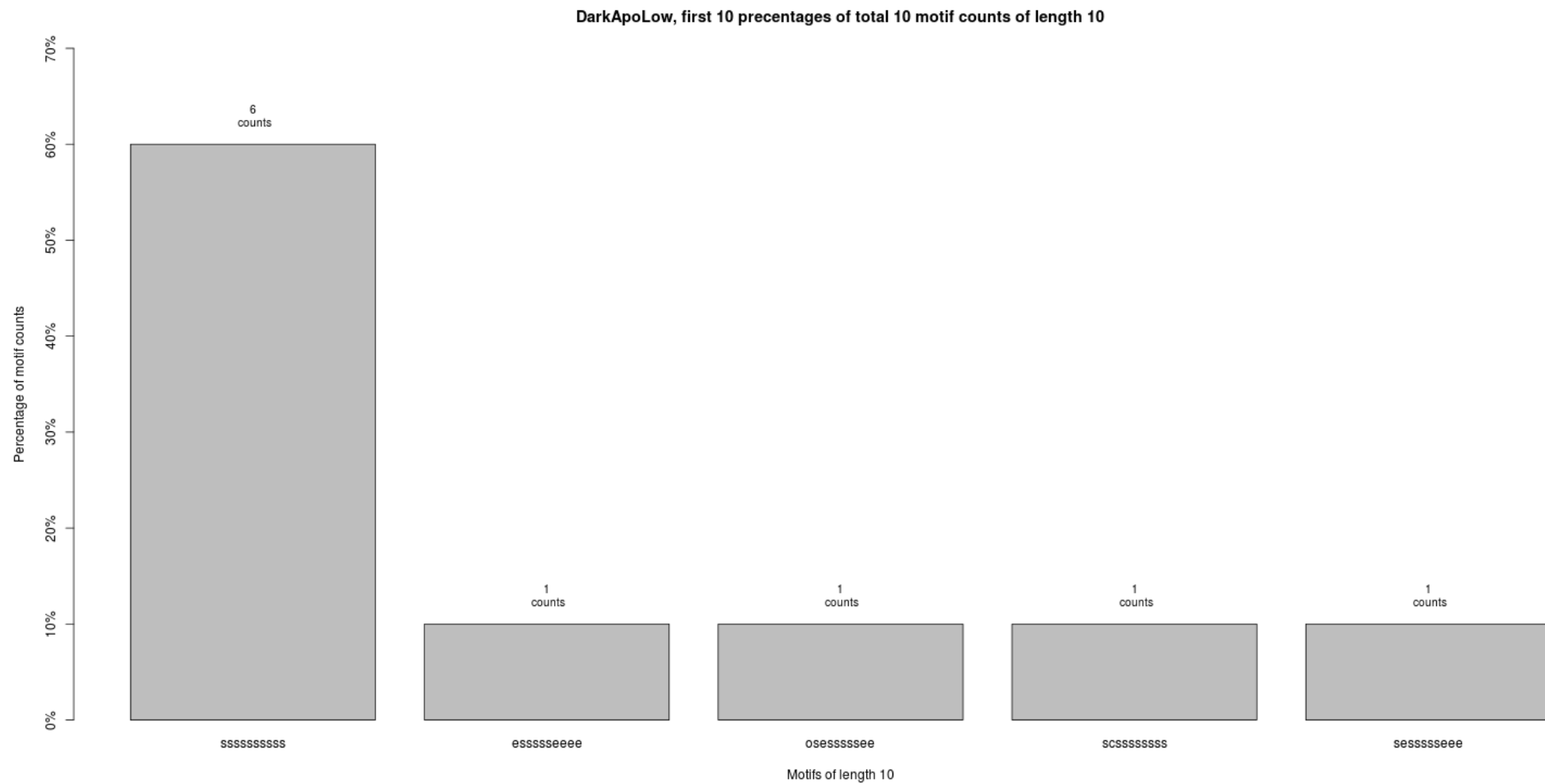
- (Dark)ApoLow:



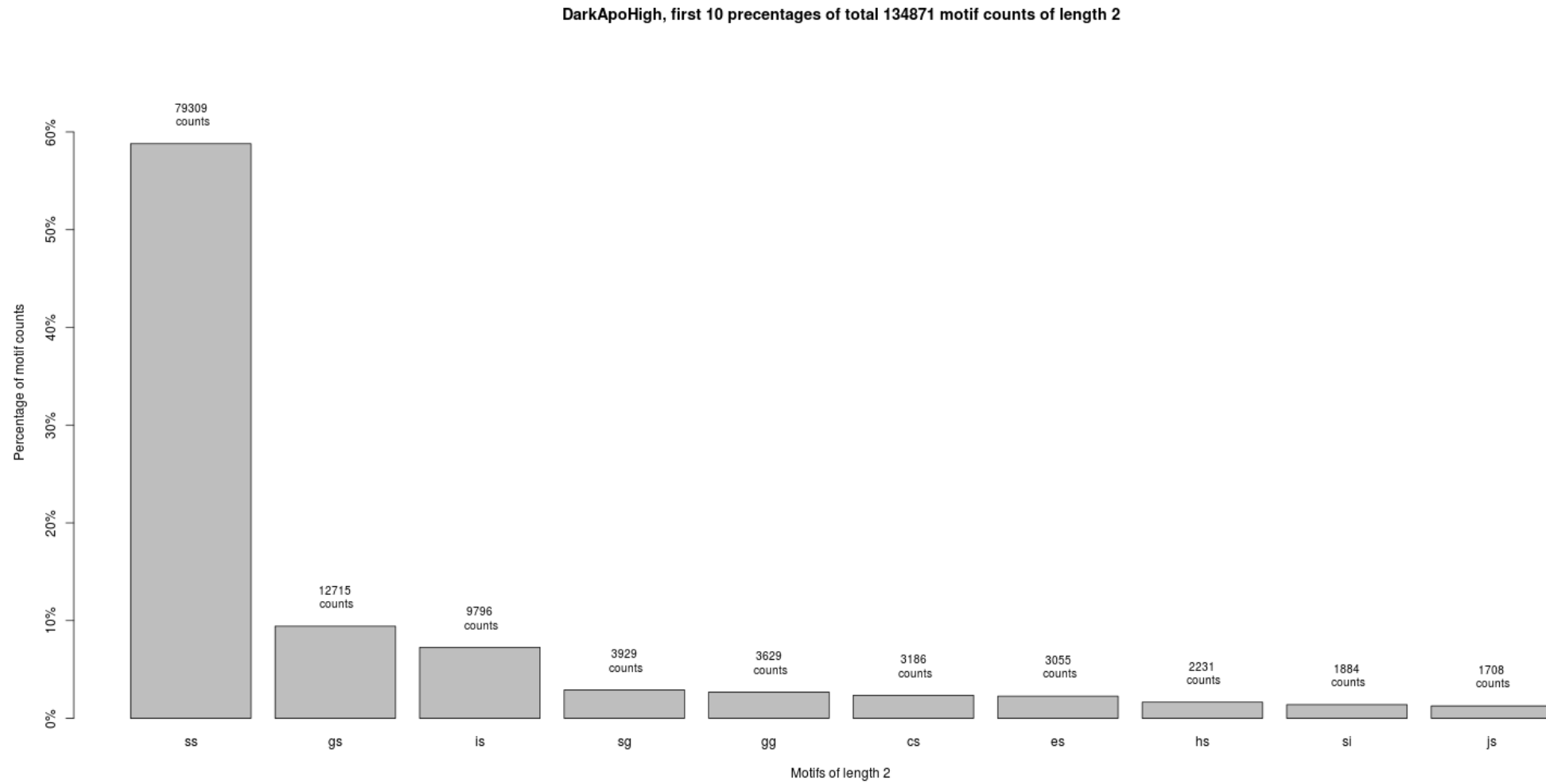
- (Dark)ApoLow:



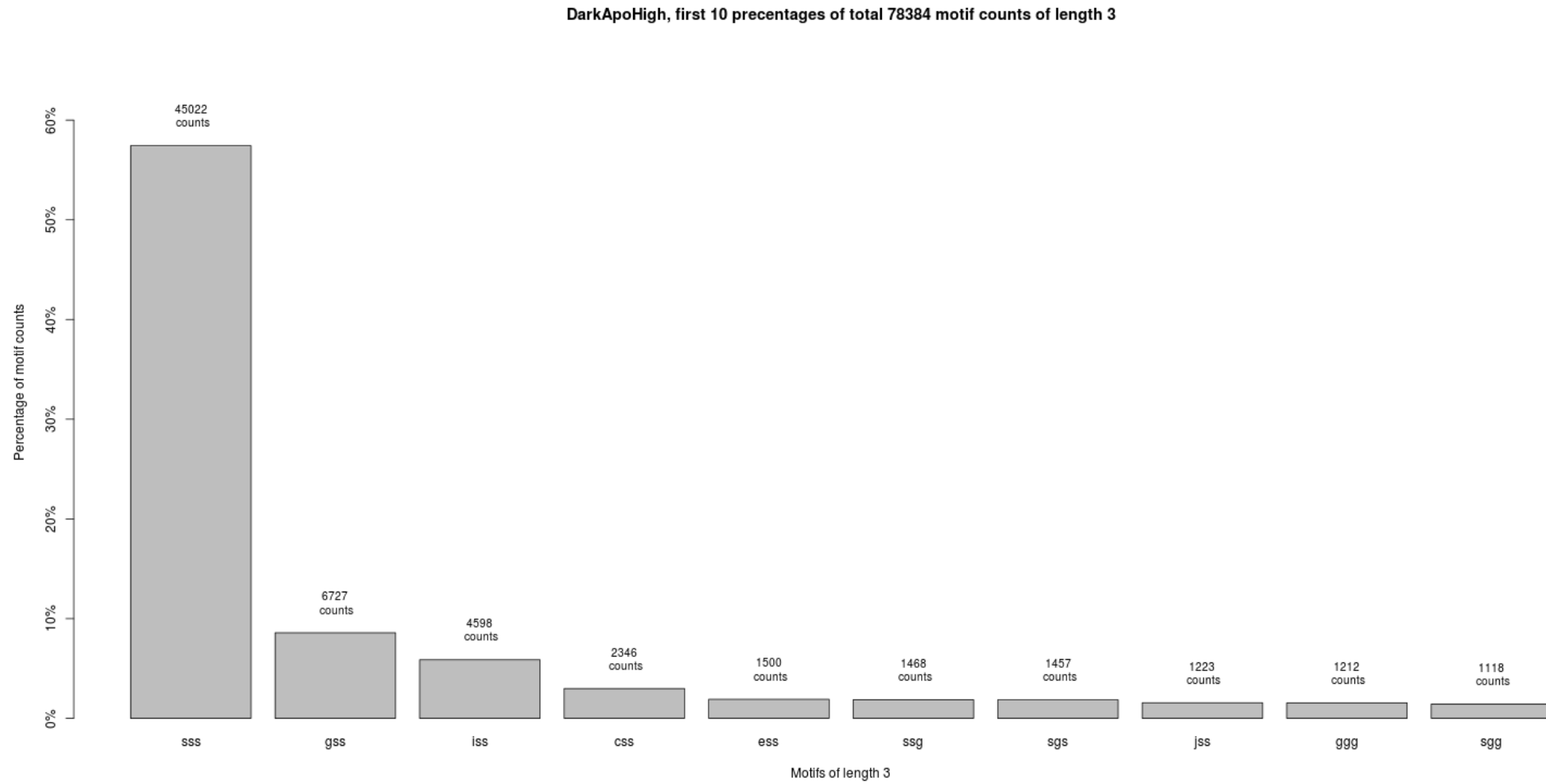
- (Dark)ApoLow:



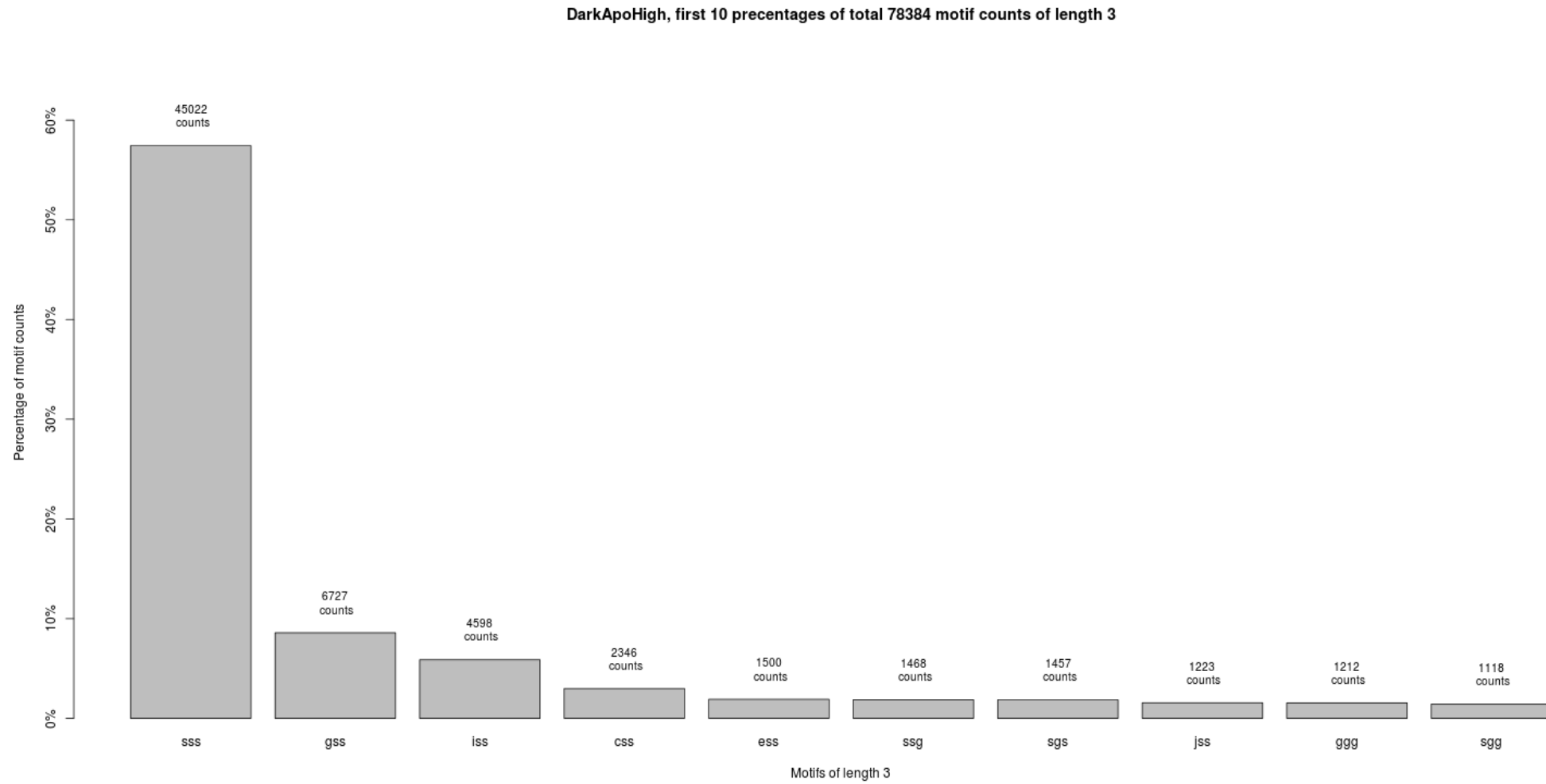
- (Dark)ApoHigh:



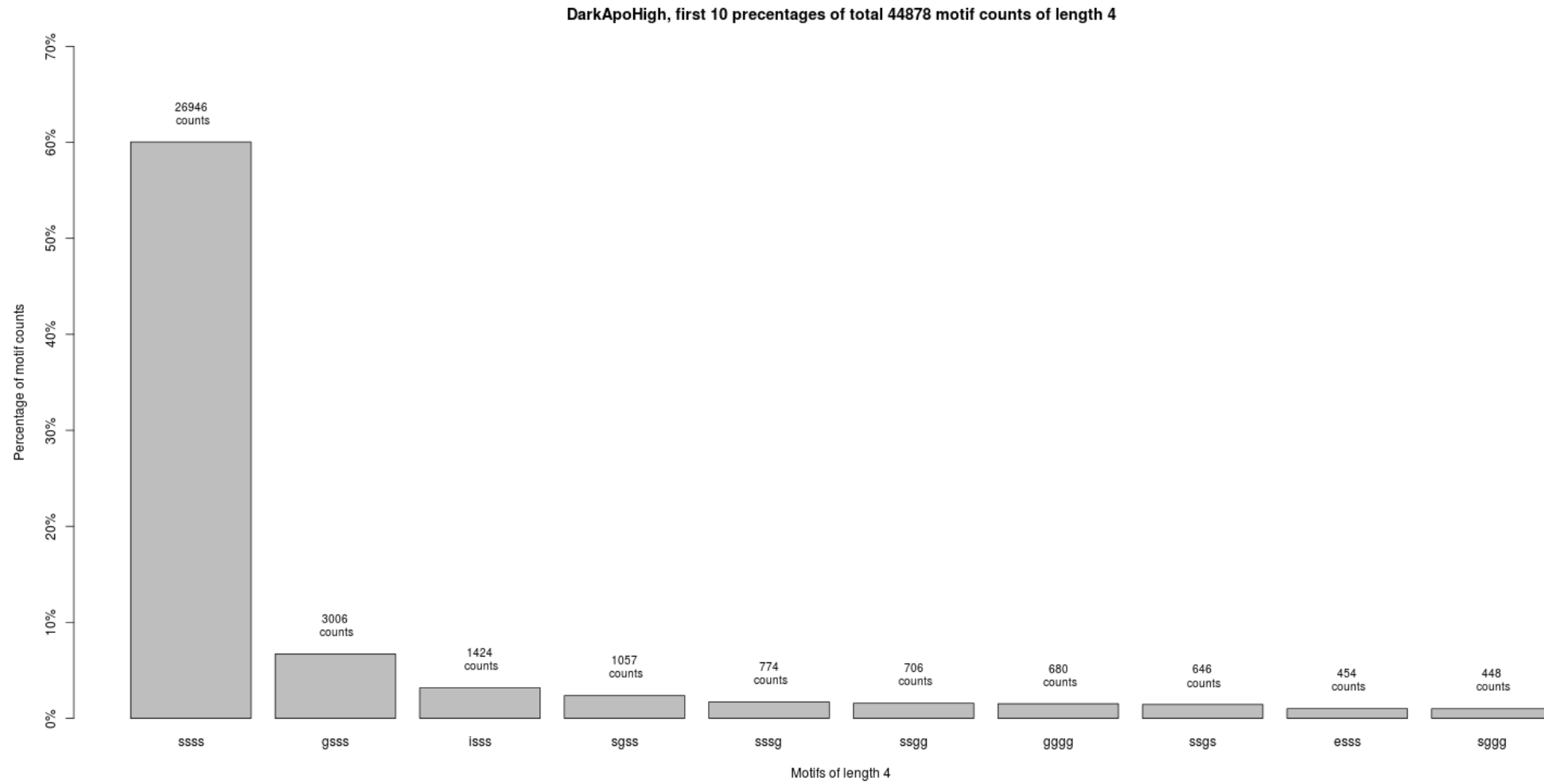
- (Dark)ApoHigh:



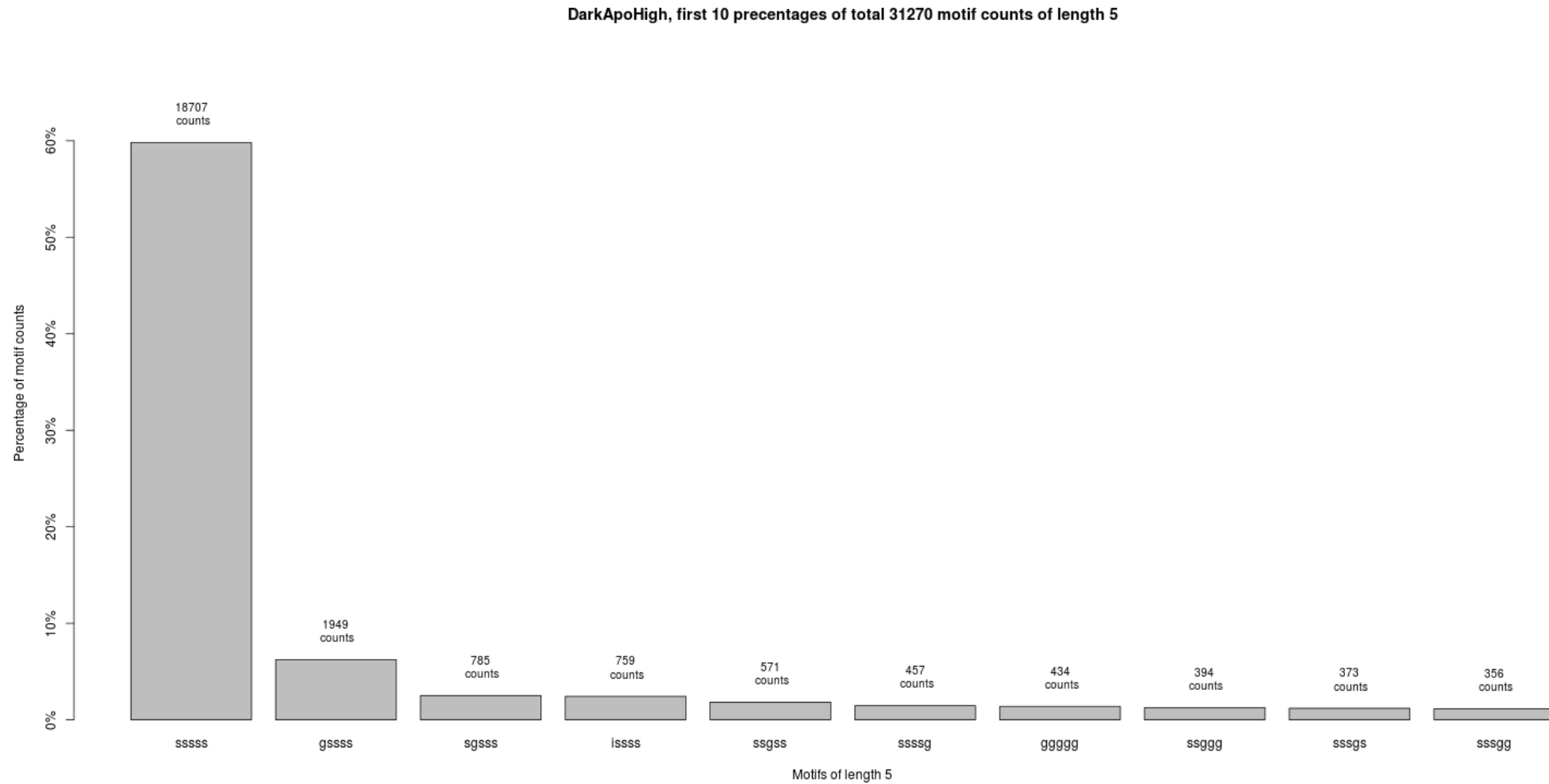
- (Dark)ApoHigh:



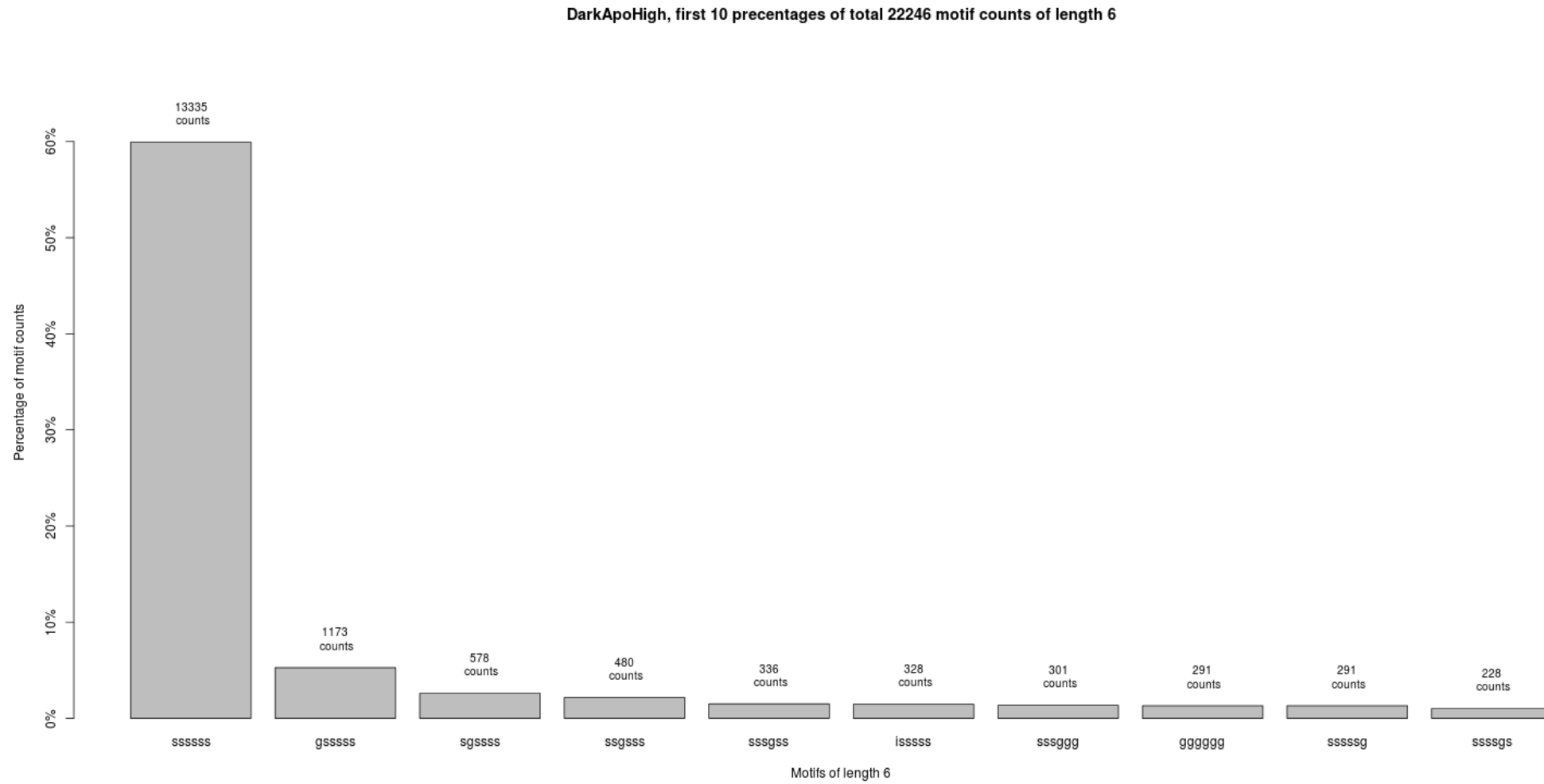
- (Dark)ApoHigh:



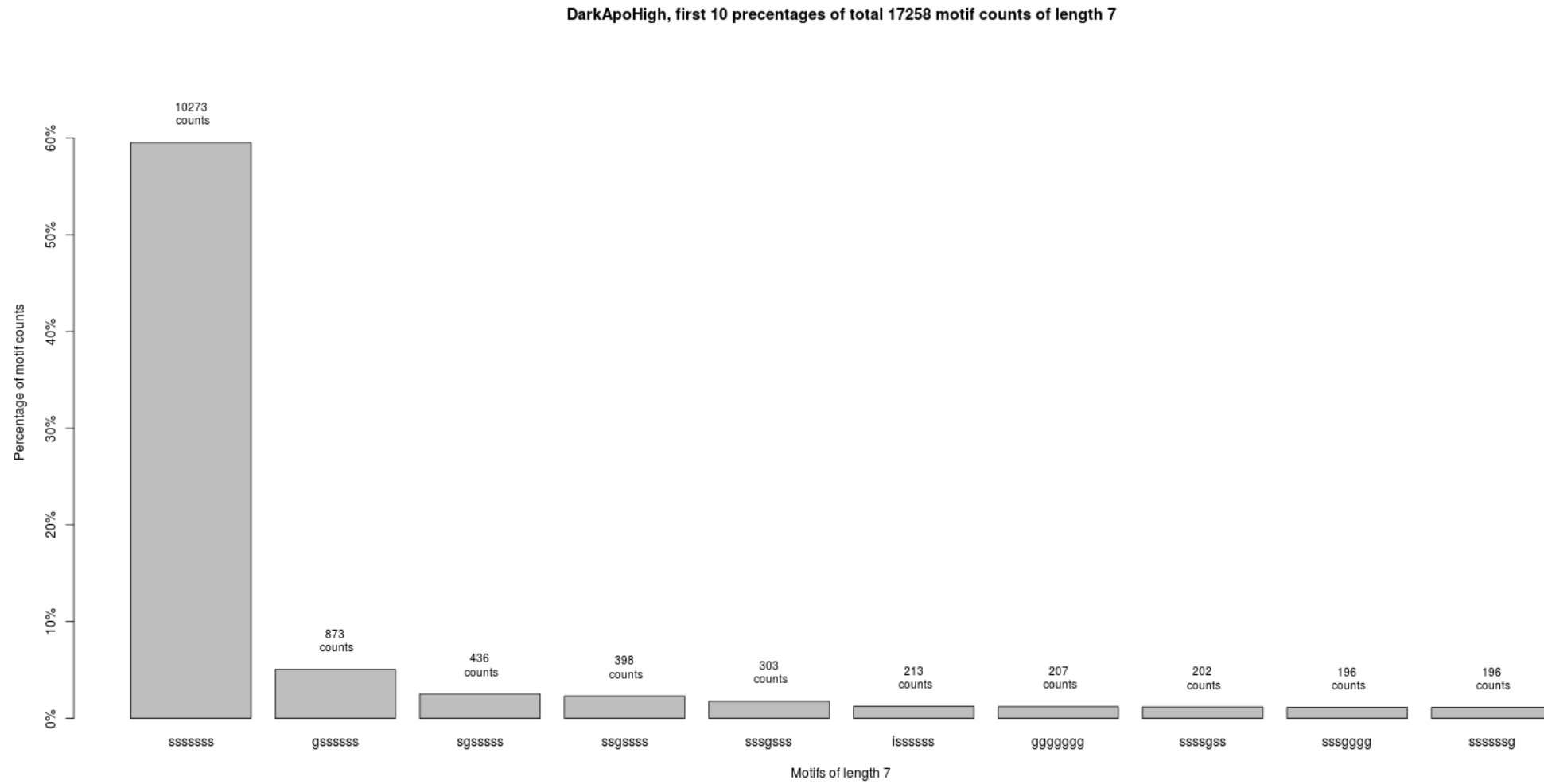
- (Dark)ApoHigh:



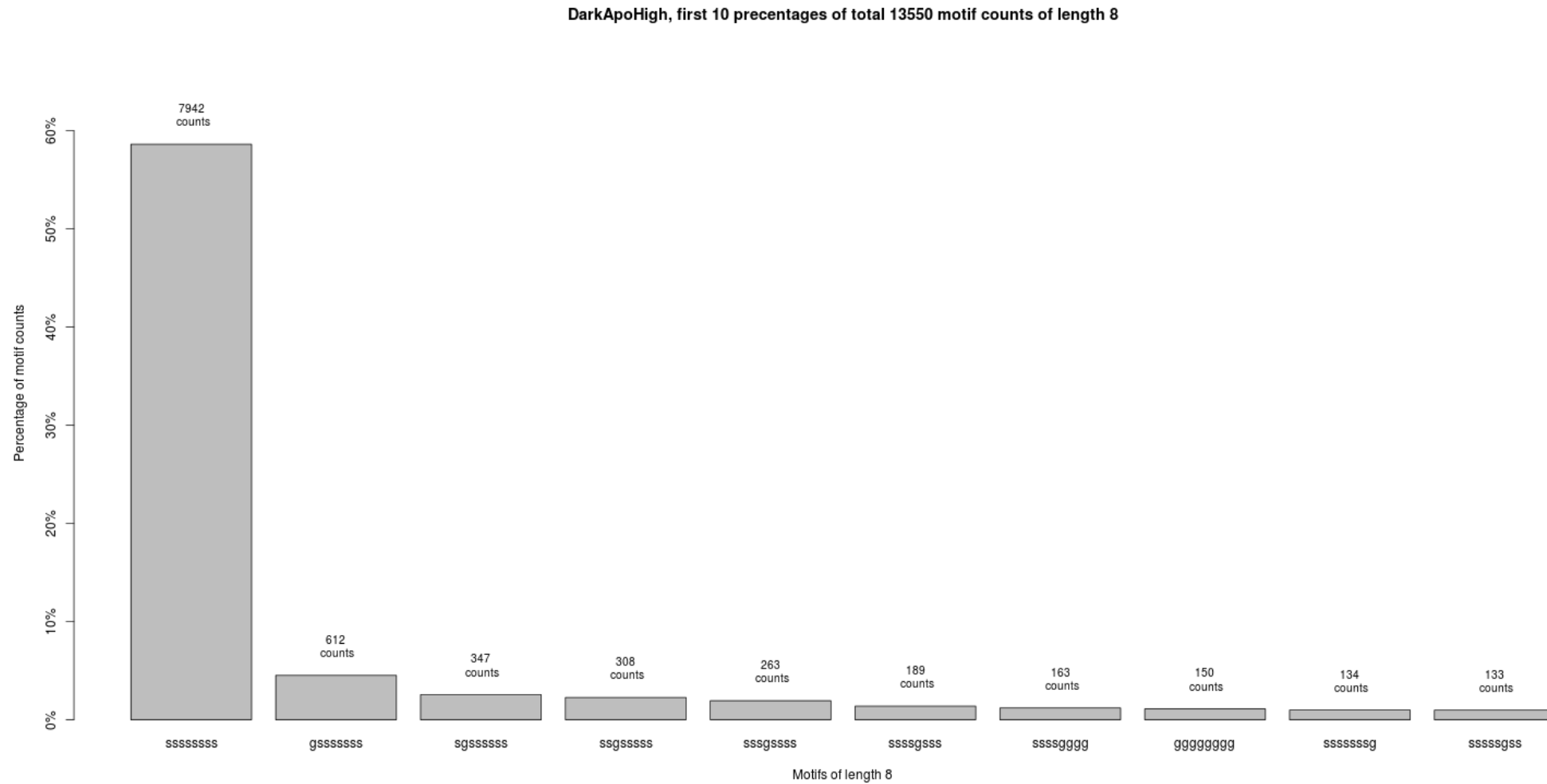
- (Dark)ApoHigh:



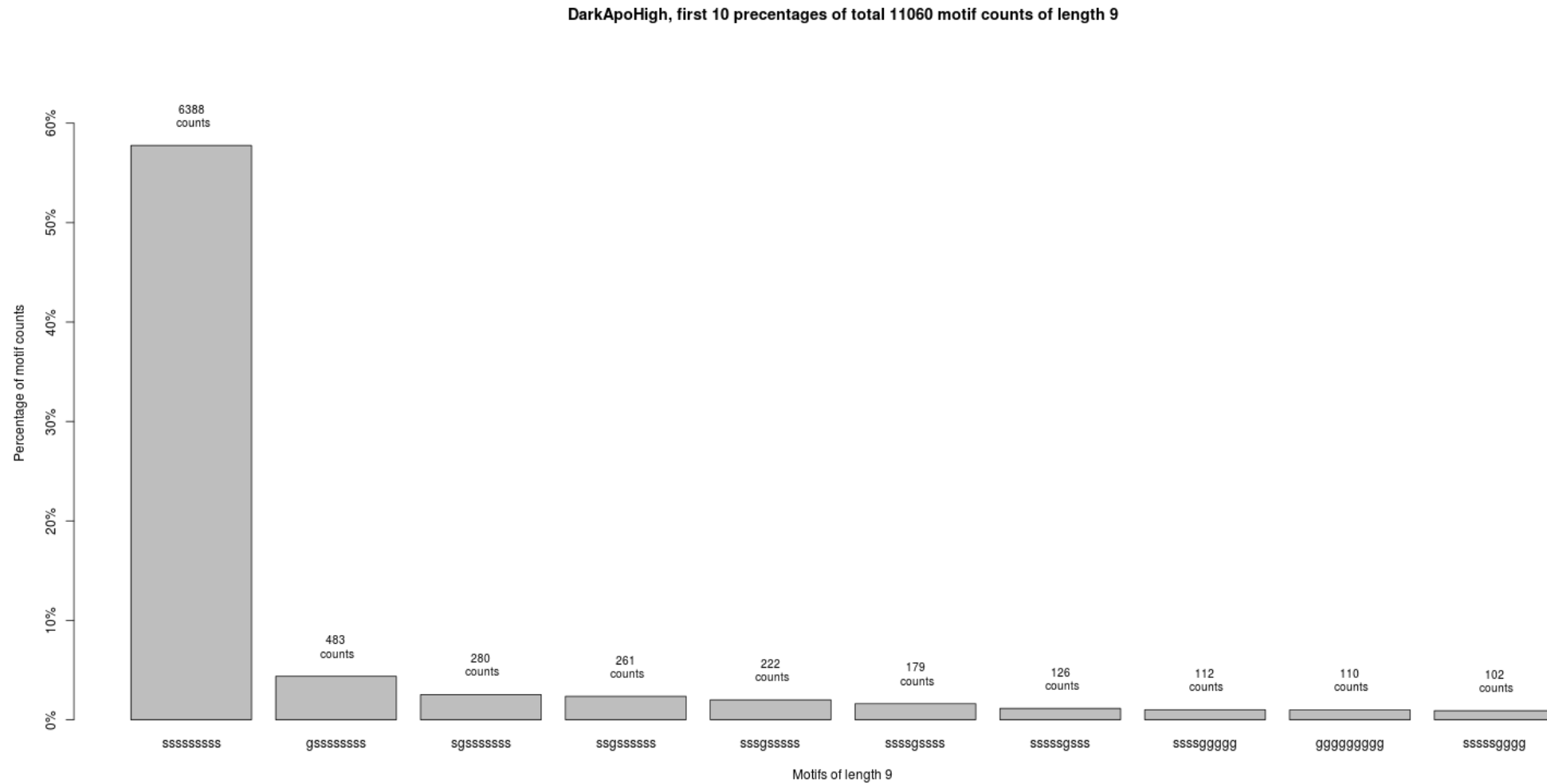
- (Dark)ApoHigh:



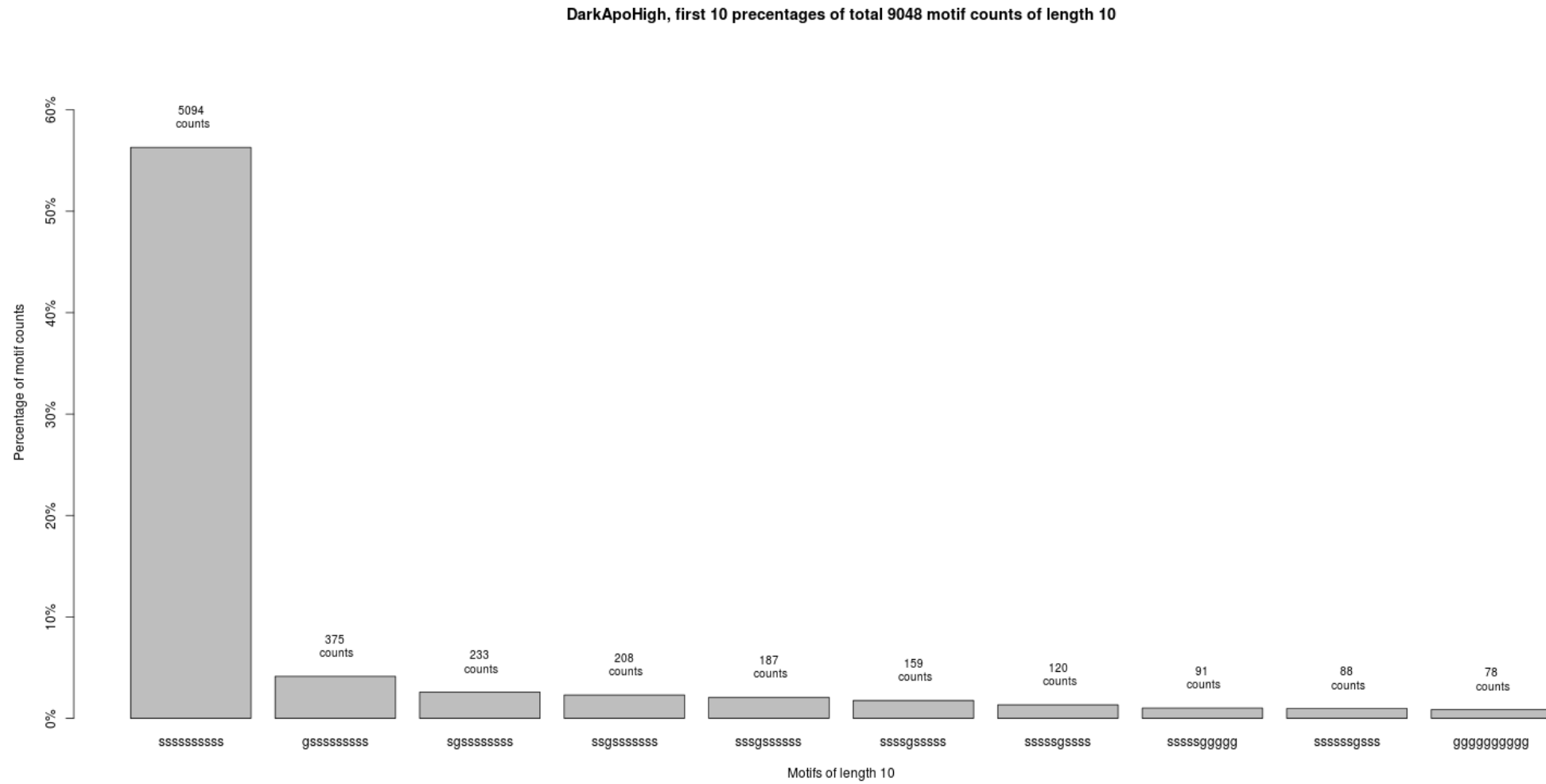
- (Dark)ApoHigh:



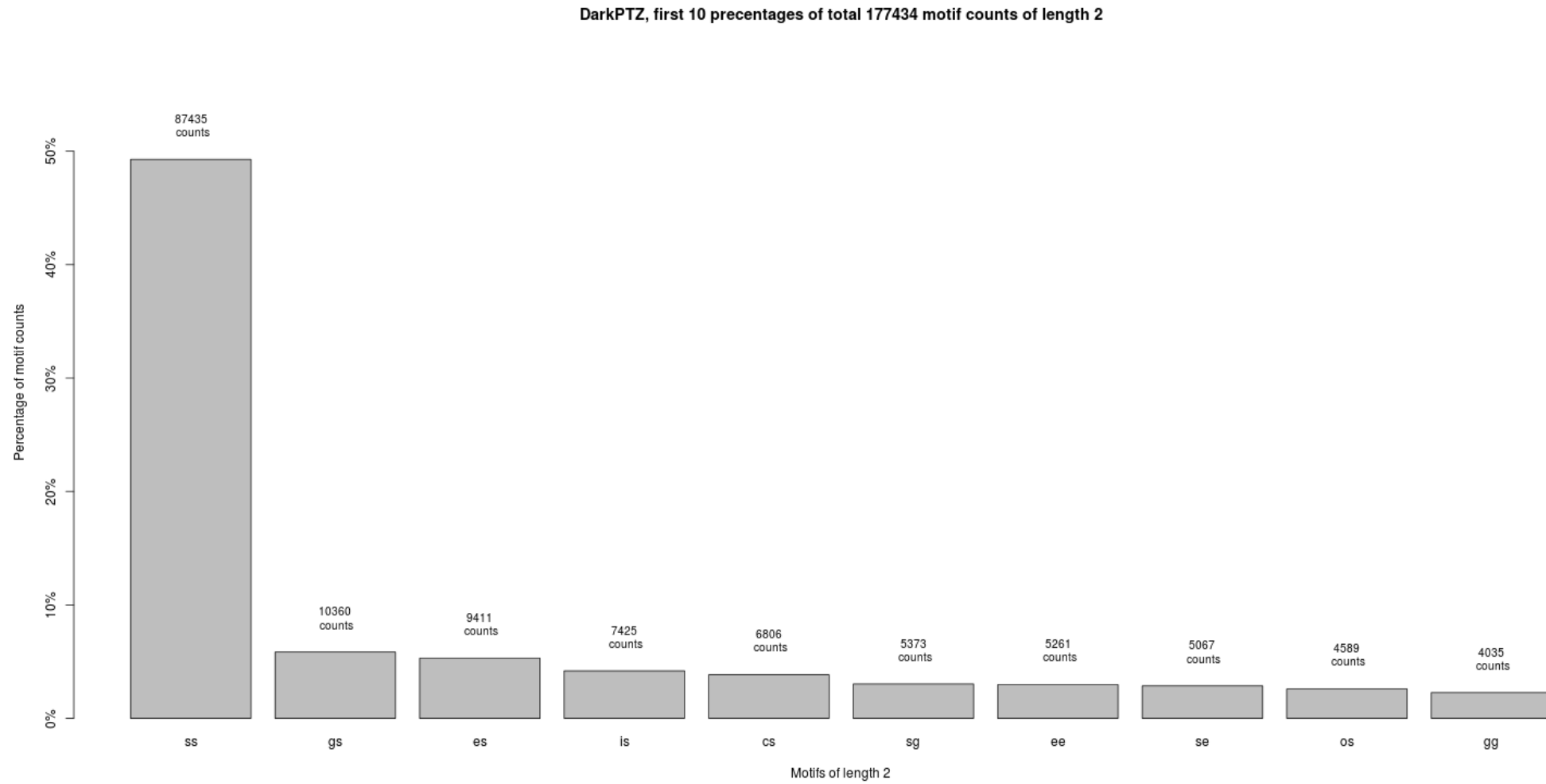
- (Dark)ApoHigh:



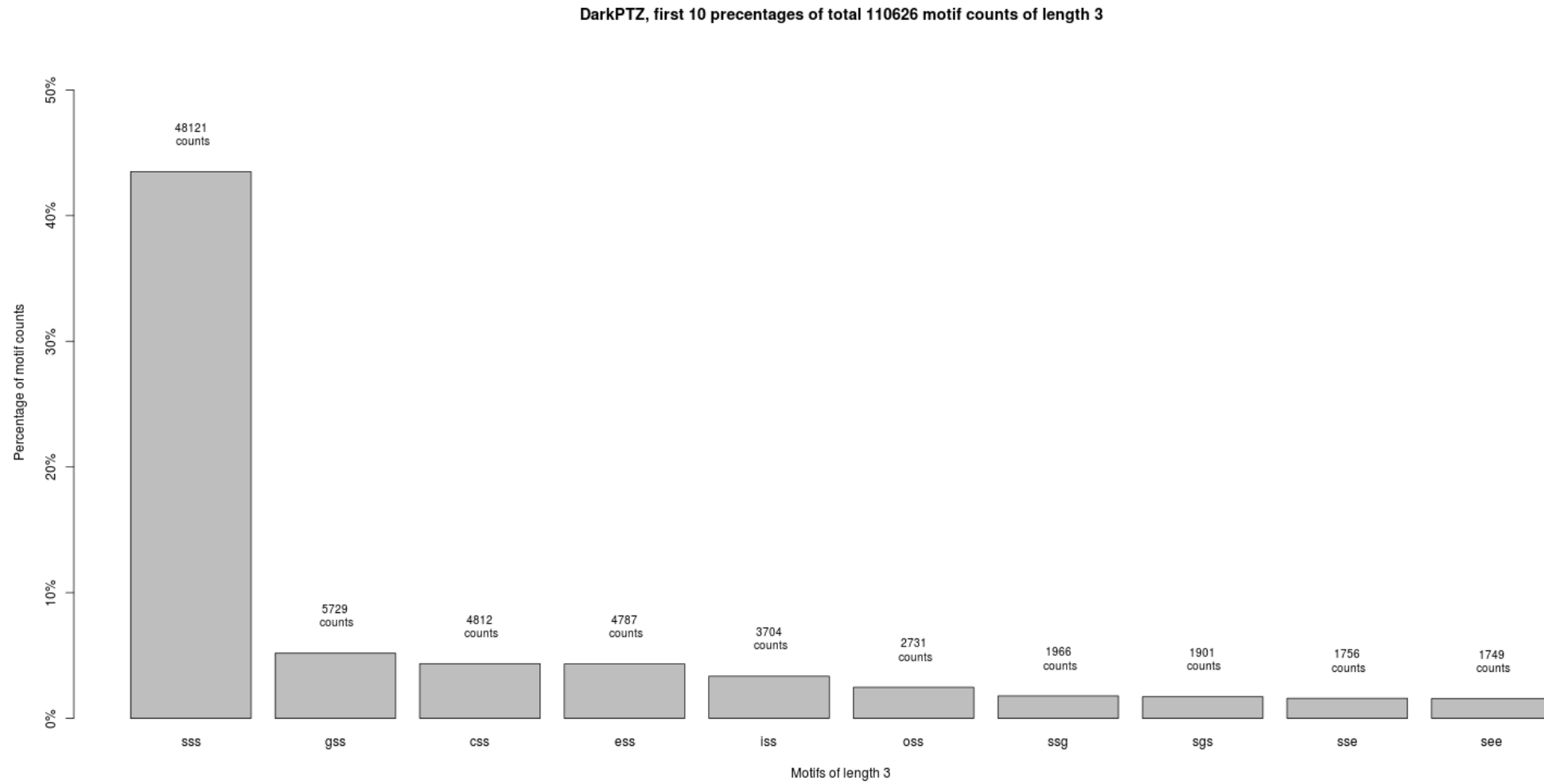
- (Dark)ApoHigh:



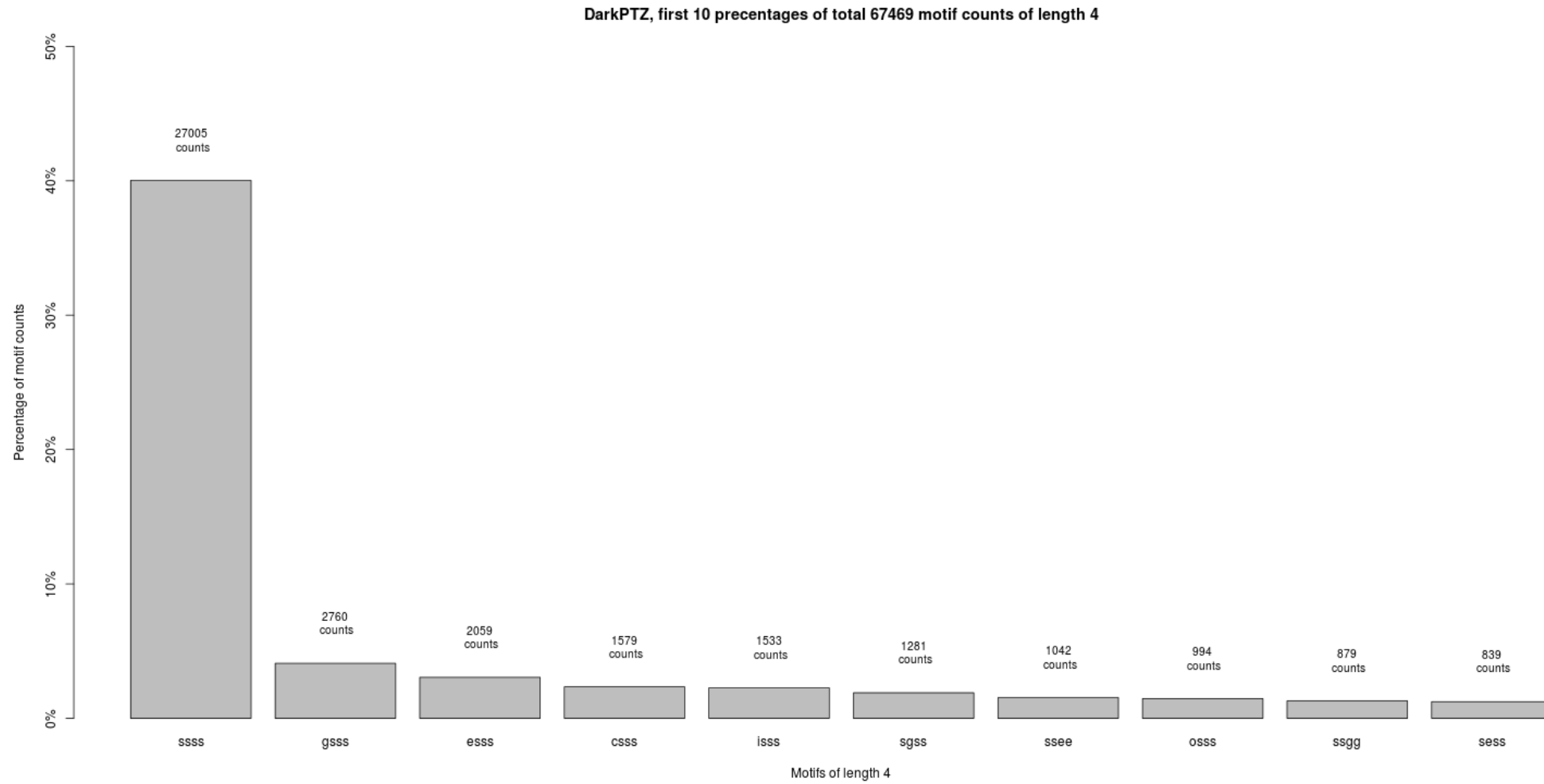
- (Dark)PTZ:



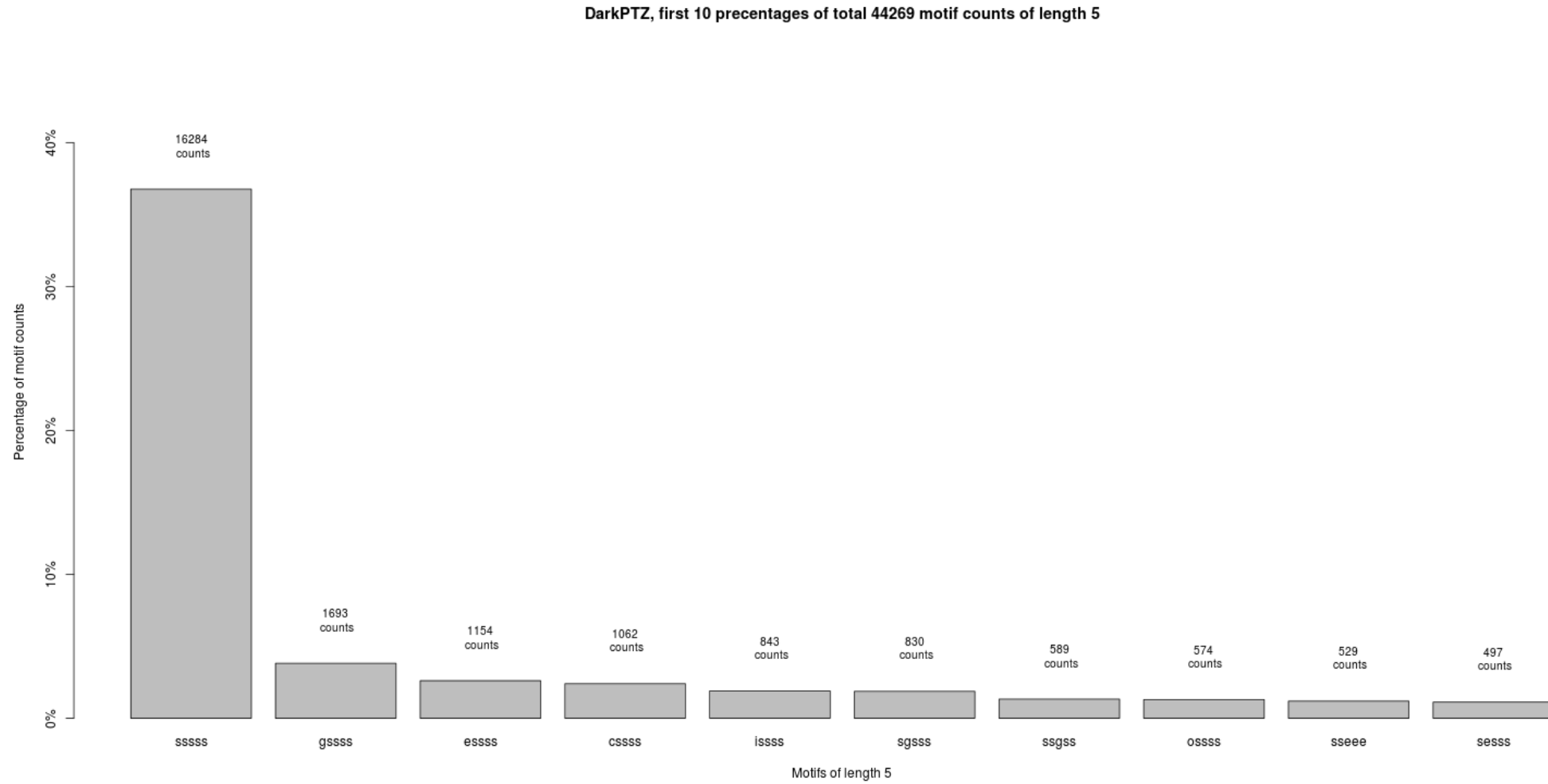
- (Dark)PTZ:



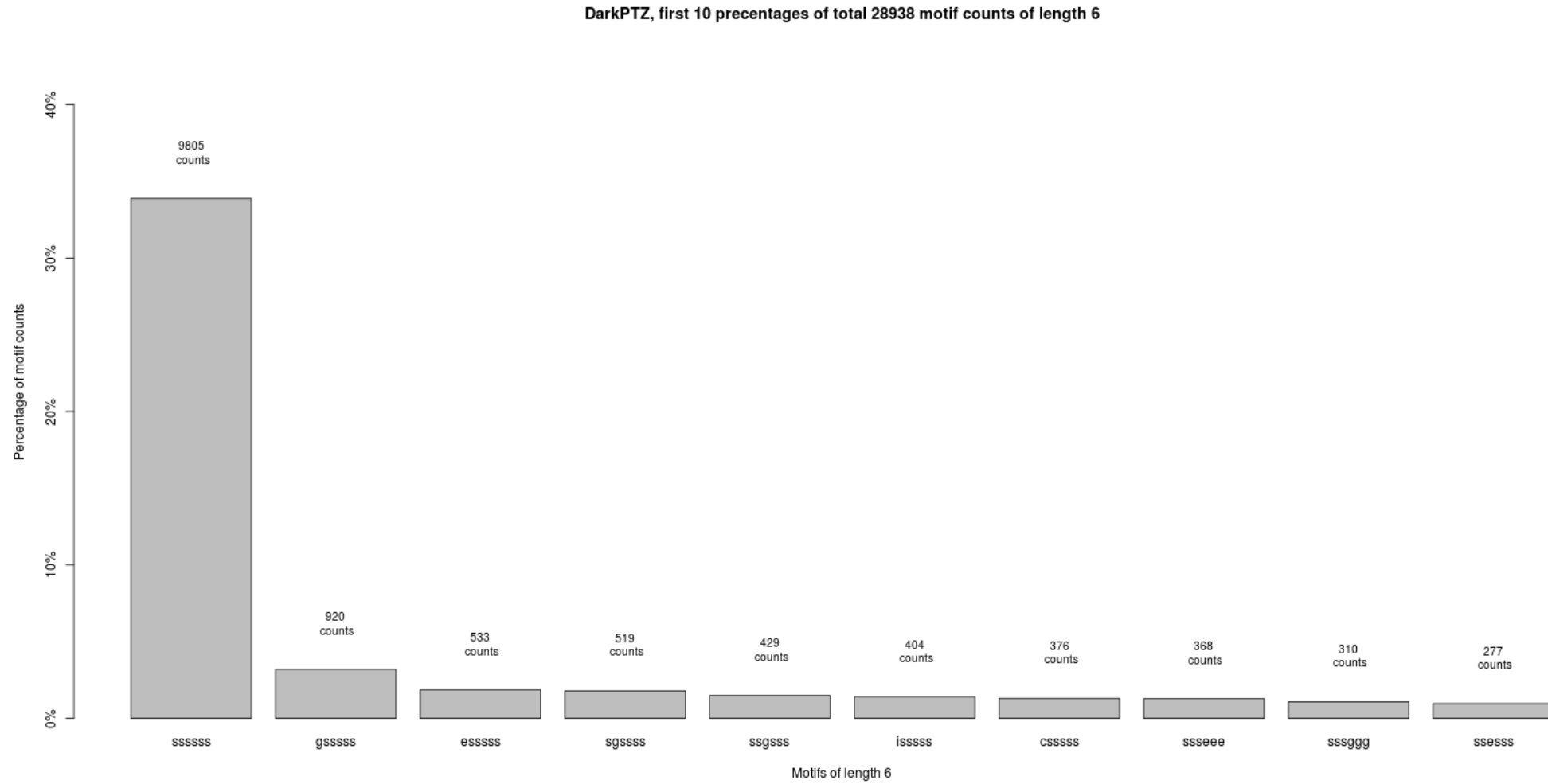
- (Dark)PTZ:



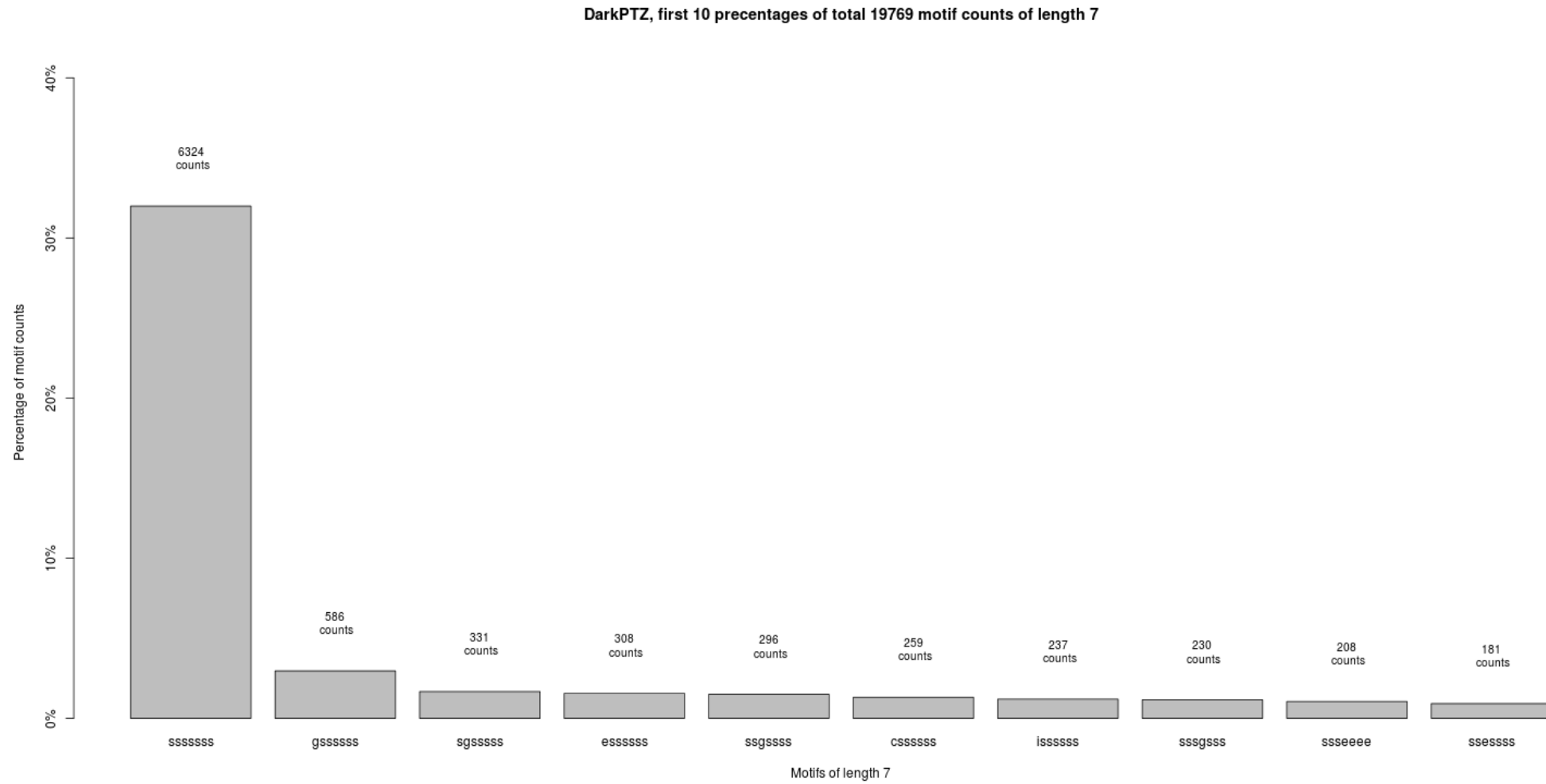
- (Dark)PTZ:



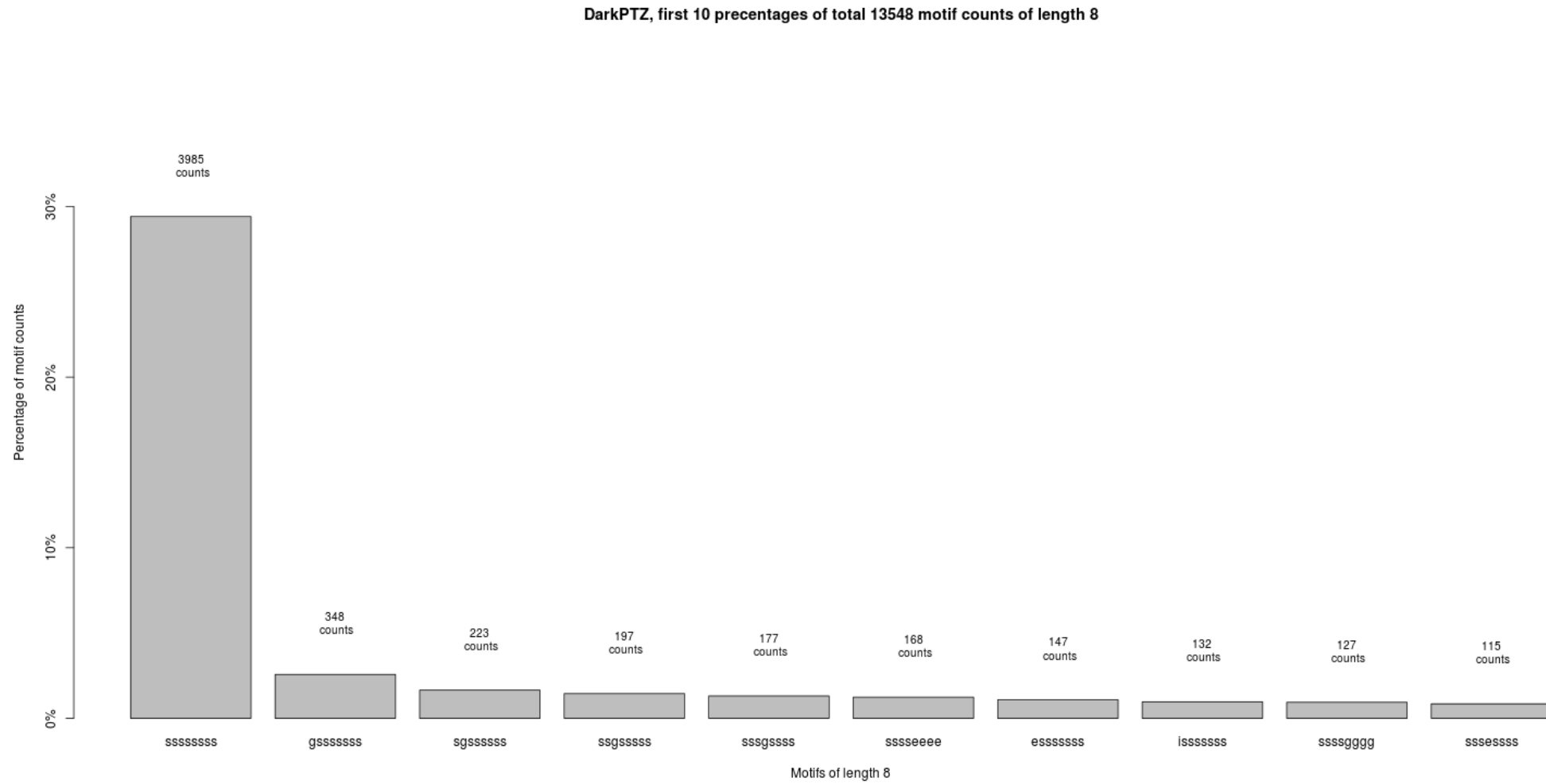
- (Dark)PTZ:



- (Dark)PTZ:

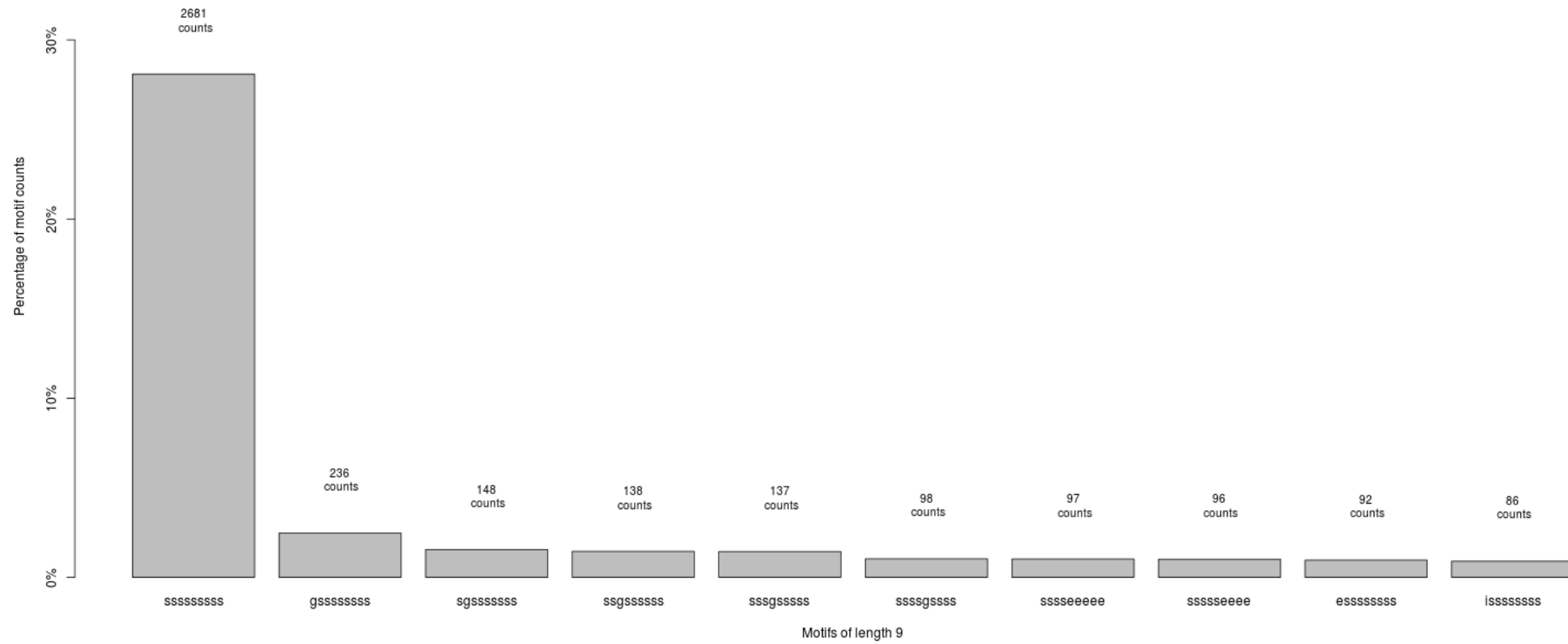


- (Dark)PTZ:



- (Dark)PTZ:

DarkPTZ, first 10 percentages of total 9544 motif counts of length 9



- (Dark)PTZ:

