

To **compare the message rates** of `/scan` and `/odom`, we analyze the number of messages published over the duration of the rosbag.

Basic Information

- **Bag Duration:** 199.7 seconds (approx)
 - **Message Counts:**
 - `/odom`: 5,794 messages
 - `/scan`: 984 messages
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Calculated Message Rates

Topic	Message Count	Duration (s)	Rate (Hz)
<code>/odom</code>	5,794	199.7	\approx 29.0 Hz
<code>/scan</code>	984	199.7	\approx 4.9 Hz

In conclusion, the `/odom` topic publishes approximately **6 times faster** than `/scan`. This makes sense because odometry is used for continuous motion estimation, while LIDAR scans are more computationally expensive and need less frequent updates.