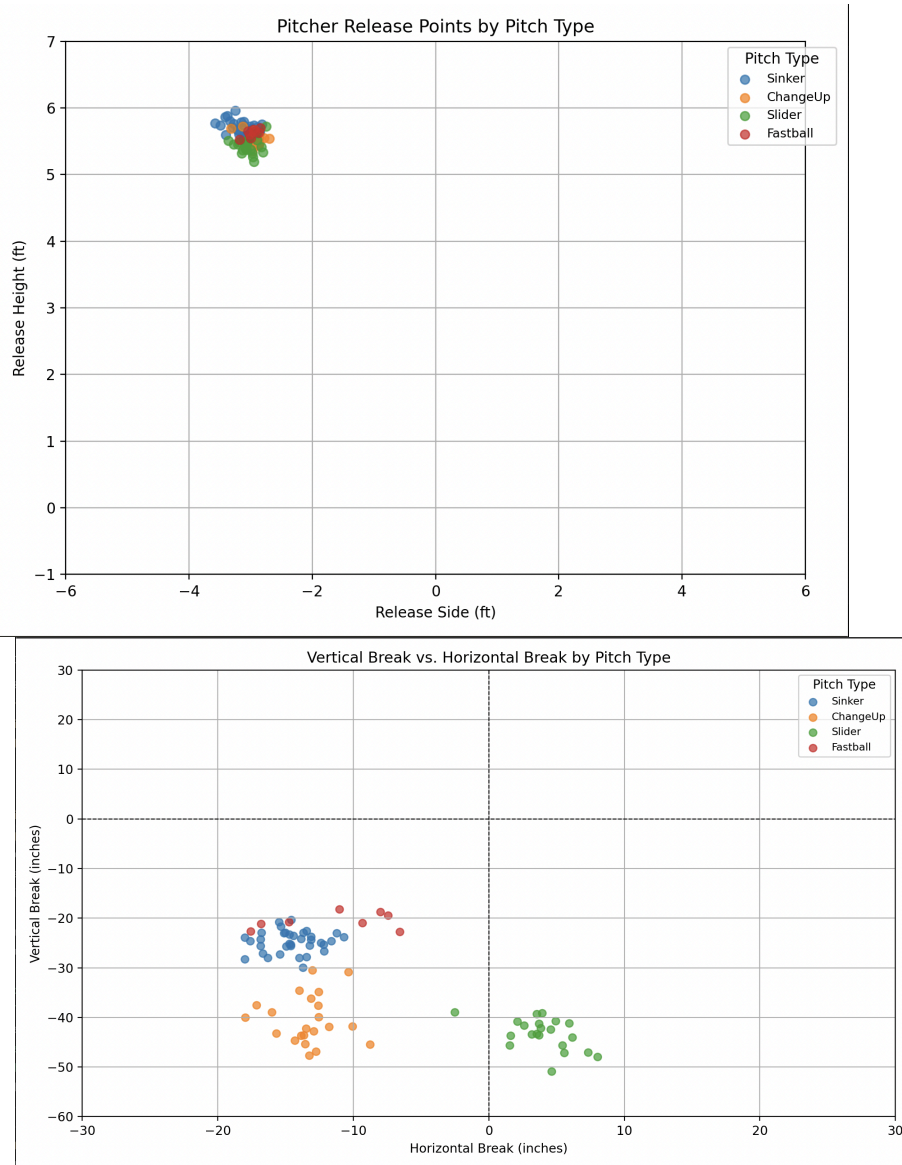
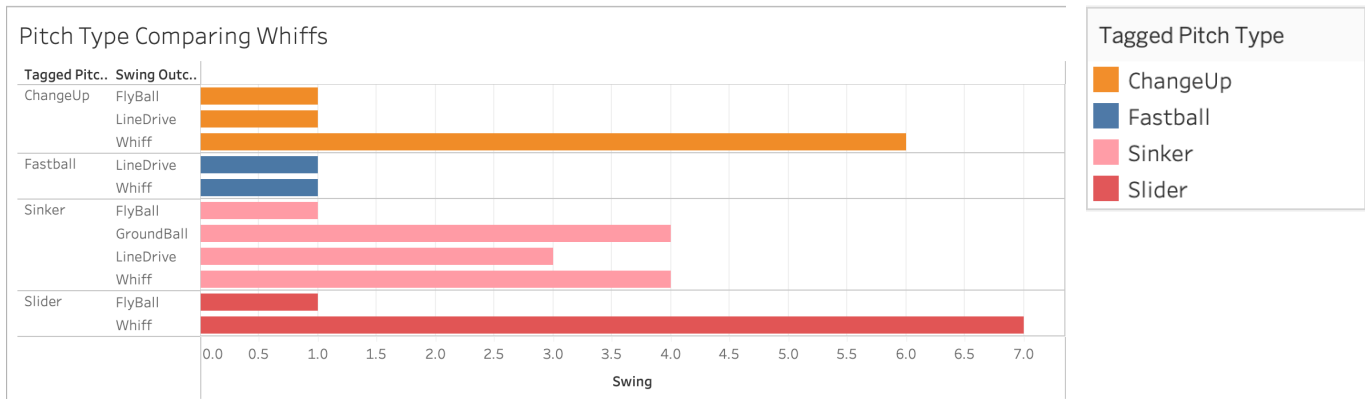


This report evaluates Jack Berg's pitching performance using data-driven analysis conducted with **SQL**, **Python**, and **Tableau**, with the full codebase and visuals available on [GitHub](#). The analysis focuses on the effectiveness of his pitch types, usage patterns, and outcomes, leveraging key metrics such as whiff rates, chase rates, and hit percentages. By examining his command, pitch locations, and movement, the report provides insights into Berg's strengths and opportunities for refinement, showcasing his strategic approach to pitching.



Jack Berg's pitch movement showcases impressive diversity and effectiveness, with each pitch type exhibiting strong, distinct break characteristics. His **Sinker** demonstrates exceptional horizontal break, ranging from 10 to 20 inches, ideal for inducing weak contact and ground balls. The **ChangeUp** features a well-balanced combination of horizontal and vertical break, effectively mimicking the fastball's release while deceiving hitters with its movement. His **Slider** stands out with a sharp vertical drop of 30 to 40 inches and moderate horizontal break, making it a dominant strikeout pitch with significant —

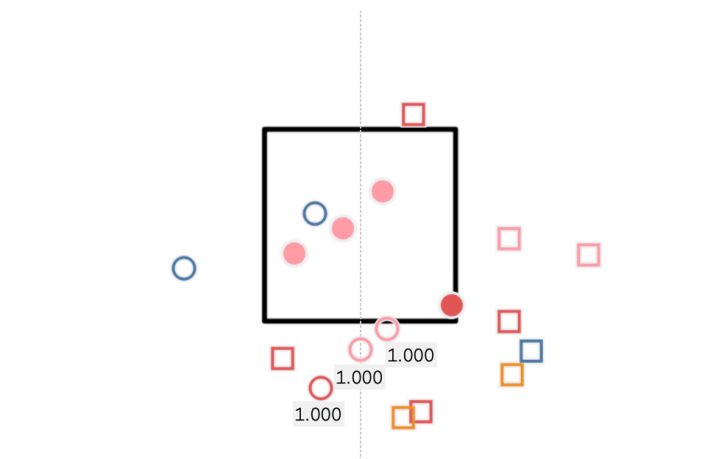
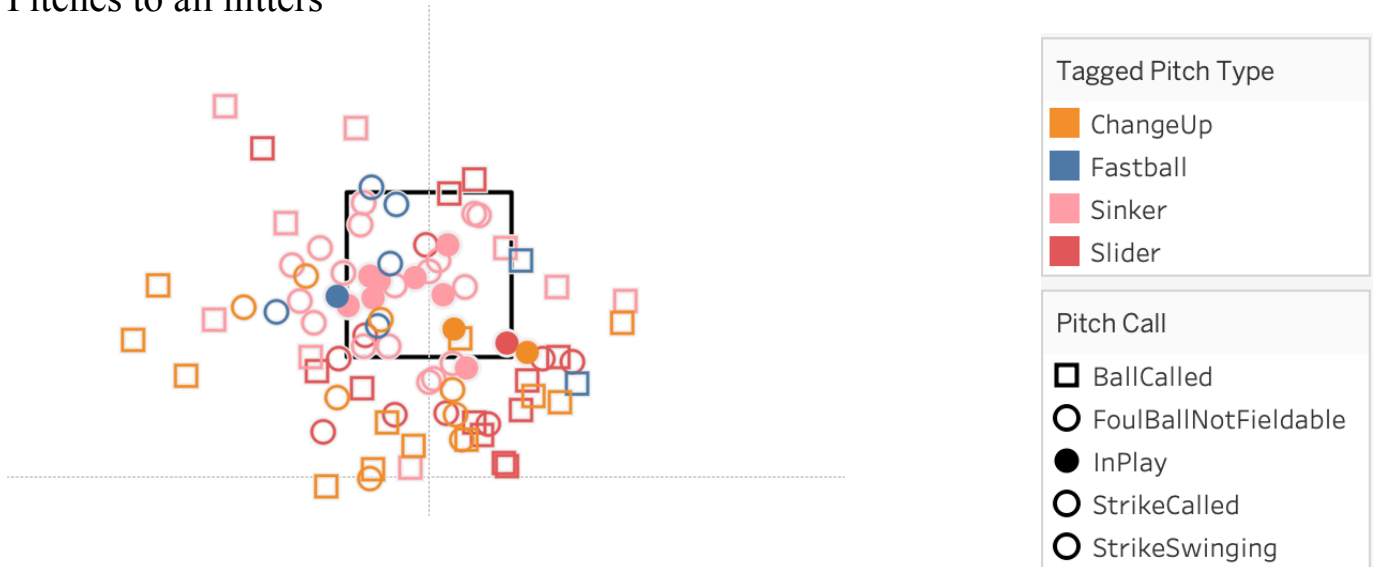
swing-and-miss potential. Meanwhile, the **Fastball** exhibits minimal break, maintaining its intended precision and velocity. This well-rounded movement profile highlights Berg’s ability to mix pitches effectively and keep hitters off balance, demonstrating his potential as a highly versatile and impactful pitcher.



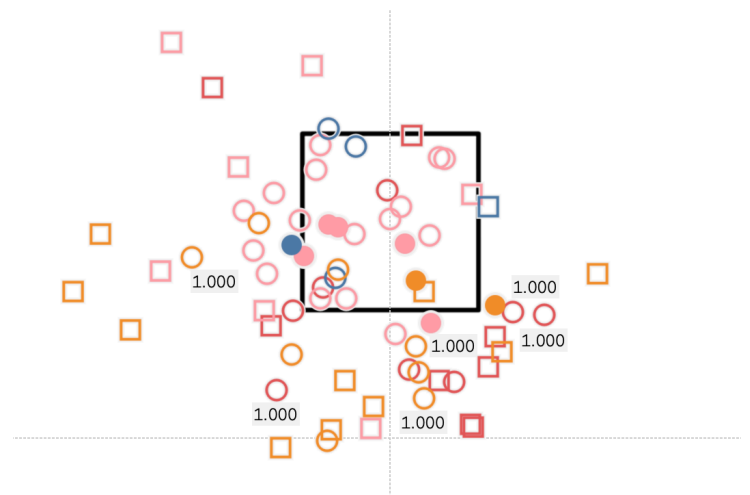
Pitch Type	Total Pitches	Whiff %	Chase %	Hit %
ChangeUp	24	25.0	25.0	0.0
Fastball	8	12.5	12.5	0.0
Sinker	37	10.81	10.81	8.11
Slider	22	31.82	27.27	0.0

Jack Berg’s pitch performance shows notable effectiveness with the **Slider** and **ChangeUp**, both generating significant swings and misses while allowing no hits. The **Slider** stands out with a **31.82% whiff rate** and **27.27% chase rate**, making it a strong choice for inducing out-of-zone swings. Similarly, the **ChangeUp** boasts a **25% whiff and chase rate**, demonstrating strong deception. The **Fastball**, with a **12.5% whiff and chase rate**, limits hits effectively but is less impactful in generating swings and misses. The **Sinker**, used most frequently with **37 total pitches**, has the lowest whiff and chase rates (**10.81% each**) and allows an **8.11% hit rate**, suggesting it is more contact-prone and we see in the chart that it is a great **ground ball pitch**. Overall, Berg’s off-speed and breaking pitches excel and his sinker is an excellent ground ball pitch.

Pitches to all hitters

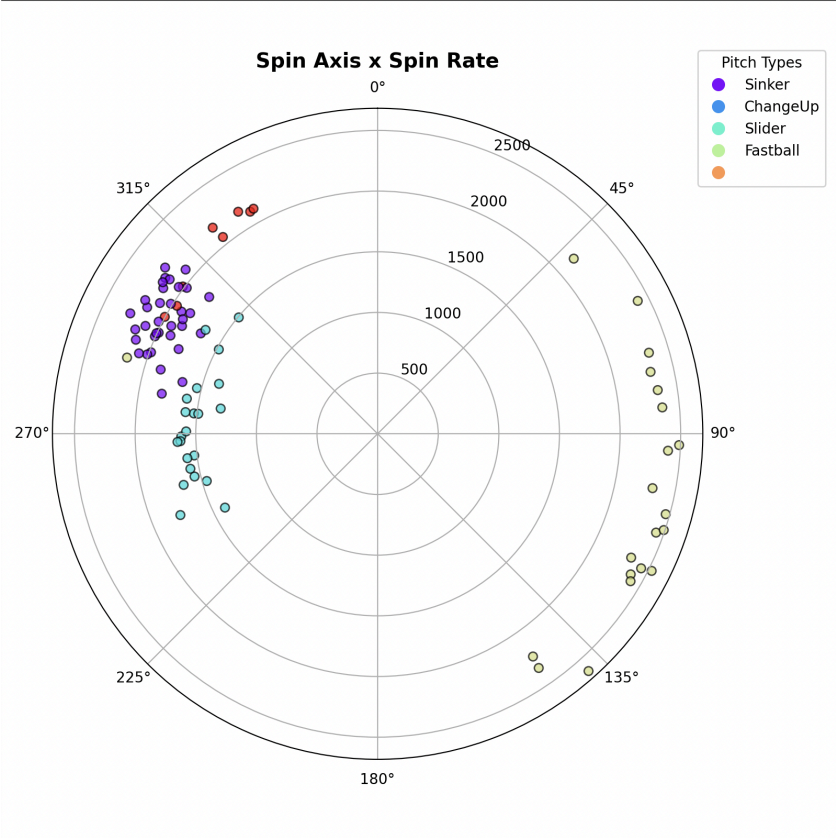


Pitches to LHH



Pitches to RHH

We first visualize the distribution of pitches thrown to all hitters and then analyze them for individual hitters. The analysis reveals that **Berg effectively utilizes his off-speed pitches** by frequently locating them **outside the strike zone**, leading to a **high number of whiffs and chases** (a whiff rate of **1.000** indicates a complete swing-and-miss). Additionally, he demonstrates **strong command** by consistently keeping these off-speed pitches **low in the zone** and effectively throwing his **sinkers for strikes**, showcasing his ability to execute a **strategic pitching approach**.



Pitcher	games	hits	runs_allowed	walks	strikeouts	WHIP	AVG
Berg, Jack	4	5	1.0	3	9	2.667	0.2

Pitch Type	X	Sits	Top	Spin	Carry/Sink	RelH	RelSide	Ext
ChangeUp	24	81-85	85.1	1547.4	1.8	5.5	-2.9	4.9
Fastball	8	93-94	94.0	2076.2	12.9	5.6	-3.0	4.8
Sinker	37	92-94	95.0	2002.2	8.7	5.7	-3.1	4.8
Slider	22	80-83	83.7	2380.8	0.2	5.4	-3.0	4.8



Summary of Jack Berg's Pitching Performance

Jack Berg's pitching demonstrates versatility and effectiveness, with a distinct profile for each pitch type. His **Slider** and **ChangeUp** stand out as dominant pitches, generating high swing-and-miss rates while allowing no hits. The Slider achieves a **31.82% whiff rate** and **27.27% chase rate**, while the ChangeUp exhibits strong deception with **25% rates** for both metrics. His **Fastball**, although less effective at inducing swings and misses (**12.5% whiff and chase rates**), excels at limiting hits. The **Sinker**, with the highest usage (**37 total pitches**), is slightly more contact-prone, with a **10.81% whiff and chase rate** and an **8.11% hit rate**, but it is an excellent ground ball pitch due to its exceptional horizontal movement.

Berg skillfully locates his off-speed pitches outside the strike zone, leveraging them to induce whiffs and chases, while maintaining strong command by keeping them low in the zone. His **Sinker** and **Fastball** are frequently thrown for strikes, showcasing his ability to mix pitches effectively. This well-rounded arsenal allows Berg to keep hitters off balance, demonstrating his potential as a highly strategic and impactful pitcher.