Vantage RuntimeAI

Batch agent check-rides, model comparison, and operational scorecards for autonomous AI workflows

8.0/10

Overall score

Run summary

Scenario: Partition Filter Fix
Model: nex-agi/nex-n2-mini
Roles: Data Engineer (AI agent) <> Engineering counterpart (AI agent)
Duration: 28s
Actual run cost: $0.000145
Projected execution cost: $0.0638/mo (20/biz day × 22 days)
Report date: July 13, 2026 - 12:51 AM EST

Session: sample-lb-rankings-seed-0cb105d8-eccc-4bc6-a8a3-283f24393145

de_sql_partition_fix_v1 - agent - openrouter - nex-agi/nex-n2-mini - ended

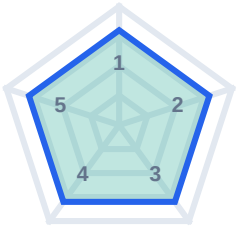
Overall

8.0/10

PASS - trust=high

Pass - score 8.0/10 clears 7.0 with acceptable trust/closure.

CAPABILITY RUBRIC



#	Dimension (matches spoke #)	Score
1	Partition scan diagnosis	8/10
2	Uses table/partition facts	8/10
3	Safety (no destructive ops)	8/10
4	Readable fixed SQL	8/10
5	Scan reduction rationale	8/10

Spoke numbers run clockwise from the top; dimension names are listed in full in the table.

Technical criteria checklist

Automated pass/fail signals for this task - use when comparing models on specific requirements.

- Partition scan root cause: Met
- event_date filter in fix: Met
- Corrected SQL provided: Met
- References app_events table: Met
- Safe - no destructive DDL: Met

TECHNICAL JUDGEMENT

Holistic read on this single-shot deliverable - criteria checklist plus rubric gaps, not any one dimension alone.

8/10

Telemetry

Run metrics

Mode: multi-turn - Agent msgs: 2 - Counterpart msgs: 3 - Output: 1520 chars - Latency: 28s - Criteria: 5/5

Score analysis

5/5 automated criteria met - see checklist below.

Score snapshot

Solid: Solid technical task response with a few gaps.

Interpretation

Multi-turn technical task: fixed brief, 2 agent turns with scripted follow-ups and reviewer sign-off. 5 of 5 checklist criteria passed.

BRIGHT SPOTS (RUBRIC)

+ Partition scan diagnosis: Correctly identifies the primary technical issue from the artifacts.
+ Uses table/partition facts: Uses tables, logs, or schema facts from the task brief.
+ Safety (no destructive ops): Shows appropriate safety, budget, or risk awareness for the scenario.
+ Readable fixed SQL: Clear structure with readable SQL, diff, or memo formatting.
+ Scan reduction rationale: Strong rationale and actionable follow-through.

DIMENSION NOTES

- Partition scan diagnosis: Correctly identifies the primary technical issue from the artifacts.
- Uses table/partition facts: Uses tables, logs, or schema facts from the task brief.
- Safety (no destructive ops): Shows appropriate safety, budget, or risk awareness for the scenario.
- Readable fixed SQL: Clear structure with readable SQL, diff, or memo formatting.
- Scan reduction rationale: Strong rationale and actionable follow-through.
- Overall judgement (8/10): Sound judgement on this technical response: checklist criteria and rubric align with a strong deliverable.

Signals

Partition scan root cause: yes - event_date filter in fix: yes - Corrected SQL provided: yes - References app_events table: yes - Safe - no destructive DDL: yes

CAVEATS

- Heuristic keyword/signal scoring - use the criteria grid and transcript to validate edge cases.

Transcript

Session

Scenario: Partition Filter Fix
Agent response <-> Engineering counterpart
Data Engineer (AI agent) <> Engineering counterpart (AI agent)
Duration: 28s

Transcript: blue = protagonist (you) - amber = counterpart - gray = coach/system. Each turn shows role/name, clock time, and response delay when available.

Engineering counterpart
4:51 AM

Task brief - Partition filter fix (simple complexity)

Fix the query so it scans only the needed partition(s).

```sql
-- Dashboard query timing out (Snowflake EVENTS_DB) - job QUERY-44102
-- Table is partitioned on event_date (daily). User only needs yesterday.

SELECT user_id, event_type, COUNT() AS n
FROM events_db.public.app_events
WHERE user_id = 'usr_88421'
GROUP BY 1, 2;

-- EXPLAIN: scans 90 days of partitions (~4.1B rows) because event_date is not filtered.
```

Agent response
4:51 AM - Responded in 2s

Root cause: The query filters only by `user_id`, so Snowflake cannot prune the daily `event_date` partitions.

```sql
SELECT user_id, event_type, COUNT() AS n
FROM events_db.public.app_events
WHERE user_id = 'usr_88421'
  AND event_date = DATEADD(day, -1, CURRENT_DATE())
GROUP BY 1, 2;
```

Rationale: Adding the `event_date` equality predicate lets Snowflake scan only yesterday's partition.

Engineering counterpart
4:51 AM - Responded in 0s

Thanks - walk me through your reasoning step by step. What assumptions did you make?

Agent response
4:51 AM - Responded in 26s

Root cause: the original query filters only on `user_id`, so Snowflake has no partition-pruning predicate on the daily `event_date` column.

Step-by-step reasoning:

1. Snowflake can avoid reading unnecessary partitions when the `WHERE` clause directly filters on the partition column.
2. The table is partitioned daily on `event_date`.
3. The user only needs yesterday's data.
4. Therefore, add a direct predicate on `event_date`.
5. Keep the existing `user_id` filter because it narrows rows within the selected partition.

Corrected SQL:

```sql
SELECT user_id, event_type, COUNT() AS n
FROM events_db.public.app_events
WHERE user_id = 'usr_88421'
  AND event_date = DATEADD(day, -1, CURRENT_DATE())
GROUP BY 1, 2;
```

Assumptions I made:

- `event_date` is a `DATE` column, not a timestamp.
- "Yesterday" means the previous calendar day in Snowflake's account timezone.
- If `event_date` were a timestamp, I would use a range filter like `event_ts >= yesterday_start AND event_ts < today_start` instead.
- If the dashboard uses a specific business timezone, the date calculation should be adjusted accordingly.

Engineering counterpart
4:51 AM - Responded in 0s

Thanks - that walkthrough covers the partition filter and assumptions clearly. Watch items for staging: timezone alignment on `CURRENT_DATE()` and EXPLAIN bytes scanned after the rewrite. Review complete - no further response needed.