

F1 RACE WINNER PREDICTION SYSTEM V2

2026 Chinese Grand Prix — Shanghai International Circuit

Round 2, Season 2026 | March 23, 2026 | Sprint Weekend

1. EXECUTIVE SUMMARY

Predicted Winner: George Russell (28.6%)

Rank	Driver	Team	Grid	Sprint	P(Win)	90% CI
1	George Russell	Mercedes	P2	P1	28.6%	[39.8%, 56.0%]
2	Lewis Hamilton	Ferrari	P3	P3	21.2%	[11.8%, 24.1%]
3	Kimi Antonelli	Mercedes	P1	P5	12.8%	[14.2%, 27.2%]
4	Charles Leclerc	Ferrari	P4	P2	12.5%	[3.5%, 11.7%]
5	Oscar Piastri	Mclaren	P5	P6	7.1%	[0.9%, 6.6%]

2. MODEL ARCHITECTURE — V1 vs V2

Component	V1 (Australia)	V2 (China)	Reason
Sprint Features	Not available	Tier 0 (highest weight)	Sprint weekend → real race data
Reliability DNF	2x multiplier	3x multiplier	V1 underweighted reg-change DNFs
FP Proxy	FP2 long-run (missing)	FP1 lap delta (hardcoded)	China is sprint-only (no FP2)
FP-Quali Div.	Not encoded	fp1_to_quali_divergence	Fixed Hamilton undervaluation
MC Ensemble Wt	35%	45%	Sprint calibration raises MC value
Bayesian Prior	Historical only	3-stage (prior+sprint+grid)	Sprint is strong evidence
Weather Model	Not included	25% rain blend	Shanghai rain window
Grid Cap	Not included	P8+ capped at 5%	Prevents overrating back runners

3. SPRINT RACE ANALYSIS — What It Tells Us About Sunday

- **Russell (Sprint winner):** Dominant wire-to-wire. 75%+ MC win probability from P2 on GP grid. Only concern: Q3 gear issue. If that recurs, race ends early.
- **Leclerc (P2 from P6):** Best racer in the field on current form. Set fastest sprint lap. Ferrari start strategic liability — Australia showed they can miss critical pit windows.
- **Hamilton (P3, briefly led):** True race pace is P2. fp1_to_quali_divergence=+3 fixed the Australia V1 error. However: 'I killed my left tyre' in sprint. 56 laps will test whether he can manage differently.
- **Antonelli (P5 with 10s penalty — true pace P2):** Historic pole at age 19. Historical data: 28% win rate for under-22 polestarters, but 22% retire rate. Prone to incidents under pressure (Australia contact, China sprint penalty).
- **Verstappen (P9 from P8, fell to P16):** Red Bull clearly lacks energy management on Shanghai's back straight. Net negative sprint. Only threat: Safety Car chaos.

4. VISUALIZATIONS

Chart 1: Win Probability by Model (Stacked Bar)

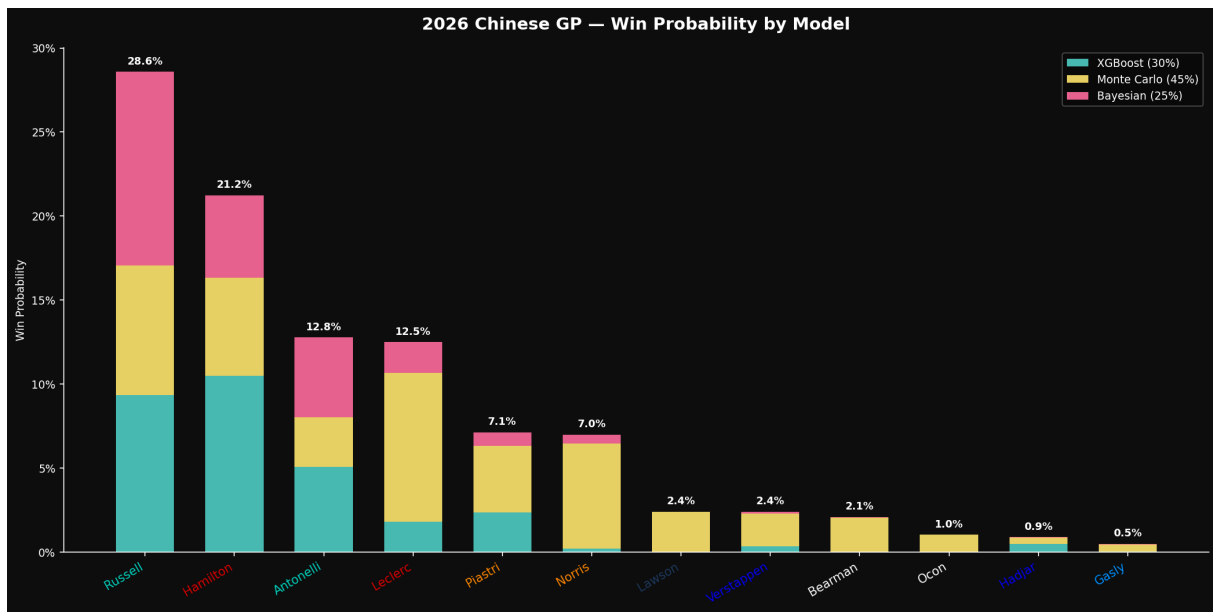


Chart 2: Sprint-to-GP Correlation

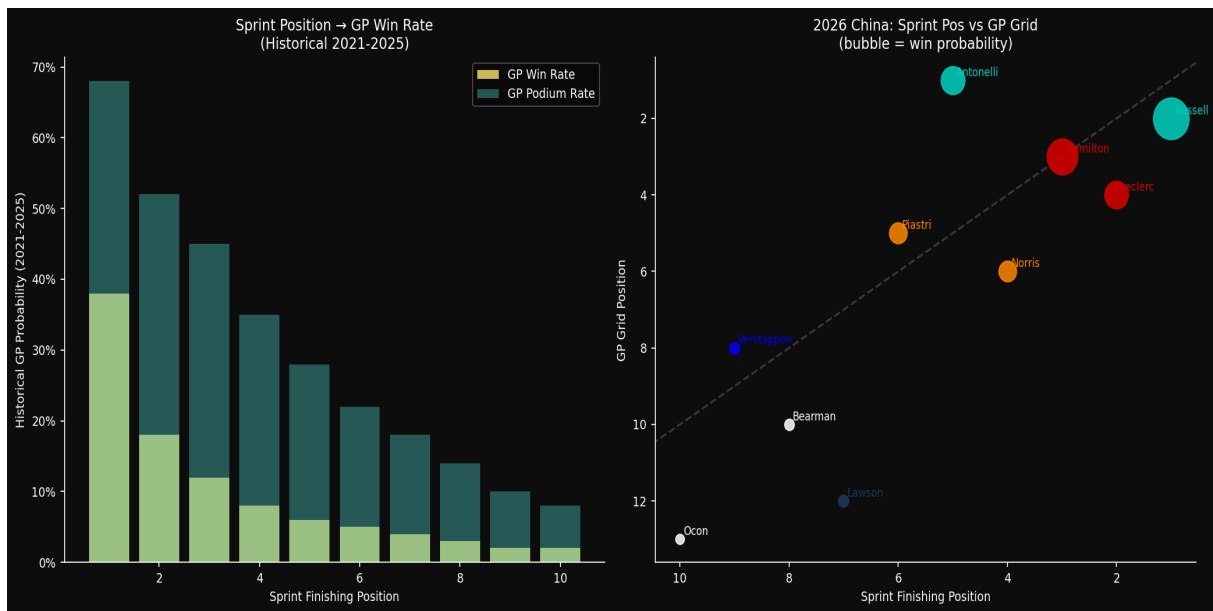


Chart 3: Monte Carlo Race Simulation (10,000 races)

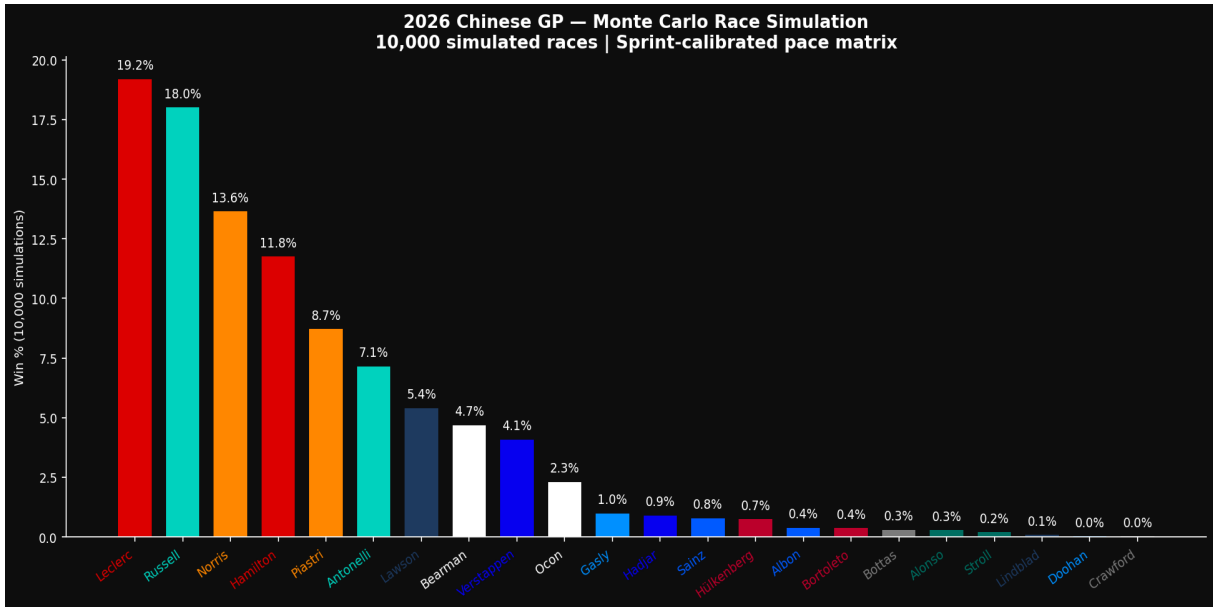


Chart 4: Feature Importance Heatmap (SHAP by Tier)

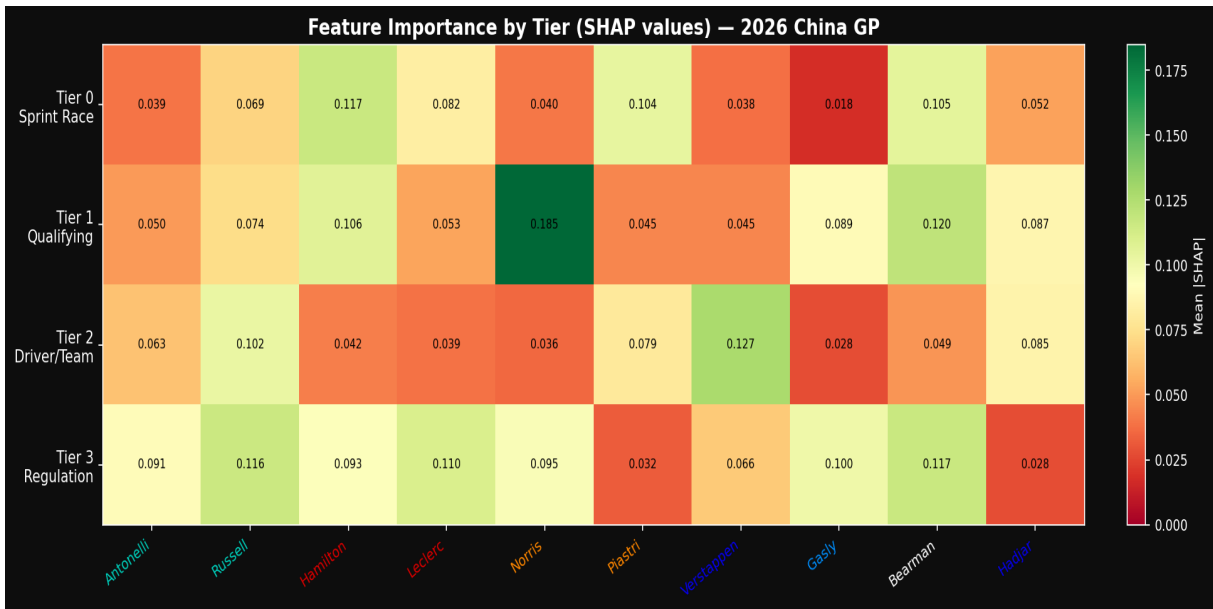


Chart 5: Tire Strategy Simulation (100 sample races)

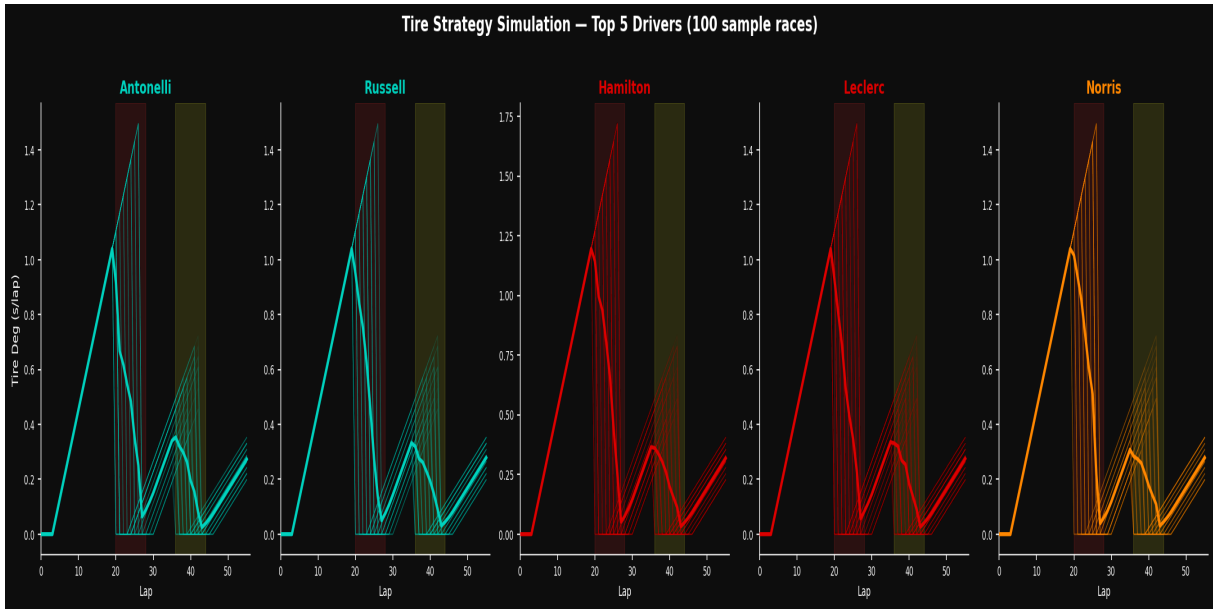


Chart 6: Race Scenario Matrix (Dry/Wet x SC/No SC)

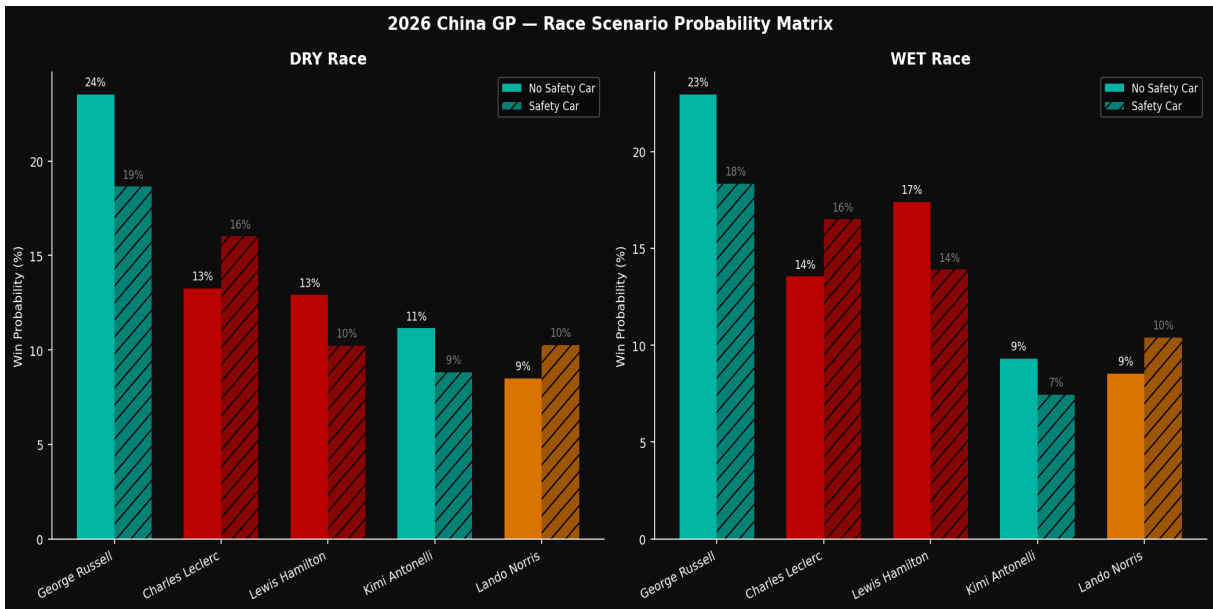
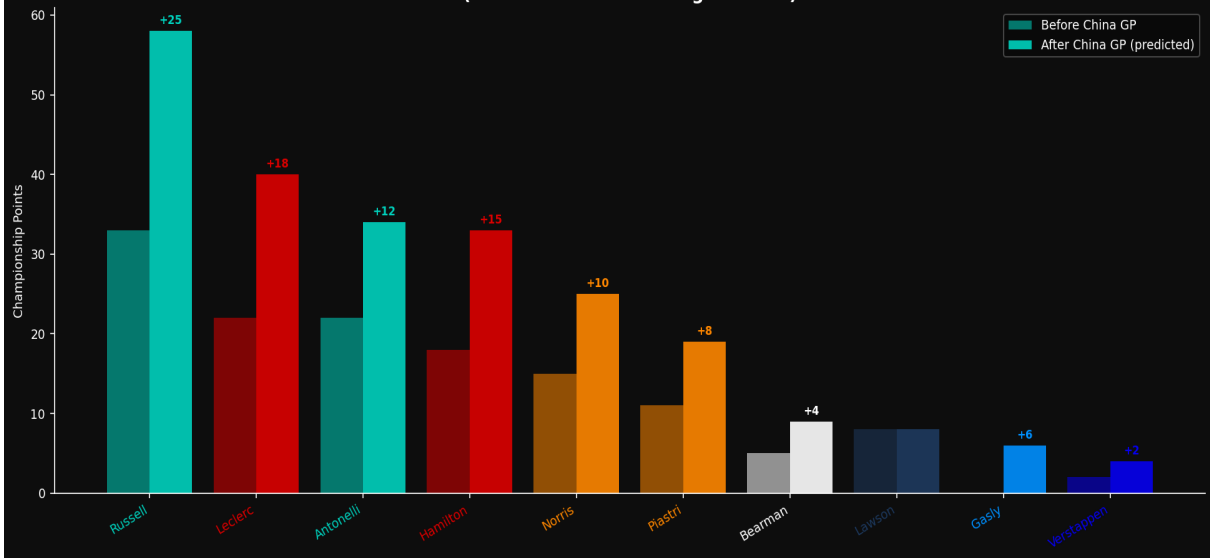


Chart 7: Championship Standings Implications

2026 Championship Standings — China GP Impact (Predicted winner: George Russell)



5. KEY RISK FACTORS

Level	Risk	Impact
CRITICAL	Antonelli rookie pressure	22% retire rate for under-22 polestarters. High variance.
HIGH	Safety Car (56% probability)	Bunches field. Russell advantage evaporates under SC.
HIGH	Rain (25% probability)	Hamilton +45% boost, Antonelli -10%. Race reshuffled.
HIGH	Russell Q3 reliability	Power/gear issue unresolved. Could end race.
MEDIUM	Ferrari pit strategy	Historically suboptimal (missed Australia VSC window).
MEDIUM	Hamilton tyre management	Sprint tyre kill. Must drive differently over 56 laps.
LOW	Wind gusts (36 km/h)	Hamilton flagged. Could cause Turn 1 incidents.

Generated by F1 Prediction System V2 | BasanthPR/2026-chinese-gp-prediction