HISTORICAL ANALYSIS · 2006–2026

# Rocket Launch Success and Failure Rates by Year

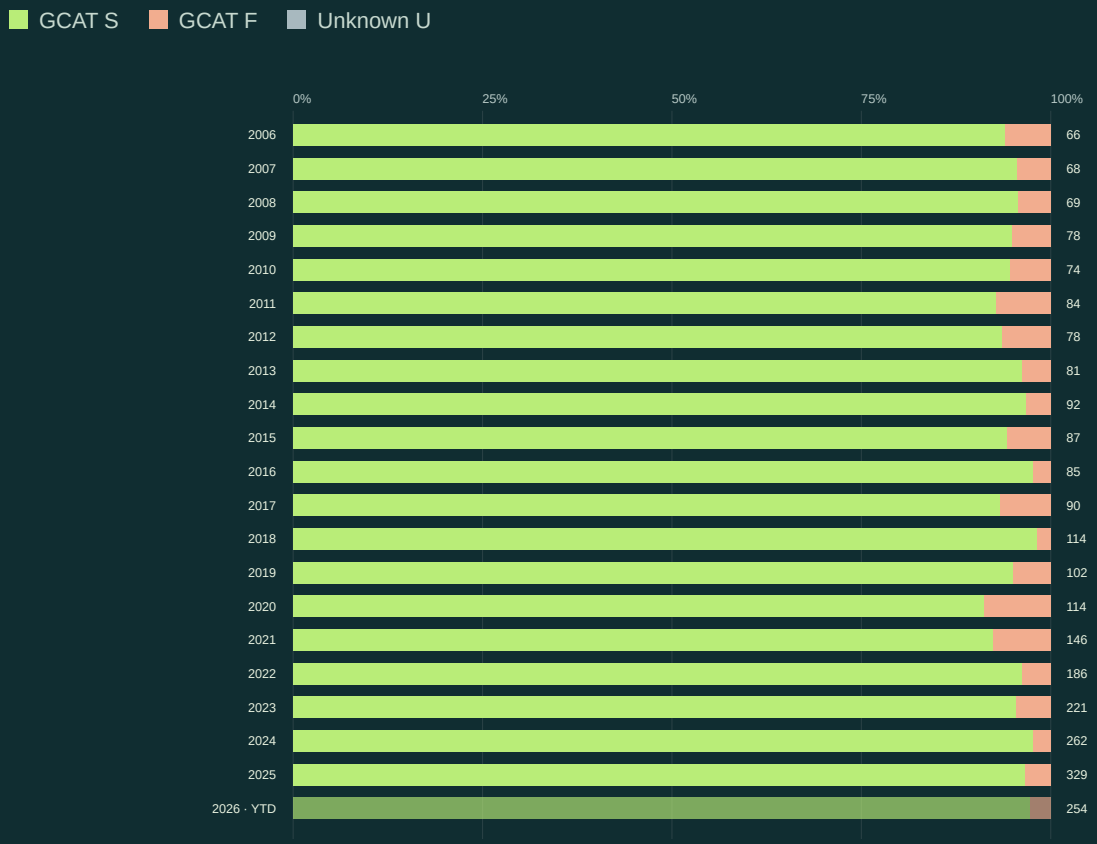
Annual GCAT launch outcomes, with explicit denominators and partial-result codes kept intact.

Source snapshot · 29 October 2026 GCAT / Jonathan McDowell Scope · O + D

| RECORDED LAUNCHES | GCAT S / KNOWN | GCAT F | PARTIAL CODES |
|---|---|---|---|
| 2,680 | 95.63% | 117 | 30 |
| O + D · includes incomplete latest year | 2,563 S out of 2,680 known outcomes | Retains GCAT failure classification | Overlaps S/F; not an extra category |

## Outcome composition by year

Bars show shares of all launches; numbers at right show annual totals. Faded rows are incomplete.




Source: GCAT · Unique launch identifiers

S/F is the source classification, not full mission success

> 2026 is incomplete: 254 launches are recorded in this snapshot year. No annual growth comparison with the previous full year is made.

READING THE DATA

# What the record shows

01

### Source-defined outcomes

The snapshot contains 2,563 S-classified and 117 F-classified launches. Among known outcomes, the S share is 95.63%.

02

### Partial results remain explicit

30 launches have a numeric partial-result suffix. They remain in their original S or F group and are not added again to the total.

03

### Unknown-outcome denominator

0 launches have an unknown outcome. They remain in annual totals but are excluded from the S-rate denominator.

THE UNDERLYING NUMBERS

# Annual outcomes and known-outcome rate

S rate = S ÷ (S + F). Partial codes overlap S/F. U is excluded only from the rate denominator.

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| YEAR | S | F | U | PARTIAL | S / KNOWN | COVERAGE |
|---|---|---|---|---|---|---|
| **2006** | 62 | 4 | 0 | 1 | 93.94% | Full year |
| **2007** | 65 | 3 | 0 | 2 | 95.59% | Full year |
| **2008** | 66 | 3 | 0 | 1 | 95.65% | Full year |
| **2009** | 74 | 4 | 0 | 2 | 94.87% | Full year |
| **2010** | 70 | 4 | 0 | 0 | 94.59% | Full year |
| **2011** | 78 | 6 | 0 | 2 | 92.86% | Full year |
| **2012** | 73 | 5 | 0 | 3 | 93.59% | Full year |

| YEAR | S | F | U | PARTIAL | S / KNOWN | COVERAGE |
|---|---|---|---|---|---|---|
| **2013** | 78 | 3 | 0 | 0 | 96.30% | Full year |
| **2014** | 89 | 3 | 0 | 2 | 96.74% | Full year |
| **2015** | 82 | 5 | 0 | 2 | 94.25% | Full year |
| **2016** | 83 | 2 | 0 | 1 | 97.65% | Full year |
| **2017** | 84 | 6 | 0 | 3 | 93.33% | Full year |
| **2018** | 112 | 2 | 0 | 1 | 98.25% | Full year |
| **2019** | 97 | 5 | 0 | 0 | 95.10% | Full year |
| **2020** | 104 | 10 | 0 | 0 | 91.23% | Full year |
| **2021** | 135 | 11 | 0 | 2 | 92.47% | Full year |
| **2022** | 179 | 7 | 0 | 1 | 96.24% | Full year |
| **2023** | 211 | 10 | 0 | 1 | 95.48% | Full year |
| **2024** | 256 | 6 | 0 | 3 | 97.71% | Full year |
| **2025** | 318 | 11 | 0 | 2 | 96.66% | Full year |
| **2026** | 247 | 7 | 0 | 1 | 97.24% | Incomplete · YTD |

TRANSPARENT BY DESIGN

# Methodology & sources

## Snapshot coverage

Data retrieved 29 October 2026. Latest recorded launch: 2026-10-27T07:25:23Z. The snapshot year remains incomplete regardless of when this report is generated.

## Outcome classification

We preserve result_code S/F/U, including partial codes such as OS65 and OF40. An S label is not proof of complete payload or mission success. Numeric suffixes are not used to reassign labels. Rates describe this historical snapshot, not future reliability. Chart percentages use all outcomes; the table rate uses known outcomes only.

## Scope and limitations

Unique O (orbital) and D (deep-space) launches are included, including failures. N flights and events without liftoff are excluded. The source classification is retained. These results describe the snapshot; they do not establish causes or forecast future activity.

## Attribution

Data from GCAT — Jonathan C. McDowell, CC BY 4.0. Compatisto aggregates and visualizes the records. · Field documentation.

Source SHA-256
ee70d1d8b7cb72a239f60a996c061cd1ddf4fed493686f2d8e8333a83a91d5c3