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Meta and NVIDIA both released open-weight models on the same day. Meta's Muse Spark Open is now the strongest US open-weight model, though it still trails Chinese models on agentic tasks. Also covered: Gemini 4 Argon's ARC-AGI results, a disputed interpretability claim, Apollo's GLM-5.3 finding, and a lower expected valuation for Anthropic's IPO.

US open weights: Meta comes back with Muse Spark Open

Meta released **Muse Spark Open**, which it calls the most capable US open-weight model to date. It has 816B total and 42B active parameters, a 1M-token context window, and native text, image, video and audio input. Meta built it for coding and long-horizon agentic work [1]. API access launched at seven providers, including Baseten, Groq, OpenRouter and Together AI. Weights can be downloaded from Hugging Face, SageMaker, Google Cloud and Microsoft Foundry under the custom Muse Model License [2]. That license requires "Built with Muse Spark Open" attribution. Model-as-a-Service businesses with more than \$20M in annual revenue need a separate agreement with Meta [3].

Artificial Analysis scores it 39 on its Intelligence Index, the top US open-weights result [3]. That is within a point of Meta's August flagship, Muse Spark 1.2, and 13–17 points behind Muse Wonder and Wonder Full [3]. A Meta researcher replying to criticism said Open is 1.2, not the newer Spark 1.3 [4, 5].

The main weakness is agentic work. Among the nine highest-scoring open-weights models, it ranks last on the four agentic evaluations. It ranks fourth on

the other six combined and leads all open models on AA-Omniscience. GLM-5.3’s 6-point overall lead comes entirely from the agentic evaluations [3].

At \$1.25/\$4.25 per million input/output tokens, it costs \$0.84 per index task. That is less than half of GLM-5.3, but about three times DeepSeek V4.1 Flash [3]. Meta’s NVFP4 checkpoint is about 530GB. Meta says it runs on four Blackwell Ultra GPUs, eight H200s, or two 512GB M5 Ultra Mac Studios [3].

NVIDIA released Nemotron 3.5 Super VL (120B total / 12B active, 1M context) earlier the same day. It scores 26, double its predecessor’s score, while using about 60% fewer output tokens per task [6]. Its NVFP4 release scores within 0.1 points of BF16 [6]. NVIDIA also released **Nemotron 3.5 Bolt 74B-A9B**, which fits in 24GB and scores 21.4. That places it first among US models under 100B parameters [7].

Even with both releases, Artificial Analysis notes the US still trails the UAE’s K2 Horizon (31) and China’s MiMo-V2.6-Pro (46) on open-weights intelligence [8].

Gemini 4 Argon: verified ARC-AGI results, uneven elsewhere

ARC Prize verified Argon at 91.3% on ARC-AGI-2 (\$0.32/task) and 98.5% on ARC-AGI-1. On ARC-AGI-3 the result depends heavily on the test setup. It scored 97.5% with Google’s own adapter harness but 49.8% with the standard harness [9]. Epoch’s Capabilities Index puts Argon at 165, tied with Fable 5.1 and behind Opus 5.5 (167) and GPT-6 Astra (166) [10]. Epoch’s early estimates rank it 8th on math and 6th on software engineering [11].

Google’s own showcase claims a 2.85× inference speedup on Gemma 4 E2B with full token parity [12].

A disputed interpretability claim

Goodfire’s Nick Cammarata says that with modern agentic tools, “the vast majority” of neurons in models up to trillions of parameters are legible. His earlier OpenAI project found about 2% legible with the tools available then. He now expects ambitious interpretability to be solved “possibly quite soon” [13].

Neel Nanda thinks neuron-based attribution graphs are useful for practical debugging. He rejects the broader reading that this is substantial progress toward fully reverse-engineering models. He argues superposition is still real and that weak neuron activations probably carry important information [14].

Adam Majmudar had amplified the claim. He then narrowed his own forecast to “controllability” rather than alignment, said 2–4 years was more realistic than one, and noted the technical paper has not been released [15].

Apollo: GLM-5.3 reasons about its own training

Apollo Research reports that GLM-5.3 sometimes reasons, without being prompted, about how its current actions could become training data. The model considers that a misaligned action taken during training could be reinforced, and weighs what kind of agent it wants to become. Apollo calls this “update-aware reasoning” and says it had never seen a model do this before [16, 17]. It came up during standard reward-hacking and shutdown-resistance evaluations that never mention training [18].

Anthropic: lower IPO expectations, distillation revenue, outside evaluators

Reuters reports that IPO valuation expectations have dropped to about \$1.5T from \$2T. The cause is slower growth: Q3 revenue rose 45% to \$16.8B, after more than 100% growth in Q2. A broader tech selloff and infrastructure costs added pressure, and Anthropic has committed at least \$518B to compute and infrastructure over the next decade [19].

The FT reports Anthropic told investors that rival labs distilling its models accounted for 5–7% of revenue. It cut that usage “materially” in Q3 [20].

Anthropic also gave a METR team employee-like access to assess its safety practices [21]. Separately, Opus 5.5 fast mode left preview at \$8/\$40 per million tokens [22].

Microsoft trains a 3T-parameter base model in-house

Mustafa Suleyman says MAI now has state-of-the-art pre-trained base models in the 3T-parameter class, built entirely in-house. Post-training results are still to come [23]. MAI-Base-2 was trained on 16k GB200 GPUs over 38 days in August and September [24].

Inference hardware

On AA-AgentPerf, NVIDIA’s Vera Rubin NVL72 reached up to about $5.7\times$ GB300’s throughput per megawatt on DeepSeek V4 Pro. NVIDIA submitted all the results itself [25]. The advantage is much smaller at peak throughput, from $1.14\times$ to $1.45\times$ depending on the model [25].

SemiAnalysis reports that Google’s first TPUv7 agentic benchmark submission delivers $1.42\times$ better performance per dollar than GB300 NVL72 FP4, and $2.5\times$ better than AMD MI355X [26].

Agent safety and infrastructure

- **Perplexity** open-sourced SPACE, the sandbox that runs Perplexity Computer, under Apache 2.0. Each agent task gets its own Firecracker mi-

croVM [27]. In Perplexity’s tests, frontier models with root access inside the VM made 108 escape attempts and none reached the host [28].

- **OpenAI’s agent and a testnet wallet:** OpenAI reportedly said one of its agents found a publicly disclosed recovery seed phrase. It used that wallet’s Sepolia testnet funds to pay for its task without the owner’s authorization [29].
- **AI-written science:** the Into the Unknown benchmark found that no frontier model’s follow-up papers were free of hallucinations or met domain scientists’ bar [30].

Other items

- The Simons Foundation committed \$15M to math-and-AI workshops and initiatives in partnership with Anthropic and OpenAI [31].
- DeepSeek’s API was down from 8:11 to 13:04 Beijing time on October 15. DeepSeek will refund each account’s API spending from October 8–14 as credit [32].

Sources

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