VIDEO REPORT

e.l.f. Cosmetics: Melisa (Super Bowl LX)

STRONGEST SECOND	STEEPEST FALL	WEAKEST 3 SECONDS	AVERAGE LEVEL
0:06	**81%**	**2:00 to 2:04**	**40%**
after the first three seconds	1:44 to 1:47	lowest stretch of the curve	of this clip's own range

Predicted response across the video

Each point is one second. The scale is this clip's own range: 0 is its lowest second, 100 its highest.



What the model predicts

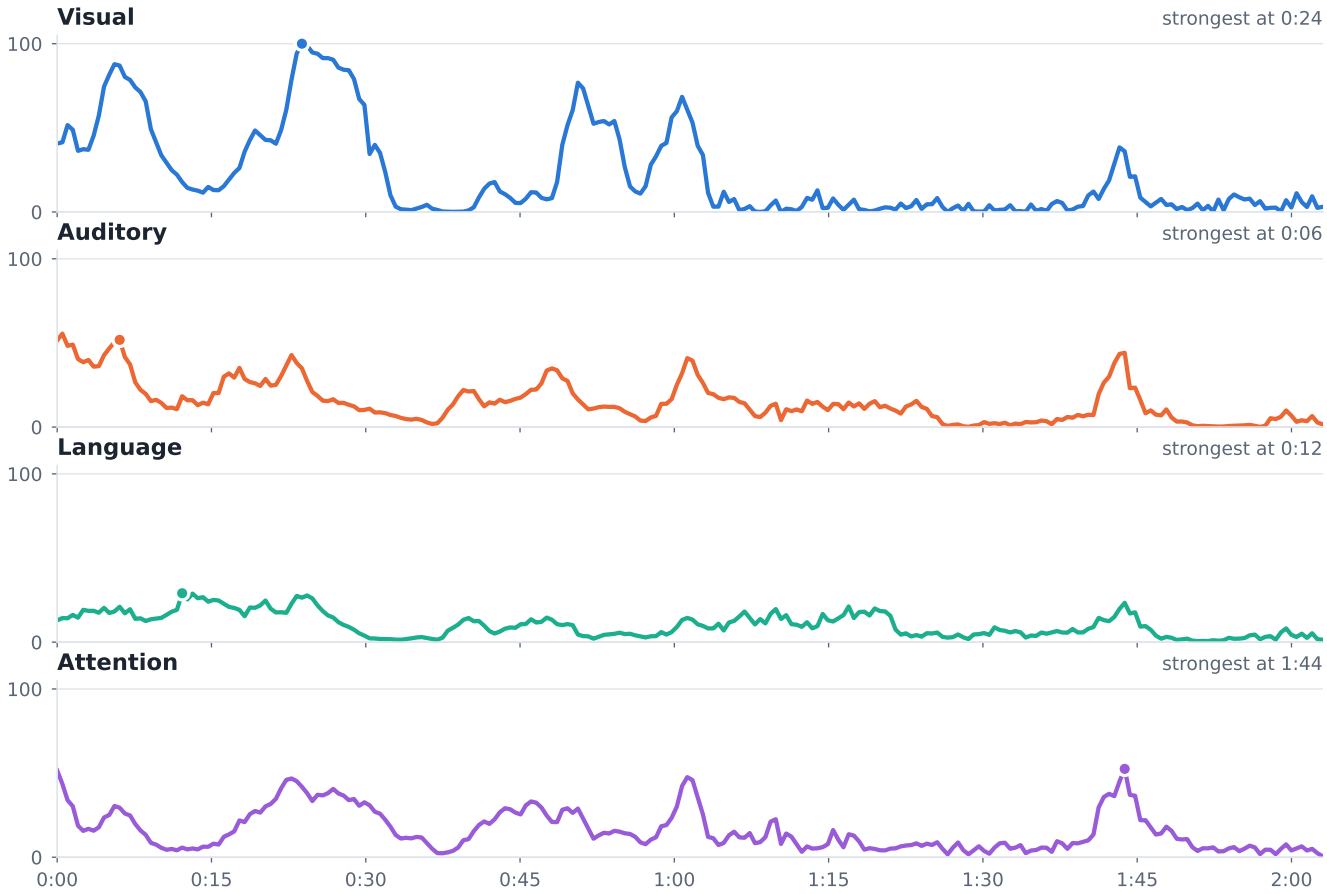
- After the first three seconds, the predicted brain response peaks at 0:06, the predicted response falls 81% between 1:44 and 1:47, and the weakest 3-second stretch is 2:00 to 2:04.
- After the fall at 1:47 the predicted response never gets back above 23% of its pre-fall level (best at 1:48); the clip's strongest moment stays 0:06.
- The visual network has the highest predicted response for 36% of the clip, the attention network for 31%.
- Speech is present in 9% of the seconds; the words are set against the curve on the later pages.

In this report

Brain networks: which of the four networks leads, and when
Key moments: the seconds worth a close look, with the frame and the words
Every second: level, leading network, most active regions and words
How to read this report: what each number is and what it is not

Brain networks

The model's cortical prediction is summarised as four networks. Each panel is scaled to that network's own range within this clip, so compare the shape and the timing of the panels, not their heights.



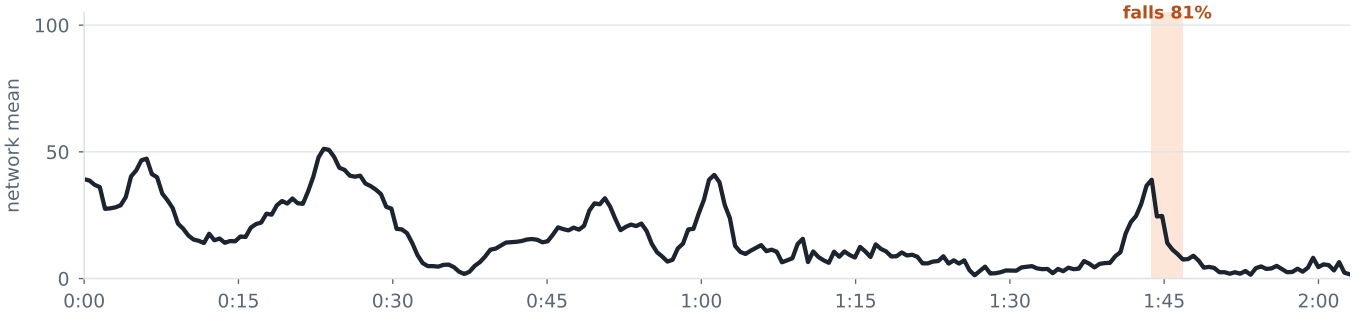
Leading network, second by second



NETWORK	LEADS FOR	SHARE OF THE CLIP	ITS STRONGEST SECOND
Visual	44 s	36%	0:24
Attention	38 s	31%	1:44
Auditory	23 s	19%	0:06
Language	18 s	15%	0:12

Mean of the four networks

This is the one series a percentage change is taken on, because it is not stretched to fill the chart. A fall is reported only when it starts at or above the clip average and loses 20% or more within three seconds.



Key moments

The seconds that define this video's predicted response. Levels are on the clip's own 0 to 100 range.

0:00 Opening

87 of 100

Leading network	Attention
System	Spatial attention
Regions	Medial intraparietal (reach planning); Posterior belt (secondary auditory)

“presents...”

0:06 Strongest second

100 of 100

Leading network	Visual
System	Objects & color
Regions	Higher visual: color + face/object patches; Color & form processing

“Get ready for the world's biggest reggaeton show. It's going to be a... I don't speak Spanish!”

1:44 Fall begins

44 of 100

Leading network	Attention
System	Salience / control
Regions	Cingulate (control); Anterior cingulate (monitoring)

“Gracias, doctor.”

1:47 Fall ends

20 of 100

Leading network	Attention
System	Scene & place recognition
Regions	Parieto-occipital sulcus; Anterior cingulate (control)

1:48 Best after the fall

12 of 100

Leading network	Attention
System	Spatial attention
Regions	Lateral intraparietal (attention); Parieto-occipital sulcus

2:00 Weakest 3 s begin

9 of 100

Leading network	Visual
System	Motion tracking (V5/MT)
Regions	Motion-related; Lateral occipital (objects)

Every second

This video is long, so each row covers 2 seconds: the level is their average and the regions are those of the strongest second in the row. Level is the position on the clip's own 0 to 100 range. The strongest second is marked with a dot; rows inside the steepest fall are tinted. Words are listed at the second their line starts.

TIME	LEVEL	NETWORK	MOST ACTIVE REGIONS	WORDS	CONFID.
0:00 to 0:01	87	Attention	Posterior belt (secondary auditory); Lateral belt (secondary auditory)	*presents...*	medium
0:01 to 0:02	99	Visual	Posterior belt (secondary auditory); Lateral belt (secondary auditory)		medium
0:02 to 0:03	100	Auditory	Posterior belt (secondary auditory); Lateral belt (secondary auditory)	*Get ready for the world's biggest reggaeton show.*	medium
0:03 to 0:04	100	Visual	Auditory area 5 (superior temporal); Auditory association cortex		medium
0:04 to 0:05	99	Visual	Higher visual: color + face/object patches; Motion-related		medium
0:05 to 0:06	100 ●	Visual	Higher visual: color + face/object patches; Motion-related	*It's going to be a...*	medium
0:06 to 0:07	100	Visual	Higher visual: color + face/object patches; Color & form processing	*I don't speak Spanish!*	medium
0:07 to 0:08	97	Visual	Higher visual: color + face/object patches; Color & form processing		medium
0:08 to 0:09	79	Visual	Higher visual: color + face/object patches; Color & form processing	*...unforgettable... Melissa McCarthy is...*	medium
0:09 to 0:10	57	Visual	Higher visual: color + face/object patches; Color & form processing		medium
0:10 to 0:11	45	Visual	Higher visual: color + face/object patches; Posterior inferotemporal (objects)		medium
0:11 to 0:12	44	Visual	Higher visual: color + face/object patches; Early visual cortex		medium
0:12 to 0:13	50	Language	Auditory area 5 (superior temporal); Superior temporal sulcus (speech)		medium
0:13 to 0:14	59	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)	*Melissa McCarthy in...*	lower
0:14 to 0:15	58	Language	Superior temporal sulcus (speech); Temporo-parieto-occipital junction		lower
0:15 to 0:16	58	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)	*Melissa.*	lower
0:16 to 0:17	57	Auditory	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
0:17 to 0:18	49	Auditory	Lateral occipital (objects); Superior temporal sulcus (speech)		medium
0:18 to 0:19	52	Visual	Lateral occipital (objects); Motion-related		medium
0:19 to 0:20	61	Visual	Lateral occipital (objects); Motion-related		medium
0:20 to 0:21	63	Visual	Lateral occipital (objects); Temporo-occipital visual (objects)		medium
0:21 to 0:22	67	Visual	Lateral occipital (objects); Temporo-occipital visual (objects)		medium
0:22 to 0:23	68	Visual	Higher visual: color + face/object patches; Color & form processing	*Doctor, what day is it?*	medium
0:23 to 0:24	81	Visual	Ventro-medial visual (scene); Dorsal visual V3B		medium
0:24 to 0:25	97	Visual	Ventro-medial visual (scene); Dorsal visual V3B	*Melissa, the big show is tonight.*	medium
0:25 to 0:26	99	Visual	Ventro-medial visual (scene); Dorsal motion/form area		medium
0:26 to 0:27	100	Visual	Ventro-medial visual (scene); Dorsal motion/form area		medium

Every second (continued)

TIME	LEVEL	NETWORK	MOST ACTIVE REGIONS	WORDS	CONFID.
0:27 to 0:28	97	Visual	Ventro-medial visual (scene); Dorsal motion/form area	*How is your Espanol?*	medium
0:28 to 0:29	80	Visual	Higher visual: color + face/object patches; Color & form processing		medium
0:29 to 0:30	61	Visual	Lateral occipital (objects); Higher visual: color + face/object patches		medium
0:30 to 0:31	50	Visual	Temporo-occipital visual (objects); Upper visual field area		medium
0:31 to 0:32	38	Visual	Temporo-occipital visual (objects); Upper visual field area	*Adios soy un baño.*	medium
0:32 to 0:33	25	Attention	Temporo-occipital visual (objects); Posterior inferotemporal (objects)		medium
0:33 to 0:34	18	Attention	Lateral intraparietal (attention); Temporo-occipital visual (objects)		lower
0:34 to 0:35	17	Attention	Motion processing; Perisylvian language area	*Soy un baño.*	medium
0:35 to 0:36	15	Attention	Motion processing; Dorsolateral prefrontal (working memory / control)		medium
0:36 to 0:37	12	Attention	Premotor language area; Broca's area (speech production)	*Normalmente, I wouldn't do this, but you need juicy lips so you can those R's.*	lower
0:37 to 0:38	35	Auditory	Auditory area 5 (superior temporal); Superior temporal sulcus (speech)		medium
0:38 to 0:39	70	Auditory	Auditory area 5 (superior temporal); Auditory association cortex		medium
0:39 to 0:41	81	Auditory	Auditory area 5 (superior temporal); Auditory association cortex		medium
0:41 to 0:42	59	Auditory	Auditory area 5 (superior temporal); Temporo-parieto-occipital junction		medium
0:42 to 0:43	35	Attention	Motion processing; Lateral occipital (objects)		medium
0:43 to 0:44	36	Attention	Lateral occipital (objects); Motion processing		medium
0:44 to 0:45	37	Attention	Lateral occipital (objects); Motion processing		medium
0:45 to 0:46	34	Attention	Superior parietal (touch / reach); Motion processing		lower
0:46 to 0:47	40	Attention	Motion processing; Superior parietal (touch / reach)	*We have a lot of work to do.*	medium
0:47 to 0:48	40	Attention	Motion processing; Superior parietal (touch / reach)		medium
0:48 to 0:49	43	Auditory	Auditory area 5 (superior temporal); Posterior belt (secondary auditory)		medium
0:49 to 0:50	52	Visual	Motion processing; Motion-related		medium
0:50 to 0:51	66	Visual	Dorsal visual V3A; Motion-related		medium
0:51 to 0:52	91	Visual	Motion-related; Motion processing		medium
0:52 to 0:53	77	Visual	Motion-related; Motion processing		medium
0:53 to 0:54	70	Visual	Motion-related; Higher visual: color + face/object patches		medium
0:54 to 0:55	58	Visual	Higher visual: color + face/object patches; Motion-related		medium
0:55 to 0:56	38	Visual	Higher visual: color + face/object patches; Color & form processing		medium
0:56 to 0:57	29	Visual	Dorsal motion/form area; Medial intraparietal (reach planning)		medium

Every second (continued)

TIME	LEVEL	NETWORK	MOST ACTIVE REGIONS	WORDS	CONFID.
0:57 to 0:58	29	Visual	Ventro-medial visual (scene); Dorsal motion/form area	*sombrero chancla beso matematica boba te amo amo now try this queso fuego queso kiss kiss*	medium
0:58 to 0:59	36	Visual	Ventro-medial visual (scene); Higher visual: color + face/object patches		medium
0:59 to 1:00	46	Visual	Motion processing; Motion-related		medium
1:00 to 1:01	55	Visual	Ventro-medial visual (scene); Dorsal visual V3B		medium
1:01 to 1:02	79	Visual	Peripheral/retinotopic vision; Scene & place recognition		medium
1:02 to 1:03	80	Visual	Scene & place recognition; Peripheral/retinotopic vision		medium
1:03 to 1:04	58	Visual	Lateral belt (secondary auditory); Posterior belt (secondary auditory)		medium
1:04 to 1:05	60	Auditory	Auditory area 5 (superior temporal); Auditory association cortex		medium
1:05 to 1:06	53	Auditory	Auditory area 5 (superior temporal); Lateral belt (secondary auditory)		medium
1:06 to 1:07	49	Auditory	Auditory area 5 (superior temporal); Lateral belt (secondary auditory)		medium
1:07 to 1:08	38	Attention	Auditory area 5 (superior temporal); Superior temporal sulcus (speech)		medium
1:08 to 1:09	22	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
1:09 to 1:10	20	Attention	Superior temporal sulcus (speech); Medial superior frontal (control)		lower
1:10 to 1:11	19	Attention	Early visual cortex; Spatial attention		medium
1:11 to 1:12	14	Attention	Superior temporal sulcus (speech); Early visual cortex		lower
1:12 to 1:13	16	Auditory	Auditory area 5 (superior temporal); Lateral belt (secondary auditory)		medium
1:13 to 1:14	22	Auditory	Lateral belt (secondary auditory); Auditory area 5 (superior temporal)		medium
1:14 to 1:15	20	Auditory	Auditory area 5 (superior temporal); Auditory association cortex		medium
1:15 to 1:16	20	Attention	Supplementary & cingulate eye field (action control); Anterior cingulate (monitoring)		lower
1:16 to 1:17	32	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
1:17 to 1:18	33	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
1:18 to 1:19	32	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
1:19 to 1:20	35	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)	*hard, my lips can't do it.*	lower
1:20 to 1:21	37	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
1:21 to 1:22	24	Auditory	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
1:22 to 1:23	8	Auditory	Middle insula (salience / body signals); Ventro-medial visual (scene)		lower
1:23 to 1:24	8	Auditory	Lateral belt (secondary auditory); Spatial attention		medium
1:24 to 1:25	11	Auditory	Auditory area 5 (superior temporal); Spatial attention	*I believe in you.*	medium
1:25 to 1:26	10	Attention	Spatial attention; Supplementary & cingulate eye field (action control)		lower

Every second (continued)

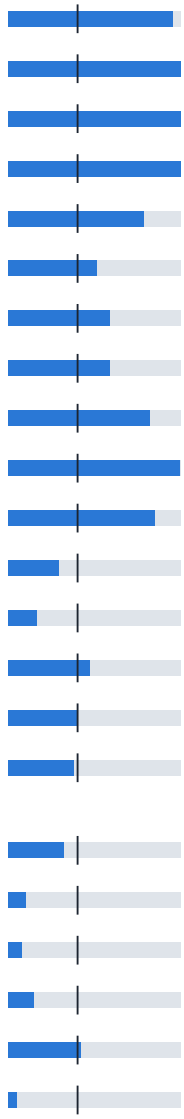
TIME	LEVEL	NETWORK	MOST ACTIVE REGIONS	WORDS	CONFID.
1:26 to 1:27	5	Attention	Spatial attention; Anterior insula (salience)		lower
1:27 to 1:28	5	Attention	Anterior insula (salience); Early visual cortex		lower
1:28 to 1:29	7	Visual	Anterior insula (salience); Medial superior frontal (control)		lower
1:29 to 1:30	6	Attention	Broca's area (speech production); Inferior frontal junction (attention switching)	*You're better than this, hija.*	lower
1:30 to 1:31	8	Language	Superior temporal sulcus (speech); Auditory area 5 (superior temporal)		lower
1:31 to 1:32	9	Attention	Broca's area (speech production); Anterior insula (salience)		lower
1:32 to 1:33	8	Attention	Frontal eye fields (gaze control); Superior temporal visual		lower
1:33 to 1:34	9	Attention	Broca's area (speech production); Anterior insula (salience)		lower
1:34 to 1:35	15	Visual	Temporo-parieto-occipital junction; Broca's area (speech production)	*Fuego, fuego, que esto juego.*	lower
1:35 to 1:36	16	Attention	Temporo-parieto-occipital junction; Broca's area (speech production)		lower
1:36 to 1:37	9	Attention	Superior temporal sulcus (speech); Broca's area (speech production)		lower
1:37 to 1:38	10	Attention	Middle insula (salience / body signals); Dorsolateral prefrontal (working memory / control)		lower
1:38 to 1:39	18	Auditory	Auditory area 5 (superior temporal); Superior temporal sulcus (speech)		medium
1:39 to 1:40	22	Attention	Auditory area 5 (superior temporal); Temporo-parieto-occipital junction		medium
1:40 to 1:41	27	Attention	Auditory area 5 (superior temporal); Temporo-parieto-occipital junction		medium
1:41 to 1:42	31	Attention	Perisylvian language area; Early visual cortex		lower
1:42 to 1:43	29	Attention	Anterior superior-temporal auditory; Anterior cingulate (monitoring)		medium
1:43 to 1:44	41	Attention	Cingulate (control); Anterior cingulate (monitoring)		lower
1:44 to 1:45	44	Attention	Parieto-occipital sulcus; Anterior cingulate (control)	*Gracias, doctor.*	medium
1:45 to 1:46	37	Attention	Parieto-occipital sulcus; Anterior cingulate (control)		medium
1:46 to 1:47	24	Attention	Parieto-occipital sulcus; Anterior cingulate (control)		medium
1:47 to 1:48	13	Attention	Ventro-medial visual (scene); Parieto-occipital sulcus		medium
1:48 to 1:49	11	Attention	Medial intraparietal (reach planning); Lateral intraparietal (attention)		lower
1:49 to 1:50	6	Attention	Frontal operculum (salience); Medial intraparietal (reach planning)	*Melissa.*	lower
1:50 to 1:51	3	Visual	Frontal operculum (salience); Cingulate (control)		lower
1:51 to 1:52	4	Attention	Upper visual field area; Intraparietal (attention)		medium
1:52 to 1:53	7	Visual	Frontal operculum (salience); Perisylvian language area		lower
1:53 to 1:54	7	Visual	Ventro-medial visual (scene); Dorsal visual V3B		medium
1:54 to 1:55	7	Visual	Ventro-medial visual (scene); Dorsal visual V3B		medium

Every second (continued)

TIME	LEVEL	NETWORK	MOST ACTIVE REGIONS	WORDS	CONFID.
1:55 to 1:56	5	Visual	Ventro-medial visual (scene); Anterior insula (salience)		medium
1:56 to 1:57	5	Visual	Early visual cortex; Inferior frontal junction (attention switching)		medium
1:57 to 1:58	8	Attention	Lateral belt (secondary auditory); Posterior belt (secondary auditory)		medium
1:58 to 1:59	16	Auditory	Lateral belt (secondary auditory); Temporo-parieto-occipital junction		medium
1:59 to 2:00	17	Auditory	Lateral belt (secondary auditory); Auditory area 5 (superior temporal)		medium
2:00 to 2:02	7	Visual	Motion-related; Lateral occipital (objects)		medium
2:02 to 2:03	4	Visual	Lateral belt (secondary auditory); Primary auditory cortex (Heschl's gyrus)		medium
2:03 to 2:04	1	Visual	Lateral belt (secondary auditory); Anterior superior-temporal auditory		medium

The words against the curve

Each spoken line with the average predicted level while it is said (clip range, 0 to 100). The clip average is 40; the tick on each bar marks it.



0:01	95	presents...
0:02	100	Get ready for the world's biggest reggaeton show.
0:06	100	It's going to be a...
0:07	100	I don't speak Spanish!
0:08	79	...unforgettable...
0:09	51	Melissa McCarthy is...
0:14	59	Melissa McCarthy in...
0:16	58	Melissa.
0:23	82	Doctor, what day is it?
0:25	100	Melissa, the big show is tonight.
0:28	85	How is your Espanol?
0:32	29	Adios soy un baño.
0:35	17	Soy un baño.
0:37	47	Normalmente, I wouldn't do this, but you need juicy lips so you can those R's.
0:46	40	We have a lot of work to do.
0:57	38	sombrero chancla beso matematica boba te amo amo now try this queso fuego queso kiss kiss It's too
1:19	32	hard, my lips can't do it.
1:24	10	I believe in you.
1:30	8	You're better than this, hija.
1:34	14	Fuego, fuego, que esto juego.
1:44	42	Gracias, doctor.
1:50	5	Melissa.

How to read this report

What the model is

v2neuro is a brain-encoding model. It was trained on fMRI recordings of people watching video, and for a new video it predicts the response of the cortex, one value per second, from the picture, the sound and the words. Nobody watched your video for this report.

Strongest second

The second with the highest predicted response, leaving aside the first three seconds. The cortex responds to any clip starting, so the opening would win on most videos and say nothing about yours.

Level, and "of this clip's own range"

Charts and bars use a 0 to 100 scale stretched to this clip: 0 is its lowest second and 100 its highest. It shows where a second sits inside this video. It cannot be compared between two videos, and a difference between two levels is not a percentage change.

Steepest fall

The largest fall within three seconds, as a true percentage of the level it falls from, taken on the mean of the four networks without stretching. It is reported only when it starts at or above the clip average and reaches 20%. When no window qualifies the report states no percentage.

Weakest stretch

The three consecutive seconds with the lowest average level (on a clip under 15 seconds, a fifth of its length, at least one second), never the strongest second itself. Every video has one; it is the place to look first, not a fault by itself.

Networks, systems and regions

The four networks (visual, auditory, language, attention) group the cortical surface. The leading network is the one with the highest value in that second, each on its own range. Regions are the atlas areas with the highest predicted response in that second.

Confidence

Higher, medium or lower says how well the model has been shown to predict the regions that lead in that second, and how typical the second is for it. It is a guide to how much weight a row can carry.

What this is not

These are predictions of an average cortical response. They are not a measurement of your viewers and they do not forecast views, watch time or sales. On recordings held out from training, the model's predictions correlate with the measured response at about r = 0.27 for material like its training set and about r = 0.12 for very different films. The useful test is your own data: compare these moments with the numbers you already have.

Timing note

The model returned 244 steps for a clip of 2:04, so times in this report are placed by the measured length of the clip.

neuro-viral

CONTACT

Website **neuro-viral.com**
Email **hello@vincli.com**

FOLLOW

Instagram **@neuro_viral.ai**
X **@vincli_ai**
YouTube **@vincli_neuro**
LinkedIn **VINCLI LTD**

VINCLI LTD, company no. 16677554, 128 City Road, London EC1V 2NX