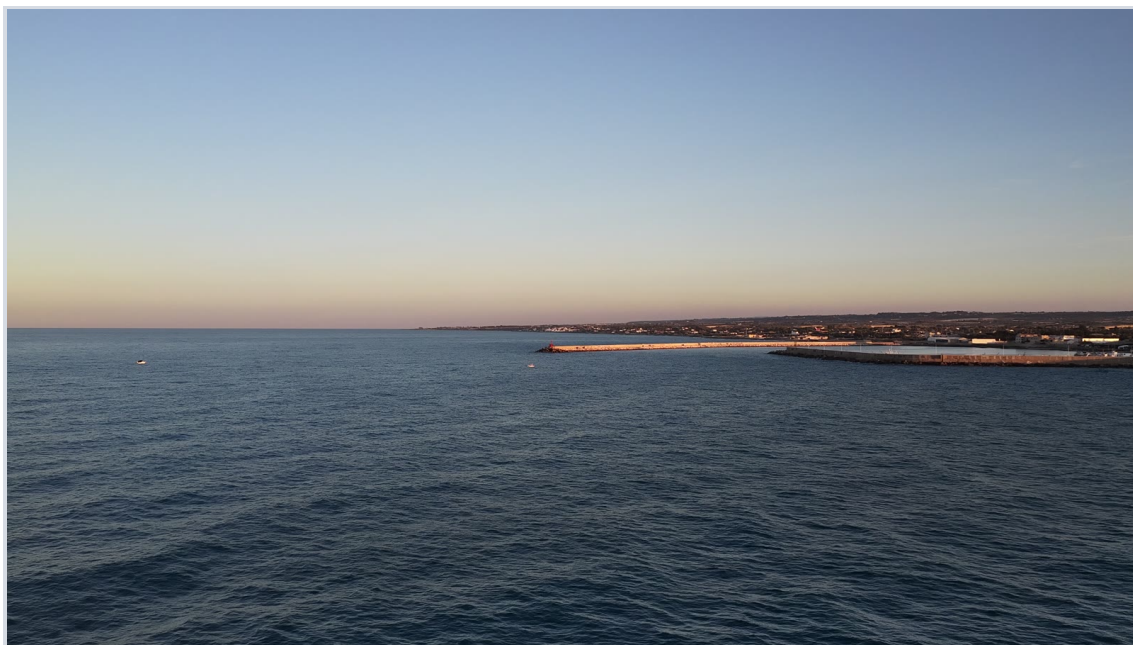


Video report

DJI_20261017174821_0463_D.MP4



Frame no. 1 · 00:00:00.000 · PTS 0.000000 s · I · 3840x2160 · Adler-32 EF775FF5

First frame of the video.

Recording device

Device	DJI Mavic4 Pro L3A
Serial number	[REDACTED]
Serial source	djmd track (stream 1), field 1-1-5
Serial format	consistent ANSI/CTA-2063-A (Remote ID) format: manufacturer 1581 (DJI), length F, identifier [REDACTED]

File and container

Path	/Volumes/NVME/2026 Video/08 Mola di Bari/DJI_20261017174821_0463_D.MP4
MD5	45795ec9e8e2050ab8473d7775d96717
SHA1	6df2daa65428ff4e43f7b9166d0385babbed8b37
SHA256	10a976033bc483060af1d6b4a9e1412915dee94d0f5c7f328c320f8c7f0340aa
Format	QuickTime / MOV (mov,mp4,m4a,3gp,3g2,mj2)
Duration	00:02:30.717 (150.717233 s)
Size	1.57 GB (1,682,400,507 B)
Bitrate	89.30 Mbit/s
Streams	4
Start time	0.000000
Creation date (metadata)	2026-10-17 17:48:21+02:00
Last modified (filesystem)	2026-10-17 17:50:52+02:00

Frames

Frames in the index	9034
Decoded frames	not counted yet
Keyframes	302
Frames per second (median)	59.941
Frame interval	16.68 – 16.68 ms
Cadence	constant
Distance between keyframes	30 – 30 (30.0)
Time gaps	0
Repeated timestamps	0

Device: data and sources

Item	Value	Source in the file
Model	DJI Mavic4 Pro L3A	djmd track (stream 1), field 1-1-10
Serial number	██████████	djmd track (stream 1), field 1-1-5
Declared version	01.00.08.00	djmd track (stream 1), field 1-1-6
Camera	Hasselblad L3D-100c	djmd track (stream 1), field 2-2-1-4
Track protocol	dvtm_Mavic4.proto	djmd track (stream 1), field 1-1-1
Model code	L3D-100c	box moov/udta/Xtra (WM/Category, model_name)
Encoder	DJI Mavic4 Pro L3A	container tag «encoder»

DJI drone SRT files contain neither the serial number nor the model: on recent models they are in the MP4 «djmd» track.

These are the values the device wrote into the file. Metadata is not signed and can be altered.

Integrity and consistency

Continuity (cuts and splices)

Result no anomaly: internal numbering complete and continuous

Frames / timing gaps 9034 / 0

djmd numbering 9034 values, 0 to 9033; jumps: 0; drone clock consistent with frame times within 0.02 ms

SRT FrameCnt numbering 9034 values, 1 to 9034; jumps: 0

Edit lists (elst) no edits

Keyframe cadence every 30 frames (100% of intervals)

Internal numbering that jumps or does not start at the beginning, a keyframe off cadence or an edit list with several segments point to a cut or splice. Cuts made by re-encoding the whole video leave none of these: for those see double compression and the device profile.

Double compression

Result no evidence (strongest period 113 frames, strength 0.7, below threshold 8)

Method: periodicity in the size of intermediate frames that does not depend on the file's current structure, a residue of the keyframes of a previous compression. It does not detect a re-encoding with a group of frames equal to or a multiple of the first. It is evidence, not proof.

Time consistency

File name (local time) 2026-10-17 17:48:21.000

Creation date (UTC) 2026-10-17 15:48:21.000Z (offset +0.0 s) · inferred zone +2.00 h

SRT start (drone time)	2026-10-17 17:48:21.280 (offset +0.3 s)
SRT end	2026-10-17 17:50:51.988 (offset +151.0 s)
Drone power-on	2026-10-17 17:37:27.165 · recording started 10.9 min later
File system: created	2026-10-17 17:48:21+02:00 (offset +0.0 s)
File system: last modified	2026-10-17 17:50:52+02:00 (offset +151.3 s)

Sun position at the start of the recording

Instant (UTC)	2026-10-17 15:48:21Z
Azimuth / elevation	254.9° / 3.0°
Shadows	towards 75°, 18.81 times the object's height

Astronomical calculation (NOAA) from the declared position and instant. Comparing the direction of shadows and the light in the image checks the declared date and time.

Telemetry

Source	video stream 1 + DJI_20261017174821_0463_D.SRT
Format	djmd
Points	9034 (9034 placed on the video timeline)
Link to the video	video time, from the source
Note	djmd track «dvtm_Mavic4.proto», DJI Mavic4 Pro L3A
Note	undocumented DJI format: fields per ExifTool's tables; Mavic 4 gimbal verified against the quaternion in the same track
Note	exposure parameters and drone time from the SRT (nearest point within 0.5 s)

SRT next to the video

File	/Volumes/NVME/2026 Video/08 Mola di Bari/DJI_20261017174821_0463_D.SRT
SHA-256	b13acdd12d3cd1e81ecaa88ffcccace8d88e4f7bb838d2ddb42d38f8042b4339
Entries / frames	9034 / 9034
SRT / video span	150.706 / 150.701 s
Comparison with the internal t...	9034 points (by frame number): max deviation position 0.07 m, absolute altitude 0.001 m, above take-off 0.001 m
Result	Consistent and confirmed by the telemetry track inside the MP4.

Reservation: the SRT is a separate file, tied to the video only by its name; it contains neither the drone serial number nor a digest of the video, and can be separated, swapped or altered without touching the MP4. Its data stand as declared by the drone insofar as they are consistent with the MP4.

Summary

Start	41.067520, 17.093506 · 2026-10-17 17:48:21.280
End	41.063546, 17.093719 · 2026-10-17 17:50:51.988
Distance travelled	2478 m
Height above take-off	3.6 – 20.2 m
Absolute altitude	50.9 – 67.5 m
Speed (computed)	mean 16.5 m/s · max 18.1 m/s (from positions, second by second)
Gimbal	
Tilt (min – max)	0.5 – 0.6°
Heading (min – max)	-180.0 – 178.7°
Roll (min – max)	0.0 – 0.0°
Gimbal - aircraft (heading)	median -20.2° · range -23.1° ... -15.4° · 100% of 9034 points within ±5° of the median

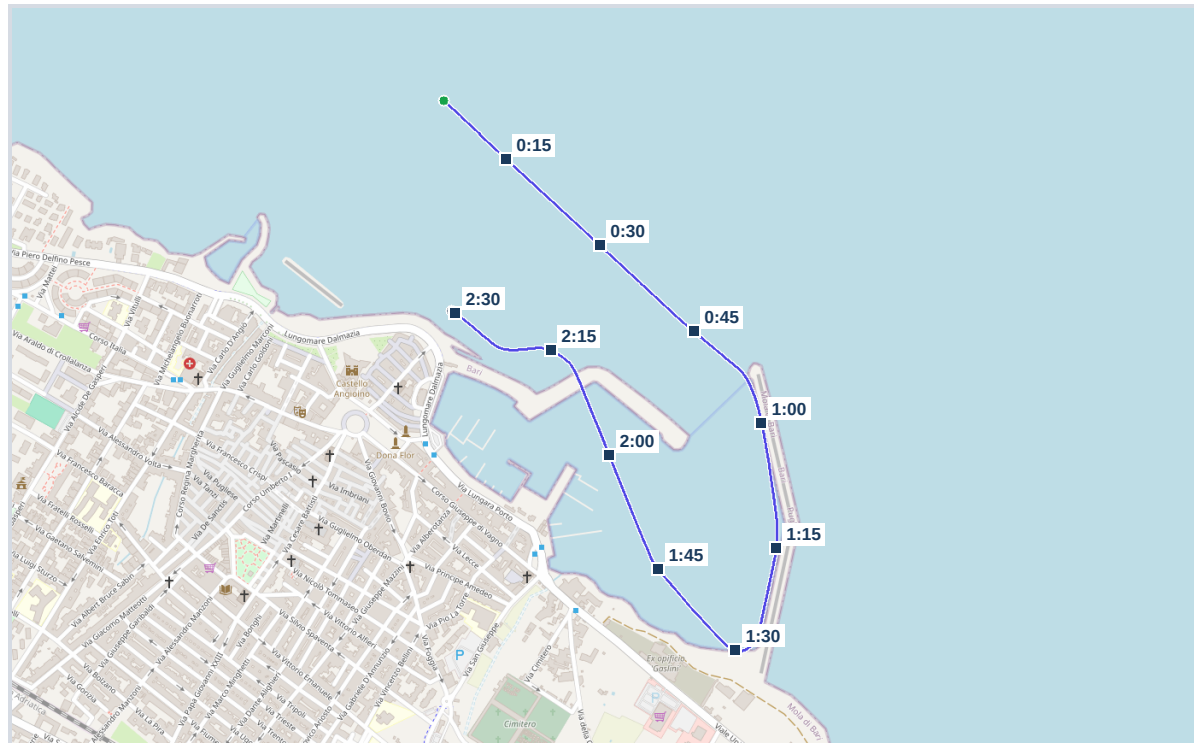
Warning: gimbal heading with a constant offset

The declared gimbal heading differs from the aircraft heading by -20.2° steadily throughout the video. An offset that does not change over time is not explained by gimbal lag in turns: it means one of the two values has a shifted reference. On a Mavic 4 Pro, comparing with a landmark in the image, the gimbal value turned out wrong and the aircraft value right. Before relying on the gimbal heading (compass, gimbal diamond) it must be checked on the image against a landmark of known position.

Known issue of the model

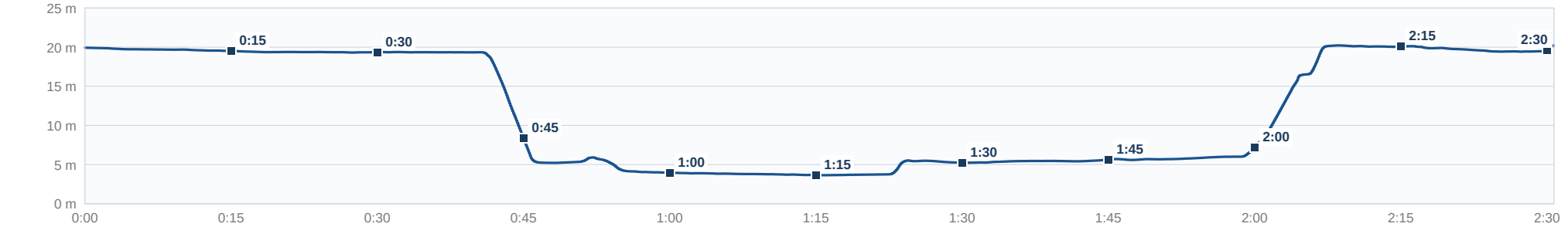
Pix4D reports that on some DJI drones, including the DJI Mavic 4 Pro, the gimbal heading recorded in metadata (GimbalYawDegree) is wrong or inconsistent, often 40–55° off the aircraft heading, and that the issue originates in the drone metadata. Source: Pix4D, «Incorrectly Oriented Reconstructions in PIX4Dcloud or PIX4Dmatic», <https://support.pix4d.com/hc/incorrectly-oriented-reconstructions-in-pix4dcloud-or-pix4dmatic>.

Path



Full track (9034 points): start in green, end in grey, labels every 15 s of video. Map © OpenStreetMap, downloaded when the report was generated.

Height above take-off profile



Altitude in metres against video time; the marks are the same as on the map (every 15 s), so each point of the path has its altitude.

Second-by-second logbook

Video	Drone time	Latitude	Longitude	Rel. alt. m	Abs. alt. m	Speed m/s	Acft hdg	Pitch / roll	Gimb. hdg	Gimb. tilt	Gimb. roll
00:00:00	17:48:21.280	41.067520	17.093506	19.9	67.2	—	131.2°	-1.7° / 0.9°	112.9°	0.5°	0.0°
00:00:01	17:48:22.282	41.067520	17.093506	19.9	67.1	0.0*	131.2°	-1.4° / 0.8°	112.9°	0.5°	0.0°
00:00:02	17:48:23.282	41.067520	17.093506	19.9	67.1	0.0*	131.2°	-1.6° / 0.9°	112.9°	0.5°	0.0°
00:00:03	17:48:24.283	41.067514	17.093516	19.8	67.0	1.0*	131.7°	-1.8° / -30.1°	112.9°	0.5°	0.0°
00:00:04	17:48:25.285	41.067476	17.093570	19.7	67.0	6.2*	133.1°	-2.5° / -27.6°	112.9°	0.5°	0.0°
00:00:05	17:48:26.286	41.067415	17.093661	19.7	67.0	10.2*	133.2°	-3.0° / -21.9°	112.9°	0.5°	0.0°
00:00:06	17:48:27.287	41.067341	17.093773	19.7	67.0	12.5*	133.2°	-2.8° / -21.6°	112.9°	0.5°	0.0°
00:00:07	17:48:28.288	41.067256	17.093901	19.7	66.9	14.3*	133.0°	-2.0° / -20.3°	112.9°	0.5°	0.0°
00:00:08	17:48:29.289	41.067158	17.094030	19.7	66.9	15.3*	133.0°	-2.2° / -21.3°	112.9°	0.5°	0.0°
00:00:09	17:48:30.273	41.067058	17.094172	19.7	66.9	16.3*	133.5°	-4.7° / -20.6°	112.9°	0.6°	0.0°
00:00:10	17:48:31.274	41.066955	17.094321	19.7	66.9	17.0*	133.2°	-3.3° / -19.3°	112.9°	0.6°	0.0°
00:00:11	17:48:32.275	41.066844	17.094465	19.6	66.9	17.3*	133.0°	-2.6° / -18.9°	112.9°	0.6°	0.0°
00:00:12	17:48:33.276	41.066735	17.094618	19.6	66.8	17.6*	133.1°	-2.9° / -19.2°	112.9°	0.5°	0.0°
00:00:13	17:48:34.278	41.066627	17.094772	19.6	66.8	17.7*	133.1°	-2.7° / -19.3°	112.8°	0.5°	0.0°
00:00:14	17:48:35.279	41.066517	17.094928	19.5	66.8	17.8*	133.1°	-2.9° / -18.5°	112.8°	0.5°	0.0°

Video	Drone time	Latitude	Longitude	Rel. alt. m	Abs. alt. m	Speed m/s	Acft hdg	Pitch / roll	Gimb. hdg	Gimb. tilt	Gimb. roll
00:00:15	17:48:36.280	41.066408	17.095083	19.5	66.8	17.8*	133.1°	-3.3° / -18.9°	112.8°	0.5°	0.0°
00:00:16	17:48:37.281	41.066300	17.095241	19.5	66.7	17.9*	133.0°	-2.4° / -17.7°	112.8°	0.5°	0.0°
00:00:17	17:48:38.282	41.066192	17.095398	19.4	66.7	17.8*	133.2°	-3.3° / -18.1°	112.9°	0.5°	0.0°
00:00:18	17:48:39.283	41.066083	17.095557	19.4	66.6	18.0*	132.8°	-1.3° / -18.8°	112.9°	0.5°	0.0°
00:00:19	17:48:40.284	41.065974	17.095714	19.4	66.6	17.9*	133.1°	-3.1° / -19.6°	112.9°	0.5°	0.0°
00:00:20	17:48:41.285	41.065866	17.095870	19.4	66.6	17.9*	133.0°	-2.4° / -19.0°	112.9°	0.5°	0.0°
00:00:21	17:48:42.286	41.065755	17.096029	19.4	66.6	18.1*	133.2°	-3.1° / -18.3°	112.9°	0.5°	0.0°
00:00:22	17:48:43.287	41.065646	17.096187	19.4	66.6	17.9*	133.1°	-3.2° / -18.2°	112.9°	0.5°	0.0°
00:00:23	17:48:44.288	41.065537	17.096346	19.4	66.6	18.0*	133.1°	-2.9° / -18.2°	112.9°	0.5°	0.0°
00:00:24	17:48:45.289	41.065427	17.096503	19.4	66.6	18.0*	133.1°	-3.1° / -18.5°	112.9°	0.5°	0.0°
00:00:25	17:48:46.290	41.065318	17.096660	19.4	66.6	17.9*	133.0°	-3.0° / -18.1°	112.9°	0.5°	0.0°
00:00:26	17:48:47.274	41.065209	17.096817	19.4	66.6	17.9*	133.0°	-2.4° / -18.2°	112.9°	0.5°	0.0°
00:00:27	17:48:48.275	41.065100	17.096974	19.3	66.6	17.9*	133.1°	-3.2° / -19.4°	112.9°	0.5°	0.0°
00:00:28	17:48:49.276	41.064990	17.097131	19.3	66.6	17.9*	133.3°	-3.9° / -19.1°	112.9°	0.5°	0.0°
00:00:29	17:48:50.277	41.064880	17.097288	19.3	66.6	18.0*	133.2°	-3.4° / -19.1°	112.9°	0.5°	0.0°
00:00:30	17:48:51.278	41.064771	17.097445	19.4	66.6	17.9*	133.4°	-4.2° / -19.9°	112.9°	0.5°	0.0°
00:00:31	17:48:52.279	41.064661	17.097603	19.4	66.6	18.0*	132.8°	-1.3° / -18.0°	112.9°	0.5°	0.0°
00:00:32	17:48:53.281	41.064551	17.097761	19.4	66.6	18.0*	132.8°	-1.2° / -16.7°	112.8°	0.5°	0.0°
00:00:33	17:48:54.281	41.064442	17.097918	19.4	66.6	17.9*	132.8°	-1.4° / -18.8°	112.9°	0.5°	0.0°
00:00:34	17:48:55.283	41.064333	17.098074	19.4	66.6	17.9*	132.9°	-1.3° / -19.0°	112.9°	0.5°	0.0°
00:00:35	17:48:56.284	41.064224	17.098231	19.4	66.6	17.9*	132.6°	0.1° / -18.5°	112.8°	0.5°	0.0°
00:00:36	17:48:57.285	41.064114	17.098387	19.3	66.6	17.9*	132.9°	-1.4° / -18.7°	112.8°	0.5°	0.0°
00:00:37	17:48:58.286	41.064005	17.098543	19.3	66.6	17.8*	132.9°	-1.4° / -19.0°	112.8°	0.5°	0.0°
00:00:38	17:48:59.287	41.063894	17.098701	19.3	66.6	18.1*	132.8°	-1.3° / -20.9°	112.8°	0.5°	0.0°

Video	Drone time	Latitude	Longitude	Rel. alt. m	Abs. alt. m	Speed m/s	Acft hdg	Pitch / roll	Gimb. hdg	Gimb. tilt	Gimb. roll
00:00:39	17:49:00.288	41.063786	17.098858	19.3	66.6	17.9*	133.0°	-2.0° / -21.6°	112.8°	0.5°	0.0°
00:00:40	17:49:01.289	41.063676	17.099015	19.3	66.6	17.9*	132.9°	-1.3° / -21.6°	112.8°	0.5°	0.0°
00:00:41	17:49:02.290	41.063566	17.099172	19.3	66.5	18.0*	133.1°	-2.2° / -22.9°	112.8°	0.5°	0.0°
00:00:42	17:49:03.274	41.063457	17.099325	17.7	64.9	17.7*	133.9°	-5.9° / -26.7°	112.8°	0.5°	0.0°
00:00:43	17:49:04.275	41.063348	17.099484	14.8	62.1	18.0*	132.5°	-5.8° / -21.2°	111.5°	0.5°	0.0°
00:00:44	17:49:05.276	41.063243	17.099645	11.5	58.8	17.8*	131.6°	-6.5° / -21.3°	110.7°	0.5°	0.0°
00:00:45	17:49:06.277	41.063141	17.099808	8.4	55.6	17.8*	130.6°	-4.4° / -20.9°	109.9°	0.5°	0.0°
00:00:46	17:49:07.279	41.063039	17.099971	5.5	52.8	17.7*	129.7°	-2.2° / -17.2°	109.7°	0.5°	0.0°
00:00:47	17:49:08.280	41.062937	17.100135	5.2	52.5	17.8*	130.2°	-3.5° / -21.0°	109.7°	0.5°	0.0°
00:00:48	17:49:09.281	41.062836	17.100296	5.2	52.5	17.6*	130.1°	-2.8° / -22.1°	109.7°	0.5°	0.0°
00:00:49	17:49:10.282	41.062733	17.100460	5.3	52.5	17.9*	130.1°	-3.0° / -21.3°	109.8°	0.5°	0.0°
00:00:50	17:49:11.283	41.062630	17.100623	5.3	52.5	17.8*	130.1°	-3.0° / -21.3°	109.8°	0.5°	0.0°
00:00:51	17:49:12.284	41.062526	17.100788	5.4	52.6	18.0*	129.7°	-2.9° / -0.9°	109.8°	0.5°	0.0°
00:00:52	17:49:13.286	41.062437	17.100929	5.9	53.1	15.5*	131.0°	10.4° / -11.5°	112.2°	0.5°	0.0°
00:00:53	17:49:14.286	41.062342	17.101046	5.6	52.9	14.4*	140.7°	12.2° / -13.2°	122.5°	0.5°	0.0°
00:00:54	17:49:15.287	41.062234	17.101141	5.2	52.4	14.5*	149.7°	12.6° / -14.9°	131.1°	0.5°	0.0°
00:00:55	17:49:16.288	41.062112	17.101216	4.3	51.6	14.9*	155.8°	1.0° / -20.0°	135.7°	0.5°	0.0°
00:00:56	17:49:17.289	41.061983	17.101289	4.1	51.4	15.6*	157.4°	3.5° / -20.4°	137.9°	0.5°	0.0°
00:00:57	17:49:18.290	41.061847	17.101353	4.1	51.3	16.0*	161.9°	1.6° / -21.3°	142.0°	0.5°	0.0°
00:00:58	17:49:19.291	41.061706	17.101410	4.0	51.3	16.4*	163.3°	9.6° / -17.8°	144.4°	0.5°	0.0°
00:00:59	17:49:20.275	41.061560	17.101458	4.0	51.2	16.8*	166.9°	-0.9° / -19.5°	146.5°	0.5°	0.0°
00:01:00	17:49:21.276	41.061409	17.101499	3.9	51.2	17.1*	166.7°	5.0° / -18.8°	147.1°	0.5°	0.0°
00:01:01	17:49:22.277	41.061257	17.101544	3.9	51.2	17.4*	167.3°	9.7° / -17.7°	148.5°	0.5°	0.0°
00:01:02	17:49:23.278	41.061103	17.101580	3.9	51.1	17.4*	170.1°	-1.1° / -19.3°	149.7°	0.5°	0.0°

Video	Drone time	Latitude	Longitude	Rel. alt. m	Abs. alt. m	Speed m/s	Acft hdg	Pitch / roll	Gimb. hdg	Gimb. tilt	Gimb. roll
00:01:03	17:49:24.279	41.060946	17.101614	3.9	51.1	17.7*	169.9°	0.0° / -19.2°	149.7°	0.5°	0.0°
00:01:04	17:49:25.280	41.060788	17.101651	3.9	51.1	17.8*	169.9°	0.4° / -18.1°	149.7°	0.5°	0.0°
00:01:05	17:49:26.282	41.060630	17.101687	3.8	51.1	17.8*	171.5°	1.5° / -19.3°	149.8°	0.6°	0.0°
00:01:06	17:49:27.283	41.060470	17.101715	3.8	51.1	17.9*	172.0°	-0.7° / -18.3°	149.8°	0.6°	0.0°
00:01:07	17:49:28.284	41.060309	17.101746	3.8	51.0	18.1*	171.8°	0.4° / -18.1°	149.8°	0.6°	0.0°
00:01:08	17:49:29.285	41.060148	17.101776	3.8	51.0	18.0*	171.6°	1.5° / -18.5°	149.8°	0.6°	0.0°
00:01:09	17:49:30.286	41.059988	17.101807	3.8	51.0	18.0*	171.7°	1.6° / -18.6°	149.8°	0.6°	0.0°
00:01:10	17:49:31.287	41.059827	17.101837	3.8	51.0	18.1*	171.6°	1.5° / -19.0°	149.8°	0.6°	0.0°
00:01:11	17:49:32.288	41.059666	17.101865	3.7	51.0	18.0*	172.6°	1.2° / -19.5°	150.7°	0.6°	0.0°
00:01:12	17:49:33.289	41.059505	17.101886	3.7	50.9	18.0*	174.7°	9.7° / -14.3°	153.8°	0.5°	0.0°
00:01:13	17:49:34.290	41.059345	17.101894	3.7	50.9	17.8*	178.3°	8.3° / -16.7°	157.4°	0.5°	0.0°
00:01:14	17:49:35.291	41.059188	17.101889	3.7	50.9	17.5*	-177.6°	10.5° / -17.8°	161.8°	0.5°	0.0°
00:01:15	17:49:36.292	41.059031	17.101868	3.7	50.9	17.6*	-173.0°	9.5° / -17.0°	166.2°	0.5°	0.0°
00:01:16	17:49:37.277	41.058877	17.101832	3.6	50.9	17.4*	-169.1°	2.7° / -19.3°	169.2°	0.5°	0.0°
00:01:17	17:49:38.277	41.058722	17.101790	3.7	50.9	17.5*	-168.3°	2.3° / -19.9°	169.9°	0.5°	0.0°
00:01:18	17:49:39.278	41.058566	17.101748	3.7	50.9	17.7*	-168.1°	3.2° / -19.5°	170.2°	0.5°	0.0°
00:01:19	17:49:40.280	41.058410	17.101704	3.7	50.9	17.8*	-168.0°	2.4° / -19.7°	170.2°	0.5°	0.0°
00:01:20	17:49:41.281	41.058253	17.101659	3.7	50.9	17.9*	-168.1°	2.8° / -18.9°	170.2°	0.5°	0.0°
00:01:21	17:49:42.282	41.058095	17.101614	3.7	51.0	17.9*	-168.0°	2.5° / -18.7°	170.2°	0.5°	0.0°
00:01:22	17:49:43.283	41.057937	17.101570	3.7	51.0	17.9*	-168.1°	3.7° / -18.3°	170.2°	0.5°	0.0°
00:01:23	17:49:44.284	41.057779	17.101524	4.0	51.2	18.0*	-167.6°	0.0° / -15.8°	170.2°	0.5°	0.0°
00:01:24	17:49:45.285	41.057622	17.101478	5.4	52.6	17.9*	-165.3°	30.0° / -1.9°	174.5°	0.5°	0.0°
00:01:25	17:49:46.286	41.057481	17.101410	5.4	52.7	16.7*	-159.7°	1.5° / -20.4°	-179.6°	0.5°	0.0°
00:01:26	17:49:47.287	41.057337	17.101335	5.5	52.7	17.2*	-157.5°	15.8° / -11.6°	-176.2°	0.5°	0.0°

Video	Drone time	Latitude	Longitude	Rel. alt. m	Abs. alt. m	Speed m/s	Acft hdg	Pitch / roll	Gimb. hdg	Gimb. tilt	Gimb. roll
00:01:27	17:49:48.288	41.057211	17.101239	5.5	52.7	16.2*	-140.1°	32.2° / 0.2°	-160.5°	0.5°	0.0°
00:01:28	17:49:49.289	41.057131	17.101112	5.4	52.6	13.9*	-118.1°	29.1° / -0.4°	-138.6°	0.5°	0.0°
00:01:29	17:49:50.290	41.057097	17.100979	5.3	52.5	11.8*	-97.1°	25.5° / -3.3°	-116.7°	0.5°	0.0°
00:01:30	17:49:51.291	41.057104	17.100849	5.2	52.5	10.9*	-78.4°	20.2° / -10.2°	-96.9°	0.5°	0.0°
00:01:31	17:49:52.293	41.057140	17.100731	5.2	52.5	10.7*	-62.2°	18.6° / -10.6°	-80.8°	0.5°	0.0°
00:01:32	17:49:53.277	41.057202	17.100628	5.3	52.5	11.0*	-48.4°	5.3° / -23.3°	-67.1°	0.5°	0.0°
00:01:33	17:49:54.277	41.057280	17.100521	5.3	52.5	12.5*	-46.9°	12.7° / -18.8°	-65.1°	0.5°	0.0°
00:01:34	17:49:55.278	41.057368	17.100406	5.4	52.6	13.7*	-44.5°	2.4° / -23.7°	-64.0°	0.5°	0.0°
00:01:35	17:49:56.280	41.057468	17.100279	5.4	52.7	15.4*	-44.8°	4.5° / -23.4°	-64.0°	0.5°	0.0°
00:01:36	17:49:57.281	41.057572	17.100145	5.4	52.7	16.1*	-44.6°	3.6° / -23.4°	-64.0°	0.5°	0.0°
00:01:37	17:49:58.282	41.057684	17.100011	5.5	52.7	16.7*	-44.0°	3.8° / -23.2°	-64.0°	0.5°	0.0°
00:01:38	17:49:59.283	41.057797	17.099874	5.5	52.7	17.0*	-44.0°	4.0° / -23.2°	-64.0°	0.5°	0.0°
00:01:39	17:50:00.284	41.057912	17.099732	5.5	52.7	17.5*	-44.1°	8.2° / -22.3°	-63.4°	0.5°	0.0°
00:01:40	17:50:01.285	41.058032	17.099597	5.4	52.7	17.5*	-41.7°	3.8° / -22.3°	-61.8°	0.5°	0.0°
00:01:41	17:50:02.286	41.058152	17.099460	5.4	52.7	17.6*	-41.9°	5.0° / -23.0°	-61.8°	0.5°	0.0°
00:01:42	17:50:03.287	41.058272	17.099323	5.4	52.7	17.6*	-41.8°	4.3° / -22.4°	-61.8°	0.5°	0.0°
00:01:43	17:50:04.288	41.058393	17.099186	5.5	52.7	17.7*	-41.6°	4.0° / -21.7°	-61.7°	0.5°	0.0°
00:01:44	17:50:05.289	41.058516	17.099047	5.5	52.8	18.0*	-41.7°	4.2° / -23.1°	-61.8°	0.5°	0.0°
00:01:45	17:50:06.290	41.058637	17.098908	5.6	52.9	17.8*	-42.1°	15.4° / -18.8°	-60.5°	0.5°	0.0°
00:01:46	17:50:07.291	41.058763	17.098788	5.7	52.9	17.2*	-32.3°	20.4° / -11.0°	-50.6°	0.5°	0.0°
00:01:47	17:50:08.292	41.058895	17.098704	5.6	52.8	16.2*	-23.7°	5.1° / -22.7°	-42.7°	0.5°	0.0°
00:01:48	17:50:09.293	41.059030	17.098629	5.6	52.9	16.3*	-23.2°	3.2° / -24.0°	-42.7°	0.5°	0.0°
00:01:49	17:50:10.278	41.059171	17.098547	5.7	52.9	17.0*	-23.3°	3.6° / -23.0°	-42.7°	0.5°	0.0°
00:01:50	17:50:11.279	41.059313	17.098468	5.7	52.9	17.1*	-22.9°	1.3° / -24.7°	-42.7°	0.5°	0.0°

Video	Drone time	Latitude	Longitude	Rel. alt. m	Abs. alt. m	Speed m/s	Acft hdg	Pitch / roll	Gimb. hdg	Gimb. tilt	Gimb. roll
00:01:51	17:50:12.280	41.059458	17.098389	5.7	52.9	17.5*	-22.3°	2.6° / -23.9°	-42.7°	0.5°	0.0°
00:01:52	17:50:13.281	41.059605	17.098310	5.7	52.9	17.6*	-22.4°	3.1° / -23.8°	-42.7°	0.5°	0.0°
00:01:53	17:50:14.282	41.059752	17.098231	5.8	53.0	17.6*	-22.4°	2.6° / -23.5°	-42.7°	0.5°	0.0°
00:01:54	17:50:15.283	41.059899	17.098152	5.8	53.1	17.7*	-22.5°	3.0° / -24.3°	-42.7°	0.5°	0.0°
00:01:55	17:50:16.284	41.060049	17.098073	5.9	53.1	17.9*	-22.5°	3.0° / -24.6°	-42.7°	0.5°	0.0°
00:01:56	17:50:17.285	41.060198	17.097994	6.0	53.2	17.8*	-22.3°	2.7° / -23.9°	-42.7°	0.5°	0.0°
00:01:57	17:50:18.286	41.060347	17.097915	6.0	53.2	17.9*	-22.4°	3.5° / -23.4°	-42.7°	0.5°	0.0°
00:01:58	17:50:19.287	41.060494	17.097836	6.0	53.2	17.7*	-22.5°	3.2° / -23.7°	-42.7°	0.5°	0.0°
00:01:59	17:50:20.288	41.060646	17.097756	6.1	53.4	18.1*	-22.2°	2.5° / -21.3°	-42.7°	0.6°	0.0°
00:02:00	17:50:21.289	41.060795	17.097677	7.2	54.4	17.9*	-22.2°	2.2° / -22.9°	-42.7°	0.5°	0.0°
00:02:01	17:50:22.290	41.060943	17.097599	8.5	55.8	17.8*	-22.5°	3.8° / -22.4°	-42.7°	0.5°	0.0°
00:02:02	17:50:23.291	41.061092	17.097521	10.5	57.8	17.8*	-22.0°	1.4° / -23.9°	-42.7°	0.5°	0.0°
00:02:03	17:50:24.292	41.061240	17.097443	12.8	60.0	17.7*	-22.0°	1.0° / -24.3°	-42.6°	0.5°	0.0°
00:02:04	17:50:25.293	41.061389	17.097361	15.0	62.3	17.9*	-22.6°	4.2° / -24.8°	-42.6°	0.5°	0.0°
00:02:05	17:50:26.294	41.061536	17.097278	16.5	63.7	17.8*	-22.7°	4.0° / -27.9°	-42.7°	0.6°	0.0°
00:02:06	17:50:27.279	41.061686	17.097197	17.1	64.4	18.0*	-22.1°	1.8° / -16.6°	-42.7°	0.6°	0.0°
00:02:07	17:50:28.280	41.061835	17.097119	19.9	67.1	17.8*	-22.2°	1.8° / -31.6°	-42.7°	0.5°	0.0°
00:02:08	17:50:29.281	41.061981	17.097041	20.2	67.4	17.5*	-22.4°	2.7° / -26.9°	-42.7°	0.5°	0.0°
00:02:09	17:50:30.282	41.062133	17.096964	20.2	67.4	18.0*	-19.8°	-12.4° / -23.8°	-42.7°	0.5°	0.0°
00:02:10	17:50:31.283	41.062280	17.096877	20.1	67.4	18.0*	-22.7°	-1.2° / -23.9°	-42.9°	0.6°	0.0°
00:02:11	17:50:32.284	41.062425	17.096784	20.1	67.4	17.8*	-28.1°	-14.5° / -14.9°	-49.8°	0.6°	0.0°
00:02:12	17:50:33.285	41.062550	17.096673	20.1	67.3	16.7*	-39.1°	-19.6° / -11.8°	-60.3°	0.6°	0.0°
00:02:13	17:50:34.286	41.062644	17.096531	20.1	67.3	15.9*	-51.2°	-14.1° / -16.1°	-72.0°	0.5°	0.0°
00:02:14	17:50:35.287	41.062720	17.096382	20.1	67.3	15.0*	-59.5°	-4.7° / -22.3°	-79.3°	0.5°	0.0°

Video	Drone time	Latitude	Longitude	Rel. alt. m	Abs. alt. m	Speed m/s	Acft hdg	Pitch / roll	Gimb. hdg	Gimb. tilt	Gimb. roll
00:02:15	17:50:36.288	41.062784	17.096215	20.1	67.3	15.8*	-65.2°	-22.0° / -9.6°	-86.2°	0.5°	0.0°
00:02:16	17:50:37.289	41.062828	17.096045	20.1	67.4	15.1*	-76.9°	-23.7° / -9.8°	-97.9°	0.5°	0.0°
00:02:17	17:50:38.290	41.062838	17.095877	20.0	67.3	14.1*	-92.2°	-16.0° / -9.7°	-112.6°	0.5°	0.0°
00:02:18	17:50:39.291	41.062827	17.095710	19.9	67.1	14.1*	-96.2°	2.3° / -24.4°	-114.7°	0.5°	0.0°
00:02:19	17:50:40.292	41.062812	17.095527	19.9	67.1	15.4*	-95.9°	2.9° / -13.8°	-114.7°	0.5°	0.0°
00:02:20	17:50:41.293	41.062800	17.095348	19.8	67.0	15.1*	-96.9°	12.4° / -18.3°	-114.0°	0.5°	0.0°
00:02:21	17:50:42.294	41.062800	17.095168	19.7	67.0	15.1*	-87.5°	19.0° / -14.2°	-104.3°	0.5°	0.0°
00:02:22	17:50:43.279	41.062820	17.094995	19.7	66.9	14.6*	-75.2°	19.5° / -12.2°	-92.3°	0.5°	0.0°
00:02:23	17:50:44.280	41.062870	17.094840	19.6	66.8	14.2*	-62.8°	18.3° / -13.3°	-79.8°	0.5°	0.0°
00:02:24	17:50:45.281	41.062943	17.094706	19.5	66.7	13.8*	-51.1°	4.1° / -20.4°	-69.4°	0.5°	0.0°
00:02:25	17:50:46.282	41.063026	17.094575	19.4	66.7	14.3*	-49.9°	1.7° / -23.6°	-68.5°	0.5°	0.0°
00:02:26	17:50:47.283	41.063114	17.094435	19.4	66.7	15.3*	-49.7°	1.0° / -23.5°	-68.5°	0.5°	0.0°
00:02:27	17:50:48.284	41.063209	17.094288	19.4	66.7	16.3*	-50.0°	2.4° / -23.4°	-68.5°	0.6°	0.0°
00:02:28	17:50:49.285	41.063305	17.094133	19.4	66.7	16.8*	-52.5°	-0.1° / -23.1°	-68.5°	0.6°	0.0°
00:02:29	17:50:50.286	41.063401	17.093970	19.5	66.7	17.3*	-52.8°	1.0° / -23.0°	-68.5°	0.6°	0.0°
00:02:30	17:50:51.287	41.063496	17.093806	19.7	66.9	17.3*	-51.9°	-1.4° / 24.1°	-68.5°	0.6°	0.0°

* Speed not reported by the source: computed from the distance between the positions of two consecutive logbook rows divided by the elapsed time (average ground speed).

For each second of the video the nearest telemetry point within half a second; seconds without a point are omitted. Angles in degrees as declared by the source (heading: 0° = north, clockwise; negative tilt = downwards). Drone time without zone, as written by the drone.

#0 · video · hevc

index	0
codec_name	hevc
codec_long_name	H.265 / HEVC (High Efficiency Video Coding)
profile	Main 10
codec_type	video
codec_tag_string	hvc1
codec_tag	0x31637668
width	3840
height	2160
coded_width	3840
coded_height	2160
has_b_frames	0
pix_fmt	yuv420p10le
level	150
color_range	tv
color_space	bt709
color_transfer	bt709
color_primaries	bt709
chroma_location	left
view_ids_available	
view_pos_available	
id	0x1
r_frame_rate	60000/1001
avg_frame_rate	60000/1001
time_base	1/60000
start_pts	0
start_time	0.000000
duration_ts	9043034

duration	150.717233
bit_rate	78169309
nb_frames	9034
nb_read_packets	9034
extradata_size	127
disposition	default

#0 · video · hevc · tag

creation_time	2026-10-17T15:48:21.000000Z
language	und
handler_name	VideoHandler

#1 · data · djmd

index	1
codec_type	data
codec_tag_string	djmd
codec_tag	0x646d6a64
id	0x2
r_frame_rate	0/0
avg_frame_rate	0/0
time_base	1/60000
start_pts	0
start_time	0.000000
duration_ts	9043034
duration	150.717233
bit_rate	153160
nb_frames	9034
nb_read_packets	9034
disposition	—

#1 · data · djmd · tag

creation_time	2026-10-17T15:48:21.000000Z
language	und
handler_name	CAM meta

#2 · data · dbgi

index	2
codec_type	data
codec_tag_string	dbgi
codec_tag	0x69676264
id	0x3
r_frame_rate	0/0
avg_frame_rate	0/0
time_base	1/60000
start_pts	0
start_time	0.000000
duration_ts	9043034
duration	150.717233
bit_rate	9950360
nb_frames	9034
nb_read_packets	9034
disposition	—

#2 · data · dbgi · tag

creation_time	2026-10-17T15:48:21.000000Z
language	und
handler_name	CAM dbgi

#3 · video · mjpeg

index	3
codec_name	mjpeg
codec_long_name	Motion JPEG
profile	Baseline
codec_type	video
codec_tag_string	[0][0][0][0]
codec_tag	0x0000
width	960
height	540
coded_width	960
coded_height	540
has_b_frames	0
sample_aspect_ratio	1:1
display_aspect_ratio	16:9
pix_fmt	yuvj420p
level	-99
color_range	pc
color_space	bt470bg
chroma_location	center
id	0x0
r_frame_rate	90000/1
avg_frame_rate	0/0
time_base	1/90000
start_pts	0
start_time	0.000000
duration_ts	13564551
duration	150.717233
bits_per_raw_sample	8

nb_read_packets1
dispositionattached_pic

Container tags

major_brandisom
minor_version512
compatible_brandsisomiso2mp41
creation_time2026-10-17T15:48:21.000000Z
encoderDJI Mavic4 Pro L3A

File structure (boxes)

Box	Offset (bytes)	Size (B)	Notes
ftyp	0	28	marca isom v512 · compatibili isom iso2 mp41
free	28	8	
free	36	468	
free	504	16000512	
mdat	16001016	1663029610	
moov	1679030626	669837	
mvhd	1679030634	108	creazione 2026-10-17 15:48:21Z · modifica 2026-10-17 15:48:21Z
trak	1679030742	74133	
tkhd	1679030750	92	creazione 2026-10-17 15:48:21Z · modifica 2026-10-17 15:48:21Z
edts	1679030842	36	
elst	1679030850	28	
mdia	1679030878	73997	
mdhd	1679030886	32	creazione 2026-10-17 15:48:21Z · modifica 2026-10-17 15:48:21Z
hdlr	1679030918	45	vide «VideoHandler»
minf	1679030963	73912	
vmhd	1679030971	20	
dinf	1679030991	36	
dref	1679030999	28	
stbl	1679031027	73848	
stsd	1679031035	256	
hvc1	1679031051	240	
stts	1679031291	24	

Box	Offset (bytes)	Size (B)	Notes
stss	1679031315	1224	
stsc	1679032539	28	
stsz	1679032567	36156	
stco	1679068723	36152	
trak	1679104875	72749	
tkhd	1679104883	92	creazione 2026-10-17 15:48:21Z · modifica 2026-10-17 15:48:21Z
edts	1679104975	36	
elst	1679104983	28	
mdia	1679105011	72613	
mdhd	1679105019	32	creazione 2026-10-17 15:48:21Z · modifica 2026-10-17 15:48:21Z
hdlr	1679105051	41	meta «CAM meta»
minf	1679105092	72532	
gmhd	1679105100	84	
dinf	1679105184	36	
dref	1679105192	28	
stbl	1679105220	72404	
stsd	1679105228	36	
djmd	1679105244	20	
stts	1679105264	24	
stsc	1679105288	28	
stsz	1679105316	36156	
stco	1679141472	36152	

Box	Offset (bytes)	Size (B)	Notes
trak	1679177624	72753	
tkhd	1679177632	92	creazione 2026-10-17 15:48:21Z · modifica 2026-10-17 15:48:21Z
edts	1679177724	36	
elst	1679177732	28	
mdia	1679177760	72617	
mdhd	1679177768	32	creazione 2026-10-17 15:48:21Z · modifica 2026-10-17 15:48:21Z
hdlr	1679177800	41	meta «CAM dbgi»
minf	1679177841	72536	
gmhd	1679177849	88	
dinf	1679177937	36	
dref	1679177945	28	
stbl	1679177973	72404	
stsd	1679177981	36	
dbgi	1679177997	20	
stts	1679178017	24	
stsc	1679178041	28	
stsz	1679178069	36156	
stco	1679214225	36152	
udta	1679250377	450022	
©uid	1679250385	12	
btec	1679250397	222	
fsid	1679250619	72	
msts	1679250691	16	
meta	1679250707	449473	
hdlr	1679250719	32	mdir «»
ilst	1679250751	449429	
©too	1679250759	42	
covr	1679250801	220573	
snal	1679471374	220573	
tnal	1679691947	8233	
Xtra	1679700180	219	
meta	1679700399	64	
hdlr	1679700407	32	mdta «»
keys	1679700439	16	
ilst	1679700455	8	
free	1679700463	2700044	

80 boxes read from headers only, up to 6 levels; indentation shows nesting.

Method

FFmpeg	8.1.3 (LGPL)
Note	Metadata read with ffprobe (packets counted by reading the whole file), frame index from packets in presentation order, box structure read by Probatio. Metadata dates are those written by the device or program that saved the file.

Report generated on 2026-10-18 11:56:40+02:00 with Probatio 1.2.3 (LGPL FFmpeg run isolated).