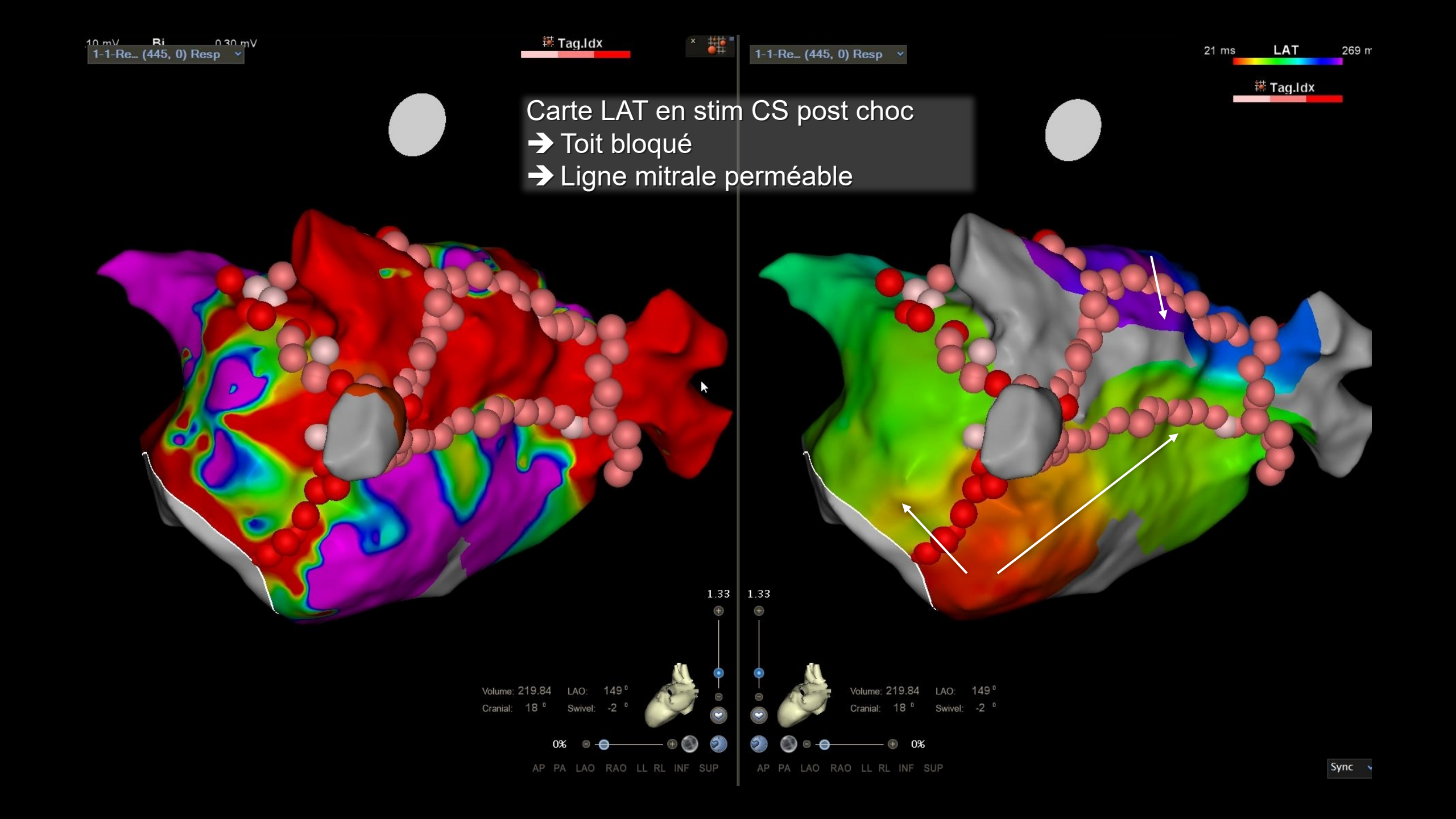
Flutter Gauche avril 2025

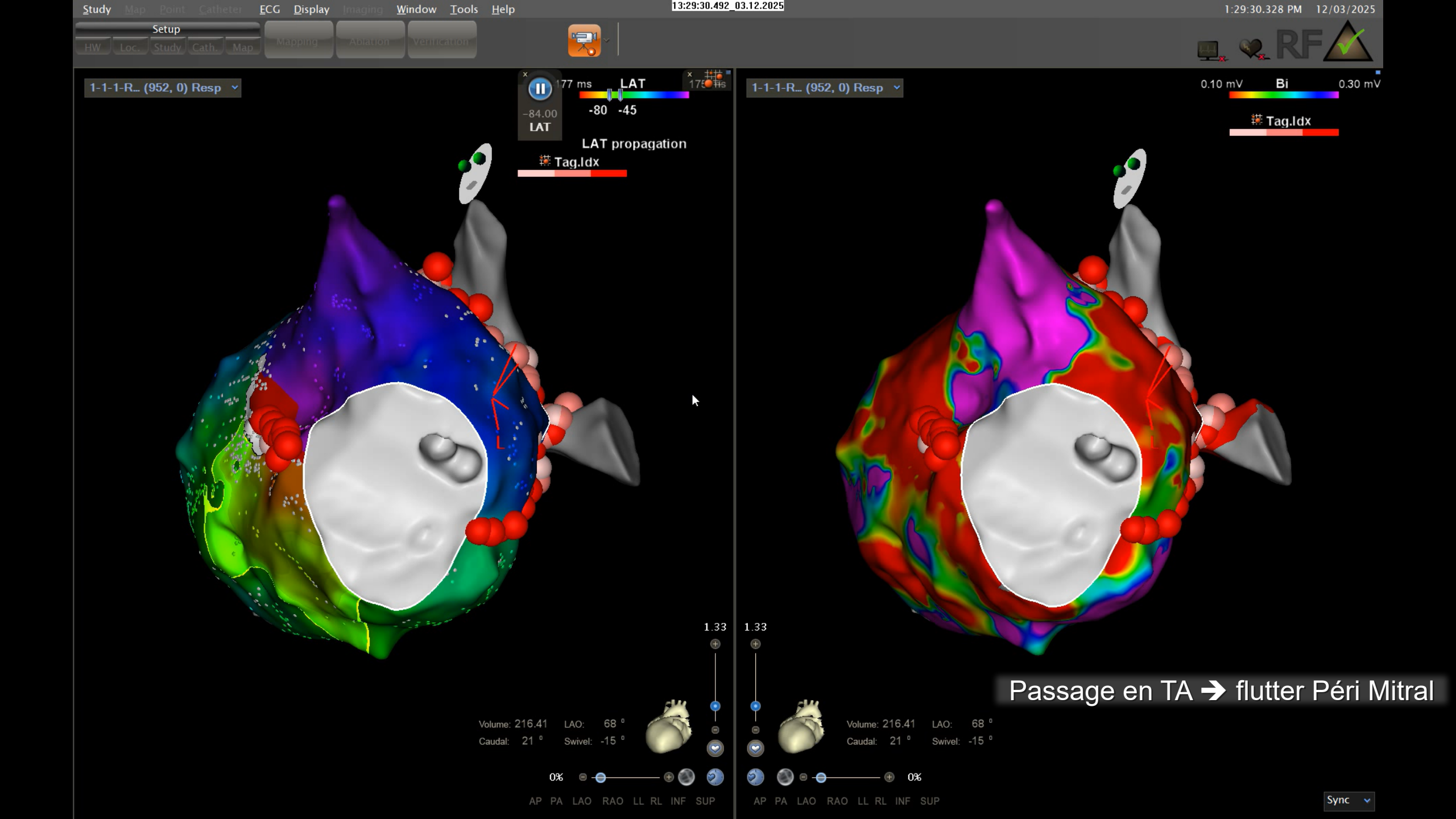
AIX en Provence

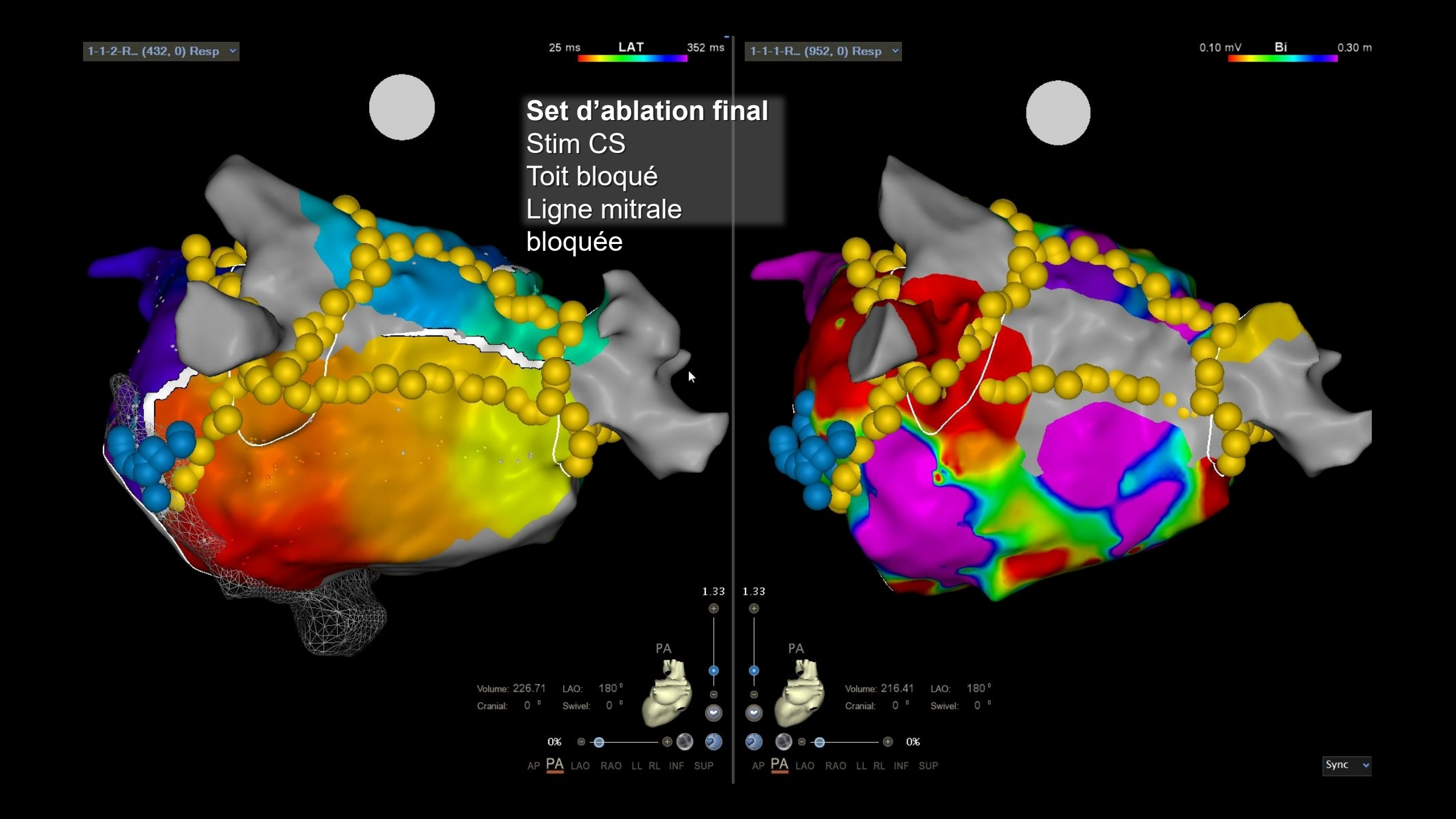
Jérôme Bouet

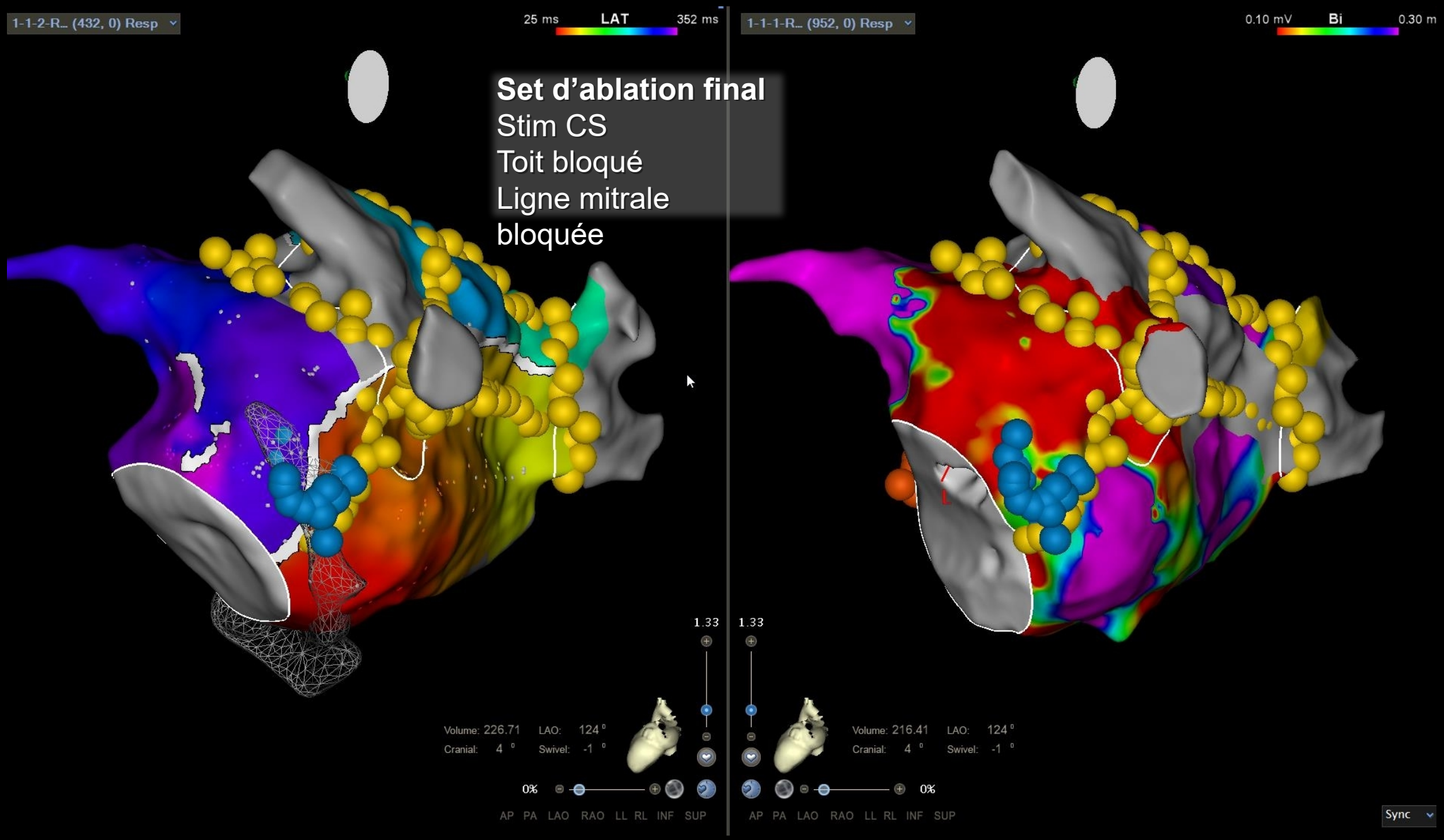
Procédure d'avril 2024

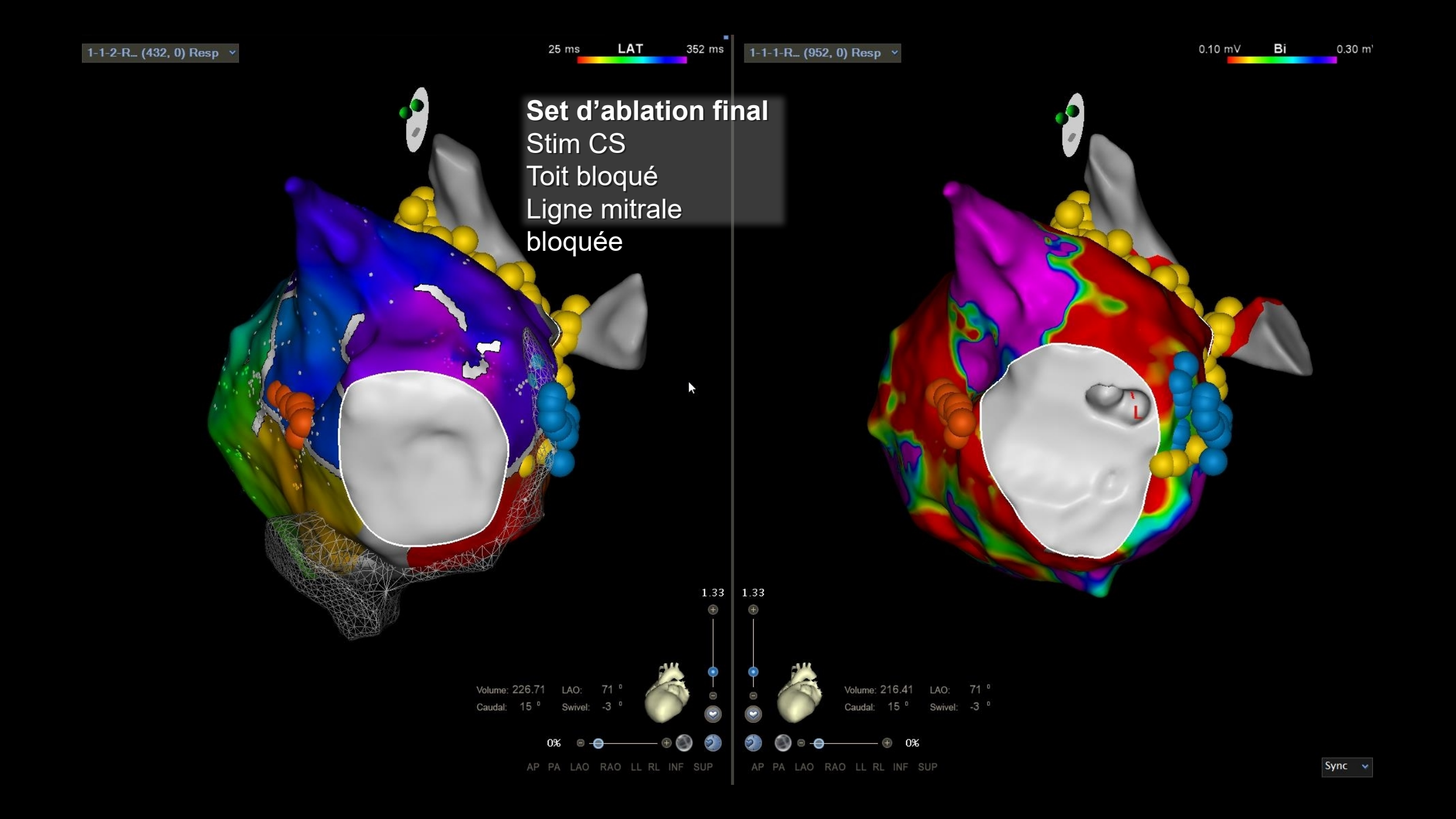
- FA Persistante longue durée
- Alcoolisation Marshall
- Isolation des Veines Pulmonaires
- Box postérieure
- Ligne mitrale endo

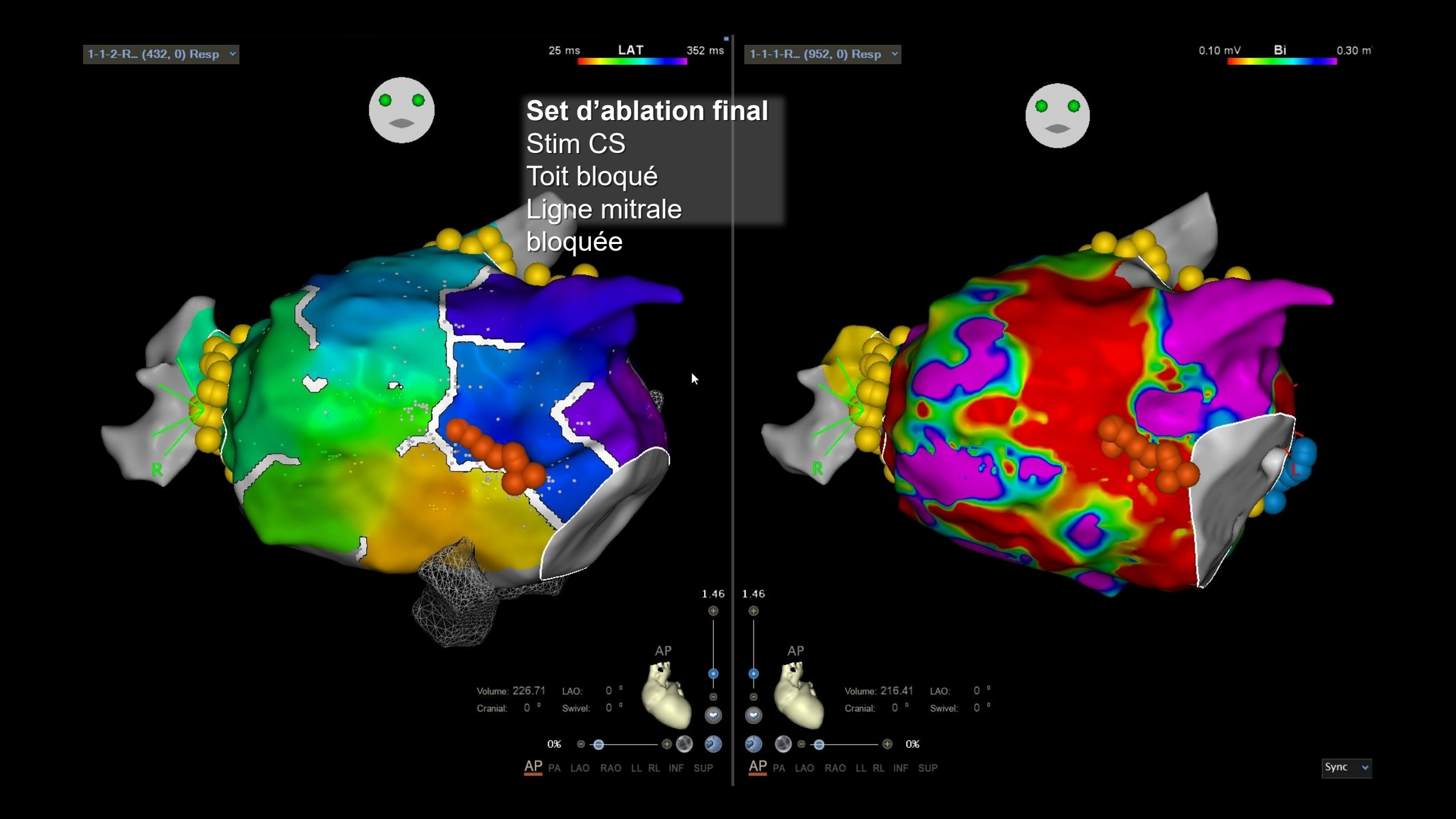

Carte LAT en stim CS post choc
➔ Toit bloqué
➔ Ligne mitrale perméable
1-1-Re... (445, 0) Resp
Tag.Idx
1-1-Re... (445, 0) Resp
21 ms
LAT
269 m
Tag.Idx
1.33
1.33
Volume: 219.84
LAO: 149 °
Cranial: 18 °
Swivel: -2 °
0%
AP PA LAO RAO LL RL INF SUP
Volume: 219.84
LAO: 149 °
Cranial: 18 °
Swivel: -2 °
0%
AP PA LAO RAO LL RL INF SUP
Sync

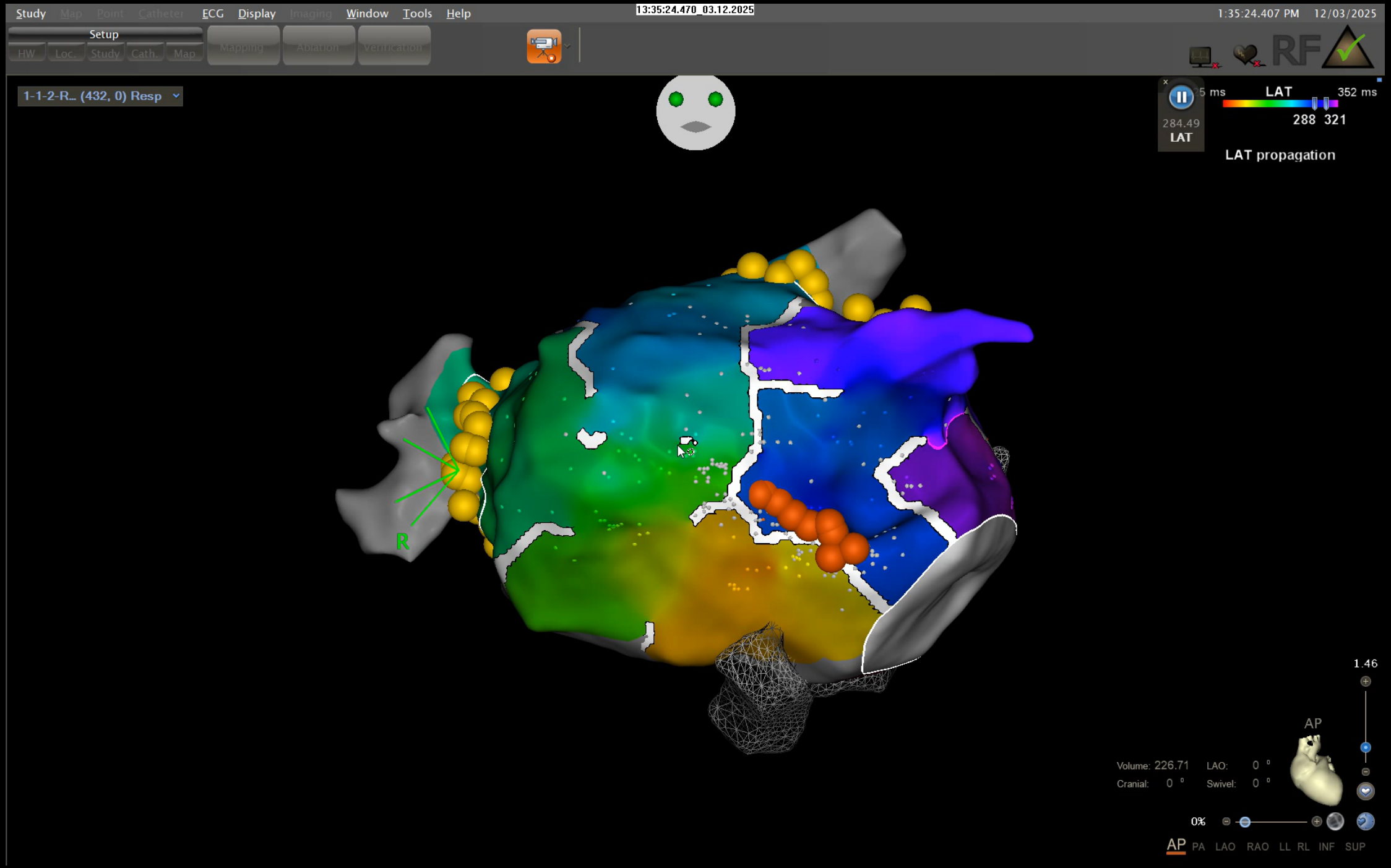

Study Map Point Catheter ECG Display Imaging Window Tools Help
13:29:30.492_03.12.2025
1:29:30.328 PM 12/03/2025
Setup
HW Loc. Study Cath. Map
Mapping Ablation Verification
RF
1-1-1-R... (952, 0) Resp
77 ms LAT
-80 -45
-84.00
LAT
LAT propagation
Tag.Idx
1-1-1-R... (952, 0) Resp
0.10 mV Bi 0.30 mV
Tag.Idx
1.33
Volume: 216.41 LAO: 68 °
Caudal: 21 ° Swivel: -15 °
0%
AP PA LAO RAO LL RL INF SUP
1.33
Volume: 216.41 LAO: 68 °
Caudal: 21 ° Swivel: -15 °
0%
AP PA LAO RAO LL RL INF SUP
Sync
Passage en TA ➔ flutter Péri Mitral


1-1-2-R... (432, 0) Resp
25 ms
LAT
352 ms
1-1-1-R... (952, 0) Resp
0.10 mV
Bi
0.30 m
Set d'ablation final
Stim CS
Toit bloqué
Ligne mitrale bloquée
1.33
1.33
PA
PA
Volume: 226.71
LAO: 180 °
Cranial: 0 °
Swivel: 0 °
Volume: 216.41
LAO: 180 °
Cranial: 0 °
Swivel: 0 °
0%
0%
AP PA LAO RAO LL RL INF SUP
AP PA LAO RAO LL RL INF SUP
Sync


1-1-2-R... (432, 0) Resp
25 ms
LAT
352 ms
1-1-1-R... (952, 0) Resp
0.10 mV
Bi
0.30 m
Set d'ablation final
Stim CS
Toit bloqué
Ligne mitrale bloquée
1.33
1.33
Volume: 226.71
LAO: 124 °
Cranial: 4 °
Swivel: -1 °
Volume: 216.41
LAO: 124 °
Cranial: 4 °
Swivel: -1 °
0%
0%
AP PA LAO RAO LL RL INF SUP
AP PA LAO RAO LL RL INF SUP
Sync

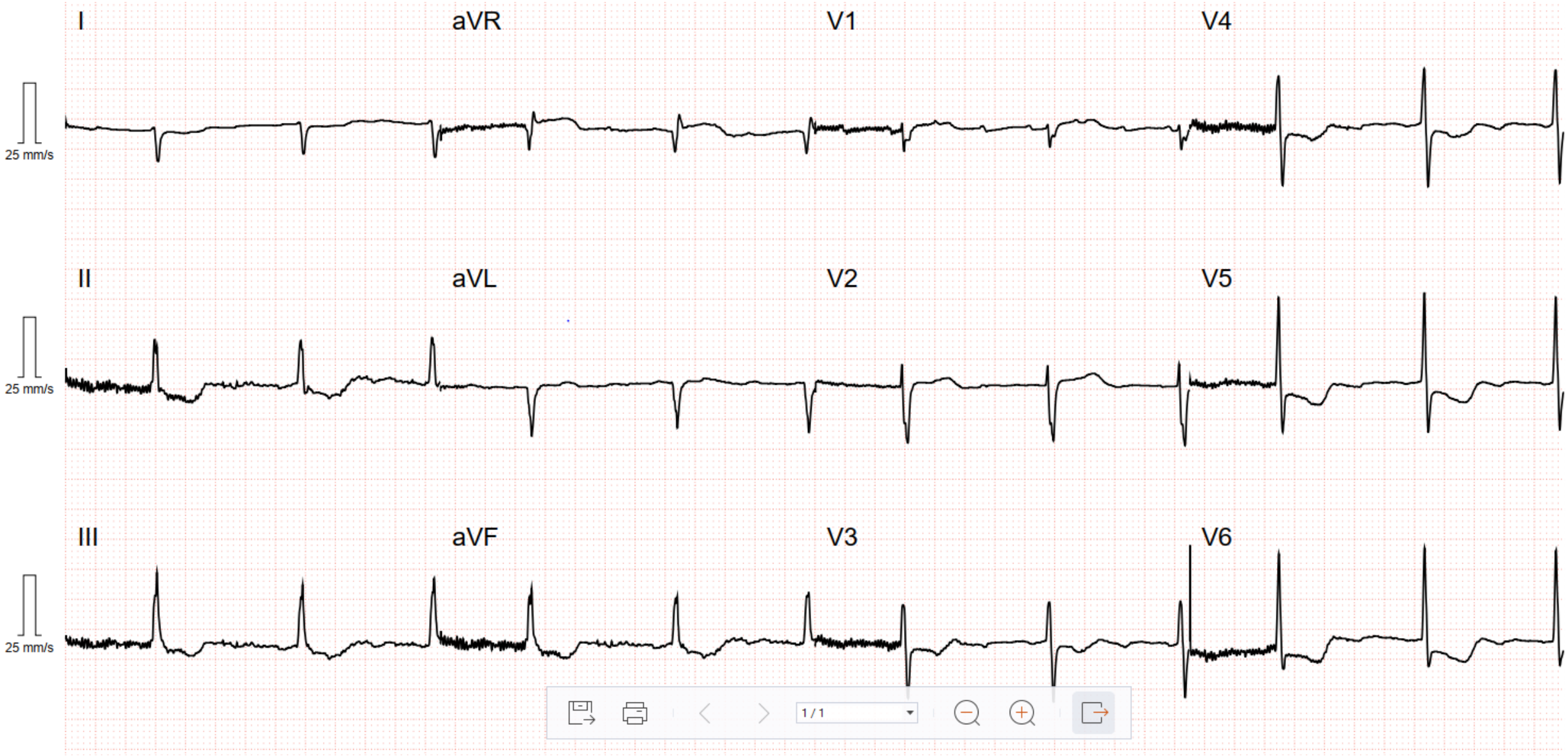

1-1-2-R... (432, 0) Resp
25 ms
LAT
352 ms
1-1-1-R... (952, 0) Resp
0.10 mV
Bi
0.30 m
Set d'ablation final
Stim CS
Toit bloqué
Ligne mitrale
bloquée
1.33
1.33
Volume: 226.71
LAO: 71 °
Caudal: 15 °
Swivel: -3 °
Volume: 216.41
LAO: 71 °
Caudal: 15 °
Swivel: -3 °
0%
0%
AP PA LAO RAO LL RL INF SUP
AP PA LAO RAO LL RL INF SUP
Sync

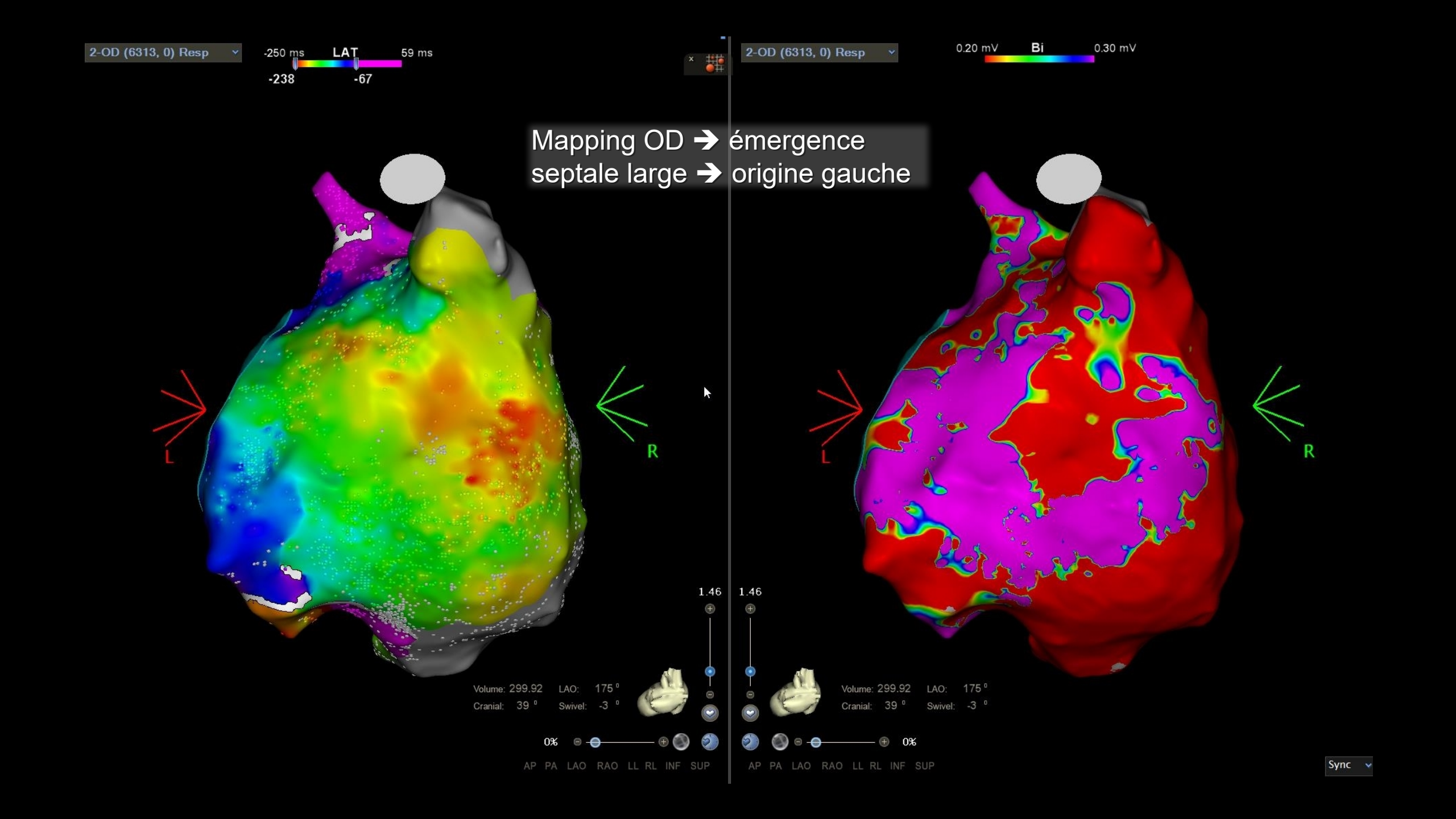

1-1-2-R... (432, 0) Resp
25 ms
LAT
352 ms
1-1-1-R... (952, 0) Resp
0.10 mV
Bi
0.30 m
Set d'ablation final
Stim CS
Toit bloqué
Ligne mitrale
bloquée
R
R
L
1.46
1.46
AP
AP
Volume: 226.71
LAO: 0
Cranial: 0
Swivel: 0
Volume: 216.41
LAO: 0
Cranial: 0
Swivel: 0
0%
0%
AP PA LAO RAO LL RL INF SUP
AP PA LAO RAO LL RL INF SUP
Sync

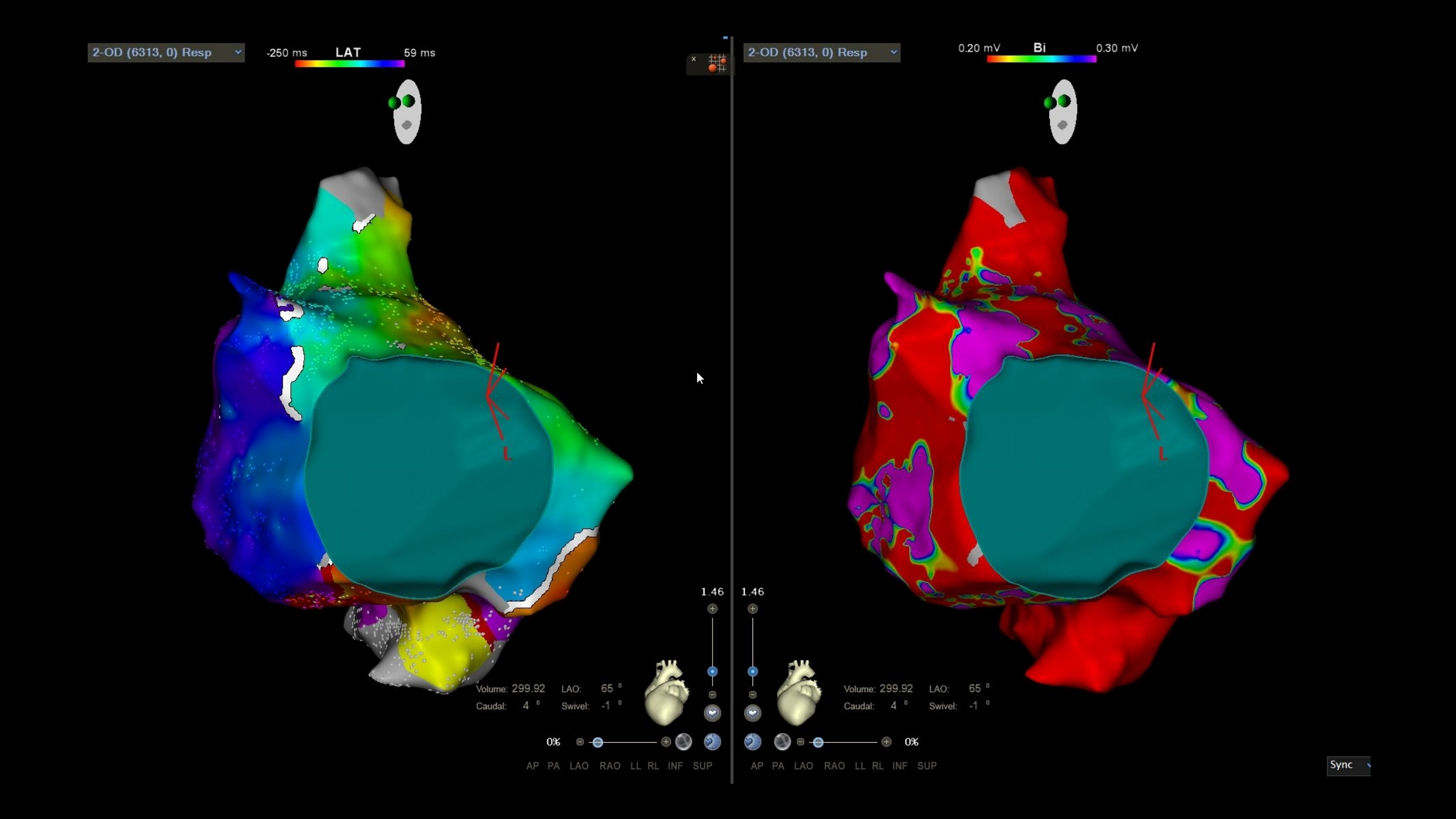

Study Map Point Catheter ECG Display Imaging Window Tools Help
13:35:24.470_03.12.2025
1:35:24.407 PM 12/03/2025
Setup
HW Loc. Study Cath. Map
Mapping
Ablation
Verification
RF
1-1-2-R... (432, 0) Resp
5 ms
LAT
352 ms
288 321
284.49
LAT
LAT propagation
R
1.46
AP
Volume: 226.71
LAO: 0 °
Cranial: 0 °
Swivel: 0 °
0%
AP PA LAO RAO LL RL INF SUP

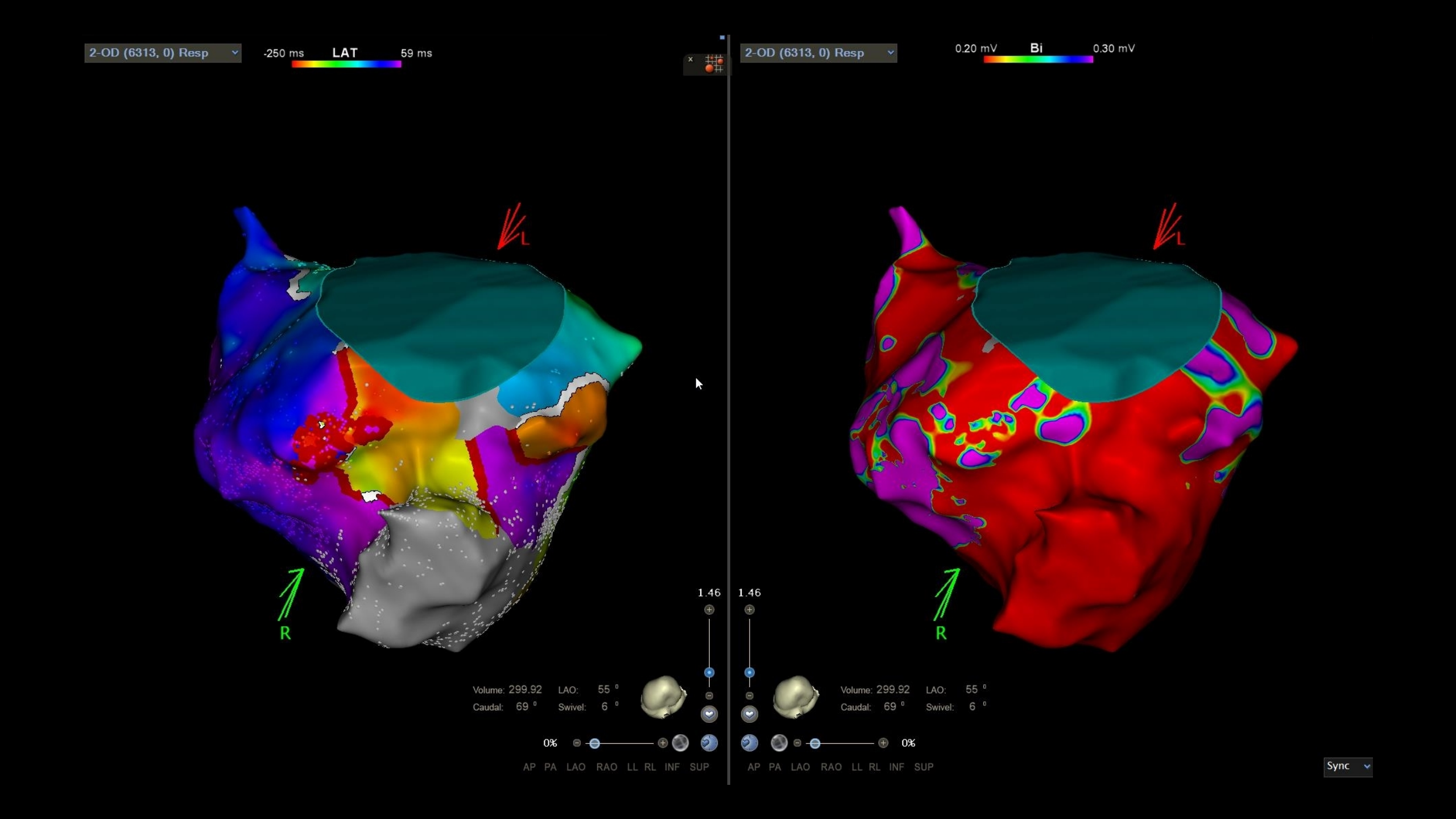
Procédure d’avril 2025
Arrivé en Flutter

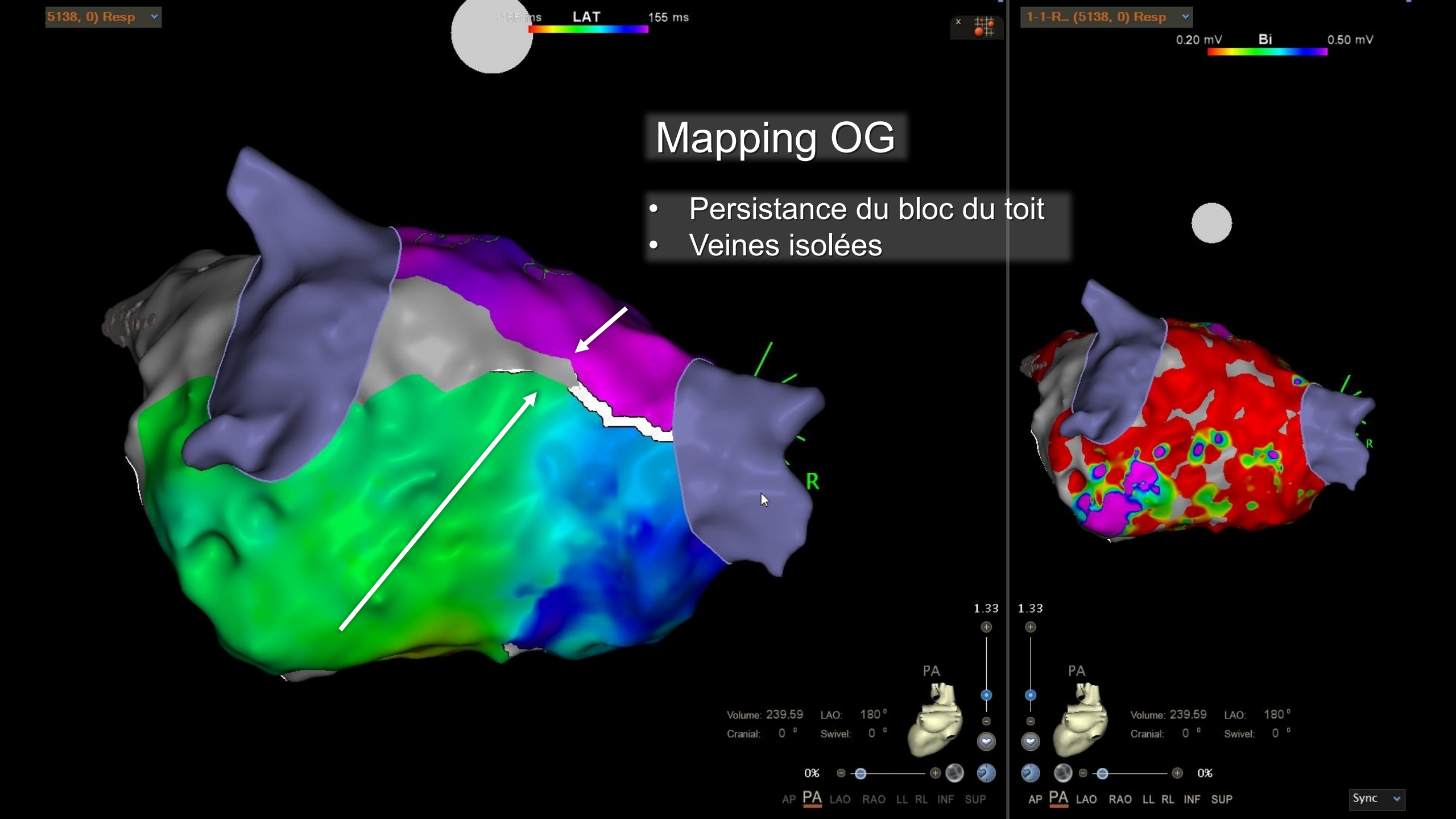
ECG de début

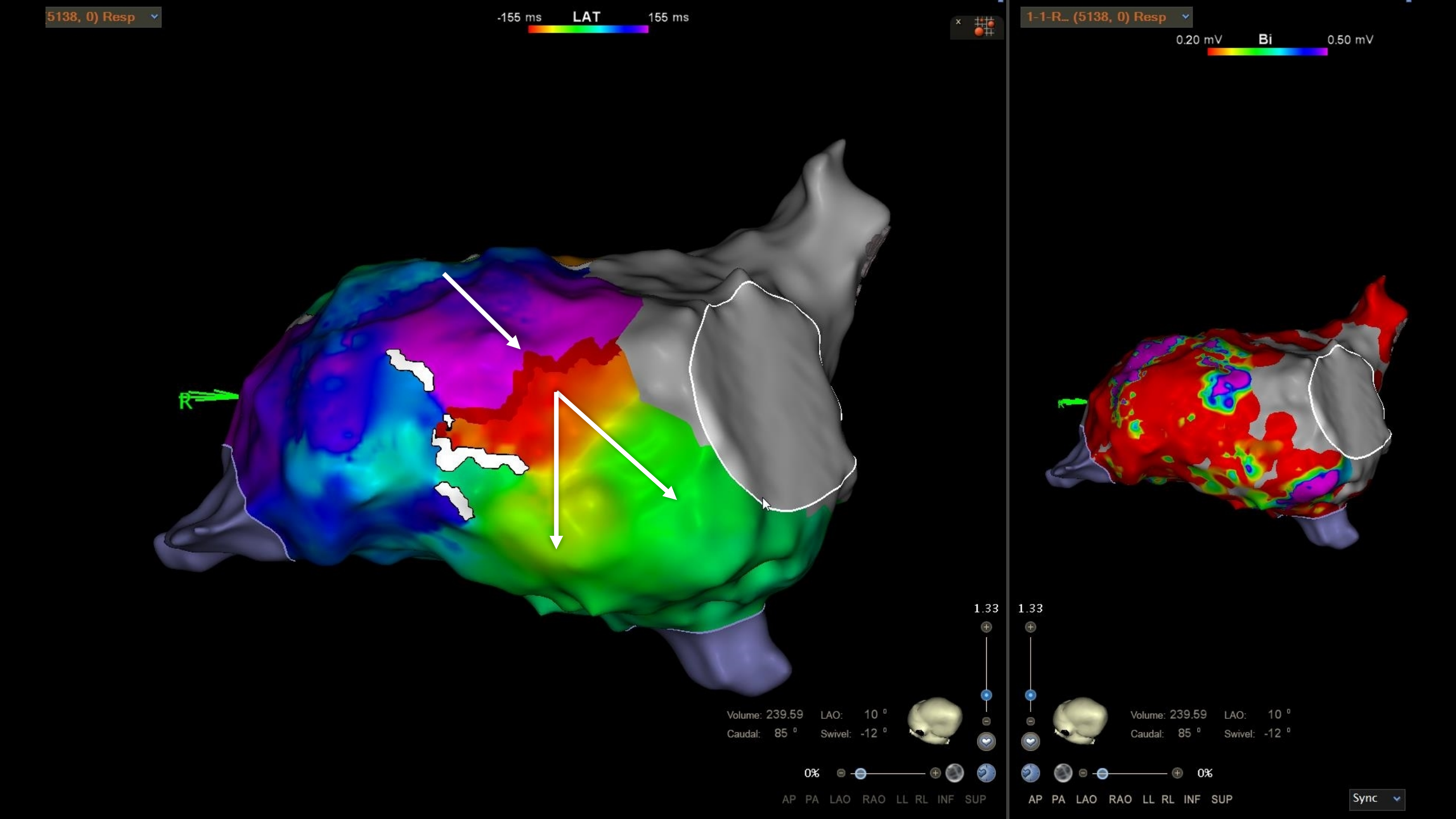


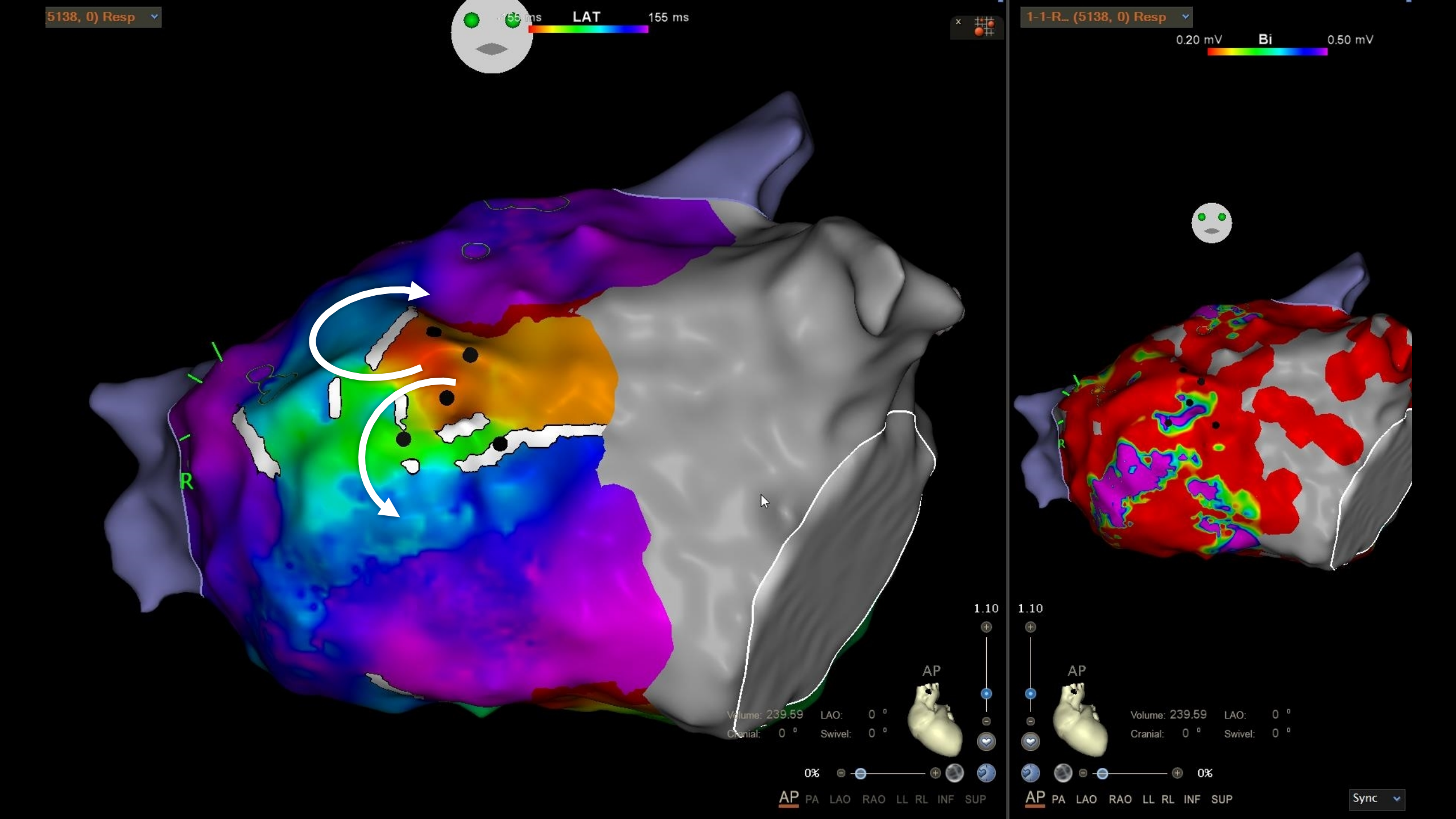

2-OD (6313, 0) Resp
-250 ms
LAT
59 ms
-238
-67
Mapping OD ➔ émergence
septale large ➔ origine gauche
L
R
1.46
Volume: 299.92
LAO: 175 °
Cranial: 39 °
Swivel: -3 °
0%
AP PA LAO RAO LL RL INF SUP
2-OD (6313, 0) Resp
0.20 mV
Bi
0.30 mV
L
R
1.46
Volume: 299.92
LAO: 175 °
Cranial: 39 °
Swivel: -3 °
0%
AP PA LAO RAO LL RL INF SUP
Sync

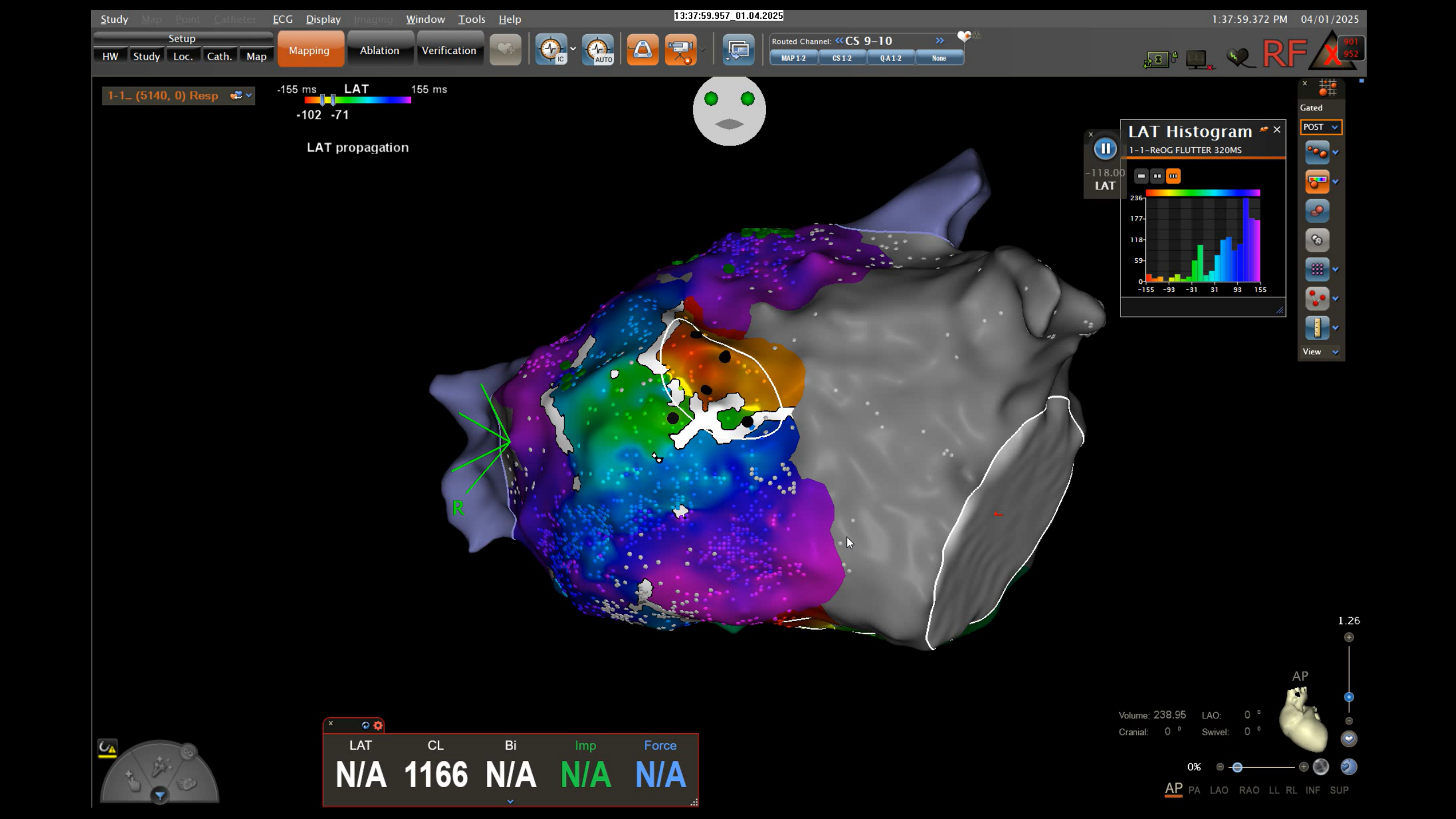

2-OD (6313, 0) Resp
-250 ms
LAT
59 ms
2-OD (6313, 0) Resp
0.20 mV
Bi
0.30 mV
L
L
1.46
1.46
Volume: 299.92
LAO: 65 °
Caudal: 4 °
Swivel: -1 °
Volume: 299.92
LAO: 65 °
Caudal: 4 °
Swivel: -1 °
0%
0%
AP PA LAO RAO LL RL INF SUP
AP PA LAO RAO LL RL INF SUP
Sync


2-OD (6313, 0) Resp
-250 ms
LAT
59 ms
L
R
1.46
Volume: 299.92
LAO: 55 °
Caudal: 69 °
Swivel: 6 °
0%
AP PA LAO RAO LL RL INF SUP
2-OD (6313, 0) Resp
0.20 mV
Bi
0.30 mV
L
R
1.46
Volume: 299.92
LAO: 55 °
Caudal: 69 °
Swivel: 6 °
0%
AP PA LAO RAO LL RL INF SUP
Sync

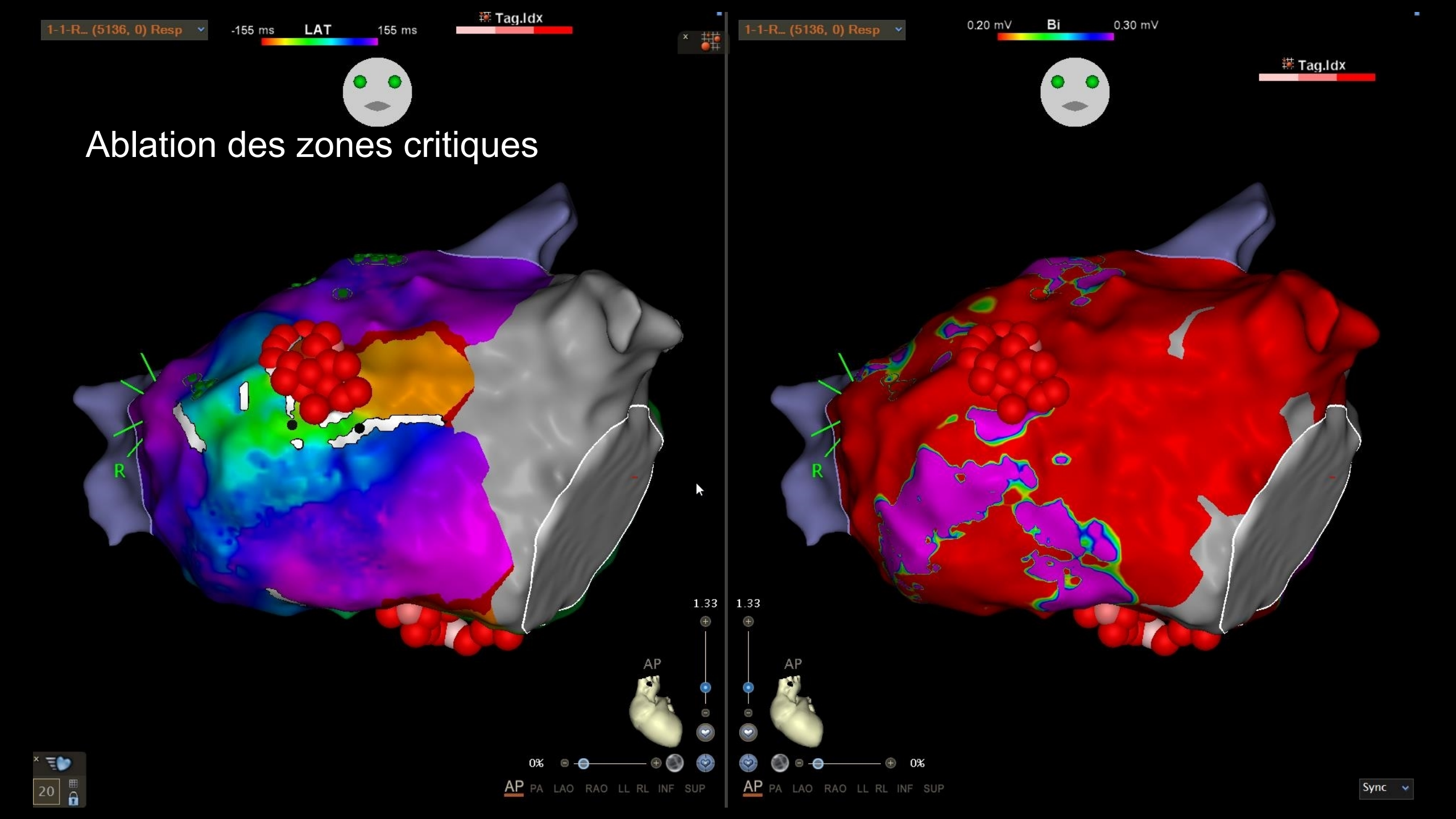

5138, 0) Resp
155 ms
LAT
155 ms
Mapping OG
• Persistance du bloc du toit
• Veines isolées
R
1.33
PA
Volume: 239.59
LAO: 180 °
Cranial: 0 °
Swivel: 0 °
0%
AP PA LAO RAO LL RL INF SUP
1-1-R... (5138, 0) Resp
0.20 mV
Bi
0.50 mV
1.33
PA
Volume: 239.59
LAO: 180 °
Cranial: 0 °
Swivel: 0 °
0%
AP PA LAO RAO LL RL INF SUP
Sync


5138, 0) Resp
-155 ms
LAT
155 ms
R
1.33
Volume: 239.59
LAO: 10 °
Caudal: 85 °
Swivel: -12 °
0%
AP PA LAO RAO LL RL INF SUP
1-1-R... (5138, 0) Resp
0.20 mV
Bi
0.50 mV
1.33
Volume: 239.59
LAO: 10 °
Caudal: 85 °
Swivel: -12 °
0%
AP PA LAO RAO LL RL INF SUP
Sync

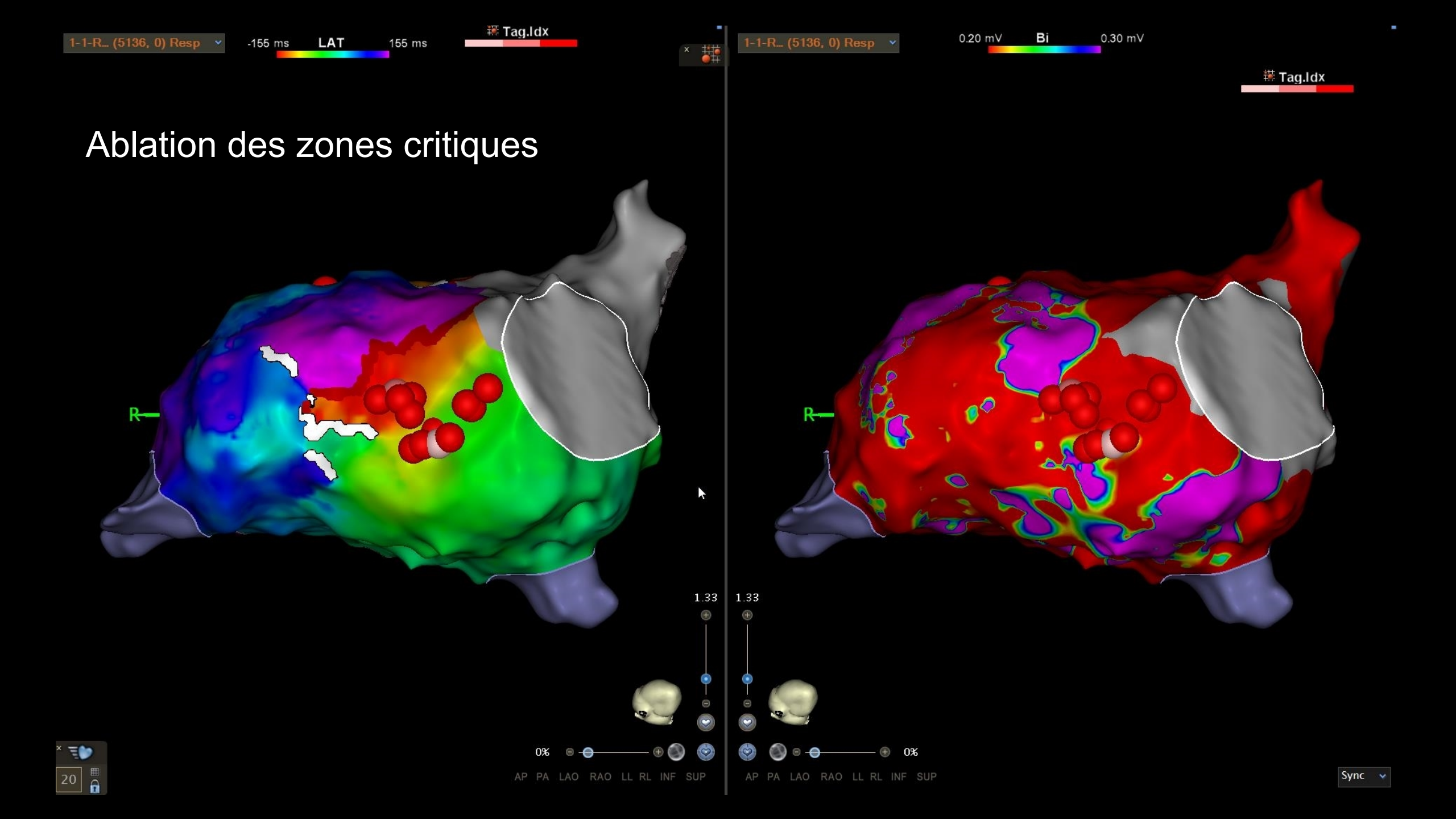

5138, 0) Resp
LAT
155 ms
R
1.10
AP
Volume: 239.59
LAO: 0 °
Cranial: 0 °
Swivel: 0 °
0%
AP PA LAO RAO LL RL INF SUP
1-1-R... (5138, 0) Resp
0.20 mV
Bi
0.50 mV
1.10
AP
Volume: 239.59
LAO: 0 °
Cranial: 0 °
Swivel: 0 °
0%
AP PA LAO RAO LL RL INF SUP
Sync


Study Map Point Catheter ECG Display Imaging Window Tools Help
13:37:59.957_01.04.2025
1:37:59.372 PM 04/01/2025
Setup
HW Study Loc. Cath. Map
Mapping
Ablation
Verification
Routed Channel: CS 9–10
MAP 1-2 CS 1-2 Q-A 1-2 None
RF
1-1.. (5140, 0) Resp
-155 ms LAT 155 ms
-102 -71
LAT propagation
LAT Histogram
1-1-ReOG FLUTTER 320MS
-118.00
LAT
236
177
118
59
0
-155 -93 -31 31 93 155
Gated
POST
View
R
LAT CL Bi Imp Force
N/A 1166 N/A N/A N/A
1.26
AP
Volume: 238.95 LAO: 0
Cranial: 0 Swivel: 0
0%
AP PA LAO RAO LL RL INF SUP

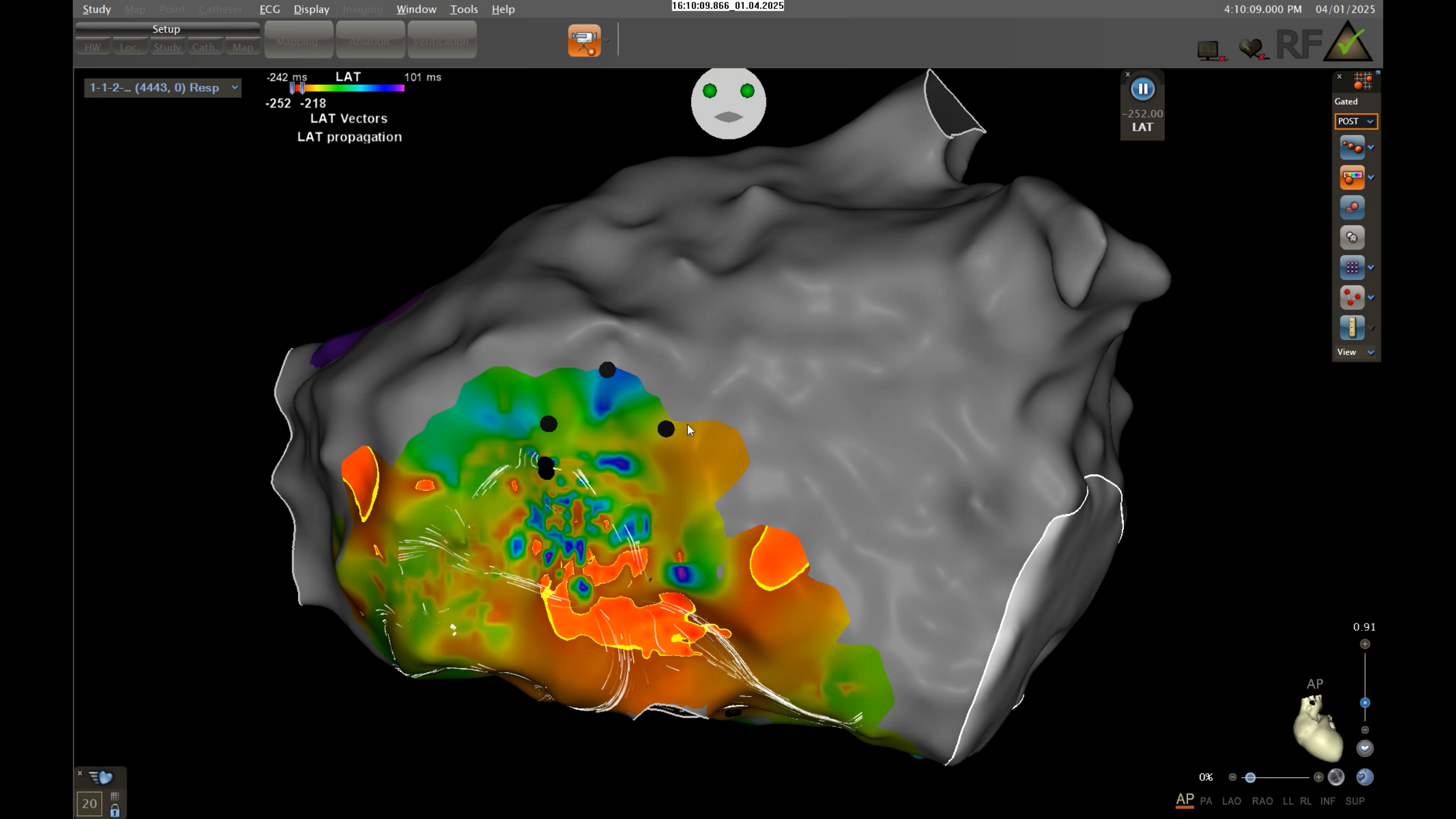
Ablation des zones critiques

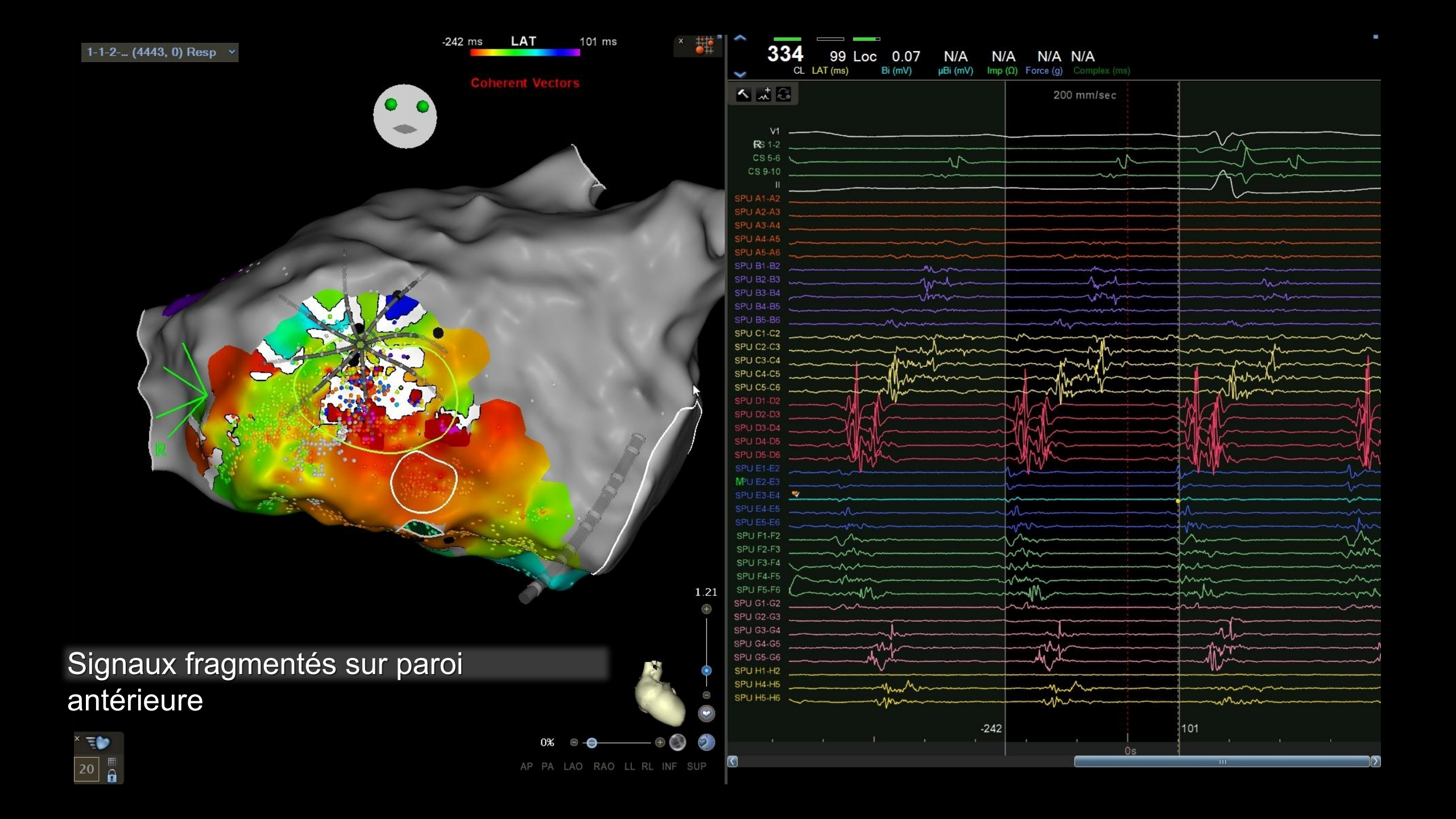


Ablation des zones critiques

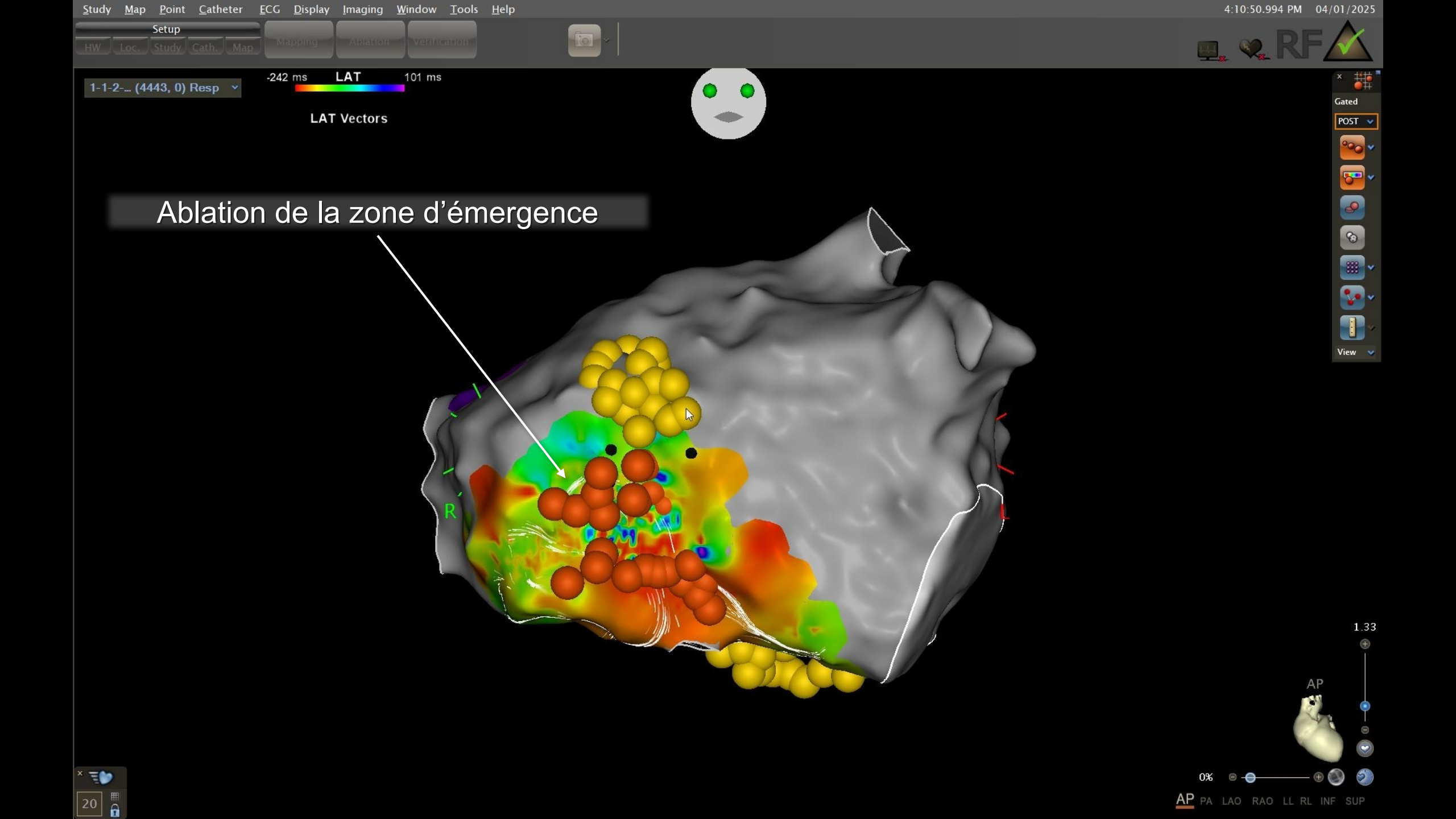


Changement de cycle sur tir
Re Mapping OG

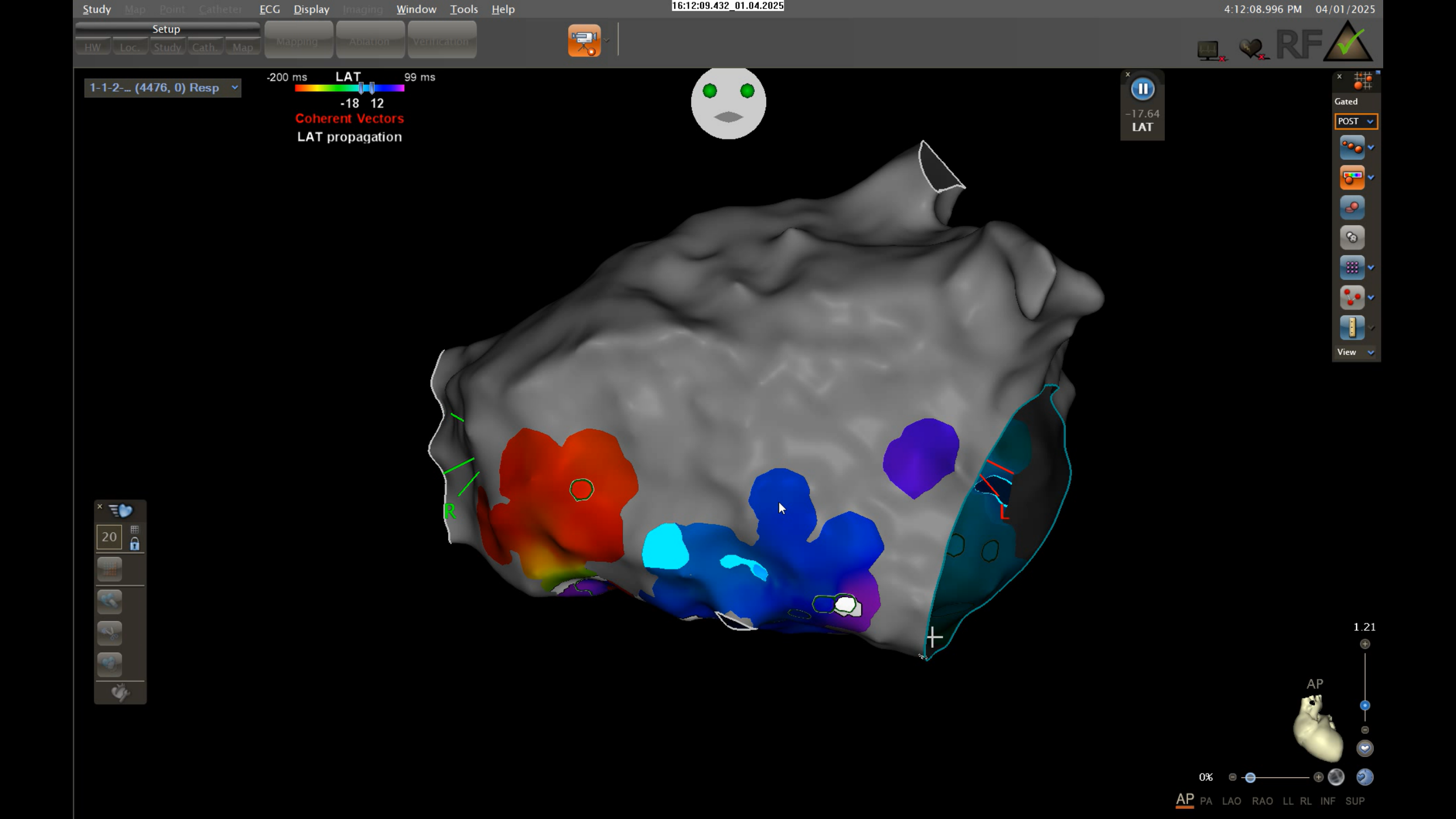

Study Map Point Catheter ECG Display Imaging Window Tools Help
16:10:09.866_01.04.2025
4:10:09.000 PM 04/01/2025
Setup
HW Loc. Study Cath. Map
Mapping
Ablation
Verification
RF
1-1-2-... (4443, 0) Resp
-242 ms LAT 101 ms
-252 -218
LAT Vectors
LAT propagation
-252.00
LAT
Gated
POST
View
0.91
AP
0%
AP PA LAO RAO LL RL INF SUP
20



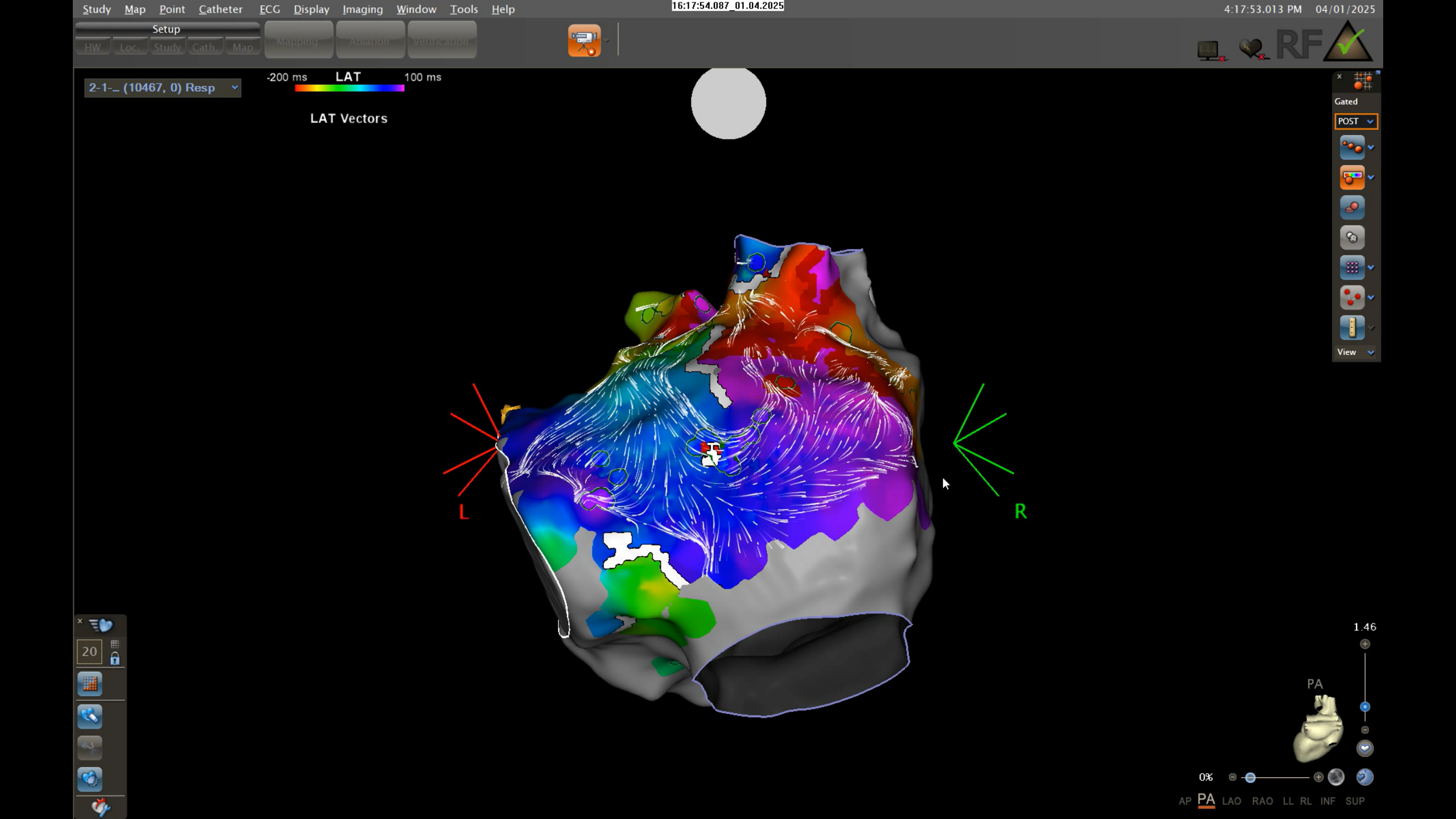
Signaux fragmentés sur paroi antérieure

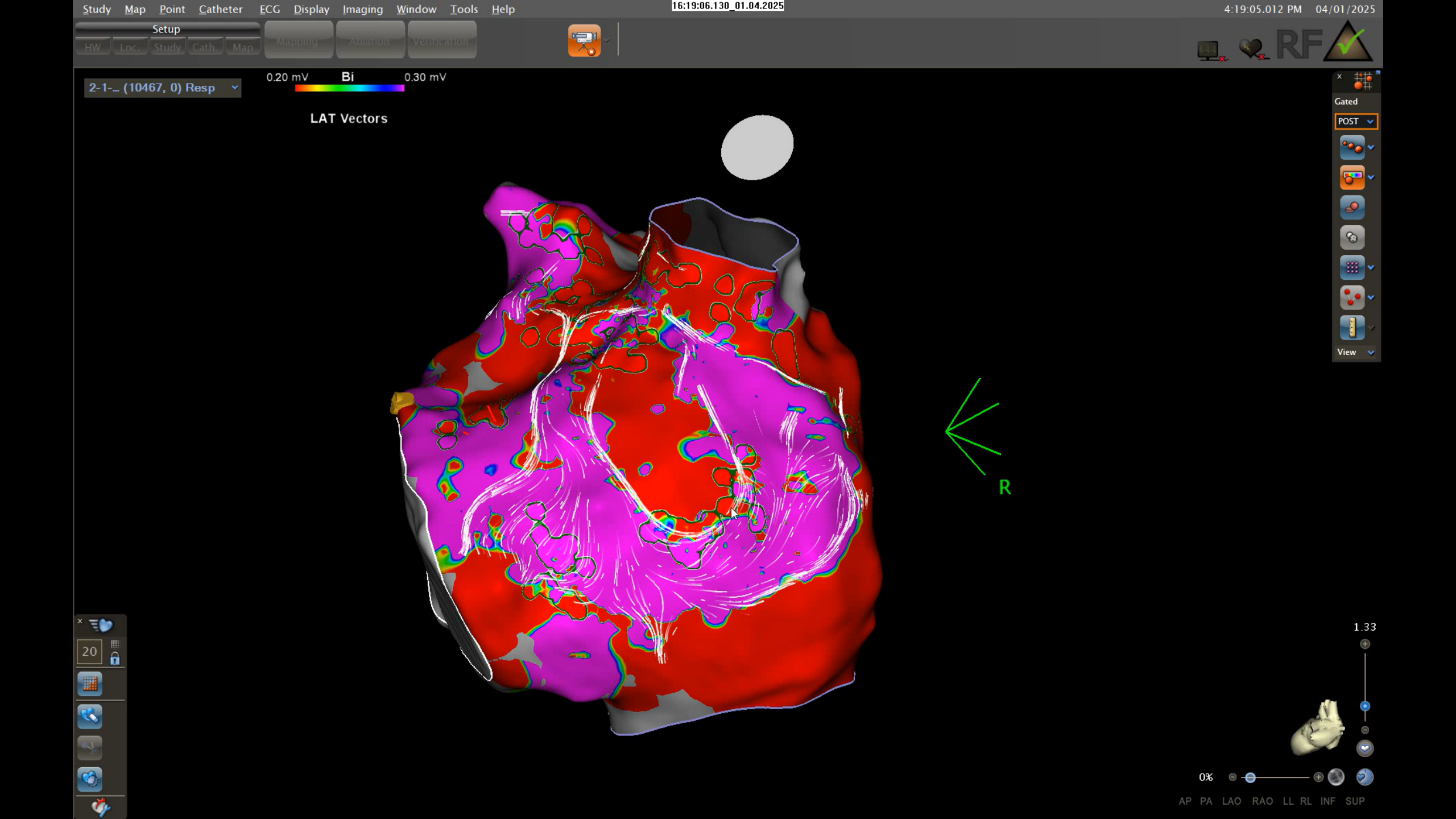

Study Map Point Catheter ECG Display Imaging Window Tools Help
4:10:50.994 PM 04/01/2025
Setup
HW Loc. Study Cath. Map
Mapping Ablation Verification
RF
1-1-2-... (4443, 0) Resp
-242 ms LAT 101 ms
LAT Vectors
Ablation de la zone d'émergence
Gated
POST
View
R
1.33
AP
0%
AP PA LAO RAO LL RL INF SUP
20

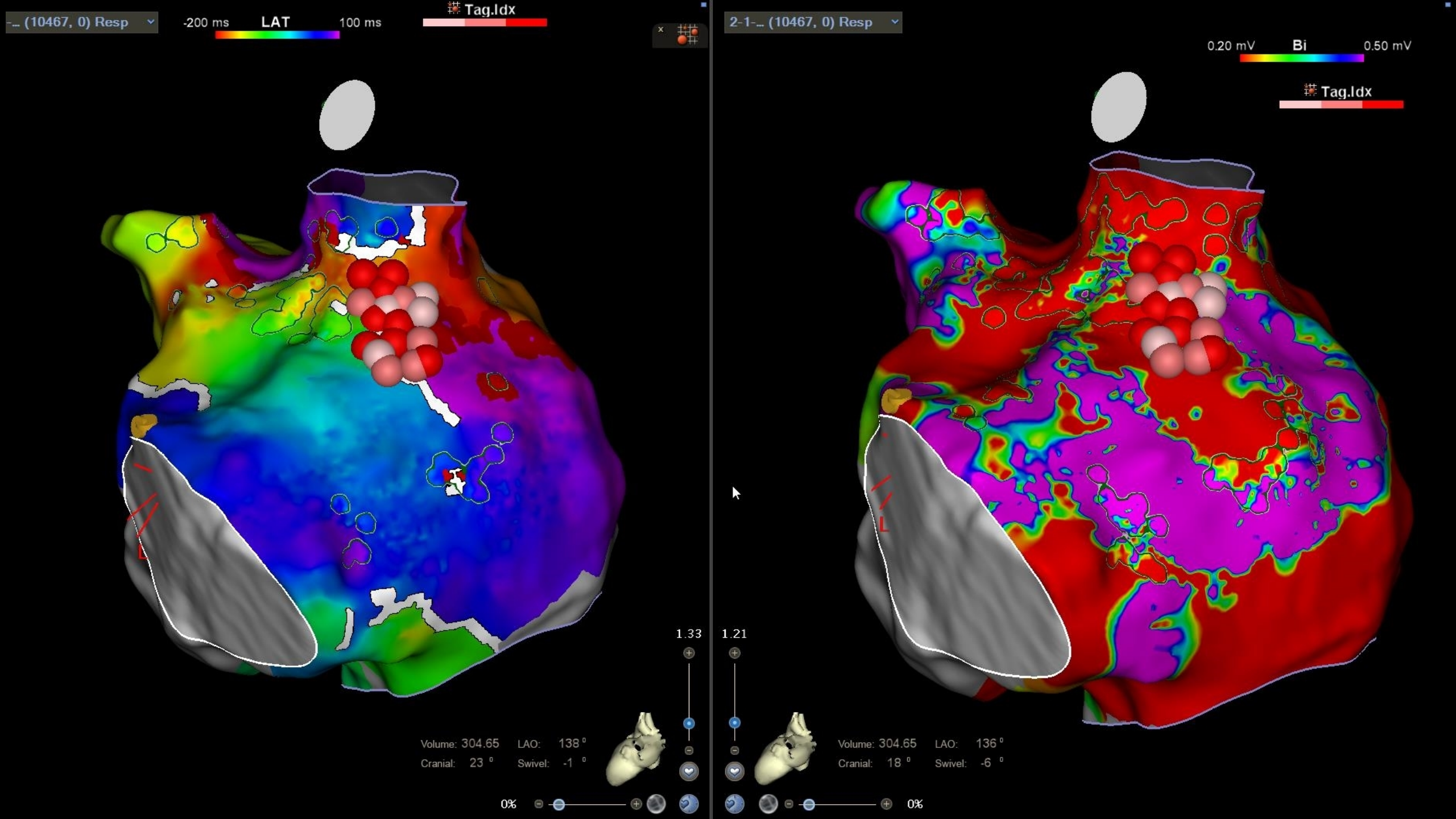
Changement de cycle sur tir antérieur (points orange)
ReMapping OG


Study Map Point Catheter ECG Display Imaging Window Tools Help
16:12:09.432_01.04.2025
4:12:08.996 PM 04/01/2025
Setup
HW Loc. Study Cath. Map
Mapping
Ablation
Verification
RF
1-1-2-... (4476, 0) Resp
-200 ms LAT 99 ms
-18 12
Coherent Vectors
LAT propagation
-17.64
LAT
Gated
POST
View
20
R
1.21
AP
0%
AP PA LAO RAO LL RL INF SUP

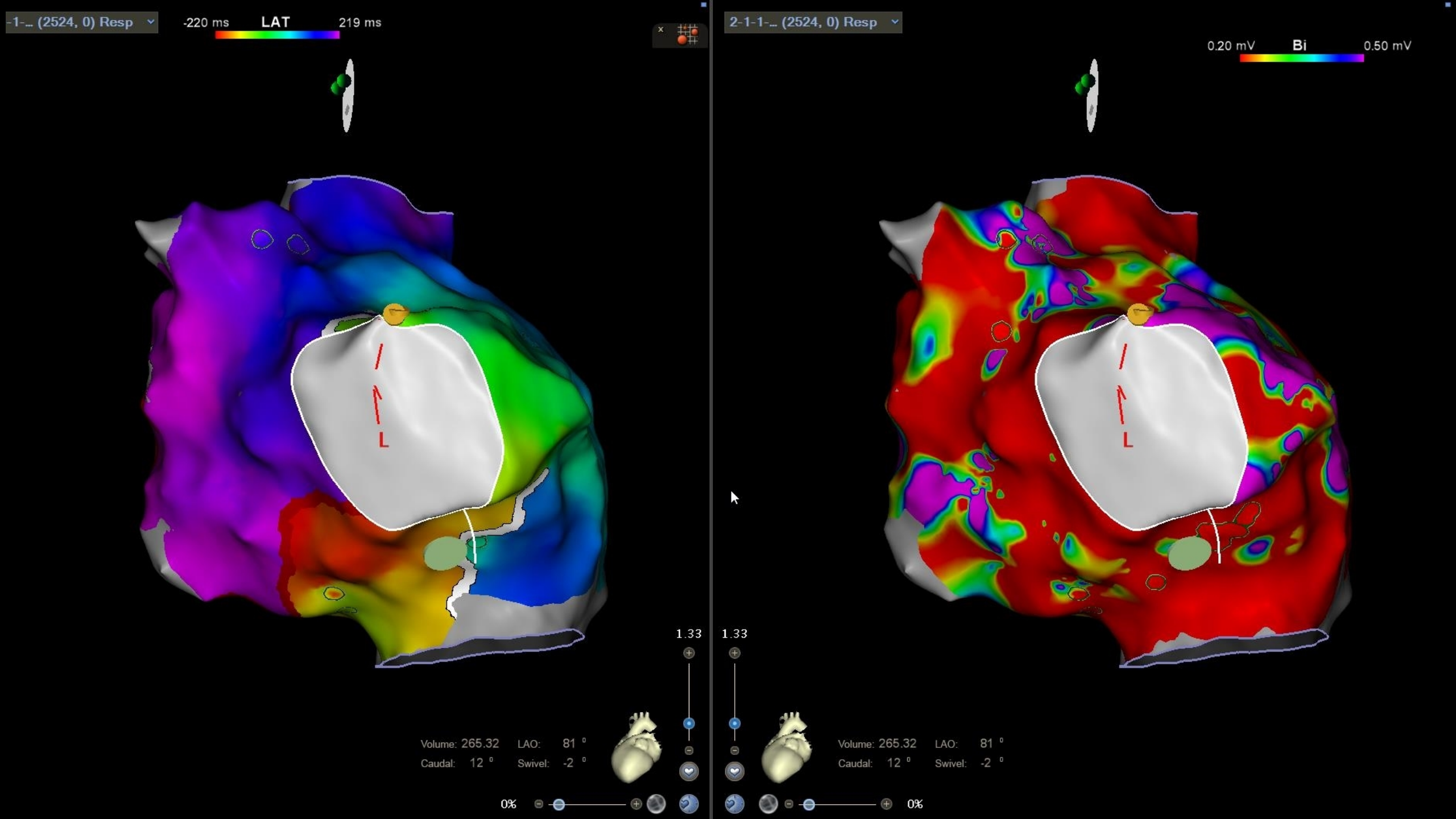
Voltage très bas sur paroi antérieur
Possible origine droite
Mapping OD

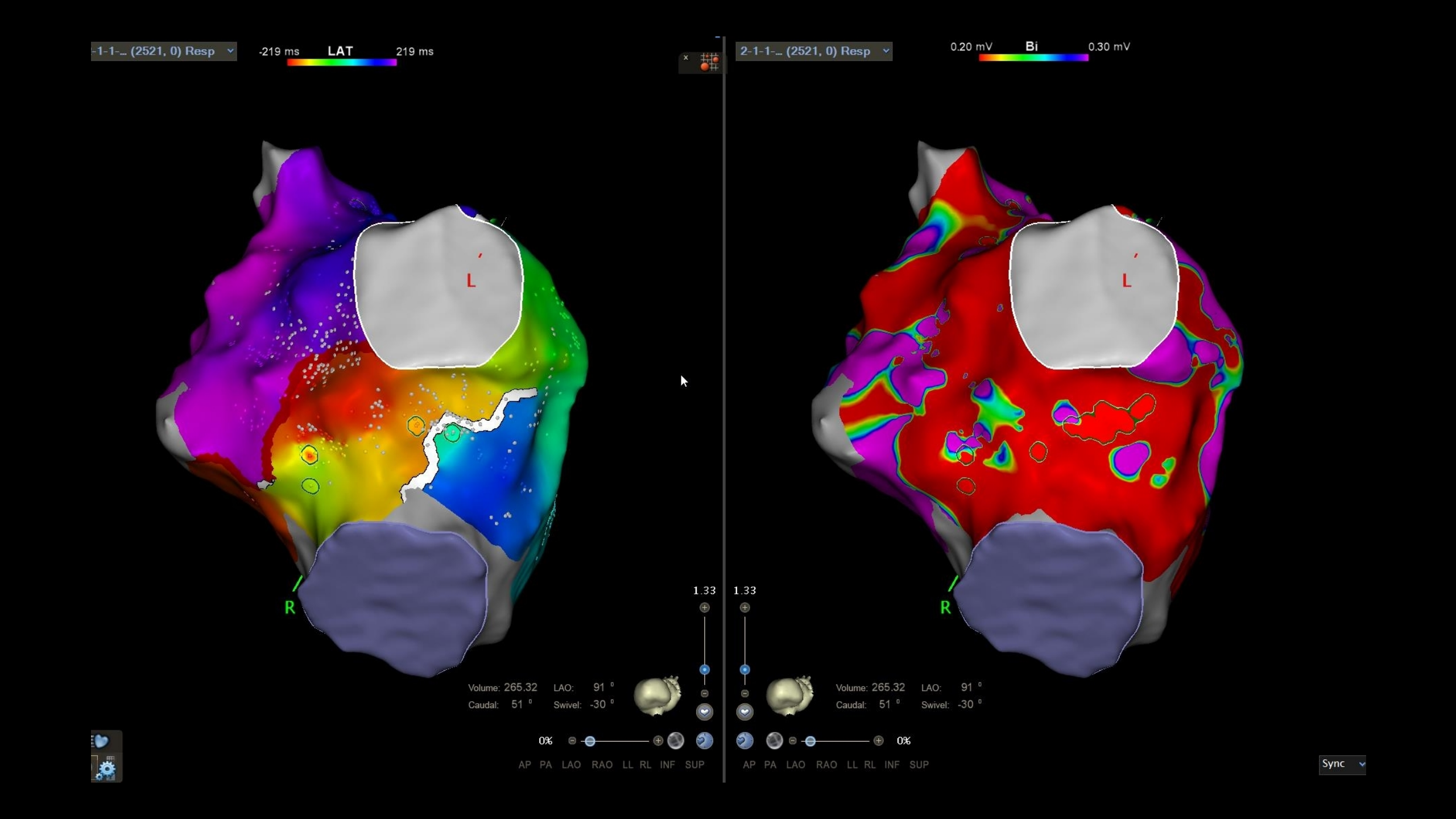

Study Map Point Catheter ECG Display Imaging Window Tools Help
16:17:54.087_01.04.2025
4:17:53.013 PM 04/01/2025
Setup
HW Loc. Study Cath. Map
Mapping
Ablation
Verification
RF
2-1-... (10467, 0) Resp
-200 ms LAT 100 ms
LAT Vectors
Gated
POST
View
L
R
20
1.46
PA
0%
AP PA LAO RAO LL RL INF SUP


Study Map Point Catheter ECG Display Imaging Window Tools Help
16:19:06.130_01.04.2025
4:19:05.012 PM 04/01/2025
Setup
HW Loc. Study Cath. Map
Mapping
Ablation
Verification
RF
2-1-... (10467, 0) Resp
0.20 mV Bi 0.30 mV
LAT Vectors
Gated
POST
View
R
20
1.33
0%
AP PA LAO RAO LL RL INF SUP

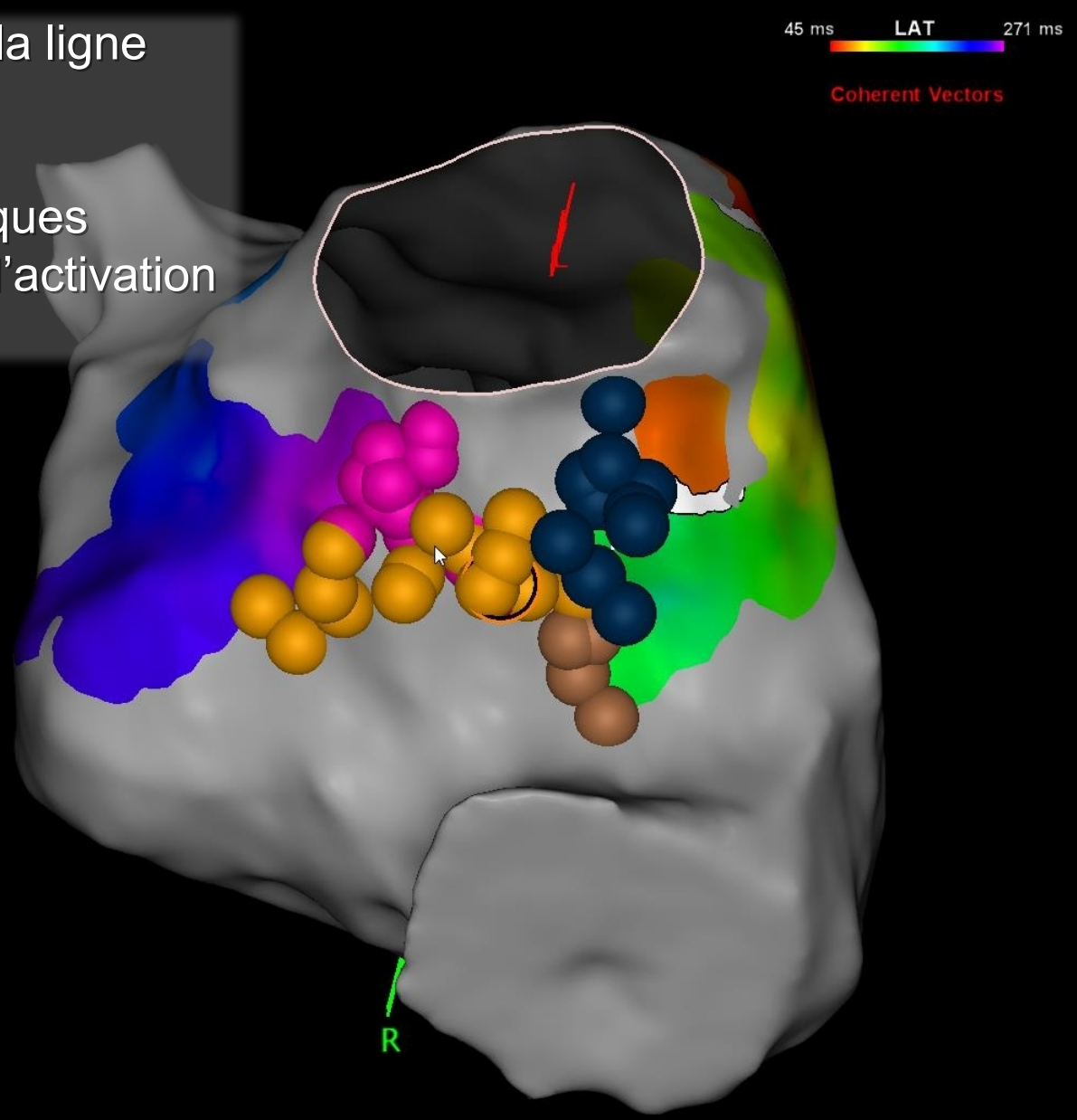

-... (10467, 0) Resp
-200 ms
LAT
100 ms
Tag.Idx
1.33
Volume: 304.65
LAO: 138 °
Cranial: 23 °
Swivel: -1 °
0%
2-1-... (10467, 0) Resp
0.20 mV
Bi
0.50 mV
Tag.Idx
1.21
Volume: 304.65
LAO: 136 °
Cranial: 18 °
Swivel: -6 °
0%

- Changement de cycle sur tir
- ReMapping OD ➔ flutter droit typique


-1-... (2524, 0) Resp
-220 ms
LAT
219 ms
2-1-1-... (2524, 0) Resp
0.20 mV
Bi
0.50 mV
L
L
1.33
1.33
Volume: 265.32
LAO: 81 °
Caudal: 12 °
Swivel: -2 °
Volume: 265.32
LAO: 81 °
Caudal: 12 °
Swivel: -2 °
0%
0%


-1-1-... (2521, 0) Resp
-219 ms
LAT
219 ms
2-1-1-... (2521, 0) Resp
0.20 mV
Bi
0.30 mV
L
R
L
R
1.33
1.33
Volume: 265.32
LAO: 91 °
Caudal: 51 °
Swivel: -30 °
Volume: 265.32
LAO: 91 °
Caudal: 51 °
Swivel: -30 °
0%
0%
AP PA LAO RAO LL RL INF SUP
AP PA LAO RAO LL RL INF SUP
Sync

- Arrêt du flutter droit sur tir sur la ligne tricuspide
- Perméabilité de la ligne
- Multiples connexions épicardiques
- 4 sets d'ablation avec cartes d'activation pour bloquer l'isthme droit



Discussion

-Pérennité des lésions du plan Marshall

-Evolution cicatrice (isolation auricule)

-Récidive sous forme de flutters ++

-Fonction contractile OG ?