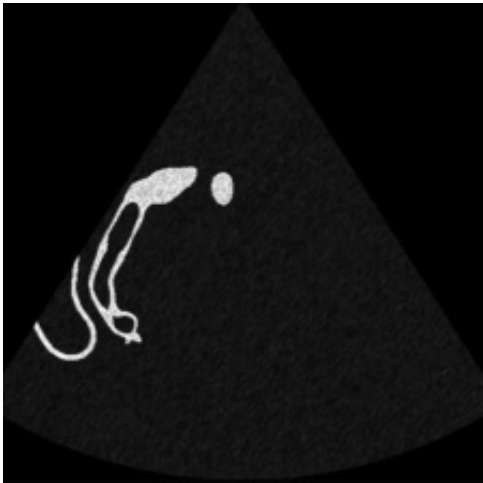


Example 1



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
 / tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.048463307321071628,"y":-0.02537141740322113,"z":-0.00011014938354492188},"rotation":{"x":31.0,"y":15.0,"z":26.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe to center the heart in view and rotate slightly to
visualize the aorta and left ventricle.
</reasoning>
<answer>
{"position":{"x":-100,"y":50,"z":0},"rotation":{"x":0,"y":30,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe to center the heart in view and rotate slightly to visualize the aorta and left ventricle.

Extracted Answer:

```
{"position":{"x":-100,"y":50,"z":0},"rotation":{"x":0,"y":30,"z":0}}
```

Metric	Value
--------	-------

numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Fan slightly and rotate clockwise.
</reasoning>
<answer>
{"position":{"x":-15,"y":-10,"z":-5},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

Extracted Reasoning:

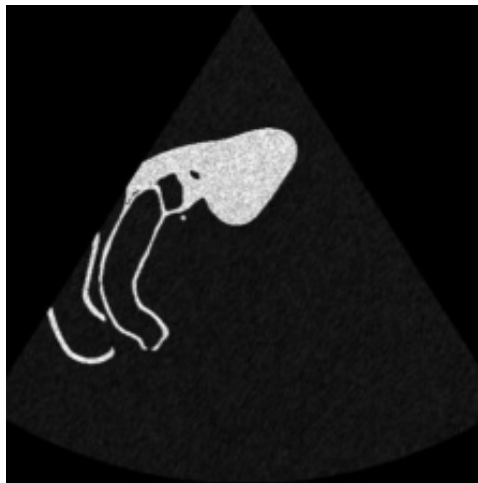
Fan slightly and rotate clockwise.

Extracted Answer:

```
{"position":{"x":-15,"y":-10,"z":-5},"rotation":{"x":0,"y":-30,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 2



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.04956212267279625,"y":-0.022336378693580629,"z":-0.0012343227863311768},"rotation":{"x":30.0,"y":14.0,"z":25.0}}

Completion -1.5

Full Model Output:

```
<reasoning>
Sliding the probe down slightly and rotating it right along with
tilting it slightly left will produce an optimal parasternal long-axis
view.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

Extracted Reasoning:

Sliding the probe down slightly and rotating it right along with
tilting it slightly left will produce an optimal parasternal long-axis
view.

Extracted Answer:

```
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":45,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe slightly to the right, roll the probe clockwise, and
tilt the probe back slightly.
</reasoning>
<answer>
{"position":{"x":100,"y":50,"z":70},"rotation":{"x":20,"y":40,"z":-10}}
</answer>
```

Extracted Reasoning:

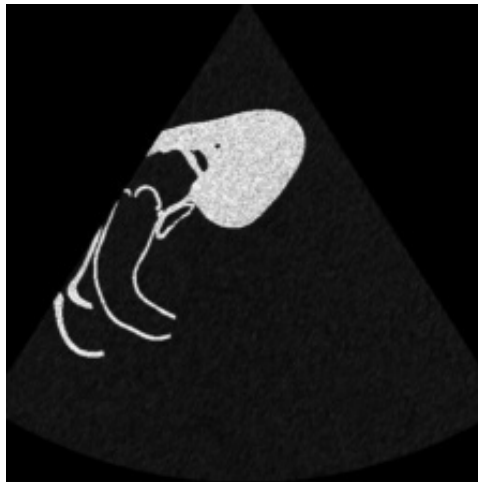
Slide the probe slightly to the right, roll the probe clockwise, and
tilt the probe back slightly.

Extracted Answer:

```
{"position":{"x":100,"y":50,"z":70},"rotation":{"x":20,"y":40,"z":-10}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 3



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.052875980734825137,"y":-0.02035290002822876,"z":-0.0035239458084106447},"rotation":{"x":29.0,"y":14.0,"z":23.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide right to optimize the view
</reasoning>
<answer>
{"position":{"x":10,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Slide right to optimize the view

Extracted Answer:

`{"position":{"x":10,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}`

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe slightly left and tilt it upwards.
</reasoning>
<answer>
{"position":{"x":-10,"y":5,"z":0},"rotation":{"x":0,"y":20,"z":0}}
</answer>
```

Extracted Reasoning:

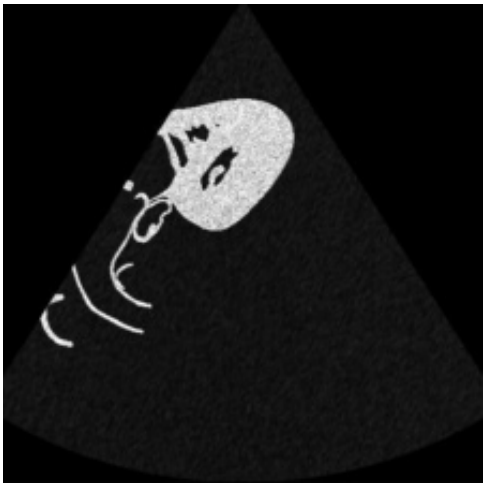
Slide the probe slightly left and tilt it upwards.

Extracted Answer:

`{"position":{"x":-10,"y":5,"z":0},"rotation":{"x":0,"y":20,"z":0}}`

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 4



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate / tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05197792872786522,"y":-0.02014879882335663,"z":-0.0035193562507629396},"rotation":{"x":30.0,"y":12.0,"z":23.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide probe slightly to the left and tilt slightly forward.
</reasoning>
<answer>
{"position":{"x":-20,"y":0,"z":0},"rotation":{"x":0,"y":15,"z":0}}
</answer>
```

Extracted Reasoning:

Slide probe slightly to the left and tilt slightly forward.

Extracted Answer:

{"position":{"x":-20,"y":0,"z":0},"rotation":{"x":0,"y":15,"z":0}}

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -2.0

Full Model Output:

The ultrasound probe should be tilted slightly upward to capture the parasternal long-axis view.

```
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}
</answer>
```

Extracted Reasoning:

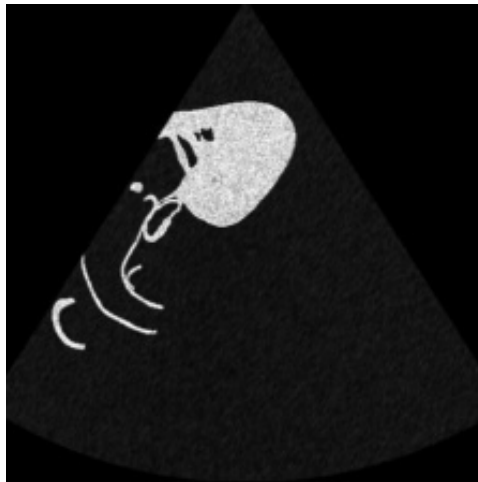
N/A

Extracted Answer:

{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.0000

Example 5



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05263088643550873,"y":-0.021262675523757936,"z":-0.00336572527885437},"rotation":{"x":30.0,"y":13.0,"z":23.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe downward and increase the tilt to the left for a
parasternal long-axis view.
</reasoning>
<answer>
{"position":{"x":-20,"y":-40,"z":-10},"rotation":{"x":-10,"y":20,"z":30}}
```

</answer>

Extracted Reasoning:

Slide the probe downward and increase the tilt to the left for a parasternal long-axis view.

Extracted Answer:

```
{"position":{"x":-20,"y":-40,"z":-10},"rotation":{"x":-10,"y":20,"z":30}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Rotate probe slightly toward the patient's left
</reasoning>
<answer>
{"position":{"x":10,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}
</answer>
```

Extracted Reasoning:

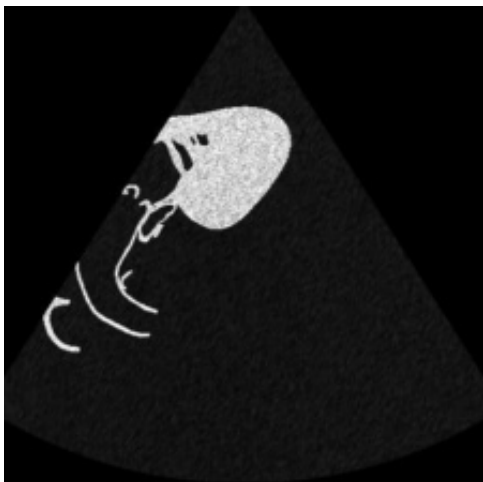
Rotate probe slightly toward the patient's left

Extracted Answer:

```
{"position":{"x":10,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 6



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
 / tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05299539864063263,"y":-0.02299174666404724,"z":-0.0028792917728424074},"rotation":{"x":31.0,"y":12.0,"z":23.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe to the left and tilt it upwards to capture the
parasternal long-axis view.
</reasoning>
<answer>
{"position":{"x":1,"y":500,"z":0},"rotation":{"x":45,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe to the left and tilt it upwards to capture the parasternal long-axis view.

Extracted Answer:

```
{"position":{"x":1,"y":500,"z":0},"rotation":{"x":45,"y":0,"z":0}}
```

Metric	Value
numeric	-3.0000

keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe superiorly and rotate 180 degrees.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":90,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

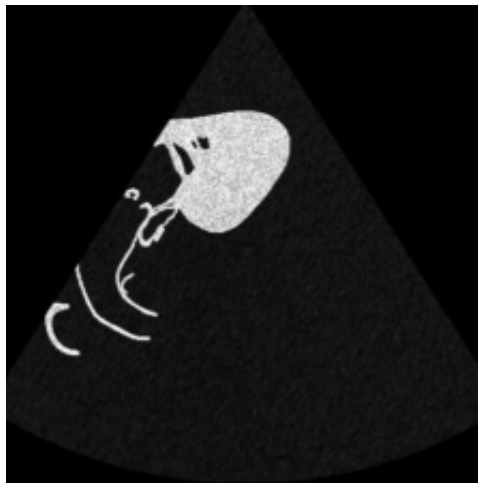
Slide the probe superiorly and rotate 180 degrees.

Extracted Answer:

```
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":90,"y":0,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 7



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
```

```
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05298867076635361,"y":-0.024206414818763734,"z":-0.0027830302715301515},"rotation":{"x":31.0,"y":12.0,"z":22.0}}

Completion -1.5

Full Model Output:

```
<reasoning>rotate the probe 90 degrees left and tilt forward 15
degrees.</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":15}}
</answer>
```

Extracted Reasoning:

rotate the probe 90 degrees left and tilt forward 15 degrees.

Extracted Answer:

```
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":15}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.0000

Completion -1.5

Full Model Output:

```
<reasoning>
The image shows a transesophageal ultrasound view. For a parasternal
long-axis (PLAX) view of the heart, the probe needs to be rotated
clockwise and slightly tilted to align with the left parasternal
window.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":25}}
</answer>
```

Extracted Reasoning:

The image shows a transesophageal ultrasound view. For a parasternal long-axis (PLAX) view of the heart, the probe needs to be rotated clockwise and slightly tilted to align with the left parasternal window.

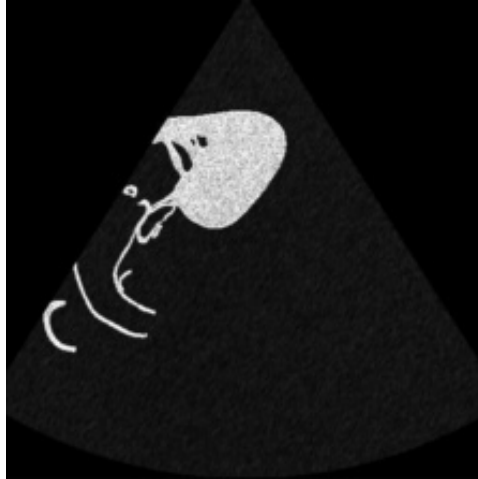
Extracted Answer:

```
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":25}}
```

Metric	Value
numeric	-3.0000
keywords	0.0000

xml	0.5000
-----	--------

Example 8



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
 / tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05240284278988838,"y":-0.024828225374221803,"z":-0.0022019147872924806},"rotation":{"x":31.0,"y":10.0,"z":21.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe to the right and slightly up, then rotate
counter-clockwise.
</reasoning>
<answer>
{"position":{"x":100,"y":80,"z":60},"rotation":{"x":30,"y":20,"z":10}}
</answer>
```

Extracted Reasoning:

Slide the probe to the right and slightly up, then rotate counter-clockwise.

Extracted Answer:

```
{"position":{"x":100,"y":80,"z":60},"rotation":{"x":30,"y":20,"z":10}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide and tilt the probe upwards.
</reasoning>
<answer>
{"position":{"x":0,"y":100,"z":0},"rotation":{"x":0,"y":0,"z":45}}
</answer>
```

Extracted Reasoning:

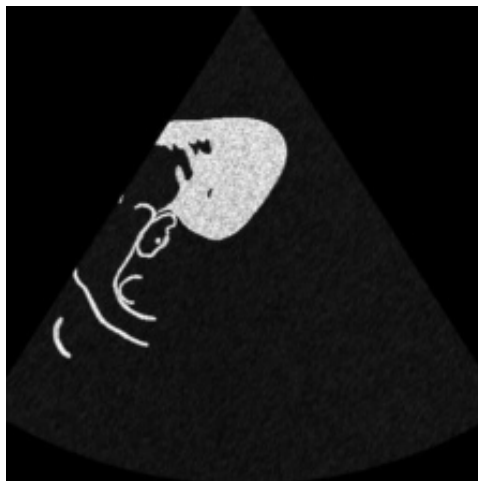
Slide and tilt the probe upwards.

Extracted Answer:

```
{"position":{"x":0,"y":100,"z":0},"rotation":{"x":0,"y":0,"z":45}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 9



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an

optimal
parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05233291536569595,"y":-0.025199010968208314,"z":-0.002280116081237793},"rotation":{"x":32.0,"y":9.0,"z":21.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
slide up, rotate probe to the right
</reasoning>
<answer>
{"position":{"x":100,"y":50,"z":0},"rotation":{"x":0,"y":-45,"z":0}}
</answer>
```

Extracted Reasoning:

slide up, rotate probe to the right

Extracted Answer:

```
{"position":{"x":100,"y":50,"z":0},"rotation":{"x":0,"y":-45,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe towards the sternum and rotate upwards to align the
heart's long axis.
</reasoning>
<answer>
{"position":{"x":20,"y":80,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe towards the sternum and rotate upwards to align the heart's long axis.

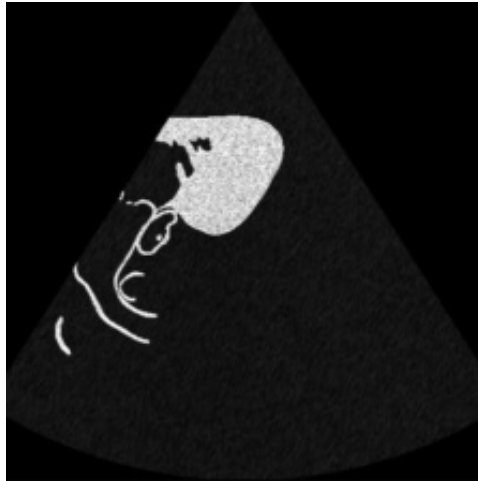
Extracted Answer:

```
{"position":{"x":20,"y":80,"z":0},"rotation":{"x":0,"y":45,"z":0}}
```

Metric	Value

numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 10



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.052994757890701297,"y":-0.023809358477592469,"z":0.0008187592029571533},"rotation":{"x":31.0,"y":5.0,"z":21.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe to the left and slightly adjust the position to
capture the cardiac silhouette.
</reasoning>
<answer>
{"position":{"x":-100,"y":200},"rotation":{"x":0,"y":10,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe to the left and slightly adjust the position to capture the cardiac silhouette.

Extracted Answer:

```
{"position":{"x":-100,"y":200},"rotation":{"x":0,"y":10,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe more to the right and tilt it slightly downward to
optimize the PLAX view.
</reasoning>
<answer>
{"position":{"x":-0.2,"y":0.1,"z":0.2},"rotation":{"x":0,"y":0,"z":-0.
1}}
</answer>
```

Extracted Reasoning:

Slide the probe more to the right and tilt it slightly downward to optimize the PLAX view.

Extracted Answer:

```
{"position":{"x":-0.2,"y":0.1,"z":0.2},"rotation":{"x":0,"y":0,"z":-0.
1}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 11



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05261314660310745,"y":-0.024336546659469606,"z":0.0027676820755004884},"rotation":{"x":33.0,"y":1.0,"z":22.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe to the left, then slightly tilt it down.
</reasoning>
<answer>
{"position":{"x":-100,"y":0,"z":50},"rotation":{"x":0,"y":0,"z":-10}}
</answer>
```

Extracted Reasoning:

Slide the probe to the left, then slightly tilt it down.

Extracted Answer:

```
{"position":{"x":-100,"y":0,"z":50},"rotation":{"x":0,"y":0,"z":-10}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000

xml	0.5000
-----	--------

Completion -1.0

Full Model Output:

```
<reasoning>
Roll and tilt the probe to place the inferior portion of the heart in
the center of the screen.
</reasoning>
<answer>
{"position":{"x":100,"y":50,"z":100},"rotation":{"x":-30,"y":0,"z":45}}
</answer>
```

Extracted Reasoning:

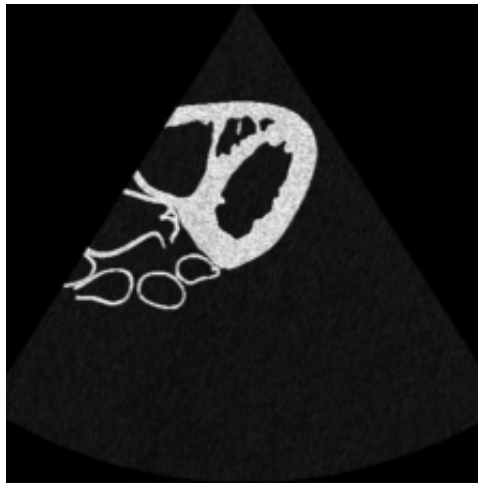
Roll and tilt the probe to place the inferior portion of the heart in the center of the screen.

Extracted Answer:

```
{"position":{"x":100,"y":50,"z":100},"rotation":{"x":-30,"y":0,"z":45}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 12



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.06086133420467377,"y":-0.02439582347869873,"z":0.006329208612442017},"rotation":{"x":30.0,"y":-6.0,"z":17.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide probe up and to the right to visualize the left ventricle.
</reasoning>
<answer>
{"position":{"x":100,"y":200,"z":150},"rotation":{"x":-30,"y":0,"z":45}}
</answer>
```

Extracted Reasoning:

Slide probe up and to the right to visualize the left ventricle.

Extracted Answer:

```
{"position":{"x":100,"y":200,"z":150},"rotation":{"x":-30,"y":0,"z":45}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide and tilt probe slightly upward.
</reasoning>
<answer>
{"position":{"x":-10,"y":5,"z":-20},"rotation":{"x":0,"y":0,"z":-10}}
</answer>
```

Extracted Reasoning:

Slide and tilt probe slightly upward.

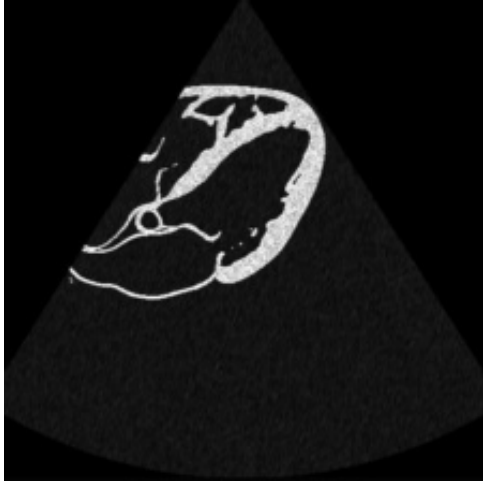
Extracted Answer:

```
{"position":{"x":-10,"y":5,"z":-20},"rotation":{"x":0,"y":0,"z":-10}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000

xml	0.5000
-----	--------

Example 13



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
 / tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05959923937916756,"y":-0.026618927717208864,"z":0.0015810728073120118},"rotation":{"x":33.0,"y":-5.0,"z":16.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe upwards and slightly to the right, then rotate
counterclockwise.
</reasoning>
<answer>
{"position":{"x":100,"y":50,"z":200},"rotation":{"x":5,"y":-15,"z":10}}
</answer>
```

Extracted Reasoning:

Slide the probe upwards and slightly to the right, then rotate counterclockwise.

Extracted Answer:

```
{"position":{"x":100,"y":50,"z":200},"rotation":{"x":5,"y":-15,"z":10}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0**Full Model Output:**

```
<reasoning>
Slide the probe left, tilt slightly upward.
</reasoning>
<answer>
{"position":{"x":100,"y":-50,"z":100},"rotation":{"x":0,"y":15,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe left, tilt slightly upward.

Extracted Answer:

```
{"position":{"x":100,"y":-50,"z":100},"rotation":{"x":0,"y":15,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 14**Prompt:**

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05505891889333725,"y":-0.02859523892402649,"z":0.0010935962200164796},"rotation":{"x":36.0,"y":-6.0,"z":18.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide probe to the left, then rotate slightly clockwise until you can
see the left ventricle in the middle of the screen.
</reasoning>
<answer>
{"position":{"x":-20,"y":50,"z":0},"rotation":{"x":0,"y":30,"z":0}}
</answer>
```

Extracted Reasoning:

Slide probe to the left, then rotate slightly clockwise until you can see the left ventricle in the middle of the screen.

Extracted Answer:

```
{"position":{"x":-20,"y":50,"z":0},"rotation":{"x":0,"y":30,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Roll the probe slightly to the left and decrease the depth to
visualize the atria and ventricles.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":10},"rotation":{"x":0,"y":-10,"z":0}}
</answer>
```

Extracted Reasoning:

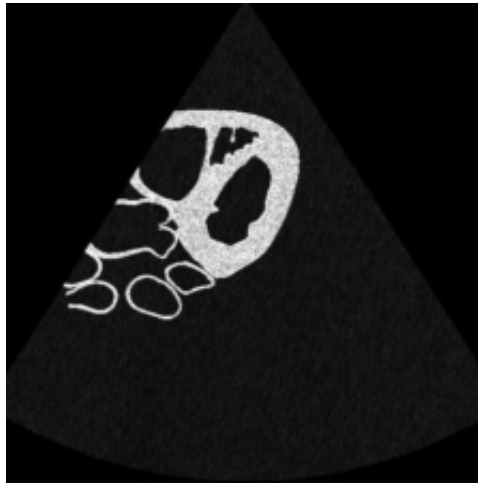
Roll the probe slightly to the left and decrease the depth to visualize the atria and ventricles.

Extracted Answer:

```
{"position":{"x":-10,"y":0,"z":10},"rotation":{"x":0,"y":-10,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 15



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05797026678919792,"y":-0.03002116084098816,"z":-0.0024569332599639894},"rotation":{"x":35.0,"y":-4.0,"z":16.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Fan the probe upward to see the PLAX view.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
```

</answer>

Extracted Reasoning:

Fan the probe upward to see the PLAX view.

Extracted Answer:

```
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide left, roll 45°, tilt upward.
</reasoning>
<answer>
{"position":{"x":0.1,"y":0.1,"z":0.1},"rotation":{"x":45,"y":45,"z":15}}
</answer>
```

Extracted Reasoning:

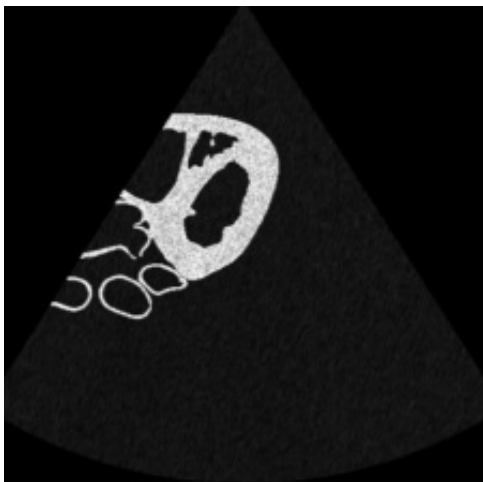
Slide left, roll 45°, tilt upward.

Extracted Answer:

```
{"position":{"x":0.1,"y":0.1,"z":0.1},"rotation":{"x":45,"y":45,"z":15}}
}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 16



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
 / tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05490908771753311,"y":-0.0309017151594162,"z":-0.00022047758102416992},"rotation":{"x":36.0,"y":-7.0,"z":16.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Fan and rotate the probe to align with the long axis of the heart.
</reasoning>
<answer>
{"position":{"x":-80,"y":0,"z":0},"rotation":{"x":0,"y":-10,"z":0}}
</answer>
```

Extracted Reasoning:

Fan and rotate the probe to align with the long axis of the heart.

Extracted Answer:

```
{"position":{"x":-80,"y":0,"z":0},"rotation":{"x":0,"y":-10,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000

xml	0.5000
-----	--------

Completion -1.0

Full Model Output:

```
<reasoning>
Fan the probe up and to the left to visualize the heart.
</reasoning>
<answer>
{"position":{"x":20,"y":-20,"z":30},"rotation":{"x":0,"y":90,"z":0}}
</answer>
```

Extracted Reasoning:

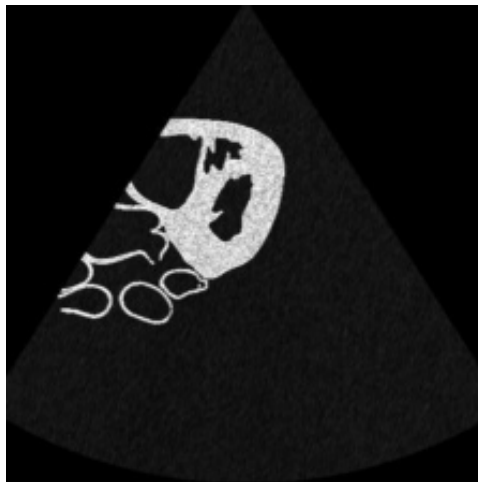
Fan the probe up and to the left to visualize the heart.

Extracted Answer:

```
{"position":{"x":20,"y":-20,"z":30},"rotation":{"x":0,"y":90,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 17



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
```

```
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.05487971752882004,"y":-0.03166823089122772,"z":-0.002008676528930664},"rotation":{"x":37.0,"y":-7.0,"z":16.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide to the right for a better view of the heart.
</reasoning>
<answer>
{"position":{"x":20,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Slide to the right for a better view of the heart.

Extracted Answer:

```
{"position":{"x":20,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe towards the patient's left chest, rotate it slightly
counterclockwise, and tilt slightly forward.
</reasoning>
<answer>
{"position":{"x":-50,"y":150,"z":-100},"rotation":{"x":-10,"y":-30,"z":
5}}
</answer>
```

Extracted Reasoning:

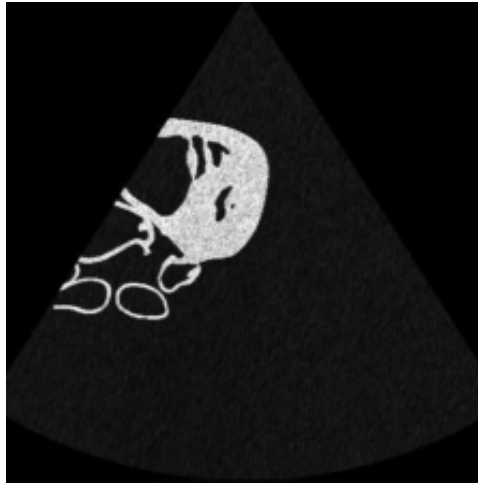
Slide the probe towards the patient's left chest, rotate it slightly counterclockwise, and tilt slightly forward.

Extracted Answer:

```
{"position":{"x":-50,"y":150,"z":-100},"rotation":{"x":-10,"y":-30,"z":
5}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 18



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.054772332310676578,"y":-0.031630948185920718,"z":-0.03184080123901367},"rotation":{"x":38.0,"y":-9.0,"z":13.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
slide and rotate to capture the heart in a long axis view
</reasoning>
<answer>
{"position":{"x":0,"y":180,"z":0},"rotation":{"x":0,"y":0,"z":-90}}
</answer>
```

Extracted Reasoning:

slide and rotate to capture the heart in a long axis view

Extracted Answer:

```
{"position":{"x":0,"y":180,"z":0},"rotation":{"x":0,"y":0,"z":-90}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe laterally to center the heart within the screen.
</reasoning>
<answer>
{"position":{"x":-2,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
</answer>
```

Extracted Reasoning:

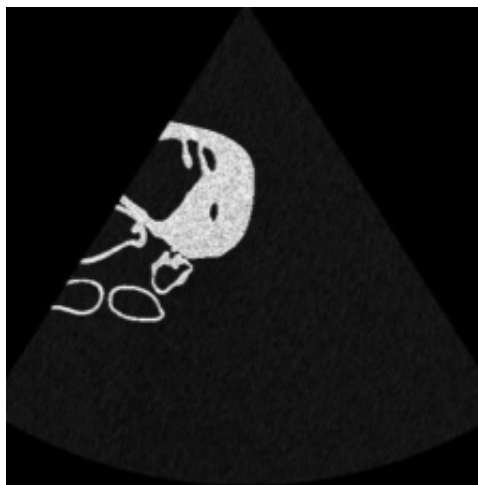
Slide the probe laterally to center the heart within the screen.

Extracted Answer:

```
{"position":{"x":-2,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Example 19



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate
/ tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.054352641105651858,"y":-0.031267374753952029,"z":-0.003087759017944336},"rotation":{"x":38.0,"y":-11.0,"z":12.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide to left, tilt down.
</reasoning>
<answer>
{"position":{"x":10,"y":0,"z":0},"rotation":{"x":0,"y":-45,"z":0}}
</answer>
```

Extracted Reasoning:

Slide to left, tilt down.

Extracted Answer:

{"position":{"x":10,"y":0,"z":0},"rotation":{"x":0,"y":-45,"z":0}}

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.5

Full Model Output:

```
<reasoning>Slide probe upward and rotate slightly to left for PLAX
view.</reasoning>
<answer>
{"position":{"x":-10,"y":20,"z":0},"rotation":{"x":30,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Slide probe upward and rotate slightly to left for PLAX view.

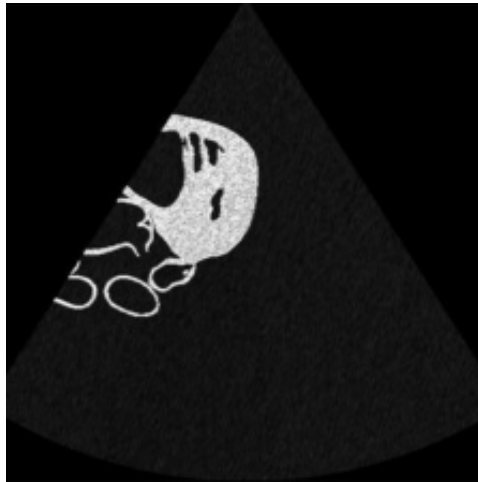
Extracted Answer:

{"position":{"x":-10,"y":20,"z":0},"rotation":{"x":30,"y":0,"z":0}}

Metric	Value
numeric	-3.0000
keywords	0.5000

xml	0.0000
-----	--------

Example 20



Prompt:

You will be shown a freeze-frame from a point-of-care ultrasound scan. Return a JSON blob giving the **probe transform** that produces an optimal parasternal long-axis (PLAX) view.

Respond **exactly** like this:

```
<reasoning>
(one short sentence - feel free to mention slide / roll / fan / rotate / tilt)
</reasoning>
<answer>
{"position":{"x":XX,"y":YY,"z":ZZ},"rotation":{"x":RX,"y":RY,"z":RZ}}
</answer>
```

Do not put any other text after </answer>.

Ground Truth Answer: {"position":{"x":-0.0540967658162117,"y":-0.030985325574874879,"z":-0.004267305135726929},"rotation":{"x":38.0,"y":-12.0,"z":11.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide probe to the left, tilt towards the right.
</reasoning>
<answer>
{"position":{"x":-100,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}
</answer>
```

Extracted Reasoning:

Slide probe to the left, tilt towards the right.

Extracted Answer:

```
{"position":{"x":-100,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -2.0

Full Model Output:

```

<reasoning>
The parasternal long-axis (PLAX) view is obtained by rotating the
probe approximately 45° from the four-chamber view towards the
tricuspid valve.
</reasoning>
<answer>{"position":{"x":100,"y":-50,"z":0},"rotation":{"x":0,"y":-1,"
z":45}} </answer>

```

Extracted Reasoning:

The parasternal long-axis (PLAX) view is obtained by rotating the probe approximately 45° from the four-chamber view towards the tricuspid valve.

Extracted Answer:

```

{"position":{"x":100,"y":-50,"z":0},"rotation":{"x":0,"y":-1,"z":45}}

```

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.0000