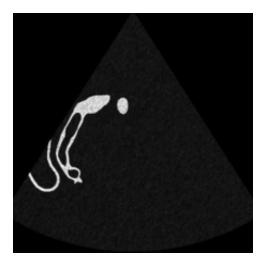
Example 1



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>
```

Ground Truth Answer: {"position":{"x":-0.048463307321071628,"y":-0.02537141740322113,"z":-0.00 011014938354492188},"rotation":{"x":31.0,"y":15.0,"z":26.0}}

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

Completion -1.0

Full Model Output:

```
<reasoning>
Tilt the probe slightly downward to visualize the left ventricle.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Tilt the probe slightly downward to visualize the left ventricle.

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

Metric	Value
numeric	-3.0000

keywords	0.5000
xml	0.5000

Full Model Output:

```
<reasoning>
Slide the probe slightly to the right and adjust the tilt to align the heart long axis.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":10}}
</answer>
```

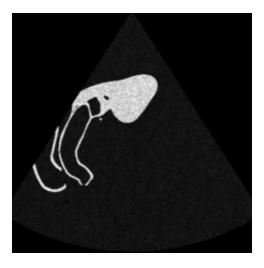
Extracted Reasoning:

Slide the probe slightly to the right and adjust the tilt to align the heart long axis.

Extracted Answer:

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>
```

Ground Truth Answer: {"position":{"x":-0.04956212267279625,"y":-0.022336378693580629,"z":-0.00 12343227863311768},"rotation":{"x":30.0,"y":14.0,"z":25.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide left, tilt upward
</reasoning>
<answer>
{"position":{"x":-100,"y":50,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

Extracted Reasoning:

Slide left, tilt upward

Extracted Answer:

```
 \{ \texttt{"position":} \{ \texttt{"x":-100,"y":50,"z":0} \}, \texttt{"rotation":} \{ \texttt{"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 slightly to the left and tilt it backward.
</reasoning>
<answer>
{"position":{"x":-5,"y":0,"z":0},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

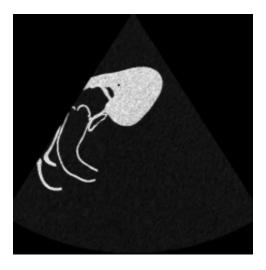
Extracted Reasoning:

Slide the probe slightly to the left and tilt it backward.

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

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}}

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

Ground Truth Answer: {"position":{"x":-0.052875980734825137,"y":-0.02035290002822876,"z":-0.00 35239458084106447},"rotation":{"x":29.0,"y":14.0,"z":23.0}}

Completion -1.5

Full Model Output:

```
<reasoning>
The optimal probe transform for a parasternal long-axis view involves
tilting the probe slightly downwards and rotating it clockwise.
</reasoning>
<answer>
{"position":{"x":-10,"y":5,"z":0},"rotation":{"x":0,"y":30,"z":0}}
</answer>
```

Extracted Reasoning:

The optimal probe transform for a parasternal long-axis view involves tilting the probe slightly downwards and rotating it clockwise.

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

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.5000

Full Model Output:

```
<reasoning>
Adjust the probe to aim slightly upward to create the parasternal
long-axis view.
</reasoning>
<answer>
{"position":{"x":0,"y":-50,"z":20},"rotation":{"x":0,"y":20,"z":90}}
</answer>
```

Extracted Reasoning:

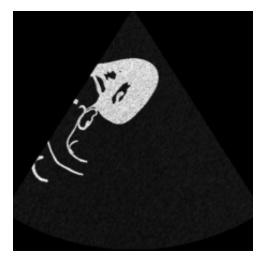
Adjust the probe to aim slightly upward to create the parasternal long-axis view.

Extracted Answer:

 $\{ \texttt{"position":} \{ \texttt{"x":0,"y":-50,"z":20} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":20,"z":90} \} \}$

Metric	Value
numeric	-3.0000
keywords	0.0000
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 $\,$

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 the probe slightly right and tilt it down.
</reasoning>
<answer>
{"position":{"x":0,"y":-2,"z":-10},"rotation":{"x":0,"y":30,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe slightly right and tilt it down.

Extracted Answer:

```
{"position":{"x":0,"y":-2,"z":-10},"rotation":{"x":0,"y":30,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.5

Full Model Output:

```
<reasoning>
The probe is angled slightly upwards and towards the patient's right side.
</reasoning>
<answer>
{"position":{"x":0.2,"y":0.4,"z":0.3},"rotation":{"x":-10,"y":15,"z":0}}
</answer>
```

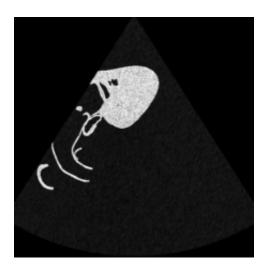
Extracted Reasoning:

The probe is angled slightly upwards and towards the patient's right side.

```
{"position":{"x":0.2,"y":0.4,"z":0.3},"rotation":{"x":-10,"y":15,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.5000

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}}

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

Ground Truth Answer: {"position":{"x":-0.05263088643550873,"y":-0.021262675523757936,"z":-0.00 336572527885437},"rotation":{"x":30.0,"y":13.0,"z":23.0}}

Completion -1.0

Full Model Output:

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

Extracted Reasoning:

Slide down the probe and tilt towards the left side.

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

Completion -1.5

Full Model Output:

```
<reasoning>
The probe needs to be rotated slightly counterclockwise and tilted upwards to align the vessel for PLAX view.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":-30,"y":0,"z":20}}
</answer>
```

Extracted Reasoning:

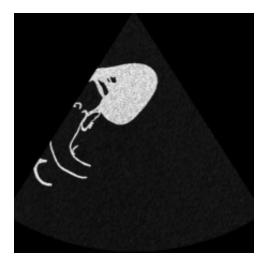
The probe needs to be rotated slightly counterclockwise and tilted upwards to align the vessel for PLAX view.

Extracted Answer:

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

Metric	Value
numeric	-3.0000
keywords	0.0000
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>
Roll slightly and tilt back for a clearer view.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

Extracted Reasoning:

Roll slightly and tilt back for a clearer view.

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

Metric	Value
numeric	-3.0000
keywords	0.5000

xml	0.5000

Full Model Output:

```
<reasoning>
Slide the probe towards the inferior direction.
</reasoning>
<answer>
{"position":{"x":-45,"y":-20,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe towards the inferior direction.

Extracted Answer:

```
{\text{"position"}: {"x":-45,"y":-20,"z":0}, \text{"rotation"}: {"x":0,"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>
```

Ground Truth Answer: {"position":{"x":-0.05298867076635361,"y":-0.024206414818763734,"z":-0.00 27830302715301515},"rotation":{"x":31.0,"y":12.0,"z":22.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe slightly to the right and adjust the tilt to
approximately 45 degrees.
</reasoning>
<answer>
{"position":{"x":0,"y":-5,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe slightly to the right and adjust the tilt to approximately $45\ \text{degrees}$.

Extracted Answer:

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

Extracted Reasoning:

Slide to the left and tilt the probe slightly upward.

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

Metric	Value
numeric	-3.0000
keywords	0.5000
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}}

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

Ground Truth Answer: {"position":{"x":-0.05240284278988838,"y":-0.024828225374221803,"z":-0.00 22019147872924806},"rotation":{"x":31.0,"y":10.0,"z":21.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
slide and rotate the probe to the right.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":0}}
</answer>
```

Extracted Reasoning:

slide and rotate the probe to the right.

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

Metric	Value
numeric	-3.0000

keywords	0.5000
xml	0.5000

Full Model Output:

```
<reasoning>
Slide the probe inferiorly and rotate counterclockwise.
</reasoning>
<answer>
{"position":{"x":2,"y":7,"z":2},"rotation":{"x":20,"y":45,"z":0}}
</answer>
```

Extracted Reasoning:

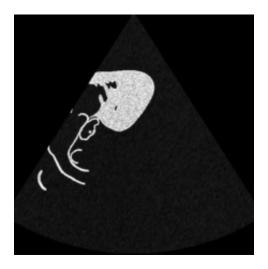
Slide the probe inferiorly and rotate counterclockwise.

Extracted Answer:

```
 \left\{ \texttt{"position":} \left\{ \texttt{"x":2,"y":7,"z":2} \right\}, \texttt{"rotation":} \left\{ \texttt{"x":20,"y":45,"z":0} \right\} \right\}
```

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>
```

Ground Truth Answer: {"position":{"x":-0.05233291536569595,"y":-0.025199010968208314,"z":-0.00 2280116081237793},"rotation":{"x":32.0,"y":9.0,"z":21.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide and rotate slightly to align the left ventricle properly.
</reasoning>
<answer>
{"position":{"x":-20,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Slide and rotate slightly to align the left ventricle properly.

Extracted Answer:

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Rotate the probe clockwise and tilt slightly forward.
</reasoning>
<answer>
{"position":{"x":0,"y":-30,"z":-15},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

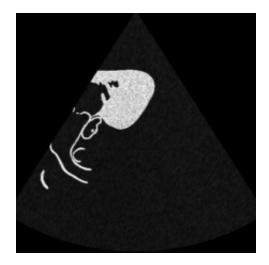
Extracted Reasoning:

Rotate the probe clockwise and tilt slightly forward.

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

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

Ground Truth Answer: {"position":{"x":-0.052994757890701297,"y":-0.023809358477592469,"z":0.00 08187592029571533},"rotation":{"x":31.0,"y":5.0,"z":21.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Fan the probe to the left and adjust the image to show the left
ventricle in the center of the screen.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":20},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

Fan the probe to the left and adjust the image to show the left ventricle in the center of the screen.

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

Metric	Value

numeric	-3.0000
keywords	0.5000
xml	0.5000

Full Model Output:

```
<reasoning>
slide up to align the left ventricle.
</reasoning>
<answer>
{"position":{"x":0,"y":-250,"z":0},"rotation":{"x":0,"y":0,"z":90}}
</answer>
```

Extracted Reasoning:

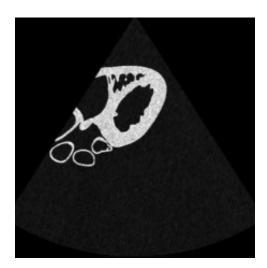
slide up to align the left ventricle.

Extracted Answer:

{"position":{
$$"x":0,"y":-250,"z":0$$
}, "rotation":{ $"x":0,"y":0,"z":90$ }}

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>
```

Ground Truth Answer: {"position":{"x":-0.05261314660310745,"y":-0.024336546659469606,"z":0.002 7676820755004884},"rotation":{"x":33.0,"y":1.0,"z":22.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide probe right, tilt probe upwards.
</reasoning>
<answer>
{"position":{"x":0,"y":-50,"z":50},"rotation":{"x":0,"y":30,"z":45}}
</answer>
```

Extracted Reasoning:

Slide probe right, tilt probe upwards.

Extracted Answer:

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Rotate the probe to the left and tilt it upwards.
</reasoning>
<answer>
{"position":{"x":150,"y":150,"z":0},"rotation":{"x":0,"y":-45,"z":20}}
</answer>
```

Extracted Reasoning:

Rotate the probe to the left and tilt it upwards.

```
{"position":{"x":150,"y":150,"z":0},"rotation":{"x":0,"y":-45,"z":20}}
```

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>
```

Ground Truth Answer: {"position":{"x":-0.06086133420467377,"y":-0.02439582347869873,"z":0.0063 29208612442017},"rotation":{"x":30.0,"y":-6.0,"z":17.0}}

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

Completion -1.0

Full Model Output:

```
<reasoning>
Slide probe slightly upward and rotate slightly to the right.
</reasoning>
<answer>
{"position":{"x":-5,"y":20,"z":0},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

Extracted Reasoning:

Slide probe slightly upward and rotate slightly to the right.

```
 \{ \texttt{"position":} \{ \texttt{"x":-5,"y":20,"z":0} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":-30,"z":0} \} \}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Full Model Output:

```
<reasoning>
The image is an ultrasound view of the heart, suggesting a parasternal long-axis view is being sought. The probe appears to be centered on the left ventricle, indicating a need to adjust the probe slightly to the left and slightly downward to capture the long-axis view.
</reasoning>
<answer>
{"position":{"x":-20,"y":-30,"z":0},"rotation":{"x":-15,"y":0,"z":0}}
</answer>
```

Extracted Reasoning:

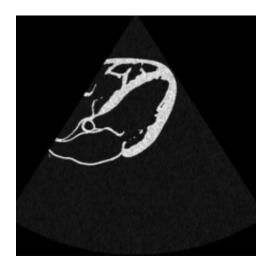
The image is an ultrasound view of the heart, suggesting a parasternal long-axis view is being sought. The probe appears to be centered on the left ventricle, indicating a need to adjust the probe slightly to the left and slightly downward to capture the long-axis view.

Extracted Answer:

```
{\text{"position":}} {\text{"x":}-20,\text{"y":}-30,\text{"z":}0}, {\text{"rotation":}} {\text{"x":}-15,\text{"y":}0,\text{"z":}0}}
```

Metric	Value
numeric	-3.0000
keywords	0.0000
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":0.001 5810728073120118},"rotation":{"x":33.0,"y":-5.0,"z":16.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Fan tilt and probe rotate slightly to align the long axis view.
</reasoning>
<answer>
{"position":{"x":102,"y":153,"z":47},"rotation":{"x":20,"y":-15,"z":30}}
</answer>
```

Extracted Reasoning:

Fan tilt and probe rotate slightly to align the long axis view.

Extracted Answer:

```
{"position":{"x":102,"y":153,"z":47},"rotation":{"x":20,"y":-15,"z":30}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe slightly upwards and rotate it to the left.
</reasoning>
<answer>
{"position":{"x":0,"y":-80,"z":0},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

Extracted Reasoning:

Slide the probe slightly upwards and rotate it to the left.

 ${\text{"position"}: {"x":0,"y":-80,"z":0}}$, "rotation": ${\text{"x"}:0,"y":-30,"z":0}}$

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":0.0010 935962200164796},"rotation":{"x":36.0,"y":-6.0,"z":18.0}}

Completion -1.5

Full Model Output:

```
<reasoning>
The ultrasound image is rotated and needs to be adjusted to align the heart's long axis.
</reasoning>
<answer>
```

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

Extracted Reasoning:

The ultrasound image is rotated and needs to be adjusted to align the heart's long axis.

Extracted Answer:

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

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
The image looks like a transverse view, so I need to tilt the probe
slightly clockwise to get a parasternal long-axis view.
</reasoning>
<answer>
{"position":{"x":-20,"y":0,"z":0},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

Extracted Reasoning:

The image looks like a transverse view, so I need to tilt the probe slightly clockwise to get a parasternal long-axis view.

Extracted Answer:

```
{"position":{"x":-20,"y":0,"z":0},"rotation":{"x":0,"y":-30,"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":-0.002 4569332599639894},"rotation":{"x":35.0,"y":-4.0,"z":16.0}}

Completion -2.0

Full Model Output:

The probe shows a right parasternal view, which is commonly aligned for a PLAX view.

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

Extracted Reasoning:

N/A

Extracted Answer:

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

Metric	Value
numeric	-3.0000
keywords	0.0000

Full Model Output:

```
<reasoning>slide the probe down, fan slightly upwards, rotate probe clockwise./reasoning>
<answer>
{"position":{"x":100,"y":-50,"z":0},"rotation":{"x":90,"y":0,"z":10}}</answer>
```

Extracted Reasoning:

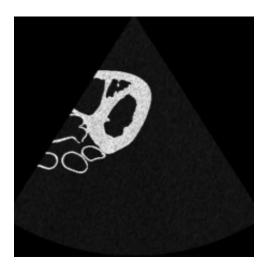
slide the probe down, fan slightly upwards, rotate probe clockwise.

Extracted Answer:

```
{"position":{"x":100,"y":-50,"z":0},"rotation":{"x":90,"y":0,"z":10}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.0000

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>
```

Ground Truth Answer: {"position":{"x":-0.05490908771753311,"y":-0.0309017151594162,"z":-0.0002 2047758102416992},"rotation":{"x":36.0,"y":-7.0,"z":16.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide probe to the left and tilt it slightly upward.
</reasoning>
<answer>
{"position":{"x":20,"y":10,"z":-20},"rotation":{"x":-10,"y":0,"z":15}}
</answer>
```

Extracted Reasoning:

Slide probe to the left and tilt it slightly upward.

Extracted Answer:

```
 \{ "position" : \{ "x" : 20, "y" : 10, "z" : -20 \}, "rotation" : \{ "x" : -10, "y" : 0, "z" : 15 \} \}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe slightly right and tilt it downward.
</reasoning>
<answer>
{"position":{"x":200,"y":100,"z":50},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

Extracted Reasoning:

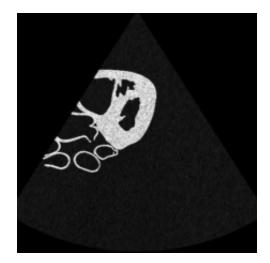
Slide the probe slightly right and tilt it downward.

Extracted Answer:

```
{"position":{"x":200,"y":100,"z":50},"rotation":{"x":0,"y":-30,"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":-0.002 008676528930664},"rotation":{"x":37.0,"y":-7.0,"z":16.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Fan tilt and rotation
</reasoning>
<answer>
{"position":{"x":10,"y":15,"z":0},"rotation":{"x":0,"y":90,"z":0}}
</answer>
```

Extracted Reasoning:

Fan tilt and rotation

```
{"position":{"x":10,"y":15,"z":0},"rotation":{"x":0,"y":90,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000

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

Full Model Output:

Extracted Reasoning:

N/A

Extracted Answer:

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

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.0000

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>
```

Ground Truth Answer: {"position":{"x":-0.054772332310676578,"y":-0.031630948185920718,"z":-0.0 03184080123901367},"rotation":{"x":38.0,"y":-9.0,"z":13.0}}

Completion -1.0

Full Model Output:

```
<reasoning>
Slide the probe to the left and tilt upward.
</reasoning>
<answer>
{"position":{"x":-30,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":40}}
</answer>
```

Extracted Reasoning:

Slide the probe to the left and tilt upward.

Extracted Answer:

```
{\text{"position"}: {"x":-30,"y":0,"z":0}, \text{"rotation"}: {"x":0,"y":0,"z":40}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

Completion -1.0

Full Model Output:

```
<reasoning>
roll probe 90 degrees and tilt slightly upwards
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":-45}}
</answer>
```

Extracted Reasoning:

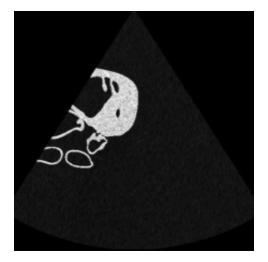
roll probe 90 degrees and tilt slightly upwards

Extracted Answer:

```
 \{ \texttt{"position":} \{ \texttt{"x":0,"y":0,"z":0} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":90,"z":-45} \} \}
```

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":-0.0 03087759017944336},"rotation":{"x":38.0,"y":-11.0,"z":12.0}}

Completion -1.5

Full Model Output:

```
<reasoning>
The probe needs to be tilted more toward the patient's left side and rotated slightly forward to see the PLAX view.
</reasoning>
<answer>
{"position":{"x":20,"y":100,"z":40},"rotation":{"x":10,"y":-5,"z":20}}
</answer>
```

Extracted Reasoning:

The probe needs to be tilted more toward the patient's left side and rotated slightly forward to see the PLAX view.

```
{"position":{"x":20,"y":100,"z":40},"rotation":{"x":10,"y":-5,"z":20}}
```

Metric	Value
numeric	-3.0000

keywords	0.0000
xml	0.5000

Full Model Output:

```
<reasoning>
Slide the probe slightly left and roll it slightly back to optimize
the PLAX view.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":5},"rotation":{"x":0,"y":-10,"z":0}}
</answer>
```

Extracted Reasoning:

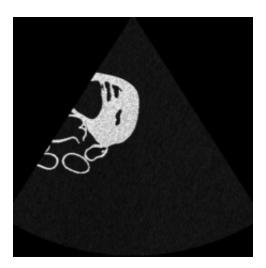
Slide the probe slightly left and roll it slightly back to optimize the PLAX view.

Extracted Answer:

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

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>
```

Ground Truth Answer: {"position":{"x":-0.0540967658162117,"y":-0.030985325574874879,"z":-0.004 267305135726929},"rotation":{"x":38.0,"y":-12.0,"z":11.0}}

Completion -1.5

Full Model Output:

```
<reasoning>
The probe should be angled slightly upward and rotated to the left to achieve the parasternal long-axis view.
</reasoning>
<answer>
{"position":{"x":45,"y":75,"z":50},"rotation":{"x":180,"y":0,"z":25}}
</answer>
```

Extracted Reasoning:

The probe should be angled slightly upward and rotated to the left to achieve the parasternal long-axis view.

Extracted Answer:

```
 \{ \texttt{"position":} \{ \texttt{"x":} 45, \texttt{"y":} 75, \texttt{"z":} 50 \}, \texttt{"rotation":} \{ \texttt{"x":} 180, \texttt{"y":} 0, \texttt{"z":} 25 \} \}
```

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.5000

Completion -1.0

Full Model Output:

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

Extracted Reasoning:

Slide the probe left and rotate slightly upwards.

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

Metric	Value
numeric	-3.0000
keywords	0.5000

xml 0.5000