

## 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}}

# Completion -1.0

# **Full Model Output:**

```
<reasoning>
Slide probe upwards and rotate towards left shoulder.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":-90,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide probe upwards and rotate towards left shoulder.

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

```
{"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

# Completion -1.0

#### **Full Model Output:**

```
<reasoning>
Slide the probe to the right and tilt slightly upwards to capture the parasternal long-axis view.
</reasoning>
<answer>
{"position":{"x":0.2,"y":0.3,"z":0.1},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

## **Extracted Reasoning:**

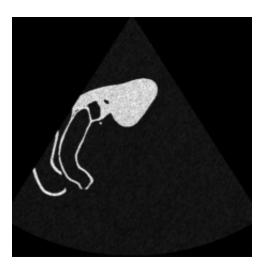
Slide the probe to the right and tilt slightly upwards to capture the parasternal long-axis view.

#### **Extracted Answer:**

```
{\text{"position"}: {"x":0.2,"y":0.3,"z":0.1}, "rotation": {"x":0,"y":0,"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>
```

**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>
Fan the image to the right.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
</answer>
```

### **Extracted Reasoning:**

Fan the image to the right.

#### **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:**

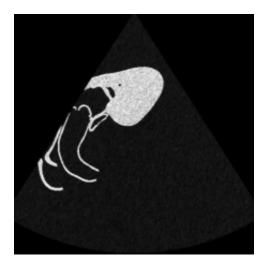
```
<reasoning>
Slide the probe to the left and tilt it slightly upward.
</reasoning>
<answer>
{"position":{"x":-20,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
</answer>
```

## **Extracted Reasoning:**

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

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000



## 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 -1.0

#### **Full Model Output:**

```
<reasoning>
slide left slightly and tilt probe upward
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

## **Extracted Reasoning:**

slide left slightly and tilt probe upward

```
{"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 -1.0

# **Full Model Output:**

```
<reasoning>
Roll the probe back slightly and then adjust to a more horizontal orientation.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":93,"z":0}}
</answer>
```

## **Extracted Reasoning:**

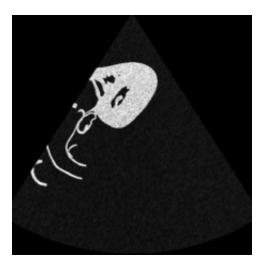
Roll the probe back slightly and then adjust to a more horizontal orientation.

## **Extracted Answer:**

$$\{ \texttt{"position":} \{ \texttt{"x":0,"y":0,"z":0} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":93,"z":0} \} \}$$

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  $\,$ 

**Ground Truth Answer:** {"position":{"x":-0.05197792872786522,"y":-0.02014879882335663,"z":-0.003 5193562507629396},"rotation":{"x":30.0,"y":12.0,"z":23.0}}

# Completion -1.5

## **Full Model Output:**

#### **Extracted Reasoning:**

Slide the probe slightly downward and to the left, and then rotate the probe counterclockwise.

#### **Extracted Answer:**

```
{"position": {"x":-5, "y":-15, "z":5}, "rotation": {"x":0, "y":-45, "z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.0000

# Completion -1.0

#### **Full Model Output:**

```
<reasoning>
Slide probe right and tilt down.
</reasoning>
<answer>
{"position":{"x":200,"y":100},"rotation":{"x":0,"y":0,"z":-45}}
</answer>
```

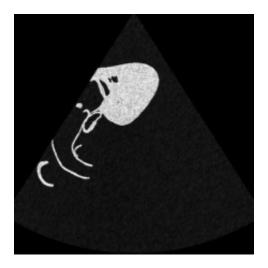
#### **Extracted Reasoning:**

Slide probe right and tilt down.

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

Metric	Value
numeric	-3.0000

keywords	0.5000
xml	0.5000



#### **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":-0.05263088643550873,"y":-0.021262675523757936,"z":-0.00 336572527885437},"rotation":{"x":30.0,"y":13.0,"z":23.0}}

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

# Completion -1.0

## **Full Model Output:**

```
<reasoning>
Slide the probe slightly to the left, roll the probe slightly to the right, and rotate it a bit clockwise.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":-50},"rotation":{"x":0,"y":10,"z":-5}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe slightly to the left, roll the probe slightly to the right, and rotate it a bit clockwise.

#### **Extracted Answer:**

 $\{ \texttt{"position":} \{ \texttt{"x":-10,"y":0,"z":-50} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":10,"z":-5} \} \}$ 

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

# Completion -1.0

# **Full Model Output:**

```
<reasoning>
Slide the probe down and rotate backward.
</reasoning>
<answer>
{"position":{"x":-75,"y":0,"z":0},"rotation":{"x":0,"y":-45,"z":0}}
</answer>
```

## **Extracted Reasoning:**

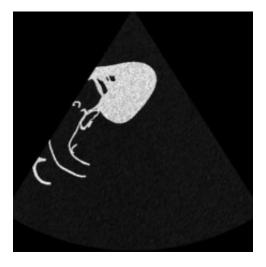
Slide the probe down and rotate backward.

## **Extracted Answer:**

 $\{ \texttt{"position":} \{ \texttt{"x":-75,"y":0,"z":0} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":-45,"z":0} \} \}$ 

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>
```

 $\label{lem:ground} \textbf{Ground Truth Answer: } \{ \text{"position":} \{ \text{"x":-0.05299539864063263,"y":-0.02299174666404724,"z":-0.0028792917728424074}, \text{"rotation":} \{ \text{"x":31.0,"y":12.0,"z":23.0} \} \}$ 

# Completion -2.0

## **Full Model Output:**

```
<answer>
{"position":{"x":0,"y":-108,"z":0},"rotation":{"x":90,"y":0,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

N/A

#### **Extracted Answer:**

```
{\text{"position"}: {"x":0,"y":-108,"z":0}, \text{"rotation"}: {"x":90,"y":0,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.0000
xml	0.0000

# Completion -1.5

#### **Full Model Output:**

```
<reasoning>Fan the probe slightly to the left and rotate towards the
patient's right shoulder</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":-15},"rotation":{"x":0,"y":90,"z":0}}
</answer>
```

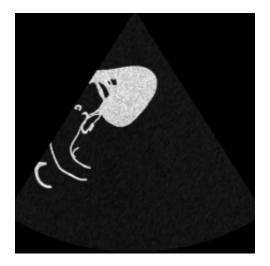
#### **Extracted Reasoning:**

Fan the probe slightly to the left and rotate towards the patient's right shoulder

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

Metric	Value
numeric	-3.0000

keywords	0.5000
xml	0.0000



#### **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":-0.05298867076635361,"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 to the right and tilt down slightly.
</reasoning>
<answer>
{"position":{"x":50,"y":30,"z":20},"rotation":{"x":0,"y":90,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe to the right and tilt down slightly.

 $\{ \texttt{"position":} \{ \texttt{"x":50,"y":30,"z":20} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":90,"z":0} \} \}$ 

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

# Completion -1.0

### **Full Model Output:**

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

## **Extracted Reasoning:**

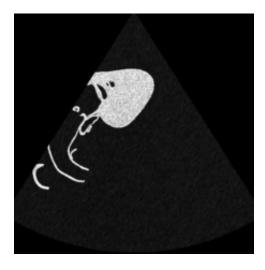
Slide probe to the left and tilt upwards.

## **Extracted Answer:**

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

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  $\,$ 

**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 probe left and rotate slightly clockwise.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":10,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide probe left and rotate slightly clockwise.

#### **Extracted Answer:**

```
{"position":{"x":-10,"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>
Slide to the left, roll slightly to the right, and tilt the probe up.
</reasoning>
<answer>
{"position":{"x":-0.8,"y":0.1,"z":0.1},"rotation":{"x":0.3,"y":-0.2,"z":-0.1}}
</answer>
```

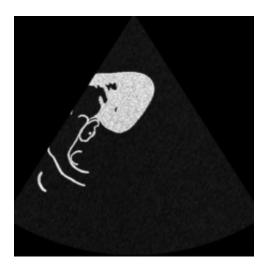
#### **Extracted Reasoning:**

Slide to the left, roll slightly to the right, and tilt the probe up.

```
{"position":{"x":-0.8,"y":0.1,"z":0.1},"rotation":{"x":0.3,"y":-0.2,"z":-0.1}}
```

Metric	Value

numeric	-3.0000
keywords	0.5000
xml	0.5000



# **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":-0.05233291536569595,"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 probe to the left and tilt upwards.
</reasoning>
<answer>
{"position":{"x":10,"y":0,"z":0},"rotation":{"x":0,"y":30,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide probe to the left and tilt upwards.

#### **Extracted Answer:**

 $\{ \texttt{"position":} \{ \texttt{"x":} 10, \texttt{"y":} 0, \texttt{"z":} 0 \}, \texttt{"rotation":} \{ \texttt{"x":} 0, \texttt{"y":} 30, \texttt{"z":} 0 \} \}$ 

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

# Completion -1.0

# **Full Model Output:**

```
<reasoning>
Slide the probe downwards and rotate slightly to the right.
</reasoning>
<answer>
{"position":{"x":120,"y":100,"z":90},"rotation":{"x":0,"y":30,"z":0}}
</answer>
```

### **Extracted Reasoning:**

Slide the probe downwards and rotate slightly to the right.

#### **Extracted Answer:**

```
 \{ \texttt{"position":} \{ \texttt{"x":} 120, \texttt{"y":} 100, \texttt{"z":} 90 \}, \texttt{"rotation":} \{ \texttt{"x":} 0, \texttt{"y":} 30, \texttt{"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>
```

**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>
roll -10° and tilt -20°
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":-10,"z":-20}}
</answer>
```

#### **Extracted Reasoning:**

roll -10° and tilt -20°

#### **Extracted Answer:**

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

# Completion -1.0

#### **Full Model Output:**

```
<reasoning>
Slide probe slightly to the left and increase the fan angle.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}
</answer>
```

#### **Extracted Reasoning:**

Slide probe slightly to the left and increase the fan angle.

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

Metric	Value

numeric	-3.0000
keywords	0.5000
xml	0.5000



# **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":0.002 7676820755004884},"rotation":{"x":33.0,"y":1.0,"z":22.0}}

# Completion -1.5

#### **Full Model Output:**

```
<reasoning>
Slide the probe down slightly and rotate it to 45 degrees to visualize
the PLAX view.
</reasoning>
<answer>{"position":{"x":-15,"y":0,"z":0},"rotation":{"x":0,"y":45,"z":0}}</answer>
```

#### **Extracted Reasoning:**

Slide the probe down slightly and rotate it to 45 degrees to visualize the PLAX view.

## **Extracted Answer:**

 ${"position": {"x":-15,"y":0,"z":0}, "rotation": {"x":0,"y":45,"z":0}}$ 

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.0000

# Completion -1.0

## **Full Model Output:**

```
<reasoning>
Adjust the probe to position the patient's left breast, then rotate to capture the left ventricle.
</reasoning>
<answer>
{"position":{"x":180,"y":0,"z":-50},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

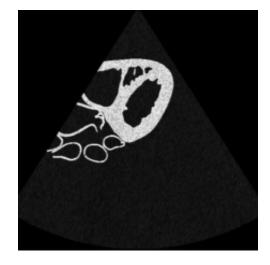
Adjust the probe to position the patient's left breast, then rotate to capture the left ventricle.

## **Extracted Answer:**

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

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}}

Do not put any other text after </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}}

# Completion -1.0

## **Full Model Output:**

```
<reasoning>
Slide the probe to the left and slightly rotate it clockwise to
achieve the PLAX view.
</reasoning>
<answer>
{"position":{"x":-1,"y":0,"z":0},"rotation":{"x":0,"y":0.1,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe to the left and slightly rotate it clockwise to achieve the PLAX view.

# **Extracted Answer:**

```
{"position":{"x":-1,"y":0,"z":0},"rotation":{"x":0,"y":0.1,"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 roll back to capture the PLAX view.
</reasoning>
<answer>
{"position":{"x":-0.1,"y":0.0,"z":0.0},"rotation":{"x":190.0,"y":10.0,"z":0.0}}
</answer>
```

#### **Extracted Reasoning:**

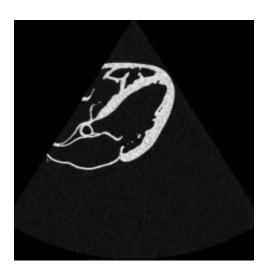
Slide the probe slightly to the left and roll back to capture the PLAX view.

## **Extracted Answer:**

```
{"position":{"x":-0.1,"y":0.0,"z":0.0},"rotation":{"x":190.0,"y":10.0,
"z":0.0}}
```

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":0.001 5810728073120118},"rotation":{"x":33.0,"y":-5.0,"z":16.0}}

# Completion -1.0

#### **Full Model Output:**

<reasoning>
Slide the probe slightly right and tilt it down to align the heart

```
long axis.
</reasoning>
<answer>
{"po-
}}
</answer>
 "position":{"x":0.2,"y":0.1,"z":0.3},"rotation":{"x":-10,"y":0,"z":15
```

### **Extracted Reasoning:**

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

#### **Extracted Answer:**

```
{"position":{"x":0.2,"y":0.1,"z":0.3},"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 to the left and slightly up, and rotate the probe
clockwise.
</reasoning>
<answer>
{"position":{"x":70,"y":-50,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe to the left and slightly up, and rotate the probe clockwise.

# **Extracted Answer:**

```
{"position":{"x":70,"y":-50,"z":0},"rotation":{"x":0,"y":45,"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 -1.0

#### **Full Model Output:**

```
<reasoning>
Slide the probe left and rotate it 90 degrees clockwise.
</reasoning>
<answer>
{"position":{"x":-40,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe left and rotate it 90 degrees clockwise.

```
{"position":{"x":-40,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000

xml	0.5000

# Completion -1.0

### **Full Model Output:**

```
<reasoning>
Slide the probe to the left and tilt up to view the PLAX view.
</reasoning>
<answer>
{"position":{"x":-30,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe to the left and tilt up to view the PLAX view.

#### **Extracted Answer:**

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

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>
```

**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 -1.0

## **Full Model Output:**

```
<reasoning>
Slide the probe upwards and tilt it slightly to the right.
</reasoning>
<answer>
{"position":{"x":0,"y":70,"z":0},"rotation":{"x":5,"y":0,"z":40}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe upwards and tilt it slightly to the right.

#### **Extracted Answer:**

```
{"position": {"x":0,"y":70,"z":0}, "rotation": {"x":5,"y":0,"z":40}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

# Completion -1.0

#### **Full Model Output:**

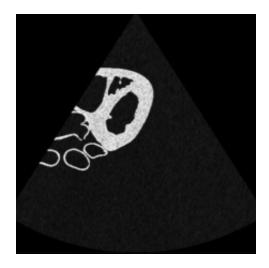
```
<reasoning>
Slide the probe slightly to the right.
</reasoning>
<answer>
{"position":{"x":-15,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe slightly to the right.

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000



## 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}}

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

# Completion -1.0

## **Full Model Output:**

```
<reasoning>
Slide probe to the left and rotate slightly to the right.
</reasoning>
<answer>
{"position":{"x":-50,"y":0,"z":0},"rotation":{"x":0,"y":20,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide probe to the left and rotate slightly to the right.

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

Metric	Value
numeric	-3.0000

keywords	0.5000
xml	0.5000

# Completion -1.0

#### **Full Model Output:**

```
<reasoning>
Slide probe up and to the left, fan to the right.
</reasoning>
<answer>
{"position":{"x":-50,"y":50,"z":0},"rotation":{"x":0,"y":60,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide probe up and to the left, fan to the right.

#### **Extracted Answer:**

```
 \left\{ \texttt{"position":} \left\{ \texttt{"x":-50,"y":50,"z":0} \right\}, \texttt{"rotation":} \left\{ \texttt{"x":0,"y":60,"z":0} \right\} \right\}
```

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>
```

**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>
Slide to the left and rotate the probe clockwise.
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":25,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide to the left and rotate the probe clockwise.

#### **Extracted Answer:**

```
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":25,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

# Completion -1.0

#### **Full Model Output:**

```
<reasoning>
Rotate the probe 90 degrees counterclockwise
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":90}}
</answer>
```

#### **Extracted Reasoning:**

Rotate the probe 90 degrees counterclockwise

```
{"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



## 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>
Fan the probe outwards and slightly upward.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":90,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Fan the probe outwards and slightly upward.

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

```
 \{ \texttt{"position":} \{ \texttt{"x":0,"y":0,"z":0} \}, \texttt{"rotation":} \{ \texttt{"x":0,"y":90,"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 side and tilt forward to capture the PLAX view.
</reasoning>
<answer>
{"position":{"x":80,"y":10,"z":50},"rotation":{"x":0,"y":0,"z":5}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe towards the patient's left side and tilt forward to capture the PLAX view.

#### **Extracted Answer:**

```
{"position":{"x":80,"y":10,"z":50},"rotation":{"x":0,"y":0,"z":5}}
```

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>
```

**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 -1.0

### **Full Model Output:**

```
<reasoning>
Slide the probe towards the apex and rotate slightly.
</reasoning>
<answer>
{"position":{"x":1,"y":2,"z":3},"rotation":{"x":20,"y":30,"z":40}}
</answer>
```

### **Extracted Reasoning:**

Slide the probe towards the apex and rotate slightly.

#### **Extracted Answer:**

```
{"position":{"x":1,"y":2,"z":3},"rotation":{"x":20,"y":30,"z":40}}
```

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 rotate it counterclockwise
towards a parasternal long-axis view.
</reasoning>
<answer>
{"position":{"x":-50,"y":0,"z":0},"rotation":{"x":0,"y":-45,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe slightly to the left and rotate it counterclockwise towards a parasternal long-axis view.

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

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

# Completion -1.0

## **Full Model Output:**

```
<reasoning>
slide left and lower the probe
</reasoning>
<answer>
{"position":{"x":-1,"y":-1,"z":-1},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

slide left and lower the probe

```
 \{ \texttt{"position":} \{ \texttt{"x":-1,"y":-1,"z":-1} \}, \texttt{"rotation":} \{ \texttt{"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 clockwise and tilt slightly forward.
</reasoning>
<answer>
{"position":{"x":-0.5,"y":0.3,"z":0.2},"rotation":{"x":0.1,"y":0.5,"z":-0.2}}
</answer>
```

# **Extracted Reasoning:**

Slide the probe clockwise and tilt slightly forward.

```
 \begin{tabular}{ll} & \begin{tabular}{ll}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000