

## 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>
Roll the probe slightly to the left and rotate it about 45 degrees to capture the PLAX view.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Roll the probe slightly to the left and rotate it about 45 degrees to capture the PLAX 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

## Completion -1.0

## **Full Model Output:**

```
<reasoning>
Adjust the probe to a 45-degree fan angle and slightly rotate back.
</reasoning>
<answer>
{"position":{"x":-60,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":5}}
</answer>
```

#### **Extracted Reasoning:**

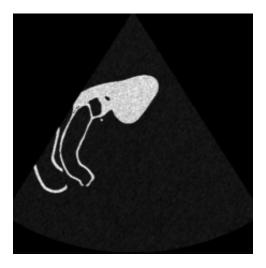
Adjust the probe to a 45-degree fan angle and slightly rotate back.

## **Extracted Answer:**

$${\text{"position":}} \{ x":-60, y":0, z":0 \}, \text{"rotation":} \{ x":0, y":0, z":5 \} \}$$

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 down and tilt the probe to the left.
</reasoning>
<answer>
{"position":{"x":50,"y":30,"z":20},"rotation":{"x":0,"y":-30,"z":0}}
</answer>
```

### **Extracted Reasoning:**

Slide down and tilt the probe to the left.

#### **Extracted Answer:**

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

## **Full Model Output:**

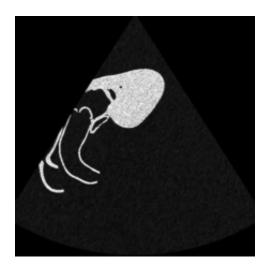
```
<reasoning>
Slide the probe slightly to the right and rotate it to a deeper angle.
</reasoning>
<answer>
{"position":{"x":0,"y":-20,"z":0},"rotation":{"x":0,"y":20,"z":-45}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe slightly to the right and rotate it to a deeper angle.

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

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 the probe down and slightly left, then rotate 90 degrees
counterclockwise.
</reasoning>
<answer>
{"position":{"x":-55,"y":-20,"z":0},"rotation":{"x":0,"y":-90,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe down and slightly left, then rotate 90 degrees counterclockwise.

```
{"position":{"x":-55,"y":-20,"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 and tilt the probe to the left, then rotate it clockwise.
</reasoning>
<answer>
{"position":{"x":-0.2,"y":0.4,"z":0.3},"rotation":{"x":0.0,"y":0.4,"z":-0.2}}
</answer>
```

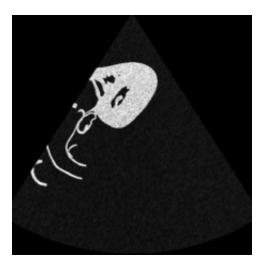
## **Extracted Reasoning:**

Slide and tilt the probe to the left, then rotate it clockwise.

#### **Extracted Answer:**

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":-0.0035193562507629396},"rotation":{"x":30.0,"y":12.0,"z":23.0}}

## Completion -1.0

## **Full Model Output:**

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

### **Extracted Reasoning:**

Slide the probe down and tilt it to the right.

#### **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 -1.0

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

```
<reasoning>
Slide probe slightly cephalad to visualize heart
</reasoning>
<answer>
{"position":{"x":-10,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":45}}
</answer>
```

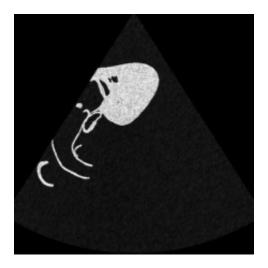
#### **Extracted Reasoning:**

Slide probe slightly cephalad to visualize heart■■■.

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

## Completion -1.0

## **Full Model Output:**

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

## **Extracted Reasoning:**

Slide probe down and tilt slightly to the right.

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

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

## **Full Model Output:**

```
Slide/roll slightly to the left and increase the fan angle.
</reasoning>
\[ \begin{aligned} \text{"x":0.1, "y":0.2, "z":0.1}, "rotation": \begin{aligned} \text{"x":0.0, "y":0.1, "z":0.2} \\ </answer> \end{aligned}
```

## **Extracted Reasoning:**

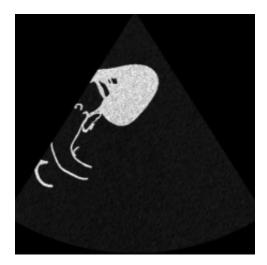
Slide/roll slightly to the left and increase the fan angle.

#### **Extracted Answer:**

```
{"position":{"x":0.1,"y":0.2,"z":0.1},"rotation":{"x":0.0,"y":0.1,"z":0.2}}
```

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>
```

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

#### **Extracted Reasoning:**

Slide and tilt the probe slightly downwards.

#### **Extracted Answer:**

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

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

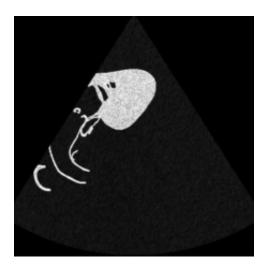
```
<reasoning>
Slide the probe upwards and slightly to the left.
</reasoning>
<answer>
{"position":{"x":-50,"y":20,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe upwards and slightly to the left.

```
{"position":{"x":-50,"y":20,"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}}

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>
Rotate the probe slightly downwards and tilt it to the left for a PLAX view.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":-15,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Rotate the probe slightly downwards and tilt it to the left for a PLAX view.

#### **Extracted Answer:**

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

## **Full Model Output:**

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

## **Extracted Reasoning:**

Fan the probe slightly to the right and tilt to the left.

## **Extracted Answer:**

```
{"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

# 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":-0.00 22019147872924806},"rotation":{"x":31.0,"y":10.0,"z":21.0}}

## Completion -1.0

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

```
<reasoning>
Slide the probe slightly to the right and rotate it counterclockwise.
</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 right and rotate it counterclockwise.

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

Metric	Value
numeric	-3.0000
keywords	0.5000

## Completion -1.0

### **Full Model Output:**

```
<reasoning>
Slide probe superiorly and slightly right, then rotate into a longer
axis view.
</reasoning>
<answer>
{"position":{"x":-10.5,"y":-3.5,"z":3},"rotation":{"x":5,"y":20,"z":15}}
</answer>
```

### **Extracted Reasoning:**

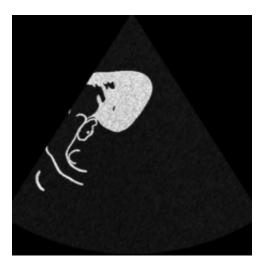
Slide probe superiorly and slightly right, then rotate into a longer axis view.

#### **Extracted Answer:**

```
{"position":{"x":-10.5,"y":-3.5,"z":3},"rotation":{"x":5,"y":20,"z":15}}
```

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 probe towards the patient's left side and tilt slightly upward.
</reasoning>
<answer>
{"position":{"x":0,"y":200,"z":100},"rotation":{"x":0,"y":5,"z":0}}
</answer>
```

### **Extracted Reasoning:**

Slide probe towards the patient's left side and tilt slightly upward.

## **Extracted Answer:**

```
{"position": {"x":0,"y":200,"z":100}, "rotation": {"x":0,"y":5,"z":0}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

## **Full Model Output:**

```
<reasoning>
Slide the probe upwards, towards the patient's right side.
</reasoning>
<answer>
{"position":{"x":0.2,"y":0.8,"z":0.4},"rotation":{"x":0.1,"y":0.2,"z":-0.3}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe upwards, towards the patient's right side.

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

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 probe 20 degrees to the right
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":100},"rotation":{"x":0,"y":20,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

roll probe 20 degrees to the right

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

```
{"position":{"x":0,"y":0,"z":100},"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 the probe up and to the left slightly and tilt it forward for a
PLAX view.
</reasoning>
<answer>
{"position":{"x":-5,"y":5,"z":0},"rotation":{"x":0,"y":20,"z":0}}
</answer>
```

## **Extracted Reasoning:**

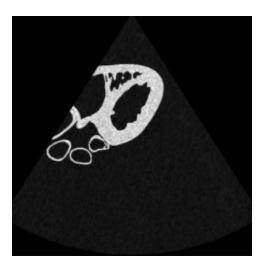
Slide the probe up and to the left slightly and tilt it forward for a PLAX view.

## **Extracted Answer:**

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

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  $\,$ 

**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 the probe to the left and tilt it forward for the PLAX view.
</reasoning>
<answer>
{"position":{"x":-0.35,"y":0.3,"z":0.35},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe to the left and tilt it forward for the PLAX view.

#### **Extracted Answer:**

```
 \left\{ \text{"position":} \left\{ \text{"x":-0.35,"y":0.3,"z":0.35} \right\}, \text{"rotation":} \left\{ \text{"x":0,"y":0,"z":0} \right\} \right\}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

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

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

#### **Extracted Reasoning:**

Slide the probe down and left.

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

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>
Fan the probe to open the heart view.
</reasoning>
<answer>
{"position":{"x":-10,"y":7,"z":0},"rotation":{"x":-15,"y":0,"z":30}}
</answer>
```

#### **Extracted Reasoning:**

Fan the probe to open the heart view.

#### **Extracted Answer:**

{"position":{"x":-10,"y":7,"z":0},"rotation":{"x":-15,"y":0,"z":30}}

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

## **Full Model Output:**

<reasoning> Rotate the probe 90 degrees and slide forward to achieve the parasternal long-axis view. </reasoning> <answer> {"position":{"x":-0.5,"y":0.866,"z":0.333},"rotation":{"x":0,"y":0,"z":90}} </answer>

## **Extracted Reasoning:**

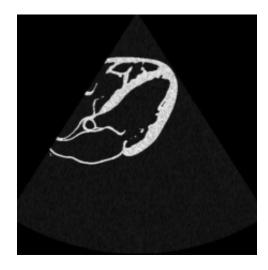
Rotate the probe 90 degrees and slide forward to achieve the parasternal long-axis view.

#### **Extracted Answer:**

{"position":{"x":-0.5,"y":0.866,"z":0.333},"rotation":{"x":0,"y":0,"z":90}}

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

## **Extracted Reasoning:**

slide the probe to the left and rotate the probe slightly inward.

#### **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 the probe inferiorly and slightly to the left.
</reasoning>
<answer>
{"position":{"x":-10,"y":5,"z":15},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe inferiorly and slightly to the left.

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

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 the probe up and rotate it slightly clockwise.
</reasoning>
<answer>
{"position":{"x":100,"y":400,"z":200},"rotation":{"x":20,"y":10,"z":-4
0}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe up and rotate it slightly clockwise.

#### **Extracted Answer:**

```
{"position":{"x":100,"y":400,"z":200},"rotation":{"x":20,"y":10,"z":-40}}
```

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000

## Completion -1.0

## **Full Model Output:**

```
<reasoning>
Slide the probe further to the left and tilt it upwards slightly.
</reasoning>
<answer>
{"position":{"x":80,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":5}}
</answer>
```

## **Extracted Reasoning:**

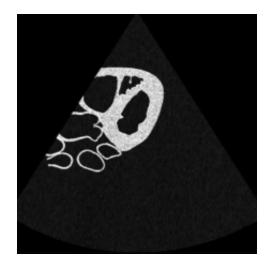
Slide the probe further to the left and tilt it upwards slightly.

## **Extracted Answer:**

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

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 0.8182586431503296

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

```
<reasoning>
Rotate the probe to the left and slightly tilt it downward.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":30,"y":0,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Rotate the probe to the left and slightly tilt it downward.

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

Metric	Value
numeric	-1.1817
keywords	0.5000

xml 0.5000

## Completion -1.0

### **Full Model Output:**

```
<reasoning>
Slide the probe upwards and towards the right, then tilt slightly to
the left.
</reasoning>
<answer>
{"position":{"x":290,"y":100,"z":100},"rotation":{"x":0,"y":15,"z":10}
</answer>
```

#### **Extracted Reasoning:**

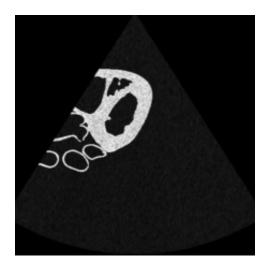
Slide the probe upwards and towards the right, then tilt slightly to the left.

#### **Extracted Answer:**

```
{"position":{"x":290,"y":100,"z":100},"rotation":{"x":0,"y":15,"z":10}
```

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>
```

**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>
Fan the probe and rotate towards the left side of the patient's chest.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":-90,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Fan the probe and rotate towards the left side of the patient's chest.

#### **Extracted 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 slightly right and tilt forward.
</reasoning>
<answer>
{"position":{"x":-20,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe slightly right and tilt forward.

```
{"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



## **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":-0.05487971752882004,"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 the probe towards the right side of the body.
</reasoning>
<answer>
{"position":{"x":1,"y":0,"z":0},"rotation":{"x":0,"y":0,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide the probe towards the right side of the body.

```
{"position":{"x":1,"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 probe to left and rotate to PLAX view.
</reasoning>
<answer>
{"position":{"x":20,"y":20,"z":40},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

## **Extracted Reasoning:**

Slide probe to left and rotate to PLAX view.

## **Extracted Answer:**

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.

**Ground Truth Answer:** {"position":{"x":-0.054772332310676578,"y":-0.031630948185920718,"z":-0.003184080123901367},"rotation":{"x":38.0,"y":-9.0,"z":13.0}}

## Completion -1.0

## **Full Model Output:**

```
<reasoning>
Slide and tilt the probe upwards and towards the left, then gently
rotate.
</reasoning>
<answer>
{"position":{"x":-45,"y":-10,"z":-10},"rotation":{"x":-90,"y":20,"z":-
90}}
</answer>
```

## **Extracted Reasoning:**

Slide and tilt the probe upwards and towards the left, then gently rotate.

#### **Extracted Answer:**

```
{"position":{"x":-45,"y":-10,"z":-10},"rotation":{"x":-90,"y":20,"z":-90}}
```

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.
</reasoning>
<answer>
{"position":{"x":0,"y":0,"z":0},"rotation":{"x":0,"y":-5,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Roll the probe slightly to the left.

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

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 -1.0

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

```
<reasoning>
Slide the probe to the left and tilt it upwards.
</reasoning>
<answer>
{"position":{"x":-15,"y":0,"z":0},"rotation":{"x":0,"y":45,"z":0}}
</answer>
```

#### **Extracted Reasoning:**

Slide the probe to the left and tilt it upwards.

## **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	0.5000

## Completion -1.0

## **Full Model Output:**

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

#### **Extracted Reasoning:**

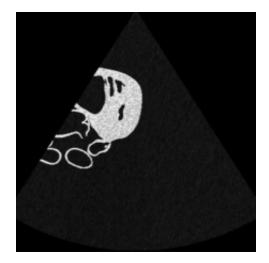
Slide the probe left to center the heart and rotate slightly to the left.

## **Extracted Answer:**

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

Do not put any other text after </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 -1.0

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

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

#### **Extracted Reasoning:**

Slide probe to left and tilt slightly back.

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

## **Extracted Reasoning:**

Slide probe up and tilt back slightly.

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

Metric	Value
numeric	-3.0000
keywords	0.5000
xml	0.5000