Perspective Projections
Jerusalem, Israel 31° 47' N, 35° 13' E .................................................. 1
Athens, Greece 37° 56' N 23° 43' E .................................................. 2
Chicago, Illinois, USA 41° 52' 55'' N 87° 37' 40'' W ................. 3
London, UK 51° 30' 28'' N 0° 7' 41'' W ......................................... 4
Göttingen, Germany 51° 32' N 9° 56' E ........................................ 5
St. Petersburg, Russia 59° 56' N, 30° 20' E .................................. 6
Jerusalem, Israel 31° 47' N, 35° 13' E
  Perspective projection .......................................................... 7
  Vertical Dial, Facing Due South ............................................. 8
  Horizontal Dial ................................................................. 9
Athens, Greece 37° 56' N 23° 43' E
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Chicago, Illinois, USA 41° 52' 55'' N 87° 37' 40'' W
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London, UK 51° 30' 28'' N 0° 7' 41'' W
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St. Petersburg, Russia 59° 56' N, 30° 20' E
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Perspective projection
Jerusalem, Israel 31° 47' N, 35° 13' E
Focus: position = (0, 5, −12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Perspective projection
Latitude 41° 54′ N (Athens, Greece)
Focus: position = (0, 5, 12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Perspective projection
Chicago, Illinois, USA 41° 52′ 55″ N 87° 37′ 40″ W
Focus: position = (0, 5, -12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
London, UK 51° 30' 28" N, 0° 7' 41" W

Perspective projection
Latitude 51° 30' 28" N (London, UK)
Focus: position = (0, 5, -12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Perspective projection
Latitude 51° 32' N (Göttingen, Germany)
Focus: position = (0, 5, -12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Perspective projection
Latitude 51° 32' N (Göttingen, Germany)
Focus: position = (0, 5, -12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Perspective projection

Jerusalem, Israel 31° 47' N, 35° 13' E
Focus: position = (0, 5, −12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Jerusalem, Israel 31° 47' N, 35° 13' E

Parallel projection onto the vertical plane (plane of \( r_1 \))
Vertical dial facing due south
Jerusalem, Israel 31° 47' N, 35° 13' E
Jerusalem, Israel 31° 47' N, 35° 13' E

Parallel projection onto the horizontal plane (plane of \( r_0 \))
Horizontal dial
Jerusalem, Israel 31° 47' N, 35° 13' E
Perspective projection
Latitude 41° 54’ N (Athens, Greece)
Focus: position = (0, 5, −12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
**Parallel projection onto the vertical plane** (plane of $r_1$)

Vertical dial facing due south

Latitude 41° 54' N (Athens, Greece)
**Parallel projection onto the horizontal plane** (plane of $r_0$)

Horizontal dial

Latitude 41° 54' N (Athens, Greece)
Perspective projection

Chicago, Illinois, USA 41° 52′ 55″ N 87° 37′ 40″ W

Focus: position = (0, 5, −12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Parallel projection onto the vertical plane (plane of $r_1$)
Vertical dial facing due south

Chicago, Illinois, USA 41° 52′ 55″ N 87° 37′ 40″ W
Chicago, Illinois, USA 41°52'55'' N 87°37'40'' W

North

Parallel projection onto the horizontal plane (plane of \( r_0 \))
Horizontal dial
Chicago, Illinois, USA 41°52'55'' N 87°37'40'' W
London, UK 51° 30' 28" N, 0° 7' 41" W

Perspective projection
Latitude 51° 30' 28" N (London, UK)
Focus: position = (0, 5, -12), direction = (0, 5, 10), distance = 10
dimensions in centimeters
**London, UK** 51° 30' 28" N, 0° 7' 41" W

Parallel projection onto the vertical plane (plane of \( r_1 \))

Vertical dial facing due south

Latitude 51° 30' 28" N (London, UK)
**London, UK** 51° 30' 28" N, 0° 7' 41" W

Parallel projection onto the horizontal plane (plane of $r_0$)
Horizontal dial
Latitude 51° 30' 28" N (London, UK)
Perspective projection
Latitude 51° 32' N (Göttingen, Germany)
Focus: position = (0, 5, -12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
Parallel projection onto the vertical plane (plane of $r_1$)
Vertical dial facing due south
Latitude 51° 32' N (Göttingen, Germany)
Parallel projection onto the horizontal plane (plane of \( r_0 \)).

Horizontal dial

Latitude 51° 32' N (Göttingen, Germany)
Perspective projection
St. Petersburg, Russia 59° 56’ N, 30° 20’ E
Focus: position = (0, 5, −12), direction = (0, 5, 10), distance = 10
(dimensions in centimeters)
St. Petersburg, Russia 59° 56' N, 30° 20' E

Parallel projection onto the vertical plane (plane of $r_1$
Vertical dial facing due south
St. Petersburg, Russia 59° 56' N, 30° 20' E
St. Petersburg, Russia 59°56’ N, 30°20’ E

Parallel projection onto the horizontal plane (plane of $r_0$).
Horizontal dial
St. Petersburg, Russia 59°56’ N, 30°20’ E