In[805]:=
```
u[lon, lat] := 0
v[lon, lat] := Cos[lon] * (1 + Cos[2 * lat])
Elonlon[lon, lat] := 1 / (R * Cos[lat]) * (D[u[lon, lat], lon] - v[lon, lat] * Sin[lat])
Elatlat[lon, lat] := 1 / R * D[v[lon, lat], lat]
Err[lon, lat] := 0
Elonlat[lon, lat] :=
 1 / (2 * R) * (D[u[lon, lat], lat] + u[lon, lat] * Tan[lat] + 1 / Cos[lat] * D[v[lon, lat], lon])
Elatr[lon, lat] := -3 / (2 * R) * v[lon, lat]
Elonr[lon, lat] := -3 / (2 * R) * u[lon, lat]
```

In[813]:=
```
Elonlon[lon, lat]
```

Out[813]=
$$-\frac{(1+\text{Cos}[2\,\text{lat}])\,\text{Cos}[\text{lon}]\,\text{Tan}[\text{lat}]}{R}$$

In[814]:=
```
Elatlat[lon, lat]
```

Out[814]=
$$-\frac{2\,\text{Cos}[\text{lon}]\,\text{Sin}[2\,\text{lat}]}{R}$$

In[815]:=
```
Err[lon, lat]
```

Out[815]=
$$0$$

In[816]:=
```
Elonlat[lon, lat]
```

Out[816]=
$$-\frac{(1+\text{Cos}[2\,\text{lat}])\,\text{Sec}[\text{lat}]\,\text{Sin}[\text{lon}]}{2\,R}$$

In[817]:=
```
Elatr[lon, lat]
```

Out[817]=
$$-\frac{3\,(1+\text{Cos}[2\,\text{lat}])\,\text{Cos}[\text{lon}]}{2\,R}$$

In[818]:=
```
Elonr[lon, lat]
```

Out[818]=
$$0$$