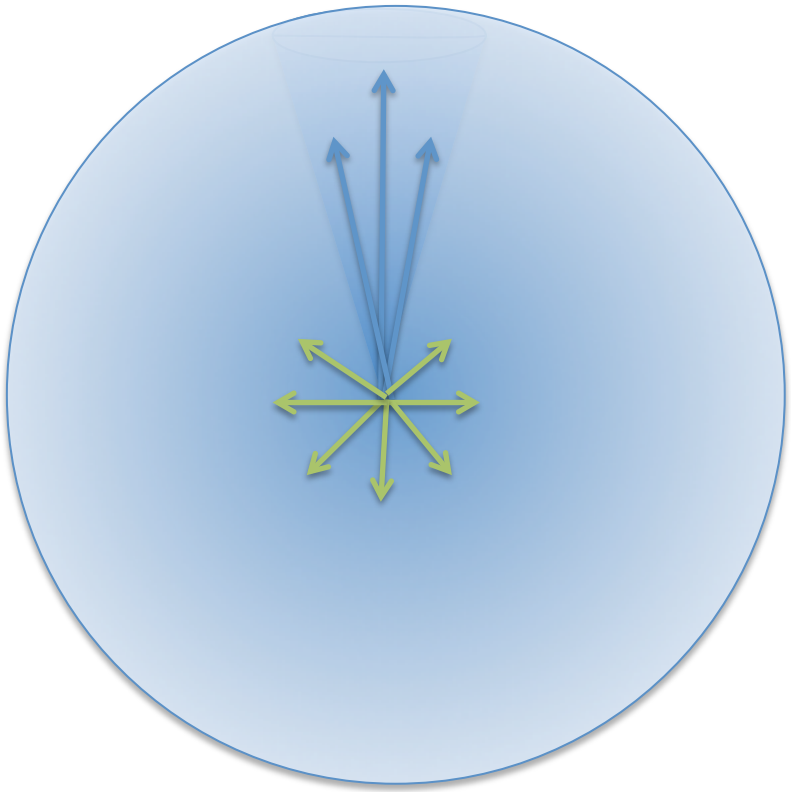

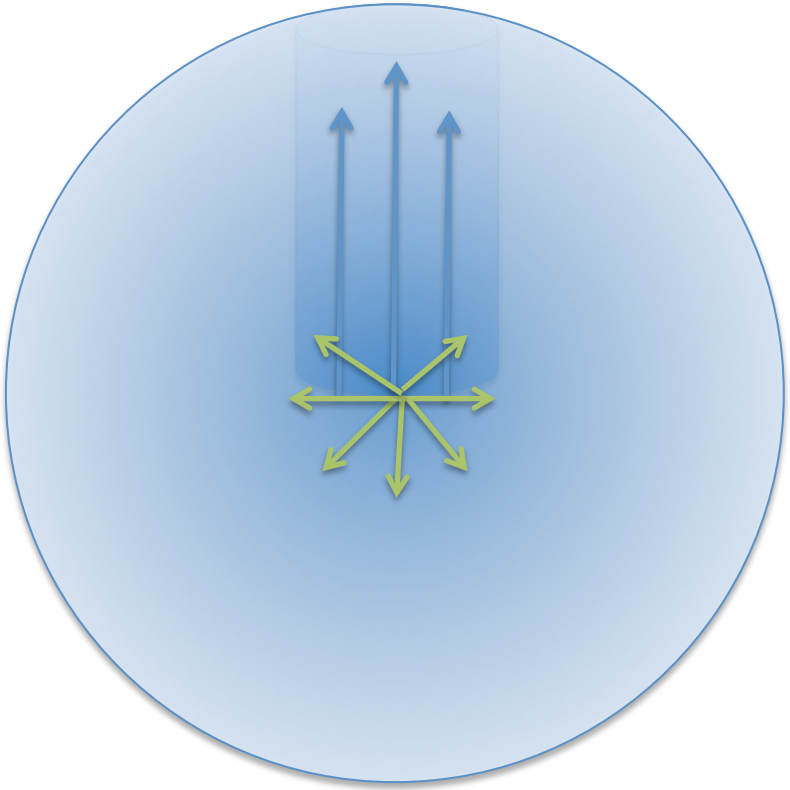

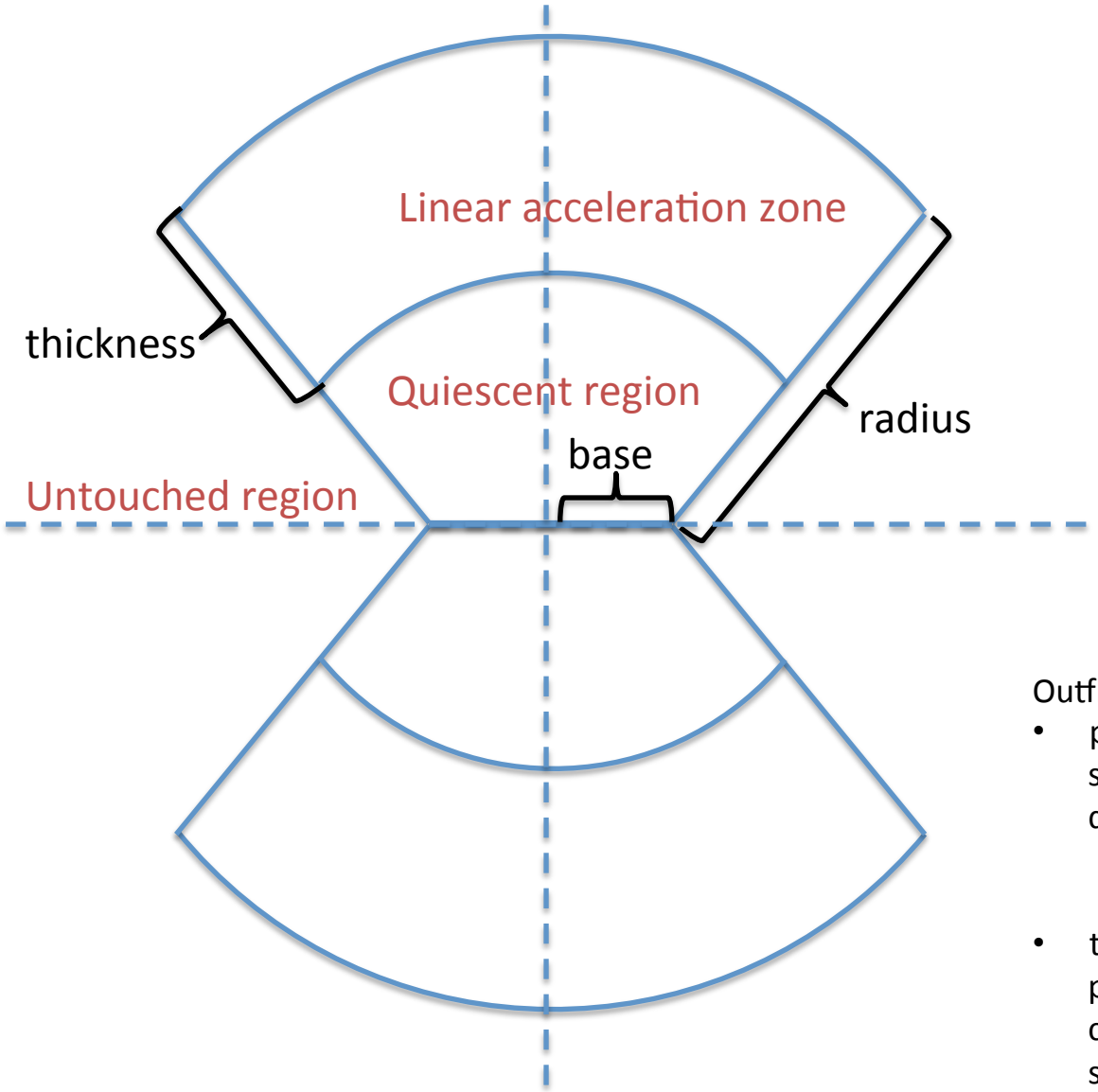

- For spherical winds set:
  - angle=pi/2
  - base=0
  - radius=r_outer
  - thickness < r_outer
- For collimated winds set:
  - angle=0
  - base=cylindrical radius
  - radius=cylinder height
  - thickness < radius
- For conical jets set:
  - angle < Pi/2
  - base >= 0
  - radius = r_outer
  - thickness < r_outer

Outflows can be implemented as

- pure source term (best option – though requires solving euler equations and/or source terms for desired source profile
  q=q+dt*s(r) where s(r) = -H(f(r)) and H is Euler Hamiltonian
- total step on (wipes out background – does not play well with other objects – unless fully contained within another object that is a step source term)
  q=q+(f(r)-q) = f(r)
- Step source term (assumes background was stepped on. Good for grid inits – or for following a previous total step on.
  q=q+f(r)

For multiple outflows (ie wide angle wind + collimated jet) option I will work with any combination of outflows (that are not cooling). Alternatively one could use option 2 for the first outflow and option 3 for the second outflow – but this would require that the boundary of the second outflow extend at least to the boundary of the 1st. Could be difficult if they have a different shape