|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | diff | diff' | diff2 | diff2’ | diffn | diffn' | diffdir | diffdir’ | grad | grad' | laplacian | laplacian' | jacobian | jacobian' | jacobianT | jacobianT’ | hessian | hessian' |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AD.Forward | x | x |  |  |  |  | x | x | x | x |  |  | x | x | x | x |  |  |
| AD.ForwardTwice | x | x | x | x |  |  |  |  | x | x | x | x | x | x | x | x |  |  |
| AD.ForwardVector | x | x |  |  |  |  |  |  | x | x |  |  | x | x | x | x |  |  |
| AD.ForwardHessian | x | x |  |  |  |  |  |  | x | x |  |  | x | x | x | x | x | x |
| AD.Reverse | x | x |  |  |  |  |  |  | x | x |  |  | x | x | x | x | x | x |
| AD.TransformForward |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Symbolic | x | x | x | x | x | x |  |  | x | x | x | x | x | x | x | x | x | x |
| Numerical | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |