

# Data Analysis Applications Group (DAAG) Update: ATAN function

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## Caution: ATAN() was changed in IDL 5.5

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- In IDL 5.4, ATAN() would, when given a complex number as an argument, split the number into its real and imaginary parts and return ATAN(imaginary part, real part)
- As of IDL 5.5, ATAN() returns the complex arctangent given complex input
- To compute ATAN(imaginary part, real part) in IDL 5.5 or higher, just do this:
  - Value = ATAN( IMAGINARY(x), REAL\_PART(x) )

## Evaluation of a complex number as a Boolean has also changed

- In IDL 5.4, `complex(1,0)` was **true** while `complex(0,1)` was **false**
- In IDL 6.0, both evaluate as **true**
- `Complex(0,0)` is still **false**