

# DALI-1.2

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summary of xtype use cases, decisions, etc

# Use cases: polymorphism

observation footprints (metadata) contain a mix of:

- positions and polygons (ESO)

- circles and polygons (HST, TESS collections at CADC, ESAC, MAST)

SIA-2.0 and SODA-1.0 POS param is polymorphic: circle, range, polygon

**agreed for WD and prototype:**

```
datatype="char" arraysize="*" xtype="shape"
```

-- start with support for circle and polygon

# Use cases: disjoint polygons

observation footprints (metadata) from mosaic camera data (ESO, CADC, others)

DALI-1.1 simple polygon cannot specify an all-sky coverage

**agreed for WD and prototype:**

**`datatype="double" arraysize="*" xtype="multipolygon"`**

-- start with NaN as separator

# Use cases: disjoint set of intervals

observation energy or time coverage (metadata), e.g. multi-band or multi-sample stacks

**proposal:** `datatype="double" arraysize="" xtype="multiinterval"`

**deferred:** continue to use `arraysize="2x*" xtype="interval"` for now

# Use cases: an STC-S standard finally?

combine disjoint and polymorphism into one general xtype

standardise current practice (subset of TAP-1.0 non-normative STC-S)

provide a standard for ADQL region function to reference

**proposal:** `datatype="char" arraysize="*" xtype="region"`

**deferred:** no concrete use cases to justify and constrain design