```
Atlas atlas-3hyy1a-shard-0 [primary] test> show dbs;
sample_airbnb
                    54.5 MB
sample_analytics 9.58 MB
sample_geospatial 1.43 MB
sample_guides
                     41 kB
                   51.5 MB
sample_mflix
sample_restaurants 6.91 MB
sample supplies 1.17 MB
sample_training 57.2 MB
sample_weatherdata 2.88 MB
admin
                340 kB
local
              1.39 GB
Atlas atlas-3hyy1a-shard-0 [primary] test> use sample_weatherdata;
switched to db sample_weatherdata
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata> show collections;
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata> db.data.find();
{
  _id: ObjectId("5553a998e4b02cf7151190b8"),
  st: 'x+47600-047900',
  ts: ISODate("1984-03-05T13:00:00.000Z"),
  position: { type: 'Point', coordinates: [-47.9, 47.6] },
  elevation: 9999.
  callLetters: 'VCSZ',
  qualityControlProcess: 'V020',
  dataSource: '4',
  type: 'FM-13',
  airTemperature: { value: -3.1, quality: '1' },
  dewPoint: { value: 999.9, quality: '9' },
  pressure: { value: 1015.3, quality: '1' },
  wind: {
   direction: { angle: 999, quality: '9' },
   type: '9',
   speed: { rate: 999.9, quality: '9' }
  },
  visibility: {
   distance: { value: 999999, quality: '9' },
   variability: { value: 'N', quality: '9' }
  skyCondition: {
   ceilingHeight: { value: 99999, quality: '9', determination: '9' },
   cavok: 'N'
  },
  sections: [ 'AG1' ],
  precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 }
},
  _id: ObjectId("5553a998e4b02cf7151190b9"),
  st: 'x+45200-066500',
  ts: ISODate("1984-03-05T14:00:00.000Z"),
  position: { type: 'Point', coordinates: [ -66.5, 45.2 ] },
  elevation: 9999,
  callLetters: 'VC81',
  qualityControlProcess: 'V020',
  dataSource: '4',
  type: 'FM-13',
```

```
airTemperature: { value: -4.7, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1025.9, quality: '1' },
 wind: {
  direction: { angle: 999, quality: '9' },
  type: '9',
  speed: { rate: 999.9, quality: '9' }
 },
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 sections: [ 'AG1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 }
},
 _id: ObjectId("5553a998e4b02cf7151190ba"),
 st: 'x+51900+003600',
 ts: ISODate("1984-03-05T14:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 3.6, 51.9 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 4.4, quality: '1' },
 dewPoint: { value: 3.5, quality: '1' },
 pressure: { value: 1030.8, quality: '1' },
 wind: {
   direction: { angle: 200, quality: '1' },
  type: 'N',
  speed: { rate: 1, quality: '1' }
 },
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'MD1', 'OA1', 'SA1', 'UA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
   quantity3Hours: { value: 0.9, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 seaSurfaceTemperature: { value: 4.5, quality: '9' },
 waveMeasurement: {
  method: 'I',
  waves: { period: 4, height: 0.5, quality: '9' },
   seaState: { code: '99', quality: '9' }
```

```
}
},
 _id: ObjectId("5553a998e4b02cf7151190bb"),
 st: 'x+60900-005300',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [-5.3, 60.9]},
 elevation: 9999,
 callLetters: 'TFRB',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 7.5, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1018.5, quality: '1' },
 wind: {
  direction: { angle: 220, quality: '1' },
  type: 'N',
  speed: { rate: 12.3, quality: '1' }
 },
 visibility: {
  distance: { value: 4000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '99', quality: '9' },
  lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
 _id: ObjectId("5553a998e4b02cf7151190bc"),
 st: 'x+66300-025200',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -25.2, 66.3 ] },
 elevation: 9999,
 callLetters: 'TFBY',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 0.4, quality: '1' },
```

```
dewPoint: { value: 999.9, quality: '9' },
pressure: { value: 1003.6, quality: '1' },
wind: {
 direction: { angle: 40, quality: '1' },
 type: 'N',
 speed: { rate: 6.7, quality: '1' }
},
visibility: {
 distance: { value: 20000, quality: '1' },
 variability: { value: 'N', quality: '9' }
skyCondition: {
 ceilingHeight: { value: 7500, quality: '1', determination: 'C' },
 cavok: 'N'
sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
pastWeatherObservationManual: [
 {
   atmosphericCondition: { value: '0', quality: '1' },
   period: { value: 3, quality: '1' }
 }
],
skyConditionObservation: {
 totalCoverage: { value: '05', opaque: '99', quality: '1' },
 lowestCloudCoverage: { value: '02', quality: '1' },
 lowCloudGenus: { value: '00', quality: '1' },
 lowestCloudBaseHeight: { value: 1750, quality: '1' },
 midCloudGenus: { value: '07', quality: '1' },
 highCloudGenus: { value: '02', quality: '1' }
presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
_id: ObjectId("5553a998e4b02cf7151190bd"),
st: 'x+59800-029700',
ts: ISODate("1984-03-05T15:00:00.000Z"),
position: { type: 'Point', coordinates: [ -29.7, 59.8 ] },
elevation: 9999,
callLetters: 'TFWB',
qualityControlProcess: 'V020',
dataSource: '4',
type: 'FM-13',
airTemperature: { value: 3.1, quality: '1' },
dewPoint: { value: 999.9, quality: '9' },
pressure: { value: 1019, quality: '1' },
wind: {
 direction: { angle: 250, quality: '1' },
 type: 'N',
 speed: { rate: 15.4, quality: '1' }
},
visibility: {
 distance: { value: 10000, quality: '1' },
 variability: { value: 'N', quality: '9' }
skyCondition: {
 ceilingHeight: { value: 750, quality: '1', determination: 'C' },
```

```
cavok: 'N'
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '07', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
 _id: ObjectId("5553a998e4b02cf7151190be"),
 st: 'x+79800-172000',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -172, 79.8 ] },
 elevation: 9999,
 callLetters: 'EMIO',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -26.7, quality: '1' },
 dewPoint: { value: -29.8, quality: '1' },
 pressure: { value: 1016.6, quality: '1' },
 wind: {
  direction: { angle: 210, quality: '1' },
  type: 'N',
  speed: { rate: 10, quality: '1' }
 },
 visibility: {
  distance: { value: 2100, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 2100, quality: '1', determination: 'C' },
  cavok: 'N'
 sections: [ 'AG1', 'AY1', 'GF1', 'MA1', 'MD1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '7', quality: '1' },
    period: { value: 3, quality: '1' }
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
```

```
lowCloudGenus: { value: '00', quality: '1' },
 lowestCloudBaseHeight: { value: 2250, quality: '1' },
 midCloudGenus: { value: '01', quality: '1' },
 highCloudGenus: { value: '99', quality: '9' }
},
atmosphericPressureObservation: {
 altimeterSetting: { value: 9999.9, quality: '9' },
 stationPressure: { value: 1016.6, quality: '1' }
},
atmosphericPressureChange: {
 tendency: { code: '7', quality: '1' },
 quantity3Hours: { value: 0.7, quality: '1' },
 quantity24Hours: { value: 99.9, quality: '9' }
presentWeatherObservationManual: [ { condition: '71', quality: '1' } ]
_id: ObjectId("5553a998e4b02cf7151190bf"),
st: 'x+49700-055900',
ts: ISODate("1984-03-05T15:00:00.000Z"),
position: { type: 'Point', coordinates: [ -55.9, 49.7 ] },
elevation: 9999,
callLetters: 'SCGB',
qualityControlProcess: 'V020',
dataSource: '4',
type: 'FM-13',
airTemperature: { value: -5.1, quality: '1' },
dewPoint: { value: 999.9, quality: '9' },
pressure: { value: 1020.8, quality: '1' },
 direction: { angle: 100, quality: '1' },
 type: 'N',
 speed: { rate: 3.1, quality: '1' }
},
visibility: {
 distance: { value: 20000, quality: '1' },
 variability: { value: 'N', quality: '9' }
},
skyCondition: {
 ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
 cavok: 'N'
sections: [ 'AG1', 'AY1', 'GF1', 'MD1', 'MW1' ],
precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
pastWeatherObservationManual: [
  atmosphericCondition: { value: '0', quality: '1' },
  period: { value: 3, quality: '1' }
skyConditionObservation: {
 totalCoverage: { value: '01', opaque: '99', quality: '1' },
 lowestCloudCoverage: { value: '01', quality: '1' },
 lowCloudGenus: { value: '01', quality: '1' },
 lowestCloudBaseHeight: { value: 800, quality: '1' },
 midCloudGenus: { value: '00', quality: '1' },
 highCloudGenus: { value: '00', quality: '1' }
```

```
},
 atmosphericPressureChange: {
  tendency: { code: '8', quality: '1' },
  quantity3Hours: { value: 0.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
  _id: ObjectId("5553a998e4b02cf7151190c0"),
 st: 'x+59500+001500',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 1.5, 59.5 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 6.3, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1026.1, quality: '1' },
  direction: { angle: 280, quality: '1' },
  type: 'N',
  speed: { rate: 9.3, quality: '1' }
 },
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1', 'OA1', 'UA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '99', quality: '9' },
  lowestCloudBaseHeight: { value: 1250, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 waveMeasurement: {
  method: 'M',
  waves: { period: 99, height: 2.5, quality: '9' },
  seaState: { code: '00', quality: '9' }
 }
},
```

```
{
 _id: ObjectId("5553a998e4b02cf7151190c1"),
 st: 'x+55600+004800',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [4.8, 55.6] },
 elevation: 9999,
 callLetters: 'OWXP',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 6.6, quality: '1' },
 dewPoint: { value: 4.4, quality: '1' },
 pressure: { value: 1033.4, quality: '1' },
 wind: {
  direction: { angle: 320, quality: '1' },
  type: 'N',
  speed: { rate: 6.2, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '1', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '04', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '00', quality: '1' },
  lowCloudGenus: { value: '00', quality: '1' },
  lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '08', quality: '1' }
 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1.3, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '01', quality: '1' } ],
 seaSurfaceTemperature: { value: 3.5, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 2, height: 0.5, quality: '9' },
```

```
seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c2"),
 st: 'x+68400+011800',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 11.8, 68.4 ] },
 elevation: 9999,
 callLetters: 'LAQU',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 2, quality: '1' },
 dewPoint: { value: -2, quality: '1' },
 pressure: { value: 999.3, quality: '1' },
 wind: {
  direction: { angle: 280, quality: '1' },
  type: 'N',
  speed: { rate: 12.3, quality: '1' }
 },
 visibility: {
  distance: { value: 4000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 420, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 2 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '09', quality: '1' },
  lowestCloudBaseHeight: { value: 450, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1.3, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '26', quality: '1' } ],
 seaSurfaceTemperature: { value: 6, quality: '9' },
```

```
waveMeasurement: {
  method: 'M',
  waves: { period: 6, height: 3.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf7151190c3"),
 st: 'x+56500+002100',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 2.1, 56.5 ] },
 elevation: 9999.
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 7.1, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1028.2, quality: '1' },
 wind: {
  direction: { angle: 320, quality: '1' },
  type: 'N',
  speed: { rate: 4.1, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'OA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 skyConditionObservation: {
  totalCoverage: { value: '00', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '00', quality: '1' },
  lowCloudGenus: { value: '00', quality: '1' },
  lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 0.4, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
```

```
},
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 waveMeasurement: {
  method: 'M',
  waves: { period: 5, height: 0.5, quality: '9' },
  seaState: { code: '00', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf7151190c4"),
 st: 'x+47600-000700',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -0.7, 47.6 ] },
 elevation: 9999,
 callLetters: 'FNUI',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 999.9, quality: '9' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1032.6, quality: '1' },
  direction: { angle: 60, quality: '1' },
  type: 'N',
  speed: { rate: 7.2, quality: '1' }
 },
 visibility: {
  distance: { value: 50000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '01', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '00', quality: '1' },
  lowestCloudBaseHeight: { value: 450, quality: '1' },
  midCloudGenus: { value: '04', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 atmosphericPressureChange: {
  tendency: { code: '4', quality: '1' },
```

```
quantity3Hours: { value: 0, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '01', quality: '1' } ],
 seaSurfaceTemperature: { value: 12.7, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 2, height: 1.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c5"),
 st: 'x+43700-059700',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [-59.7, 43.7] },
 elevation: 9999,
 callLetters: 'VCNP',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -4.5, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1024.6, quality: '1' },
 wind: {
  direction: { angle: 340, quality: '1' },
  type: 'N',
  speed: { rate: 11.3, quality: '1' }
 visibility: {
  distance: { value: 2000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 900, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1', 'UG1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '08', quality: '1' },
  lowestCloudBaseHeight: { value: 450, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
```

```
},
 atmosphericPressureChange: {
  tendency: { code: '1', quality: '1' },
  quantity3Hours: { value: 0.8, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '85', quality: '1' } ],
 seaSurfaceTemperature: { value: 1, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 5, height: 1, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c6"),
 st: 'x-39600+173400',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 173.4, -39.6 ] },
 elevation: 9999,
 callLetters: 'SINL',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 17.2, quality: '1' },
 dewPoint: { value: 16.5, quality: '1' },
 pressure: { value: 1009.1, quality: '1' },
 wind: {
  direction: { angle: 110, quality: '1' },
  type: 'N',
  speed: { rate: 2.1, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1', 'UG1'
 precipitationEstimatedObservation: { discrepancy: '0', estimatedWaterDepth: 999 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '6', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '99', quality: '9' },
```

```
lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '8', quality: '1' },
  quantity3Hours: { value: 0.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '15', quality: '1' } ],
 seaSurfaceTemperature: { value: 19, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 0, height: 0, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c7"),
 st: 'x+67400+010500',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 10.5, 67.4 ] },
 elevation: 9999,
 callLetters: 'UUQR',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 0.9, quality: '1' },
 dewPoint: { value: -4.3, quality: '1' },
 pressure: { value: 1002.8, quality: '1' },
 wind: {
  direction: { angle: 260, quality: '1' },
  type: 'N',
  speed: { rate: 11, quality: '1' }
 },
 visibility: {
  distance: { value: 200, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 30, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GA1', 'GF1',
  'MD1', 'MW1',
  'SA1', 'UA1',
  'UG1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 2 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
```

```
skyCoverLayer: [
    coverage: { value: '09', quality: '1' },
    baseHeight: { value: 99999, quality: '9' },
    cloudType: { value: '99', quality: '9' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '09', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '09', quality: '1' },
  lowCloudGenus: { value: '09', quality: '1' },
  lowestCloudBaseHeight: { value: 250, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 2.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '26', quality: '1' } ],
 seaSurfaceTemperature: { value: 8.9, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 5, height: 2, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c8"),
 st: 'x+53200+003200',
 ts: ISODate("1984-03-05T16:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 3.2, 53.2 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 5.4, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1032.9, quality: '1' },
 wind: {
  direction: { angle: 20, quality: '1' },
  type: 'N',
  speed: { rate: 1.5, quality: '1' }
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'MD1', 'OA1', 'UA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 },
 atmosphericPressureChange: {
```

```
tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1.2, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 waveMeasurement: {
  method: 'I',
  waves: { period: 5, height: 0.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c9"),
 st: 'x+51900+003200',
 ts: ISODate("1984-03-05T17:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 3.2, 51.9 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 4.8, quality: '1' },
 dewPoint: { value: 4.6, quality: '1' },
 pressure: { value: 1032.6, quality: '1' },
 wind: {
  direction: { angle: 170, quality: '1' },
  type: 'N',
  speed: { rate: 0.5, quality: '1' }
 },
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'MD1', 'OA1', 'SA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1.2, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 seaSurfaceTemperature: { value: 5.5, quality: '9' }
},
 _id: ObjectId("5553a998e4b02cf7151190ca"),
 st: 'x+21100+116200',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 116.2, 21.1 ] },
 elevation: 9999,
 callLetters: 'UYOK',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 17, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
```

```
pressure: { value: 1017.2, quality: '1' },
 wind: {
   direction: { angle: 40, quality: '1' },
  type: 'N',
  speed: { rate: 10, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 skyConditionObservation: {
  totalCoverage: { value: '00', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '00', quality: '1' },
   lowCloudGenus: { value: '00', quality: '1' },
   lowestCloudBaseHeight: { value: 99999, quality: '9' },
   midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
 _id: ObjectId("5553a998e4b02cf7151190cb"),
 st: 'x+43400-065600',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -65.6, 43.4 ] },
 elevation: 9999,
 callLetters: 'CG26',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 999.9, quality: '9' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 9999.9, quality: '9' },
  direction: { angle: 270, quality: '1' },
  type: 'N',
  speed: { rate: 7.7, quality: '1' }
 },
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
   cavok: 'N'
```

```
},
  sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
  precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
  pastWeatherObservationManual: [
     atmosphericCondition: { value: '0', quality: '1' },
     period: { value: 6, quality: '1' }
   }
  skyConditionObservation: {
   totalCoverage: { value: '04', opaque: '99', quality: '1' },
    lowestCloudCoverage: { value: '99', quality: '9' },
    lowCloudGenus: { value: '99', quality: '9' },
    lowestCloudBaseHeight: { value: 99999, quality: '9' },
    midCloudGenus: { value: '99', quality: '9' },
    highCloudGenus: { value: '99', quality: '9' }
  presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
Type "it" for more
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata> db.data.find().pretty();
   _id: ObjectId("5553a998e4b02cf7151190b8"),
  st: 'x+47600-047900',
  ts: ISODate("1984-03-05T13:00:00.000Z"),
  position: { type: 'Point', coordinates: [ -47.9, 47.6 ] },
  elevation: 9999,
  callLetters: 'VCSZ',
  qualityControlProcess: 'V020',
  dataSource: '4',
  type: 'FM-13',
  airTemperature: { value: -3.1, quality: '1' },
  dewPoint: { value: 999.9, quality: '9' },
  pressure: { value: 1015.3, quality: '1' },
   direction: { angle: 999, quality: '9' },
   type: '9',
   speed: { rate: 999.9, quality: '9' }
  visibility: {
    distance: { value: 999999, quality: '9' },
   variability: { value: 'N', quality: '9' }
  skyCondition: {
   ceilingHeight: { value: 99999, quality: '9', determination: '9' },
   cavok: 'N'
  sections: [ 'AG1' ],
  precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 }
 },
   _id: ObjectId("5553a998e4b02cf7151190b9"),
  st: 'x+45200-066500',
  ts: ISODate("1984-03-05T14:00:00.000Z"),
  position: { type: 'Point', coordinates: [ -66.5, 45.2 ] },
```

```
elevation: 9999,
 callLetters: 'VC81',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -4.7, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1025.9, quality: '1' },
 wind: {
  direction: { angle: 999, quality: '9' },
  type: '9',
  speed: { rate: 999.9, quality: '9' }
 },
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 },
 sections: [ 'AG1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 }
},
 _id: ObjectId("5553a998e4b02cf7151190ba"),
 st: 'x+51900+003600',
 ts: ISODate("1984-03-05T14:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 3.6, 51.9 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 4.4, quality: '1' },
 dewPoint: { value: 3.5, quality: '1' },
 pressure: { value: 1030.8, quality: '1' },
 wind: {
  direction: { angle: 200, quality: '1' },
  type: 'N',
  speed: { rate: 1, quality: '1' }
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 sections: [ 'AG1', 'MD1', 'OA1', 'SA1', 'UA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 0.9, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
```

```
seaSurfaceTemperature: { value: 4.5, quality: '9' },
 waveMeasurement: {
  method: 'I',
  waves: { period: 4, height: 0.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf7151190bb"),
 st: 'x+60900-005300',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [-5.3, 60.9]},
 elevation: 9999,
 callLetters: 'TFRB',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 7.5, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1018.5, quality: '1' },
 wind: {
  direction: { angle: 220, quality: '1' },
  type: 'N',
  speed: { rate: 12.3, quality: '1' }
 },
 visibility: {
  distance: { value: 4000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '99', quality: '9' },
  lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
 id: ObjectId("5553a998e4b02cf7151190bc"),
 st: 'x+66300-025200',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -25.2, 66.3 ] },
 elevation: 9999,
```

```
callLetters: 'TFBY',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 0.4, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1003.6, quality: '1' },
 wind: {
  direction: { angle: 40, quality: '1' },
  type: 'N',
  speed: { rate: 6.7, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 7500, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '05', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '02', quality: '1' },
   lowCloudGenus: { value: '00', quality: '1' },
   lowestCloudBaseHeight: { value: 1750, quality: '1' },
   midCloudGenus: { value: '07', quality: '1' },
  highCloudGenus: { value: '02', quality: '1' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
  _id: ObjectId("5553a998e4b02cf7151190bd"),
 st: 'x+59800-029700',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -29.7, 59.8 ] },
 elevation: 9999,
 callLetters: 'TFWB',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 3.1, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1019, quality: '1' },
 wind: {
  direction: { angle: 250, quality: '1' },
  type: 'N',
  speed: { rate: 15.4, quality: '1' }
 visibility: {
```

```
distance: { value: 10000, quality: '1' },
 variability: { value: 'N', quality: '9' }
skyCondition: {
 ceilingHeight: { value: 750, quality: '1', determination: 'C' },
 cavok: 'N'
sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 0 },
pastWeatherObservationManual: [
  atmosphericCondition: { value: '0', quality: '1' },
  period: { value: 3, quality: '1' }
skyConditionObservation: {
 totalCoverage: { value: '07', opaque: '99', quality: '1' },
 lowestCloudCoverage: { value: '07', quality: '1' },
 lowCloudGenus: { value: '05', quality: '1' },
 lowestCloudBaseHeight: { value: 800, quality: '1' },
 midCloudGenus: { value: '00', quality: '1' },
 highCloudGenus: { value: '00', quality: '1' }
},
presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
_id: ObjectId("5553a998e4b02cf7151190be"),
st: 'x+79800-172000',
ts: ISODate("1984-03-05T15:00:00.000Z"),
position: { type: 'Point', coordinates: [-172, 79.8] },
elevation: 9999,
callLetters: 'EMIO',
qualityControlProcess: 'V020',
dataSource: '4',
type: 'FM-13',
airTemperature: { value: -26.7, quality: '1' },
dewPoint: { value: -29.8, quality: '1' },
pressure: { value: 1016.6, quality: '1' },
wind: {
 direction: { angle: 210, quality: '1' },
 type: 'N',
 speed: { rate: 10, quality: '1' }
},
visibility: {
 distance: { value: 2100, quality: '1' },
 variability: { value: 'N', quality: '9' }
skyCondition: {
 ceilingHeight: { value: 2100, quality: '1', determination: 'C' },
 cavok: 'N'
},
sections: [ 'AG1', 'AY1', 'GF1', 'MA1', 'MD1', 'MW1' ],
precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
pastWeatherObservationManual: [
  atmosphericCondition: { value: '7', quality: '1' },
  period: { value: 3, quality: '1' }
```

```
}
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '08', quality: '1' },
   lowCloudGenus: { value: '00', quality: '1' },
   lowestCloudBaseHeight: { value: 2250, quality: '1' },
   midCloudGenus: { value: '01', quality: '1' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureObservation: {
   altimeterSetting: { value: 9999.9, quality: '9' },
  stationPressure: { value: 1016.6, quality: '1' }
 atmosphericPressureChange: {
  tendency: \{ \; code: \; '7', \; quality: \; '1' \; \},
   quantity3Hours: { value: 0.7, quality: '1' },
   quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '71', quality: '1' } ]
},
  _id: ObjectId("5553a998e4b02cf7151190bf"),
 st: 'x+49700-055900',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -55.9, 49.7 ] },
 elevation: 9999,
 callLetters: 'SCGB',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -5.1, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1020.8, quality: '1' },
  direction: { angle: 100, quality: '1' },
  type: 'N',
  speed: { rate: 3.1, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
 sections: [ 'AG1', 'AY1', 'GF1', 'MD1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '01', opaque: '99', quality: '1' },
```

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lowestCloudCoverage: { value: '01', quality: '1' },
  lowCloudGenus: { value: '01', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 },
 atmosphericPressureChange: {
  tendency: { code: '8', quality: '1' },
  quantity3Hours: { value: 0.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
 _id: ObjectId("5553a998e4b02cf7151190c0"),
 st: 'x+59500+001500',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 1.5, 59.5 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 6.3, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1026.1, quality: '1' },
 wind: {
  direction: { angle: 280, quality: '1' },
  type: 'N',
  speed: { rate: 9.3, quality: '1' }
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1', 'OA1', 'UA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '99', quality: '9' },
  lowestCloudBaseHeight: { value: 1250, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 waveMeasurement: {
```

```
method: 'M',
  waves: { period: 99, height: 2.5, quality: '9' },
  seaState: { code: '00', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf7151190c1"),
 st: 'x+55600+004800'.
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [4.8, 55.6] },
 elevation: 9999,
 callLetters: 'OWXP',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 6.6, quality: '1' },
 dewPoint: { value: 4.4, quality: '1' },
 pressure: { value: 1033.4, quality: '1' },
 wind: {
  direction: { angle: 320, quality: '1' },
  type: 'N',
  speed: { rate: 6.2, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '1', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '04', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '00', quality: '1' },
  lowCloudGenus: { value: '00', quality: '1' },
  lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '08', quality: '1' }
 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1.3, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
```

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presentWeatherObservationManual: [ { condition: '01', quality: '1' } ],
 seaSurfaceTemperature: { value: 3.5, quality: '9' },
 waveMeasurement: {
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  waves: { period: 2, height: 0.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf7151190c2"),
 st: 'x+68400+011800',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 11.8, 68.4 ] },
 elevation: 9999,
 callLetters: 'LAQU',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 2, quality: '1' },
 dewPoint: { value: -2, quality: '1' },
 pressure: { value: 999.3, quality: '1' },
 wind: {
  direction: { angle: 280, quality: '1' },
  type: 'N',
  speed: { rate: 12.3, quality: '1' }
 },
 visibility: {
  distance: { value: 4000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 420, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 2 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 3, quality: '1' }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '09', quality: '1' },
  lowestCloudBaseHeight: { value: 450, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
```

```
quantity3Hours: { value: 1.3, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '26', quality: '1' } ],
 seaSurfaceTemperature: { value: 6, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 6, height: 3.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c3"),
 st: 'x+56500+002100',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [2.1, 56.5]},
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 7.1, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1028.2, quality: '1' },
 wind: {
  direction: { angle: 320, quality: '1' },
  type: 'N',
  speed: { rate: 4.1, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'OA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '00', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '00', quality: '1' },
  lowCloudGenus: { value: '00', quality: '1' },
  lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
```

```
},
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 0.4, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 waveMeasurement: {
  method: 'M',
  waves: { period: 5, height: 0.5, quality: '9' },
  seaState: { code: '00', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c4"),
 st: 'x+47600-000700',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -0.7, 47.6 ] },
 elevation: 9999,
 callLetters: 'FNUI',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 999.9, quality: '9' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1032.6, quality: '1' },
 wind: {
  direction: { angle: 60, quality: '1' },
  type: 'N',
  speed: { rate: 7.2, quality: '1' }
 visibility: {
  distance: { value: 50000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '01', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '00', quality: '1' },
  lowestCloudBaseHeight: { value: 450, quality: '1' },
```

```
midCloudGenus: { value: '04', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 atmosphericPressureChange: {
  tendency: { code: '4', quality: '1' },
  quantity3Hours: { value: 0, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '01', quality: '1' } ],
 seaSurfaceTemperature: { value: 12.7, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 2, height: 1.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c5"),
 st: 'x+43700-059700',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -59.7, 43.7 ] },
 elevation: 9999,
 callLetters: 'VCNP',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -4.5, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1024.6, quality: '1' },
 wind: {
  direction: { angle: 340, quality: '1' },
  type: 'N',
  speed: { rate: 11.3, quality: '1' }
 },
 visibility: {
  distance: { value: 2000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 900, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1', 'UG1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
```

```
lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '08', quality: '1' },
  lowestCloudBaseHeight: { value: 450, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '1', quality: '1' },
  quantity3Hours: { value: 0.8, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '85', quality: '1' } ],
 seaSurfaceTemperature: { value: 1, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 5, height: 1, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c6"),
 st: 'x-39600+173400',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 173.4, -39.6 ] },
 elevation: 9999,
 callLetters: 'SINL',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 17.2, quality: '1' },
 dewPoint: { value: 16.5, quality: '1' },
 pressure: { value: 1009.1, quality: '1' },
 wind: {
  direction: { angle: 110, quality: '1' },
  type: 'N',
  speed: { rate: 2.1, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1', 'UG1'
 ],
 precipitationEstimatedObservation: { discrepancy: '0', estimatedWaterDepth: 999 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '6', quality: '1' },
    period: { value: 3, quality: '1' }
  }
```

```
],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '99', quality: '9' },
  lowCloudGenus: { value: '99', quality: '9' },
  lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '8', quality: '1' },
  quantity3Hours: { value: 0.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '15', quality: '1' } ],
 seaSurfaceTemperature: { value: 19, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 0, height: 0, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
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 st: 'x+67400+010500',
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 position: { type: 'Point', coordinates: [ 10.5, 67.4 ] },
 elevation: 9999,
 callLetters: 'UUQR',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 0.9, quality: '1' },
 dewPoint: { value: -4.3, quality: '1' },
 pressure: { value: 1002.8, quality: '1' },
 wind: {
  direction: { angle: 260, quality: '1' },
  type: 'N',
  speed: { rate: 11, quality: '1' }
 },
 visibility: {
  distance: { value: 200, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 30, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GA1', 'GF1',
  'MD1', 'MW1',
  'SA1', 'UA1',
  'UG1'
 ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 2 },
 pastWeatherObservationManual: [
```

```
{
    atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyCoverLayer: [
    coverage: { value: '09', quality: '1' },
    baseHeight: { value: 99999, quality: '9' },
    cloudType: { value: '99', quality: '9' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '09', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '09', quality: '1' },
   lowCloudGenus: { value: '09', quality: '1' },
   lowestCloudBaseHeight: { value: 250, quality: '1' },
   midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
   quantity3Hours: { value: 2.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '26', quality: '1' } ],
 seaSurfaceTemperature: { value: 8.9, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 5, height: 2, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190c8"),
 st: 'x+53200+003200',
 ts: ISODate("1984-03-05T16:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 3.2, 53.2 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 5.4, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1032.9, quality: '1' },
 wind: {
  direction: { angle: 20, quality: '1' },
  type: 'N',
  speed: { rate: 1.5, quality: '1' }
 },
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
```

```
cavok: 'N'
 },
 sections: [ 'AG1', 'MD1', 'OA1', 'UA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1.2, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 waveMeasurement: {
  method: 'I',
  waves: { period: 5, height: 0.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
},
 _id: ObjectId("5553a998e4b02cf7151190c9"),
 st: 'x+51900+003200',
 ts: ISODate("1984-03-05T17:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 3.2, 51.9 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 4.8, quality: '1' },
 dewPoint: { value: 4.6, quality: '1' },
 pressure: { value: 1032.6, quality: '1' },
 wind: {
  direction: { angle: 170, quality: '1' },
  type: 'N',
  speed: { rate: 0.5, quality: '1' }
 visibility: {
  distance: { value: 999999, quality: '9' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 99999, quality: '9', determination: '9' },
  cavok: 'N'
 sections: [ 'AG1', 'MD1', 'OA1', 'SA1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 999 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1.2, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 seaSurfaceTemperature: { value: 5.5, quality: '9' }
},
 _id: ObjectId("5553a998e4b02cf7151190ca"),
 st: 'x+21100+116200',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 116.2, 21.1 ] },
 elevation: 9999,
 callLetters: 'UYOK',
```

```
qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 17, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1017.2, quality: '1' },
  direction: { angle: 40, quality: '1' },
  type: 'N',
  speed: { rate: 10, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '00', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '00', quality: '1' },
   lowCloudGenus: { value: '00', quality: '1' },
   lowestCloudBaseHeight: { value: 99999, quality: '9' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
  _id: ObjectId("5553a998e4b02cf7151190cb"),
 st: 'x+43400-065600',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -65.6, 43.4 ] },
 elevation: 9999,
 callLetters: 'CG26',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 999.9, quality: '9' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 9999.9, quality: '9' },
 wind: {
  direction: { angle: 270, quality: '1' },
  type: 'N',
  speed: { rate: 7.7, quality: '1' }
 visibility: {
   distance: { value: 10000, quality: '1' },
```

```
variability: { value: 'N', quality: '9' }
  },
  skyCondition: {
   ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
   cavok: 'N'
  },
  sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
  precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
  pastWeatherObservationManual: [
     atmosphericCondition: { value: '0', quality: '1' },
     period: { value: 6, quality: '1' }
   }
  ],
  skyConditionObservation: {
   totalCoverage: { value: '04', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '99', quality: '9' },
   lowCloudGenus: { value: '99', quality: '9' },
   lowestCloudBaseHeight: { value: 99999, quality: '9' },
   midCloudGenus: { value: '99', quality: '9' },
   highCloudGenus: { value: '99', quality: '9' }
  presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
 }
Type "it" for more
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata> db.data.find().count();
(node:18451) [MONGODB DRIVER] Warning: cursor.count is deprecated and will be removed in the next major version,
please use `collection.estimatedDocumentCount` or `collection.countDocuments` instead
(Use `node --trace-warnings ...` to show where the warning was created)
Atlas atlas-3hyy1a-shard-0 [primary] sample weatherdata> db.data.find({"skyCondition.ceilingHeight.value":750}).count();
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata> db.data.find({"skyCondition.ceilingHeight.value":750}).pretty();
[
  id: ObjectId("5553a998e4b02cf7151190bd"),
  st: 'x+59800-029700',
  ts: ISODate("1984-03-05T15:00:00.000Z"),
  position: { type: 'Point', coordinates: [ -29.7, 59.8 ] },
  elevation: 9999,
  callLetters: 'TFWB',
  qualityControlProcess: 'V020',
  dataSource: '4',
  type: 'FM-13',
  airTemperature: { value: 3.1, quality: '1' },
  dewPoint: { value: 999.9, quality: '9' },
  pressure: { value: 1019, quality: '1' },
  wind: {
   direction: { angle: 250, quality: '1' },
   type: 'N',
   speed: { rate: 15.4, quality: '1' }
  visibility: {
   distance: { value: 10000, quality: '1' },
   variability: { value: 'N', quality: '9' }
```

```
skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '07', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
  id: ObjectId("5553a998e4b02cf7151190ed"),
 st: 'x+35900-048600',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [-48.6, 35.9]},
 elevation: 9999,
 callLetters: 'UTDY',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 14.8, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1008.5, quality: '1' },
 wind: {
  direction: { angle: 300, quality: '1' },
  type: 'N',
  speed: { rate: 12, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 3 },
 pastWeatherObservationManual: [
```

```
atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 6, quality: '1' }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
   lowCloudGenus: { value: '09', quality: '1' },
   lowestCloudBaseHeight: { value: 800, quality: '1' },
   midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '7', quality: '1' },
   quantity3Hours: { value: 2.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 18, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 99, height: 99.9, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190f1"),
 st: 'x+48200-037000',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [-37, 48.2]},
 elevation: 9999,
 callLetters: '99999',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 15, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1011.4, quality: '1' },
 wind: {
  direction: { angle: 150, quality: '1' },
  type: 'N',
  speed: { rate: 17, quality: '1' }
 },
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
   'UA1'
 ],
```

```
precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '07', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureChange: {
  tendency: { code: '4', quality: '1' },
  quantity3Hours: { value: 0, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 13, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 8, height: 3, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151190f9"),
 st: 'x+41700-068400',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -68.4, 41.7 ] },
 elevation: 9999,
 callLetters: 'SHP',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 44.4, quality: '1' },
 dewPoint: { value: 27.8, quality: '1' },
 pressure: { value: 1024, quality: '1' },
 wind: {
  direction: { angle: 200, quality: '1' },
  type: 'N',
  speed: { rate: 3.1, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1', 'UA1', 'UG1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
```

```
{
    atmosphericCondition: { value: '1', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '05', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '05', quality: '1' },
  lowCloudGenus: { value: '02', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '06', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 presentWeatherObservationManual: [ { condition: '03', quality: '1' } ],
 waveMeasurement: {
  method: 'M',
  waves: { period: 0, height: 0, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf715119370"),
 st: 'x+22400-063100',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -63.1, 22.4 ] },
 elevation: 9999,
 callLetters: 'UVTW',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 26, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1023.4, quality: '1' },
 wind: {
  direction: { angle: 40, quality: '1' },
  type: 'N',
  speed: { rate: 15, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1', 'UG1'
 precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
```

```
}
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 1, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 27, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 6, height: 1.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf715119382"),
 st: 'x+66700+010400',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 10.4, 66.7 ] },
 elevation: 9999,
 callLetters: 'UUQR',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 2.6, quality: '1' },
 dewPoint: { value: -1.2, quality: '1' },
 pressure: { value: 1005.1, quality: '1' },
 wind: {
  direction: { angle: 270, quality: '1' },
  type: 'N',
  speed: { rate: 19, quality: '1' }
 },
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1', 'UG1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
 pastWeatherObservationManual: [
```

```
{
    atmosphericCondition: { value: '2', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '06', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '06', quality: '1' },
   lowCloudGenus: { value: '02', quality: '1' },
   lowestCloudBaseHeight: { value: 800, quality: '1' },
   midCloudGenus: { value: '06', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
   quantity3Hours: { value: 2.3, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '15', quality: '1' } ],
 seaSurfaceTemperature: { value: 8.9, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 8, height: 3.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf715119385"),
 st: 'x-20000+012100',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 12.1, -20 ] },
 elevation: 9999,
 callLetters: 'ESVJ',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 16.5, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1010.6, quality: '1' },
 wind: {
  direction: { angle: 180, quality: '1' },
  type: 'N',
  speed: { rate: 3, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
   'UA1', 'UG1'
```

```
],
 precipitationEstimatedObservation: { discrepancy: '0', estimatedWaterDepth: 999 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureChange: {
  tendency: { code: '4', quality: '1' },
  quantity3Hours: { value: 0, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 22, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 3, height: 0.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 id: ObjectId("5553a998e4b02cf7151193f4"),
 st: 'x+44100-059600',
 ts: ISODate("1984-03-05T21:00:00.000Z"),
 position: { type: 'Point', coordinates: [-59.6, 44.1] },
 elevation: 9999,
 callLetters: 'RIGG',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -3.9, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1024.2, quality: '1' },
 wind: {
  direction: { angle: 340, quality: '1' },
  type: 'N',
  speed: { rate: 5.1, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [ 'AG1', 'AY1', 'GF1', 'MD1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
```

```
pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '06', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '06', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 atmosphericPressureChange: {
  tendency: { code: '3', quality: '1' },
  quantity3Hours: { value: 2, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
  id: ObjectId("5553a998e4b02cf7151193f9"),
 st: 'x+59000+003300',
 ts: ISODate("1984-03-05T21:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 3.3, 59 ] },
 elevation: 9999,
 callLetters: 'LHDO',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 6.5, quality: '1' },
 dewPoint: { value: 4, quality: '1' },
 pressure: { value: 1025.1, quality: '1' },
  direction: { angle: 280, quality: '1' },
  type: 'N',
  speed: { rate: 9.8, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
```

```
period: { value: 3, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '07', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '7', quality: '1' },
  quantity3Hours: { value: 1.6, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 5.2, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 4, height: 1.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf7151195d3"),
 st: 'x+85600-124000',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -124, 85.6 ] },
 elevation: 9999,
 callLetters: 'ROBB',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -22.9, quality: '1' },
 dewPoint: { value: -24.9, quality: '1' },
 pressure: { value: 1000.2, quality: '1' },
 wind: {
  direction: { angle: 270, quality: '1' },
  type: 'N',
  speed: { rate: 7, quality: '1' }
 visibility: {
  distance: { value: 7000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 sections: [ 'AG1', 'AY1', 'GF1', 'MA1', 'MD1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '7', quality: '1' },
    period: { value: 3, quality: '1' }
```

```
],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureObservation: {
  altimeterSetting: { value: 9999.9, quality: '9' },
  stationPressure: { value: 1000.2, quality: '1' }
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 0.7, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '71', quality: '1' } ]
},
 _id: ObjectId("5553a998e4b02cf7151195d8"),
 st: 'x+57900+000100',
 ts: ISODate("1984-03-05T15:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 0.1, 57.9 ] },
 elevation: 9999,
 callLetters: 'PLAT',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 7.3, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1029.3, quality: '1' },
 wind: {
  direction: { angle: 230, quality: '1' },
  type: 'N',
  speed: { rate: 6.2, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'OA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 3, quality: '1' }
```

```
}
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '05', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '07', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 0.2, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 waveMeasurement: {
  method: 'I',
  waves: { period: 5, height: 1.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf7151195e8"),
 st: 'x+59300-030500',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [-30.5, 59.3] },
 elevation: 9999,
 callLetters: 'TFWB',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 3.8, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1021, quality: '1' },
 wind: {
  direction: { angle: 250, quality: '1' },
  type: 'N',
  speed: { rate: 12.3, quality: '1' }
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 skyConditionObservation: {
```

```
totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '07', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
  _id: ObjectId("5553a998e4b02cf715119601"),
 st: 'x+33500-025100'.
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -25.1, 33.5 ] },
 elevation: 9999,
 callLetters: 'EWXK',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 15, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1009.5, quality: '1' },
 wind: {
  direction: { angle: 330, quality: '1' },
  type: 'N',
  speed: { rate: 8, quality: '1' }
 },
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 skyConditionObservation: {
  totalCoverage: { value: '06', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '06', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 atmosphericPressureChange: {
```

```
tendency: { code: '4', quality: '1' },
  quantity3Hours: { value: 0, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 17, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 8, height: 2.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf715119608"),
 st: 'x+59500-048600',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -48.6, 59.5 ] },
 elevation: 9999,
 callLetters: 'UTDY',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 14.8, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1008.5, quality: '1' },
 wind: {
  direction: { angle: 300, quality: '1' },
  type: 'N',
  speed: { rate: 12, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 ],
 precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 2 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '8', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '09', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
```

```
highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '7', quality: '1' },
  quantity3Hours: { value: 2.5, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 18, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 99, height: 99.9, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf71511960b"),
 st: 'x-15000+007500',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [7.5, -15]},
 elevation: 9999,
 callLetters: 'UJEI',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 24.5, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1015.9, quality: '1' },
 wind: {
  direction: { angle: 160, quality: '1' },
  type: 'N',
  speed: { rate: 7, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '0', estimatedWaterDepth: 999 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '6', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '07', quality: '1' },
```

```
lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '06', quality: '1' },
  highCloudGenus: { value: '02', quality: '1' }
 },
 atmosphericPressureChange: {
  tendency: { code: '3', quality: '1' },
  quantity3Hours: { value: 0.1, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 24.9, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 99, height: 99.9, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf71511960d"),
 st: 'x-39000-084400',
 ts: ISODate("1984-03-05T18:00:00.000Z"),
 position: { type: 'Point', coordinates: [ -84.4, -39 ] },
 elevation: 9999,
 callLetters: 'SHIP',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 16.4, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1020, quality: '1' },
 wind: {
  direction: { angle: 200, quality: '1' },
  type: 'N',
  speed: { rate: 2, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '0', estimatedWaterDepth: 999 },
 pastWeatherObservationManual: [
  {
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
```

```
skyConditionObservation: {
  totalCoverage: { value: '07', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '07', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '00', quality: '1' },
  highCloudGenus: { value: '00', quality: '1' }
 },
 atmosphericPressureChange: {
  tendency: { code: '0', quality: '1' },
  quantity3Hours: { value: 0, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 18.1, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 99, height: 0, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf715119686"),
 st: 'x+45400+150400',
 ts: ISODate("1984-03-06T00:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 150.4, 45.4 ] },
 elevation: 9999,
 callLetters: 'UKDZ',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 0.5, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1006.2, quality: '1' },
  direction: { angle: 290, quality: '1' },
  type: 'N',
  speed: { rate: 6, quality: '1' }
 },
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 ],
 precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 0 },
 pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
```

```
period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 },
 atmosphericPressureChange: {
  tendency: { code: '2', quality: '1' },
  quantity3Hours: { value: 0.3, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 2, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 3, height: 1, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
  _id: ObjectId("5553a998e4b02cf71511968d"),
 st: 'x-45300-060100',
 ts: ISODate("1984-03-06T00:00:00.000Z"),
 position: { type: 'Point', coordinates: [-60.1, -45.3] },
 elevation: 9999,
 callLetters: 'EVCH',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: 12.7, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1009.5, quality: '1' },
 wind: {
  direction: { angle: 30, quality: '1' },
  type: 'N',
  speed: { rate: 8, quality: '1' }
 visibility: {
  distance: { value: 10000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
  'UA1'
 precipitationEstimatedObservation: { discrepancy: '0', estimatedWaterDepth: 999 },
```

```
pastWeatherObservationManual: [
    atmosphericCondition: { value: '0', quality: '1' },
    period: { value: 6, quality: '1' }
  }
 ],
 skyConditionObservation: {
  totalCoverage: { value: '08', opaque: '99', quality: '1' },
  lowestCloudCoverage: { value: '08', quality: '1' },
  lowCloudGenus: { value: '05', quality: '1' },
  lowestCloudBaseHeight: { value: 800, quality: '1' },
  midCloudGenus: { value: '99', quality: '9' },
  highCloudGenus: { value: '99', quality: '9' }
 atmosphericPressureChange: {
  tendency: { code: '7', quality: '1' },
  quantity3Hours: { value: 2.1, quality: '1' },
  quantity24Hours: { value: 99.9, quality: '9' }
 },
 presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
 seaSurfaceTemperature: { value: 12.2, quality: '9' },
 waveMeasurement: {
  method: 'M',
  waves: { period: 2, height: 0.5, quality: '9' },
  seaState: { code: '99', quality: '9' }
 }
},
 _id: ObjectId("5553a998e4b02cf715119690"),
 st: 'x+51000+157000',
 ts: ISODate("1984-03-06T00:00:00.000Z"),
 position: { type: 'Point', coordinates: [ 157, 51 ] },
 elevation: 9999,
 callLetters: 'UNWZ',
 qualityControlProcess: 'V020',
 dataSource: '4',
 type: 'FM-13',
 airTemperature: { value: -2.1, quality: '1' },
 dewPoint: { value: 999.9, quality: '9' },
 pressure: { value: 1007.9, quality: '1' },
 wind: {
  direction: { angle: 50, quality: '1' },
  type: 'N',
  speed: { rate: 7, quality: '1' }
 visibility: {
  distance: { value: 20000, quality: '1' },
  variability: { value: 'N', quality: '9' }
 },
 skyCondition: {
  ceilingHeight: { value: 750, quality: '1', determination: 'C' },
  cavok: 'N'
 },
 sections: [
  'AG1', 'AY1',
  'GF1', 'MD1',
  'MW1', 'SA1',
```

```
'UG1'
precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 0 },
pastWeatherObservationManual: [
  atmosphericCondition: { value: '0', quality: '1' },
  period: { value: 6, quality: '1' }
 }
],
skyConditionObservation: {
 totalCoverage: { value: '08', opaque: '99', quality: '1' },
 lowestCloudCoverage: { value: '08', quality: '1' },
 lowCloudGenus: { value: '05', quality: '1' },
 lowestCloudBaseHeight: { value: 800, quality: '1' },
 midCloudGenus: { value: '99', quality: '9' },
 highCloudGenus: { value: '99', quality: '9' }
},
atmosphericPressureChange: {
 tendency: { code: '4', quality: '1' },
 quantity3Hours: { value: 0, quality: '1' },
 quantity24Hours: { value: 99.9, quality: '9' }
presentWeatherObservationManual: [ { condition: '02', quality: '1' } ],
seaSurfaceTemperature: { value: -0.4, quality: '9' }
_id: ObjectId("5553a998e4b02cf7151196a2"),
st: 'x+05300+143500',
ts: ISODate("1984-03-06T00:00:00.000Z"),
position: { type: 'Point', coordinates: [143.5, 5.3]},
elevation: 9999,
callLetters: 'UTUI',
qualityControlProcess: 'V020',
dataSource: '4',
type: 'FM-13',
airTemperature: { value: 28.8, quality: '1' },
dewPoint: { value: 999.9, quality: '9' },
pressure: { value: 1011.7, quality: '1' },
wind: {
 direction: { angle: 90, quality: '1' },
 type: 'N',
 speed: { rate: 6, quality: '1' }
},
visibility: {
 distance: { value: 10000, quality: '1' },
 variability: { value: 'N', quality: '9' }
skyCondition: {
 ceilingHeight: { value: 750, quality: '1', determination: 'C' },
 cavok: 'N'
},
sections: [
 'AG1', 'AY1',
 'GF1', 'MD1',
 'MW1', 'SA1',
 'UA1', 'UG1'
```

```
precipitationEstimatedObservation: { discrepancy: '1', estimatedWaterDepth: 3 },
  pastWeatherObservationManual: [
     atmosphericCondition: { value: '2', quality: '1' },
     period: { value: 6, quality: '1' }
   }
  ],
  skyConditionObservation: {
    totalCoverage: { value: '08', opaque: '99', quality: '1' },
    lowestCloudCoverage: { value: '06', quality: '1' },
    lowCloudGenus: { value: '06', quality: '1' },
    lowestCloudBaseHeight: { value: 800, quality: '1' },
    midCloudGenus: { value: '02', quality: '1' },
    highCloudGenus: { value: '99', quality: '9' }
  atmosphericPressureChange: {
    tendency: { code: '2', quality: '1' },
    quantity3Hours: { value: 0.3, quality: '1' },
    quantity24Hours: { value: 99.9, quality: '9' }
  },
  presentWeatherObservationManual: [ { condition: '16', quality: '1' } ],
  seaSurfaceTemperature: { value: 30, quality: '9' },
  waveMeasurement: {
    method: 'M',
    waves: { period: 2, height: 0.5, quality: '9' },
    seaState: { code: '99', quality: '9' }
  }
 }
Type "it" for more
Atlas atlas-3hyy1a-shard-0 [primary] sample weatherdata> db.data.find(ObjectId("5553a998e4b02cf7151195d3")).pretty();
[
   _id: ObjectId("5553a998e4b02cf7151195d3"),
  st: 'x+85600-124000',
  ts: ISODate("1984-03-05T15:00:00.000Z"),
  position: { type: 'Point', coordinates: [ -124, 85.6 ] },
  elevation: 9999,
  callLetters: 'ROBB',
  qualityControlProcess: 'V020',
  dataSource: '4',
  type: 'FM-13',
  airTemperature: { value: -22.9, quality: '1' },
  dewPoint: { value: -24.9, quality: '1' },
  pressure: { value: 1000.2, quality: '1' },
    direction: { angle: 270, quality: '1' },
    type: 'N',
    speed: { rate: 7, quality: '1' }
  },
  visibility: {
    distance: { value: 7000, quality: '1' },
    variability: { value: 'N', quality: '9' }
  },
  skyCondition: {
    ceilingHeight: { value: 750, quality: '1', determination: 'C' },
    cavok: 'N'
```

```
},
  sections: [ 'AG1', 'AY1', 'GF1', 'MA1', 'MD1', 'MW1' ],
  precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
  pastWeatherObservationManual: [
     atmosphericCondition: { value: '7', quality: '1' },
     period: { value: 3, quality: '1' }
   }
  ],
  skyConditionObservation: {
   totalCoverage: { value: '08', opaque: '99', quality: '1' },
   lowestCloudCoverage: { value: '08', quality: '1' },
   lowCloudGenus: { value: '05', quality: '1' },
   lowestCloudBaseHeight: { value: 800, quality: '1' },
   midCloudGenus: { value: '99', quality: '9' },
   highCloudGenus: { value: '99', quality: '9' }
  },
  atmosphericPressureObservation: {
   altimeterSetting: { value: 9999.9, quality: '9' },
   stationPressure: { value: 1000.2, quality: '1' }
  },
  atmosphericPressureChange: {
   tendency: { code: '2', quality: '1' },
   quantity3Hours: { value: 0.7, quality: '1' },
   quantity24Hours: { value: 99.9, quality: '9' }
  presentWeatherObservationManual: [ { condition: '71', quality: '1' } ]
 }
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata> db.data.insertOne({
       "st" : "x+85600-124000",
       "ts": ISODate("1984-03-07T13:00:00Z"),
        "position" : {
              "type": "Point",
....
              "coordinates" : [
                   -124,
                   85.6
              ]
       "elevation": 8787,
       "callLetters": "ROBZ",
       "qualityControlProcess": "V020",
       "dataSource": "3",
       "type" : "FM-13",
       "airTemperature" : {
              "value": -22.9,
              "quality": "1"
        "dewPoint" : {
...
              "value": -24.9,
....
              "quality": "1"
        "pressure" : {
              "value": 1000.2,
              "quality": "1"
        "wind" : {
```

```
"direction" : {
                     "angle": 270,
                     "quality": "1"
.....
               },
               "type" : "N",
               "speed" : {
                     "rate": 7,
                     "quality": "1"
               }
         },
.....
        "visibility" : {
...
               "distance" : {
                     "value": 7000,
                     "quality": "1"
               "variability" : {
                     "value": "N",
                     "quality": "9"
.....
.....
        "skyCondition": {
               "ceilingHeight" : {
....
                     "value": 760,
                     "quality" : "1",
                     "determination": "C"
.....
               }
.....
         }
....
... });
 acknowledged: true,
 insertedId: ObjectId("62411736e12b465556581cb1")
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata> db.data.find(ObjectId("62411736e12b465556581cb1")).pretty();
[
   _id: ObjectId("62411736e12b465556581cb1"),
  st: 'x+85600-124000',
  ts: ISODate("1984-03-07T13:00:00.000Z"),
   position: { type: 'Point', coordinates: [ -124, 85.6 ] },
   elevation: 8787,
   callLetters: 'ROBZ',
   qualityControlProcess: 'V020',
   dataSource: '3',
   type: 'FM-13',
   airTemperature: { value: -22.9, quality: '1' },
   dewPoint: { value: -24.9, quality: '1' },
   pressure: { value: 1000.2, quality: '1' },
   wind: {
    direction: { angle: 270, quality: '1' },
    type: 'N',
    speed: { rate: 7, quality: '1' }
  },
   visibility: {
    distance: { value: 7000, quality: '1' },
    variability: { value: 'N', quality: '9' }
   skyCondition: { ceilingHeight: { value: 760, quality: '1', determination: 'C' } }
```

```
}
]
Atlas atlas-3hyy1a-shard-0 [primary] sample_weatherdata>
```