

# Bad Elf Flex: Base/Rover Logs - JSON Specification

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## JSON Specification

When using the Bad Elf Flex: Base/Rover configuration a wealth of metadata is stored along with the project detail. Any event of note during the collection interval is recorded. These events are all exported in a JSON file included in the project folder and are limited to the following set of instances.

Event	Description
<b>Shutdown</b>	The Bad Elf Flex - Base shut down. Every event log is expected to have at least one of these events.
<b>Rover lost GPS lock</b>	The Bad Elf Flex - Rover unit is not able to provide a positional solution.
<b>Rover GPS lock restored</b>	The Bad Elf Flex - Rover unit has regained a positional solution.
<b>Base Lost GPS lock</b>	The Bad Elf Flex - Base unit is not able to provide a positional solution.
<b>Base GPS lock restored</b>	The Bad Elf Flex - Base unit has regained a positional solution.
<b>Start without fix</b>	The Base Elf Flex Base/Rover project session was started without a positional solution at the Bad Elf Flex - Base.
<b>Radio link lost</b>	The communication link between the Bad Elf Flex - Base unit and Bad Elf Flex - Rover unit has failed.
<b>Radio link restored</b>	The communication link between the Bad Elf Flex - Base unit and Bad Elf Flex - Rover unit has been restored.
<b>Base tilt error detected</b>	A tilt of the Bad Elf Flex - Base unit greater than XX° will result in this event an indication that the base has shifted from its original position.
<b>Base tilt error cleared</b>	A Base tilt error is cleared when the digital level reports an angle less than XX°.

## Example

```
{
  "Mode": "Base",
  "StartTime": "2022-04-14T14:37:20Z",
  "CommunicationsMethod": "RF",
  "CorrectionsFormat": "RTCM3",
  "Events": [
    {
      "event_type": "Shutdown",
      "sequence": 1,
      "timestamp": "2022-04-14T14:45:37Z"
    }
  ],
  "refType": "KNOWN",
  "refPoint": {
    "NAME": "BE_MON1",
    "LATITUDE": 33.9988046,
    "LONGITUDE": -111.9870778,
```

```

    "ELLIPSOIDAL_M": 536.964,
    "DATUM": "NAD83(2011)_6318"
  },
  "BytesSent": 179445,
  "RtcmPacketsSent": 535,
  "EndTime": "2022-04-14T14:45:37Z"
}

```

## Schema

```

{
  "$schema": "http://json-schema.org/draft-04/schema# (http://json-schema.org/draft-04/schema#)",
  "type": "object",
  "properties": {
    "Mode": {
      "type": "string"
    },
    "StartTime": {
      "type": "string"
    },
    "CommunicationsMethod": {
      "type": "string"
    },
    "CorrectionsFormat": {
      "type": "string"
    },
    "Events": {
      "type": "array",
      "items": [
        {
          "type": "object",
          "properties": {
            "event_type": {
              "type": "string"
            },
            "sequence": {
              "type": "integer"
            },
            "timestamp": {
              "type": "string"
            }
          }
        }
      ],
      "required": [
        "event_type",
        "sequence",
        "timestamp"
      ]
    },
    "refType": {
      "type": "string"
    },
    "refPoint": {
      "type": "object",
      "properties": {
        "NAME": {

```

```
    "type": "string"
  },
  "LATITUDE": {
    "type": "number"
  },
  "LONGITUDE": {
    "type": "number"
  },
  "ELLIPSOIDAL_M": {
    "type": "number"
  },
  "DATUM": {
    "type": "string"
  }
},
"required": [
  "NAME",
  "LATITUDE",
  "LONGITUDE",
  "ELLIPSOIDAL_M",
  "DATUM"
]
},
"BytesSent": {
  "type": "integer"
},
"RtcmPacketsSent": {
  "type": "integer"
},
"EndTime": {
  "type": "string"
}
},
"required": [
  "Mode",
  "StartTime",
  "CommunicationsMethod",
  "CorrectionsFormat",
  "Events",
  "refType",
  "refPoint",
  "BytesSent",
  "RtcmPacketsSent",
  "EndTime"
]
}
```